European Commission

Study to support the Commission impact assessment on Individual Learning Accounts

REQUEST FOR SERVICES UNDER THE MULTIPLE FRAMEWORK CONTRACTS VT/2016/027 FOR THE PROVISION OF SERVICES RELATED TO THE IMPLEMENTATION OF BETTER REGULATION GUIDELINES

VT/2020/031

Fondazione Giacomo Brodolini Srl SB, Ockham IPS, COWI

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Directorate B — Jobs and Skills
Unit B.2— Skills Agenda

E-mail: *empl-b2-unit@ec.europa.eu*

European Commission
B-1049 Brussels

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Abbreviations

AES	Adult Education Survey
AI	Artificial intelligence
AL	Adult Learning
ALE	Adult Learning Education
ALMP	Active Labour Market Policies
AZAV	Accreditation and Approval for Employment Promotion
BRG	Better Regulation Guidelines
CBA	Cost Benefit Analysis
CCFI	Carta di Credito Formativo Individuale
CDC	Caisse des dépôts et consignations
CIF	Congé Individuel de Formation
CPB	Bureau for Economic Policy Analysis
CPF	Compte personnel de formation
CVET	Continuing vocational education and training
CVTS	Continuing Vocational Training Survey
DG EMPL	Directorate-General for Employment, Social Affairs and Inclusion
DG REGIO	Directorate-General for Regional and Urban Policy
DWL	Dead weight lost
EC	European Commission
EENEE	European Expert Network on Economics of Education
EMCO	European Semester and the Employment Committee of the Council
EQUAVET	European Quality Assurance in Vocational Education and Training
EQF	European Qualifications Framework
ESF	European Social Funds
ESJ/ESJS	Cedefop's European skills and jobs survey
ET2020	European policy cooperation (ET 2020 framework)
EU	European Union
EU-SILC	EU-Statistics on Income and Living Conditions
FGB	Fondazione Giacomo Brodolini
FWC	Framework Contract
GDP	Gross Domestic Product
GOJT	Guided on the job training
HVE	Higher Vocational Education
IA	Impact Assessment

IAG	Information Advice Guidance
ICT	Information and Communication technologies
ILA	Individual Learning Account
ILO	International labour organisation
ISC	Inter-Service Consultation
ISCED	International Standard Classification of Education
ISCO	International Standard Classification of Occupations
ISG	Interservice Group
IVET	Initial vocational education and training
JRC	Joint Research Centre
LFS	Labour Force Survey
LLL	Life Long Learning
LLLE	Life Long Learning Entitlement
LM	Labour Market
MFC	Multiple Framework Contract
MOOC	Massive Open Online Courses
MS	Member State
OECD	Organisation for Economic Co-operation and Development
OPC	Open Public Consultation
PC	Public Consultation
PES	Public Employment Services
PIAAC	Programme for the International Assessment of Adult Competencies
PISA	Programme for International Student Assessment
PTL	Paid Training Leave
QA	Quality Assurance
RSB	Regulatory Scrutiny Board
SCO	Simplified Cost Option
SFC	SkillFuture Credit
SFI	SkillsFuture Initiative
SLS	Skills and Learning Study
SMART	Specific, Measurable, Attainable, Relevant, and Time-Bound
SME	Small to Medium Enterprise
STAP	Stimulans Arbeidsmarktpositie [Stimulus of the Labour Market Position]
STEM	Science, technology, engineering, and mathematics
SWD	Staff Working Document
TFEU	Treaty on the Functioning of the European Union

ToR	Terms of Reference
TS	Technical Specifications
TVET	Technical and Vocational Education and Training
UOE	UN, OECD, Eurostat
VET	Vocational education and training
WB	World Bank

1. Introduction

The Final Report is submitted by Fondazione G. Brodolini srl SB (FGB) in cooperation with COWI and Ockham IPS as subcontractor.

1.1. Aims and scope of this assignment for DG EMPL's impact assessment and the policy initiative

The aim of this study is to support the Commission "in exploring the merits of a European initiative on individual learning accounts (ILAs) to empower individuals to get the training they need."

This implies supporting the Commission through the key steps of the Commission's own impact assessment (IA)[1], including:

- Support to the Commission in the collection and analysis of relevant data and expertise, foresight and consultation of stakeholders.
- Support to the drafting of mandatory Annexes 2, 3 and 4 of the Commission's Impact Assessment report. Additional Annexes were prepared to support the IA. They form the basis for this report.
- Ad hoc support on comments received on draft versions of the IA.

More specifically, we acknowledge that:

- Substantial preparatory work has been carried out by the Commission in regard to the problem definition, objectives, policy options and initial assessment of the conditions under demand-driven and individual oriented support to training that might be effective;
- The main goal of this assignment is effectively to help the Commission identify evidence on what measures work best to reach the objectives of this initiative. This, in turn, should allow the Commission to provide Member States with the best possible evidence and recommendations on how to develop their adult learning systems; and

Against this background, and based on the in-depth discussions with and feedback from the Commission, particular emphasis within this assignment was placed upon:

- The gathering of conclusive evidence to underpin the problem definition;
- An identification and quantification, whenever possible, of effectiveness and efficiency of the options towards the specific objectives of this initiative. This is translated into a nuanced comparison of different policy options;
- The validation of all parts of the impact assessment with key stakeholders through participatory approaches, and including the analysis of the public consultation replies as well as the outcomes of targeted stakeholder events and meetings.

Lastly, the geographical scope of the assignment is the EU-27, although evidence has been drawn also from other relevant geographical entities and countries including the UK and Singapore for their experience of ILAs.

[1] See the impact assessment accompanying the Proposal for a Council Recommendation on individual learning accounts, SWD(2021)369.

With respect to the objective scope of this assignment, it is worth to recall here the working definitions of some of the instruments under review.

In particular:

- individual training entitlement: a personal budget to spend on training according to individual preferences and needs. Also, guidance and validation offers may be eligible for funding from this budget;
- individual learning account: a specific mode of delivering training entitlements consisting in a personal account where individual training entitlements can be accumulated over time, possibly funded by different sponsors. Training entitlements from the account can be spent on training when requested by the individual, independent of the employment status.

1.2. Context

The planned initiative for ILAs is one of a number of initiatives announced in the 2020 European Skills Agenda and included in the Commission Work Programme for 2021. It is designed as a tool to support the up-skilling and re-skilling of working age adults and builds on research that shows an increasing number of professional and employment transitions during the working age[2], as well as a rapidly changing demand for skills as a result of automation, digitisation and decarbonisation. At the same time the Covid-19 pandemic has – and will continue to have –a significant effect on Europe's labour markets and is likely to accelerate the trends already in place pre-pandemic. These include the increased demand for digital and green skills, and the growth in atypical forms of employment (around 40% of EU workers currently), where the 'normal' training responsibilities of employers are less clear, or indeed absent[3].

Against this background, levels of adult participation remain low across Europe, and well below the 2030 target of 60% set by the 2021 European Pillar of Social Rights Action Plan. The lower-qualified tend to have lower levels of participation. At the same time, many employers – who sponsor 90% of job-related training – report difficulties in recruiting skilled labour. There are also current differentials between Member States: Nordic and Western European countries tend to have higher rates of participation, while they are much lower in some Central and Eastern European Member States.

For many adults, there are barriers influencing participation in training, especially for those looking to learn new skills or enter new professions. Costs and time constraints are some of the barriers, but there is also a lack of incentives and motivation of individuals to take up training. The former category include for example insufficient investments (public and private) in adult learning, and barriers to devoting time to training, such as restricted access to paid training leave. The latter category includes uncertainties about the quality of training and its recognition in the labour market, alongside a lack of transparency about available support and training offers. In addition, training opportunities are not always tailored to individual needs and circumstances, further reducing the motivation to engage in training.

1.3. Overview of the methodology

The analytical approach for this exercise comprises a range of qualitative and quantitative analysis and assessment techniques. The work has included extensive **literature and data reviews and analysis**; **case study** analysis, including an extended analysis of the

[2] OECD Employment Outlook 2019.

[3] Including self-employment, part-time working, contracting work and freelancing.

French *Compte Personnel de Formation* (CPF), the only current operational ILA in the EU (although ILAs are being considered elsewhere); **stakeholder consultations** (including a focus group and a validation seminar) and a **public consultation** (organised by the European Commission, but reported here- Annex III); **scenario analysis** to simulate the potential impacts of the package of measures proposed in the IA, measured against the baseline, and including an analysis of the impact on participation rates, a **cost-benefit analysis** and a **macro-model** (using the BeTa model) of potential medium to longer term impacts. Details of analytical methods are given in Annex I. As set out in section 6, the report assesses social impacts (including participation in adult learning, wages, employment, working conditions, social dialogue, health, well-being, etc.), economic impacts (including the costs and benefits for individuals, education and training providers, employers, Member States, as well as the wider impacts on the economy in terms of GDP for instance) and the impact on fundamental rights. This integrated approach covering both the micro- and macroeconomic perspectives, requires a combination of quantitative and qualitative assessments.

This is in line with the Better Regulation Guidelines (BRG) and the aim of assessing and comparing the impacts of the various policy options, for which it is indicated that impacts need to be quantified whenever possible, or assessed qualitatively. Table 1 outlines the key elements of the study and how they are reported in the subsequent sections. The intervention logic is annexed (see Annex II).

Table 1 Study Elements and Chapters

Task	Methods	Position in this report
Analysis of the key characteristics and participation levels	EU and Member State literature and data review Targeted stakeholder events and public consultation (annexed to this report)	Chapter 2 Adult learning: measurement, key characteristics and participation levels
Further evidence and analysis around the problem drivers	EU and Member State literature and data review Targeted stakeholder events and public consultation	Chapter 3 Analyses of the problem definition
Review of existing baseline (EU instruments and the situation in the EU-27) as well extrapolating participation rates forward, from the baseline (what might happen anyway)	EU and Member State literature and data review Case study analysis Targeted stakeholder events	Chapter 4 Baseline scenario
A detailed review of the French ILA (the CPF), its origins, development to 2021 and achievements to date	Literature and data review Case study analysis Interview with CPF managers	Chapter 5 Individual learning accounts – the French experience
Review of possible policy options (the long list)	Literature review Targeted stakeholder events and public consultation	Chapter 6 Evidence of discarded policy measures
Analysis of the returns from training to individuals, employers and society	Literature and data review	Chapter 7 Evidence of the benefits of adult learning
Analysis to support the discussion of the policy options, including accompanying measures based on actual experience where information is available	Literature and data review Case study analysis	Chapter 8 Evidence on the policy measures

Task	Methods	Position in this report
Summary of key features in selected EU Member States and the UK concerning training entitlements and accompanying measures	Case study analysis	Chapter 9 Case Studies
Quantitative and qualitative analysis of the policy packages including sensitivity analyses	Literature and data review Simulations for modelling participation rates Cost-benefit analysis of the policy packages Macro-economic analysis	Chapter 10 Scenario analyses for the quantification
Outline of performance indicators	Literature Review	Chapter 11 Monitoring indicators

1.4. Methodological constraints

This study has been subject to challenging data and methodological constraints. The EU only has one operational ILA (with one other in Singapore) and information on the effectiveness of training entitlements, including from the numerous voucher schemes, is variable. The Adult Education Survey from 2016 is the key data source for training activity and participation rates but is five years old. The Labour Force Survey provides valuable data, but provides less detailed information than the AES and (until 2022) does not include adult learning participation over the preferred and more comprehensive 12 month reference period. Some of the academic sources including randomized controlled trials are dated but still relevant, in the absence of more recent analyses. Data on set-up and operational costs of training entitlements and accompanying measures such as registries of accredited training, adult guidance and validation systems is partial and has required us to triangulate information from various sources and in some cases to make informed assumptions. There is little quantitative analysis of the wider social and environmental impacts whilst national data sources are liable to inconsistencies that need to be factored in (e.g. which costs are included and reported). Some potentially interesting examples are very new or not yet implemented (the STAP training entitlement in the Netherlands for example), and there are time lags in some of the data sets.

To counter these methodological issues a mixed methods approach has been used, drawing data and information from various sources, and using that data and information to make informed assumptions. Standard approaches have been used for sensitivity analyses, the cost-benefit analysis and the macro-economic modelling, involving specialist inputs. The literature review has been particularly extensive and wherever possible multiple sources are used to support that analysis. The targeted stakeholder events and the public consultation provide valuable insights and reinforcement of the main arguments. Overall, care has been taken to balance information from different sources, with minority opinion (both from the literature and the stakeholder consultations) also noted. Annex 1 presents in more detail the methodology issues on 1) The quantification of impacts; 2) Qualitative approaches and 3) Data constraints.

2. Adult learning: measurement, key characteristics and participation levels

2.1. Measurement

For the purpose of EU-level benchmarking, adult learning is measured as **participation in formal or non-formal learning among adults aged 25-64 during the past 12 months.** Formal learning is characterised by an official recognition of the learning outcome by public authorities (such as a University diploma). Non-formal learning aims to improve knowledge and skills in any areas in an institutionalised setting and may take the form of courses, workshops or private lessons, sometimes resulting in credentials and certificates that are recognised by employers. It excludes informal learning (such as learning from a friend, colleague, book, guided tour or library visit).[4] **Non-formal learning is much more prevalent among adults than formal learning**: in 2016 (the most recent year with available data), 34.8% of adults participated in non-formal learning, compared to only 5.0% for formal learning.

The three **main EU statistical data sources on adult learning** are the **Labour Force Survey (LFS)**, the **Adult Education Survey (AES)** and the **Continuing Vocational Training Survey (CVTS)** on training provision by enterprises.

The **LFS** provides annual data on adult learning participation during the last 4 weeks, which has been used to monitor progress towards the 15% participation target by 2020 set out as part of the strategic framework for European cooperation in education and training ("ET 2020")[5]. However, the short reference period is considered sub-optimal for a comprehensive measurement of the short learning periods that are characteristic of adult learning.[6] Therefore, the LFS will measure adult learning participation during the last 12 months every second year starting in 2022.[7]

The **AES** collects more detailed information on adult learning than the LFS, however at a lower frequency: the most recent available data are for 2016, and further data are available for 2011 and 2007 (with limited comparability between the 2007 "pilot survey" and the subsequent survey waves). The coverage of non-formal learning activities in the AES is slightly broader than in the LFS as it includes "guided on the job training", which is closer to informal learning than the other types of non-formal learning activities and not included in the EU benchmarking framework. Most **adult learning participation data presented throughout this impact assessment are hence taken from the 2016 AES**, adjusted to correspond to the definition of adult learning used for EU benchmarking by excluding guided on the job training.[8]

The **CVTS** complements the individual-level survey data from LFS and AES with information on enterprises' training needs, planning, provision and financing from the

[4] Eurostat (2016). Classification of learning activities (CLA): Manual.

[5] Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training ('ET 2020').

[6] European Commission (2020). Towards an improved adult learning monitoring framework: Revisiting the available data and indicators.

[7] European Commission (2020). Education and Training Monitor 2020.

[8] This leads to differences between the AES participation data reported in this impact assessment to the published data by Eurostat: for instance, excluding guided on the job training reduces EU-27 participation in 2016 from 43.7% to 37.4%. The data excluding guided on the job training can be found here.

perspective of enterprises. The results of the fifth and latest wave of CVTS are available for the reference year 2015.

2.2. Key characteristics of adult learning

The AES allows for a characterisation of adult learning in terms of its **purpose**, **duration**, **providers** and **sponsors**.[9]

Concerning the purpose of adult learning, AES asks participants of non-formal learning activities whether these activities have been "mainly job-related" or "mainly personal/non-job related".[10] **About 80% of non-formal learning in the EU was mainly job-related**, a pattern that is consistent across EU Member States for both men and women, with somewhat higher shares for men (85%) as compared to women (76%). An analysis of the instruction hours spent by field of study reveals that about one fifth (18%) of adult learning in the EU concerned business, administration and law, followed by services (16%), and health and welfare (14%), arts and humanities (14%), engineering, manufacturing and construction (12%) and information and communication technologies (6%).

The reported length of an average adult learning activity in 2016 was **118 instruction hours**, with a considerably shorter average duration of non-formal (75 hours) as compared to formal (469 hours) learning activities and a noticeable **decrease in average duration compared to 2007** (when average duration was 134 hours).[11] This decrease may reflect a move towards more frequent but shorter learning activities facilitated by digital learning offers, consistent also with the overall modest increase in participation rates over this period. While formal learning is provided by Universities, VET schools or similar publicly recognised institutions, the **main provider of non-formal education are employers** (35%), followed by non-formal education and training institutions (18%). All the other types of providers, from commercial institutions to non-profit associations, from trade unions to formal education institutions, etc. constitute a mosaic of providers of adult education, with none of them amounting to more than 10%. Concerning the sponsors of adult learning, it is common for adults to pay for the costs of formal learning themselves (55%), whereas non-formal learning activities are often for free (23%) or fully paid by someone else (53%). **88% of job related non-formal learning activities were at least partially sponsored by the employer**.[12]

2.3. Participation levels and differences between groups

2.3.1. Progress in adult learning participation towards EU-level targets

Progress in participation in adult learning over the last decade has been limited and uneven across EU Member States; the EU-level target of 15% was not met in 21 of 27 EU Member States in 2020 and reached 9.2% overall, compared to 7.8% in 2010 (see Figure

[9] The figures in this section are based on European Commission (2020), Adult learning statistical synthesis report and Eurostat statistics explained: Adult learning statistics - characteristics of education and training.

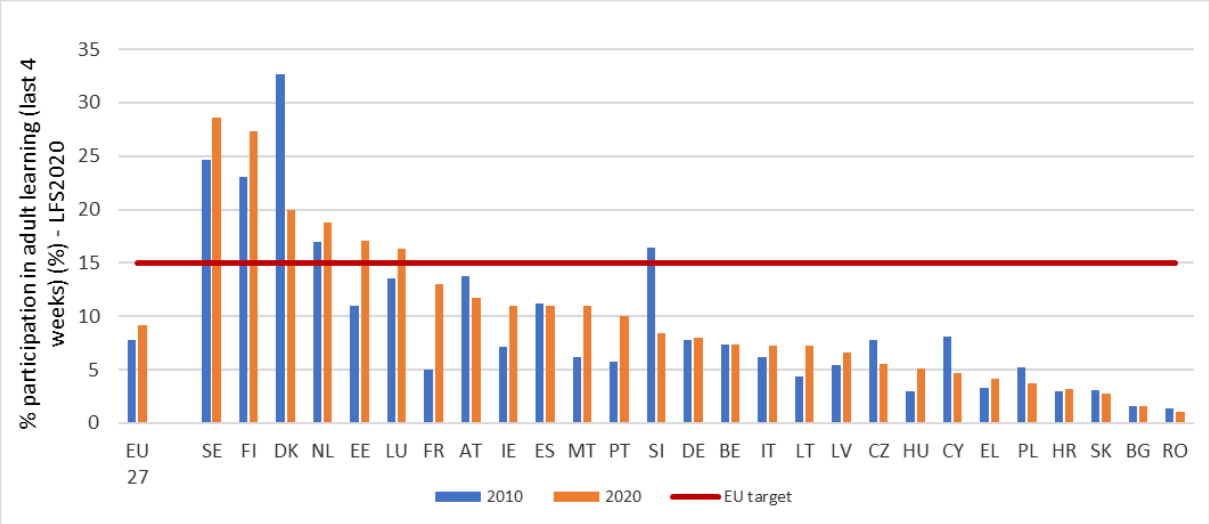
[10] No corresponding question is asked for formal learning activities, or in the LFS. Starting in 2022, the LFS will also ask for whether non-formal learning has been undertaken for mainly personal or professional reasons.

[11] All respondents that indicated to have participate in education or training in the last 12 months were asked to specify the total number of instruction hours for the most recent formal education or training activity. The presented average is an aggregated of all these responses at the EU level.

[12] Namely, it took either place fully or in part during working hours and/or was paid-for in part or in full by the employer. See Eurostat website, data code TRNG_AES_123.

1).[13] In nine Member States the participation rate even decreased over the last 10 years (Denmark, Austria, Spain, Slovenia, Czechia, Cyprus, Poland, Slovakia, Romania). While the remainder of this section will draw on the Adult Education Survey as measurement for participation in adult learning, the figure below summarises progress towards the ET2020 targets, which is based on participation as measured by the LFS[14].

Figure 1 Progress to ET2020 objectives - participation of adults 2010 and 2020



Source: Labour Force Survey[15]

According to the OECD's "Programme for the International Assessment of Adult Competencies" (PIAAC), adult learning participation in the EU is also not particularly high in international comparison, with EU average participation lagging behind the OECD average and countries such as New Zealand, Norway, the US, and Canada.[16] The figure below summarises the EU average against OECD averages and individual OECD countries.

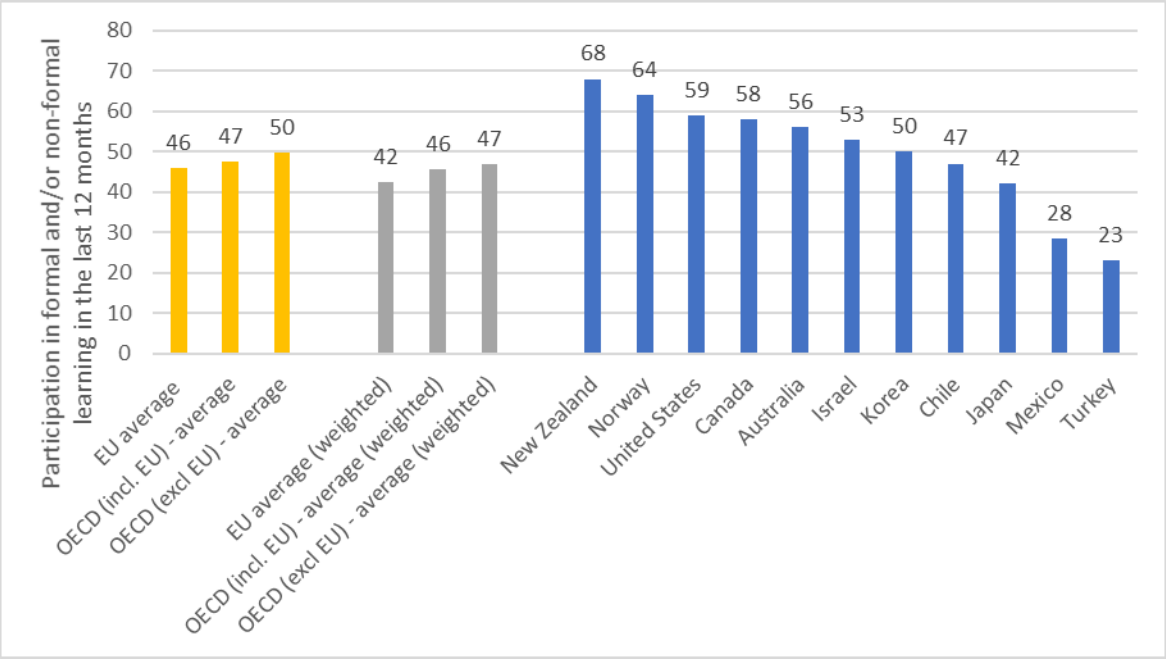
[13] Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training ('ET 2020'). OJ C 119 pp2-10, 28/5/2009.

[14] Even though the figure does not measure the full extent of participation in adult learning (see section 2 of this annex), it does highlight the challenges of meeting the EU targets, particularly also in the face of the most recent drop in participation, associated with COVID-19 lockdowns. This highlights the continued need for policy attention, which is highlighted in the results from the Adult Education Survey from 2016. It is less suitable as a basis for the remaining analysis in the impact assessment because of its narrower understanding of adult learning.

[15] Participation rate is calculated as the share of adults from 25 to 64 year in some form of learning in the last four weeks as percentage of total population.

[16] See Figure 4.1 of OECD (2019), Returns to different forms of job-related training: factoring in informal learning, OECD Social, Employment and Migration Working Papers and the PIAAC data on the OECD's website.

Figure 2 Comparison participation figures in OECD context



Source: Source: OECD PIAAC pooled data from 2012-2017[17].

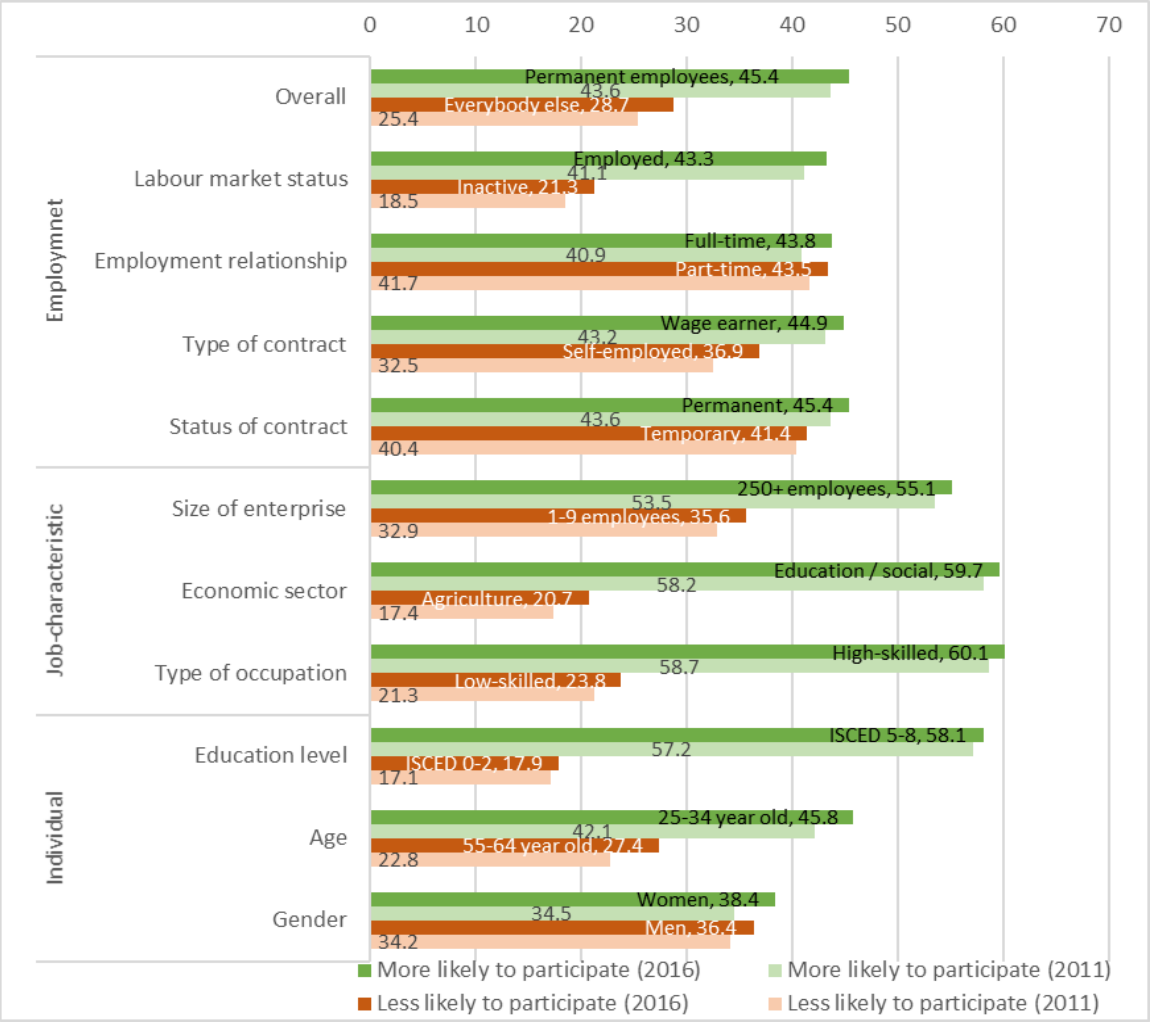
2.3.2. Participation differences between groups of adults

Existing studies show that access to adult-learning opportunities is influenced by characteristics of the employment relationship, the employer/sector as well as individual-level characteristics.[18] Figure 3 below provides an overview of participation differences for each of the key dimensions, which are further discussed in detail in the sections below.

[17] The figure only includes OECD countries for which PIAAC data is collected at the national level. The results were collected in 2012 (PIAAC round 1), except for Chile, Greece, Israel, Lithuania, New Zealand, Slovenia and Turkey (2015, round 2), and Hungary and Mexico (2017, round 3). Weighted values are based on population size as recorded in Worldbank (2020).

[18] European Commission (2020), Education and Training Monitor 2020.

Figure 3 Overview of participation figures – key characteristics



Source: AES 2016.

The scope of the various characteristics of employment status in the general population are summarised in Figure 4 below. The blue and green categories present the share of workers with a permanent contract (56.7%), among which one can find workers that fulltime and others that work part-time. This category is further split into workers in lage companies (21%) and workers in SMEs (35.7%). A narrow definition of atypical forms of work puts 18% of adults aged 25-64 into this group, consisting of: employees with temporary contracts (6.6%), self-employed (with staff 3.2%, without staff 7.4%, in total 10.6%), and others (0.8%). These represent 24.1% of all employed adults. A more common definition[19] includes part-time work among atypical forms of work, which increases this share to 27.3% of all adults and 37.6% of all employed adults aged 25-64 in 2020. In addition, a group of 5.0% of the adult population is unemployed, and another 20.3% inactive.

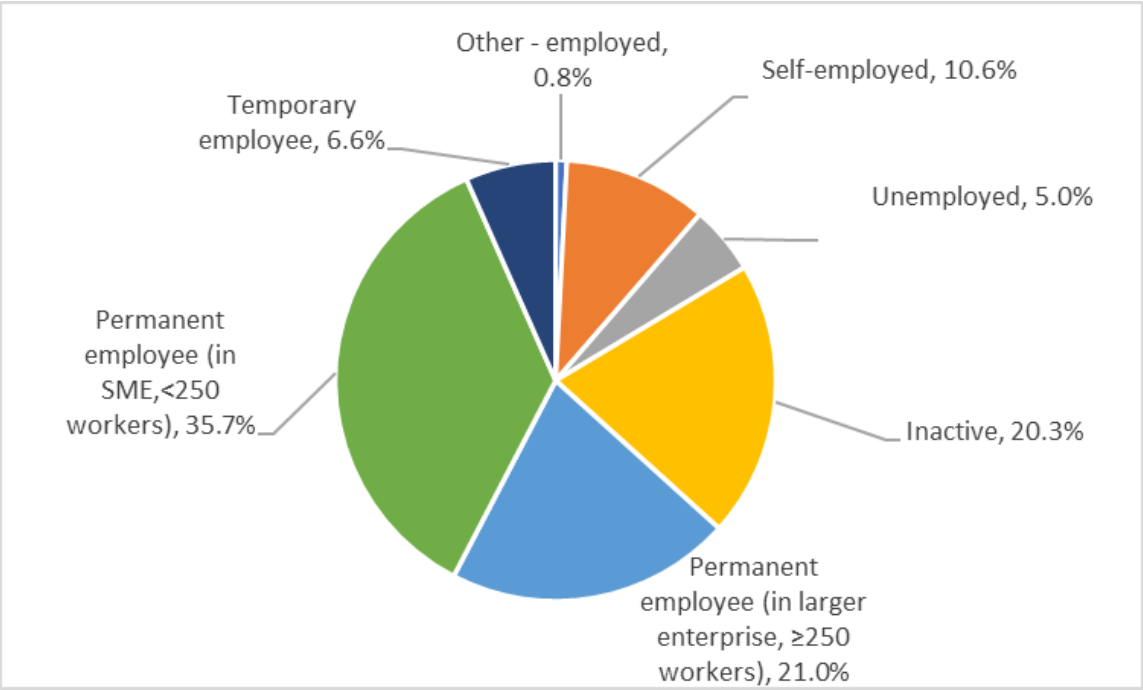
Participation differences based on characteristics of the employment status

Statistics show consistently lower participation for groups that are likely to receive less support from an employer. While employer involvement in the provision and support for job-related adult learning is crucial to ensure adequate and relevant skills development, statistics show that this has not benefitted all workers equally. The figure 4 below

[19] European Parliament (2016), Precarious Employment in Europe: Patterns, Trends and Policy Strategies.

highlights how across practically all Member States, workers that receive less support from an employer (atypical workers, who may be temporary workers, people in self-employment, platform workers – roughly 44.7 million or 20.1% of working age population, as well as the unemployed and inactive– another 60.2 million or 25% of adult population) consistently participate less in adult learning than permanent employees (28.7% against 45.4% participated in adult learning in the last 12 months)[20]. If we exclude the unemployed and inactive (not presented in section 2.1), who by definition do not receive support from employers, this gap narrows only partially, with a participation of 37.5% for all atypical workers. Figure 3 above shows how this gap between groups have been relatively constant between 2011 and 2016. More specific details of each subgroup are provided in below.

Figure 4 Size of various employment status in total population (25-64 years old)



Source: Eurostat Labour Force Survey 2020[21]

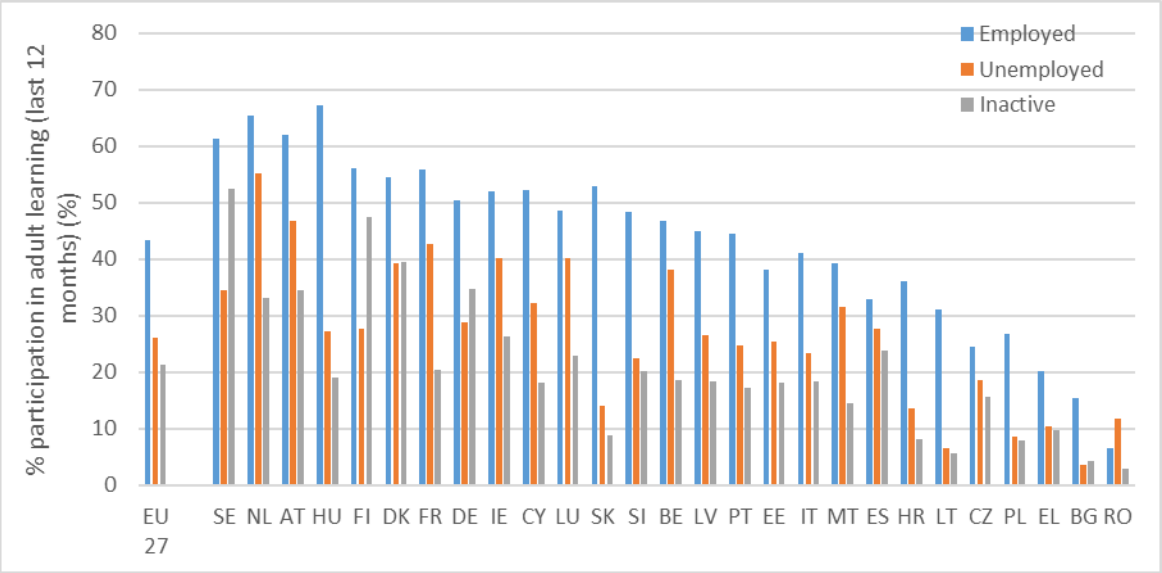
<u>Labour market status</u>: The dominance of employer-supported adult learning is clear when looking at participation by labour market status. The share of employed individuals (total population estimated by LFS2020 as 177.6 million or 75% of 25-64 population) that participated in adult learning (43.3%) is almost double that of unemployed (26%: entire group estimated by LFS2020 as 11.6 million or 5% of 25-64 population) and inactive persons (21.3%, entire group estimated by LFS2020 as 48.2 million or 20% of 25-64 population), despite the broad variety of active labour market policies that may be in place. Particularly high differences can be observed in BG, HU, LT, PL, PT, SI, and SK. The only exception to this pattern is found in RO, where the share of unemployed that participated in adult learning in the last year is higher than the share of employees. Generally, the

[20] Czechia is an exception, with higher participation shares of atypical workers than fulltime permanent workers. However, participation in adult learning in Czechia as reported in Adult Education Survey 2016 is in more respects an outlier. For instance, a considerably larger share of participation is reported as guided-on-the-job training than other Member States, which are excluded from this analysis.

[21] While the categories in the figure are defined on the basis of LFS2020, the split of permanent workers between SME and larger enterprises was conducted on the basis of the AES2016, as the LFS does not use similar categories. For this split we assume the distribution of workers across SME and larger enterprises is equal for temporary and permanent employees.

share of inactive that participates in adult learning is lower than that of unemployed, except in DK, FI and SE.

Figure 5 Participation in adult learning - by labour market status



Source: Adult Education Survey 2016[22]

The above results were confirmed also by the analysis of the Joint Research Centre of the European Commission, which also concluded that employees were more likely to participate in non-formal education and training than the unemployed and inactive[23]. At the same time, unemployed and the inactive display a higher probability of being engaged in formal education and training than employed.

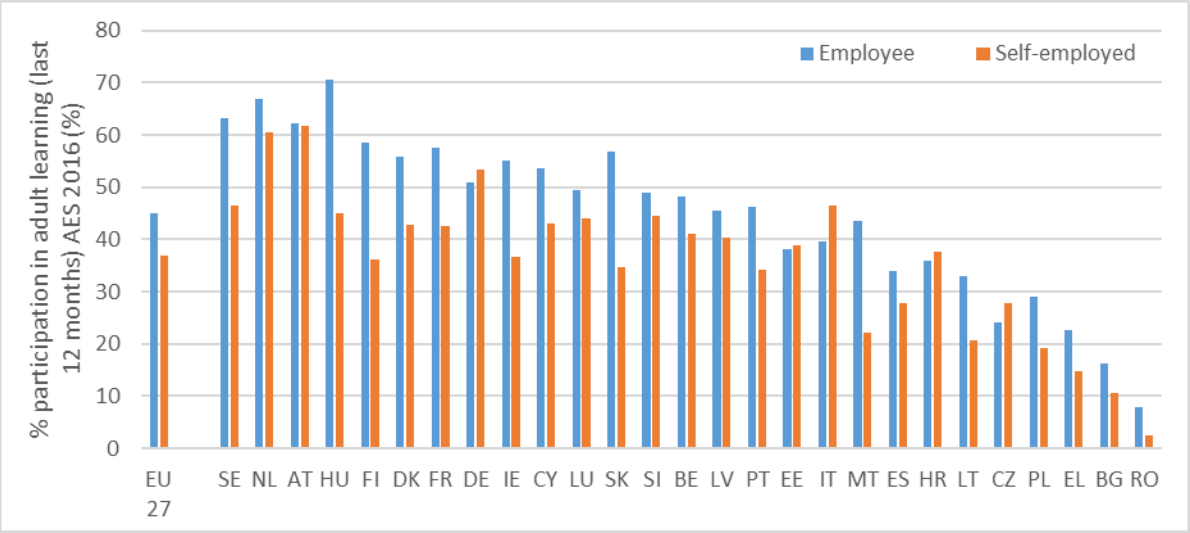
Employed/self-employed: Employees (wage earners) are consistently more often engaged in adult learning (44.9%, group size estimated by LFS2020 as 152.1 million, or 64% of 25-64 population) than self-employed individuals (36.9%, group size estimated by LFS2020 as 25.1 million, or 11% of the 25-64 population). Particularly steep differences between these groups can be identified in RO, MT, and SK. Only in a handful of Member States, self-employed report more often to have participated in adult learning, such as in CZ, HR, EE, DE, and IT. The OECD PIAAC study found an even more substantial difference, with 35% of self-employed workers participating in adult learning yearly compared with 57% of full-time permanent employees.[24] Further regressions analyses done by the Joint Research Centre on the AES data show significant differences in participation in all types of learning between employees and self-employed.

[22] Participation rate in education and training – formal and non-formal, 25-64 years old. Excluding GOJT.

[23] G. Di Pietro, Z. Karpiński, F. Biagi 2020), Adult learning in Europe: An analysis of the determinants and an attempt at forecasting. Unpublished analysis for DG EMPL.

[24] OECD (2019), Employment Outlook 2019: *the future of work*. Based on Survey of Adults Skills (PIAAC), chapter 6.

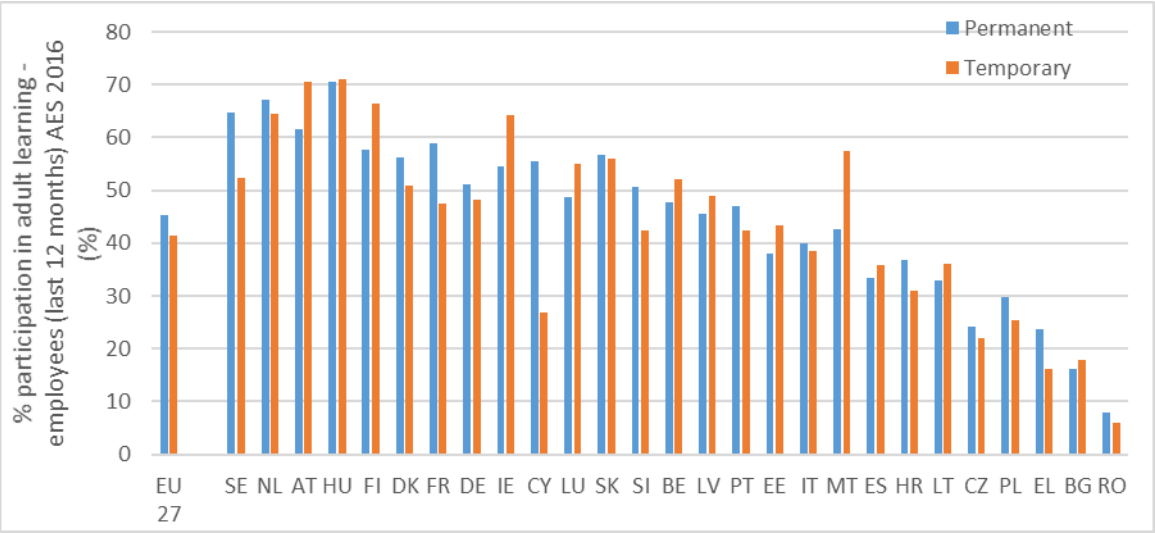
Figure 6 Participation rate, employed and self-employed



Source: Adult Education Survey 2016[25]

<u>Contract status</u>: Generally, employees with permanent contracts (estimated by LFS2020 as 134.7 million or 57% of 25-64 population) report more often to have participated in adult learning (45.4%) than employees with a temporary contract (41.4%, entire group estimated by LFS2020 as 15.8 million or 6% of 25-64 population). However, exceptions are found AT, HU, FI, IE, LU, BE, LV, EE, MT, ES, LT, and BG.

Figure 7 Participation in adult learning – by contract status



Source: Adult Education Survey 2016[26]

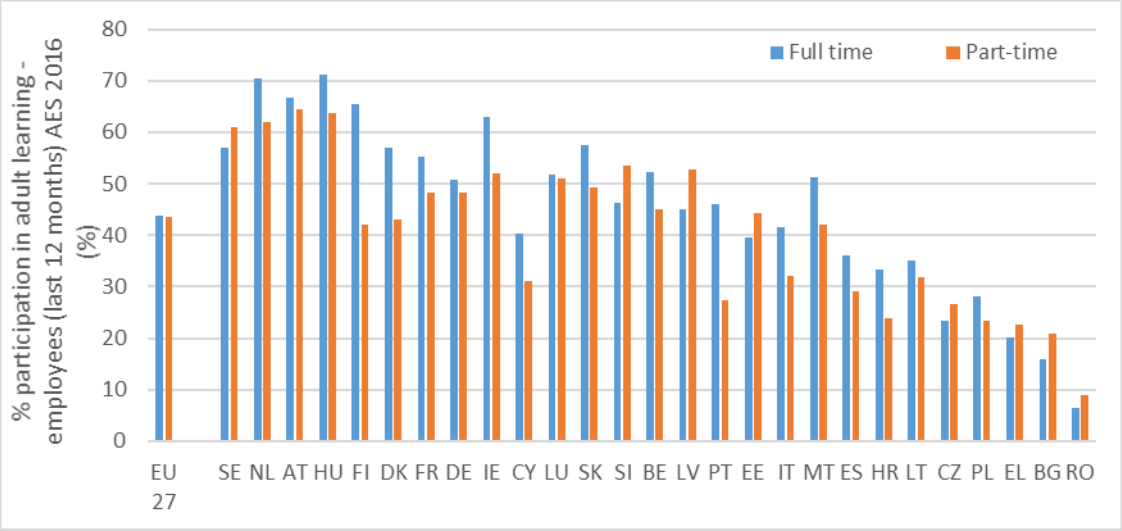
<u>Full-time/part-time</u>: Participation patterns between employees with full-time and part-time contracts are relatively similar when aggregated at the EU level. In most Member States, however, individuals with full-time contracts (estimated by LFS2020 as 146.9 million or 62%of 25-64 population) report more often to have participated in adult learning

[25] Participation rate in education and training of employees – formal and non-formal, 25-64 years old. Excluding guided on the job training (GOJT). Sorted by overall participation.

[26] Participation rate in education and training – formal and non-formal, 25-64 years old. Excluding guided on the job training (GOJT).

(43.8%) than employees with part-time contracts (43.5%, group size estimated by LFS2020 as 30.3 million or 13% of 25-64 population), except in SE, EE, CZ, LV, SI, EL, BG, and RO. Larger differences appear for part-time workers when comparing those with a permanent contract (48.8%), and those and without (38.8%). JRC regressions analysis on AES data shows that full time employees are significantly less likely to participate in formal education and training relative to part-time employees, whereas they are more likely to participate non-formal education and training[27]. This suggests how the factors of employer support and time available affect each in their own way preferences for specific types of training activities.

Figure 8 Participation in adult learning – by contract type



Source: Adult Education Survey 2016[28]

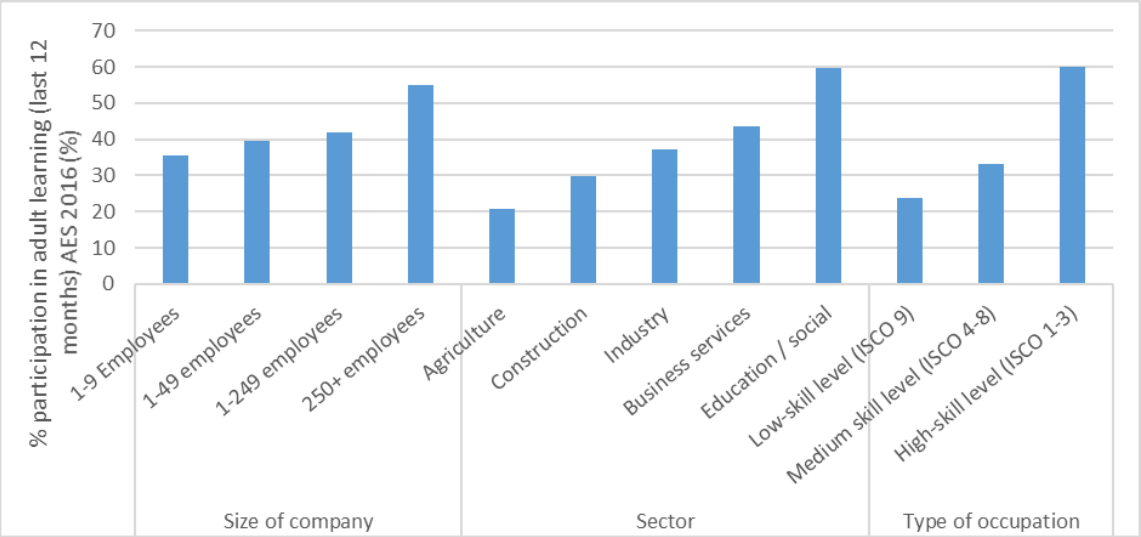
Participation differences based on characteristics of the job-characteristics

Participation in adult learning also differs considerably based on characteristics of the employer, the sector and type of occupation as presented below.

[27] G. Di Pietro, Z. Karpiński, F. Biagi 2020), Adult learning in Europe: An analysis of the determinants and an attempt at forecasting. Unpublished analysis for DG EMPL.

[28] Participation rate in education and training of employees – formal and non-formal, 25-64 years old. Excluding guided on the job training (GOJT). Sorted by overall participation.

Figure 9 Different patterns in participation for work-related characteristics – EU27



Source: Adult Education Survey 2016[29]

Size: The size of the employing enterprise is consistently associated with participation in adult learning; Figure 9 shows how participation consistently increases for each increase in size. This pattern is consistent in every Member State. A particularly substantial difference is visible when comparing the participation of employees in SME (less than 250 employees, 42.0%, estimated group size 100 million, 41.7% of 25-64 population) with larger enterprises (with more than 250 employees – 55.1% participated in adult learning, group size estimated at 52.9 million or 21.9% of 25-64 population)[30]. Differences between smaller enterprises (1-49 staff, group size estimated by LFS2020 as 78.8 million, 32.8%) and micro-enterprises (1-10 staff, group size estimated by LFS2020 as 37.9 million, 16.0%) are less profound. This outcome is confirmed by The European Continuing Vocational Training Survey and the JRC analysis Specifically, JRC regressions shows that employees working in firms with 50 or more workers are found about 7.2 percentage points more likely to participate in non-formal learning compared with those employed in firms with 10 or less workers.

Sector: AES data shows steep differences between sectors, particularly between workers in the education/social sector (participation of 59.7%, group size estimated by LFS2020 as 34.9 million or 15% of 25-64 population) against agriculture (participation of 20.7%, group size estimated by LFS2020 as 7.7 million, or 3% of 25-64 population) and construction sectors (participation 29.7%, group size estimated by LFS2020 as 12.7 million, or 5% of 25-64 population). Industry (37.1%) and business services (43.5%) score on average somewhere in between these other sectors.

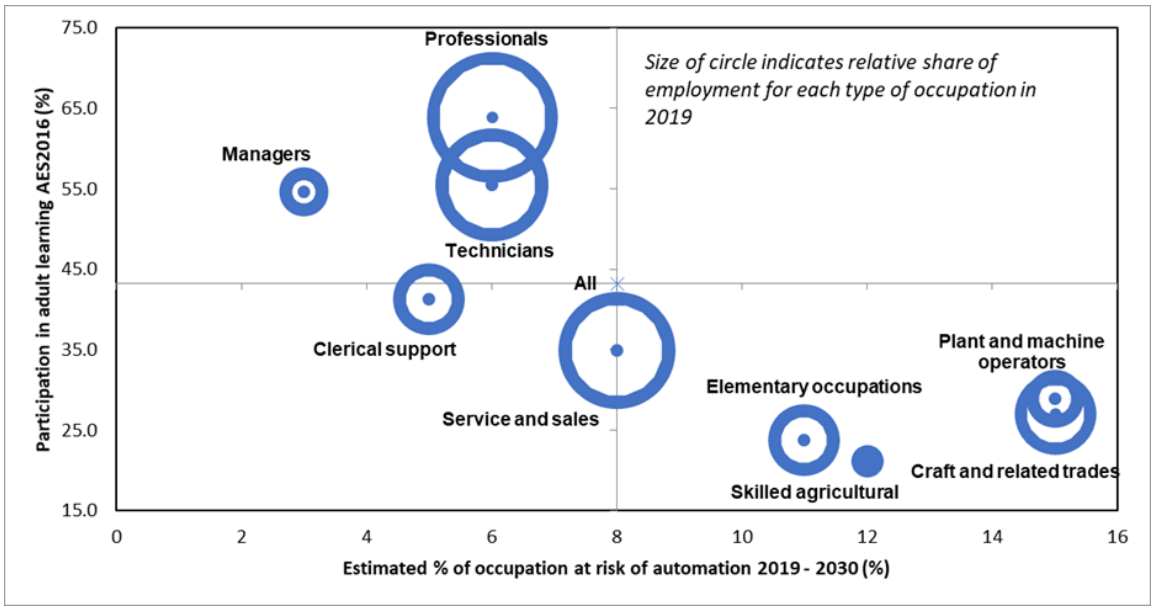
Occupation: Occupations that require low and medium level skills show the lowest participation figures in most Member States. Workers in occupations that require higher levels of skills (technicians, professionals and managers, estimated by LFS2020 as 80.0 million, or 34% of 25-64 population) show considerably higher participation figures

[29] Participation rate in education and training of employees – formal and non-formal, 25-64 years old. Excluding guided on the job training (GOJT). Sorted by overall participation.

[30] The LFS does not distinguish between small and medium-sized enterprises when asking respondents how many employees work in their company. An estimated 73.9 million people (27.1%) work in companies larger than 50 employees. If compare an estimate from DG GROW (COM(2020) 103) that SME employ around 100 million people against the LFS finding that in 2020 78.8 million work in enterprises of more than 50 employees, this would put the estimated group size of employees working in enterprises with over 250 staff at 52.9 million, or 21.9% of the 25-64 population.

(60.1%). Especially groups that run the highest risk of displacement by automation show the lowest participation figures in most Member States (see the figure below). This finding is confirmed by the OECD PIAAC survey that finds that workers from sectors at high risk of automation are 30 percentage points less likely to engage in adult learning than their peers in less exposed jobs[31].

Figure 10 Participation in adult learning and risk of automation

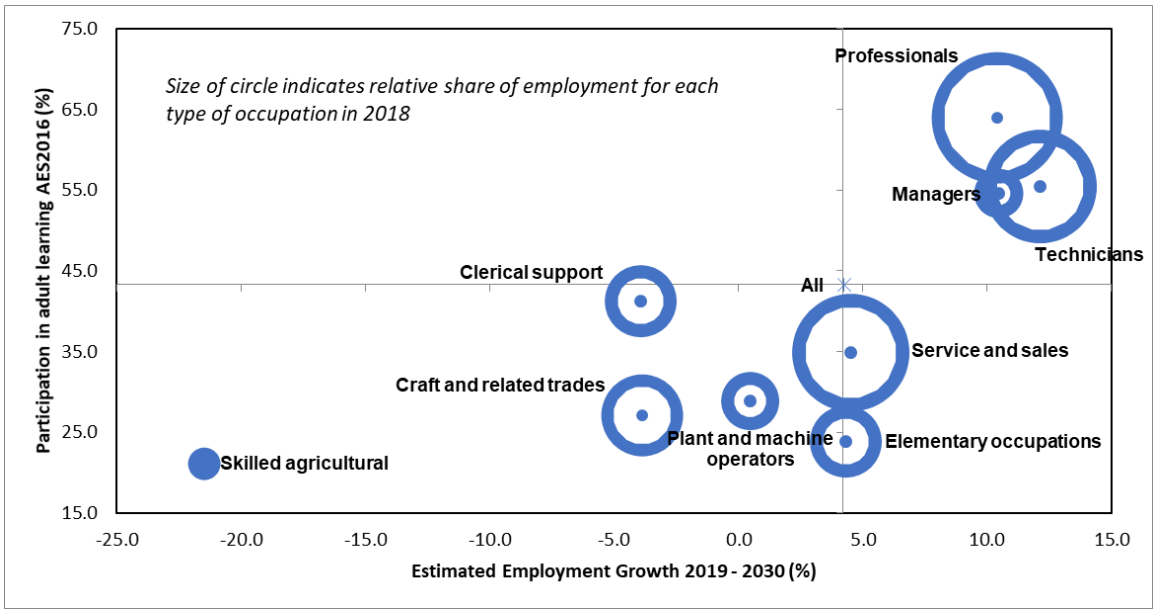


Source: Cedefop estimates from the Skills Panorama and Adult Education Survey 2016

Estimated employment growth: Based on the evidence provided above, using Cedefop's forecasts of future skill demand, it is possible to assess how participation is linked to occupations for which shortages are expected. The figure below shows projected growth in occupational employment (at the 2-digit ISCO level) projected to 2030 by occupation along with the percentage of people in that occupation who participated in adult learning. It reveals that there are a distinct set of occupations which are characterised by relatively low growth and low level of participation in adult learning (agricultural workers, machine operatives and assemblers, and skilled trades workers). In contrast, there are occupations where relatively high levels of growth are projected and where the workers participate considerably more in adult learning. It may well be that the risks facing these different groups of occupations vis-à-vis their participation in adult learning may become even more differentiated in the future.

[31] OECD (2019), Employment Outlook 2019: the future of work. Based on Survey of Adults Skills (PIAAC), chapter 6.

Figure 11 Projected employment growth by occupation by participation in adult learning

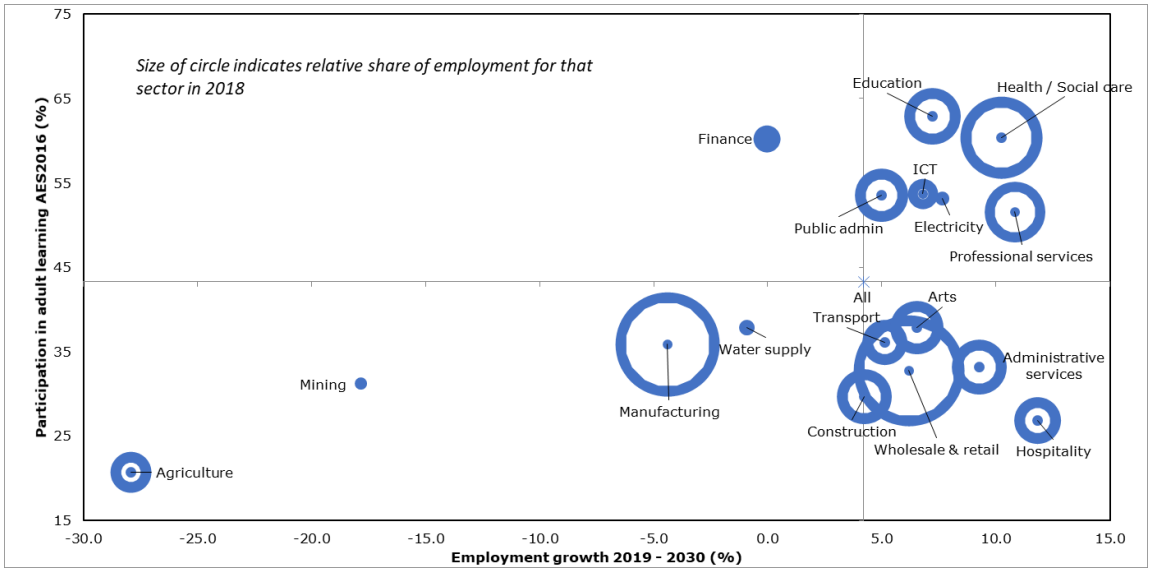


Source: Cedefop Skill Forecasts via Skills Panorama, Adult Education Survey 2016, own calculations

The figure below summarises the expected employment trends against participation figures at the sector level. It shows that there is a range of sectors where employment is expected to fall and where workers participate comparatively less often in adult learning (i.e. manufacturing, agriculture, mining, and water supply). The position of those currently working in such sectors may be a relatively precarious one: a relatively high risk of job loss with limited participation in training opportunities compared with people working in other occupations. This is particularly true against the background of different consequences of green jobs and occupational changes for different sectors per sector. Some sectors such as renewable energy and environmental goods and services (including water and waste management) have developed significantly and show potential for employment growth. For other sectors the impact varies, such as the construction sector, depending on the degree to which the existing built environment is greened through retro-fitting or, conversely, where the focus is on ensuring that new construction is greener. Some parts of manufacturing, notably the automotive sector, are gradually changing their output to produce more energy-efficient versions of the same product, with limited net employment gains. Other parts of manufacturing are producing green products and creating jobs in the supply chains of green sectors: an example is the production of wind turbines[32].

[32] ILO (2018). World Employment and Social Outlook 2018: Greening with jobs.

Figure 12 Projected employment growth by sector and participation in adult learning



Source: Cedefop Skill Forecasts via Skills Panorama, Adult Education Survey, own calculations

Participation differences based on individual characteristics

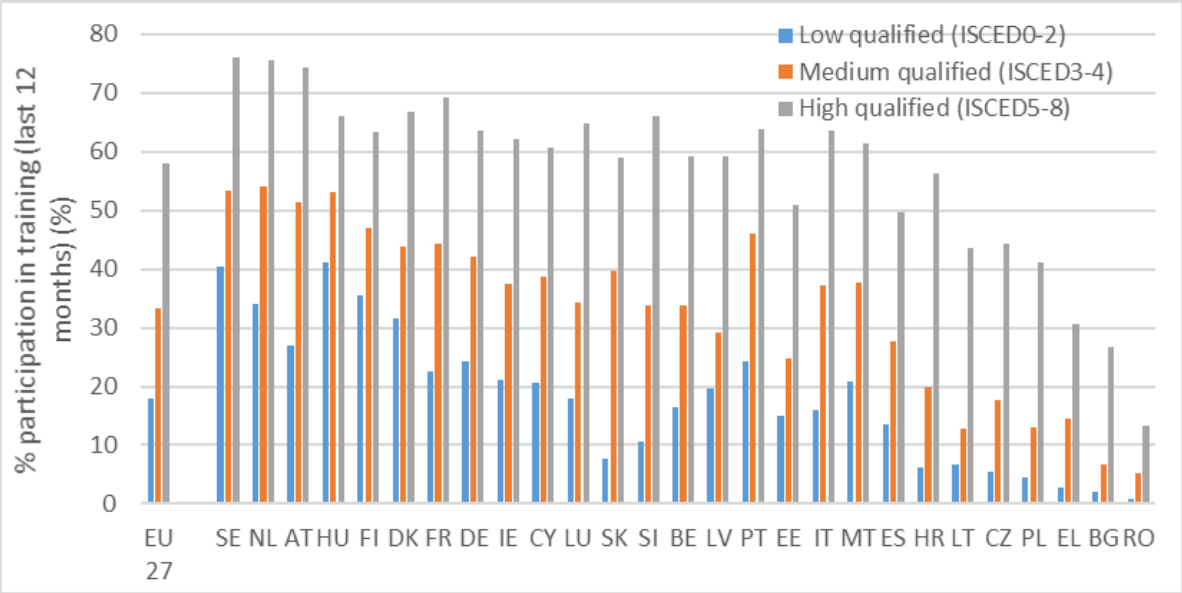
Besides the characteristic of the employment relationship, and characteristics of the occupation, individual characteristics play an important role explaining levels of participation as well, such as level of qualification, age, and sex. However, within groups of similar educational attainment and age, differences observed above continue to be important determinants of participation as well.

Educational attainment: The level of education of individuals is widely regarded as one of the driving factors of participation in education and training.[33] Low-qualified adults (estimated by LFS2020 as 49.7 million, or 21% of 25-64 population) are considerably less likely to have engaged in adult learning (18.0%) than adults with secondary (33.4%) or tertiary qualifications (58.1%). Across all OECD countries participation in adult learning by low qualified adults is 40 percentage points below that of high-qualified adults[34]. This broader pattern is largely confirmed for the EU by the AES as well, which are presented in the figure below. Low qualified workers are participating considerably less in EL, HR, PL, and RO; here the participation rates of lower qualified adults are less than a quarter of that of the general population.

[33] This is know as Matthew effect. Individuals with a higher level of education are especially motivated to deepening their learning Boeren, E. (2017). Understanding adult lifelong learning participation as a layered problem. Studies in Continuing Education, 39, 161-175; Rubenson, K. (2018). Conceptualizing participation in adult learning and education: Equity issues. In M. Milana, et al. (Eds.), The Palgrave international handbook on adult and lifelong education and learning (pp. 337-357). London, England: Palgrave.

[34] OECD (2019), Employment Outlook 2019: the future of work. Based on Survey of Adults Skills (PIAAC).

Figure 13 Participation in adult learning – by education level



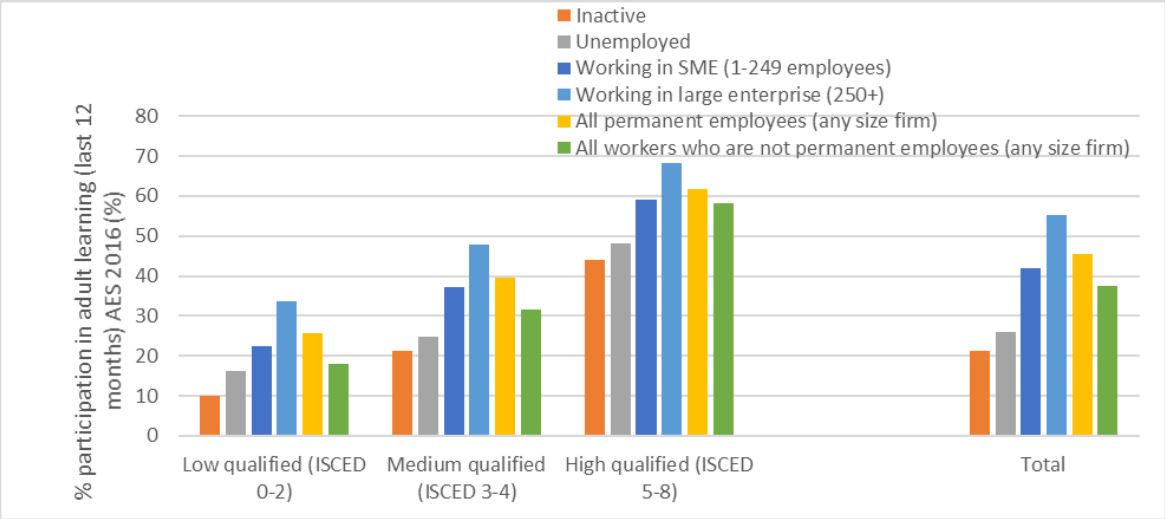
Source: Adult Education Survey 2016[35]

Regression analysis performed by the Joint Research Centre confirms this. It also shows that the size of the effect of education is stronger for non-formal education and training and informal learning compared with formal education and training. The JRC regression analysis shows that individuals with tertiary education are about between 28 and 30 percentage points more likely to participate in non-formal education and training and informal learning than those with lower secondary education or less. The corresponding figure for formal education and training is about 7 percentage points.

While education level is widely considered as one of the main determinants of an individual's participation in adult learning, one needs a broader perspective if one seeks to address such differences in participation. The barriers experienced by individuals with lower qualifications vary, based on other conditions, such as the support available by their employer, or the need for specific training on the short term for their work. The figure below for instance highlights the differences in adult learning participation across different education levels, but also shows that the differences in support for individuals continue to contribute to participation as well; among each level of qualification, individuals with permanent contracts participate more in adult learning than workers who are not permanent employees. The figure also highlights how for each qualification level, workers in larger companies consistently participated more often in adult learning than individuals in smaller companies, while the unemployed and inactive participate consistently less. This underlines the need for also better understanding the barriers that individuals at all qualification levels face.

[35] Participation rate in education and training – formal and non-formal, 25-64 years old. Excluding guided on the job training (GOJT).

Figure 14 Participation rate, by education level, employment status and size of enterprise



Source: Adult Education Survey 2016[36]

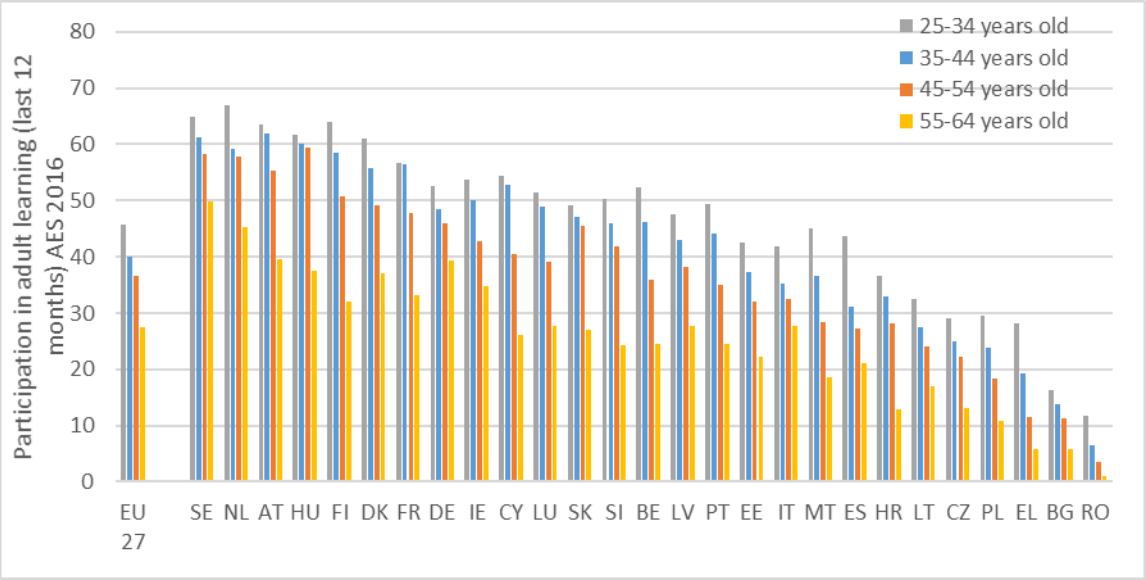
Age: Participation tends to be consistently lower for higher age categories (Figure 15 below). This pattern is observed across all Member States. Particularly the higher age group (55 to 64 years – participation of 27.4%, group size estimated by LFS2020 as 60.1 million, or 25% of 25-64 population) reports considerably lower participation rates than other groups. Nevertheless, additional analysis again points to substantial differences when comparing participation in formal and non-formal learning (recall the differences between fulltime/part-time workers)[37]. For non-formal learning the estimates point to an inverse-U relationship: the probability increases up to age 31-32 and declines thereafter. Particularly for job-related non-formal learning, the mid-aged participate most, which is consistent with a need to update skills via non-formal learning for those with some distance to initial education[38]. On the other hand, for formal learning, a U-shape is observed, with the likelihood decreasing after age 21 and increasing again after age 61.

[36] Participation rate in education and training. Excluding guided on the job training (GOJT). Note that the two categories depicting size of firm overlap with the two categories depicting the type of contract of salaried workers.

[37] G. Di Pietro, Z. Karpiński, F. Biagi (2020), Adult learning in Europe: An analysis of the determinants and an attempt at forecasting. Unpublished analysis for DG EMPL.

[38] See also Eurostat (2021), Adult learning statistics. Statistics explained.

Figure 15 Participation in adult learning – by age



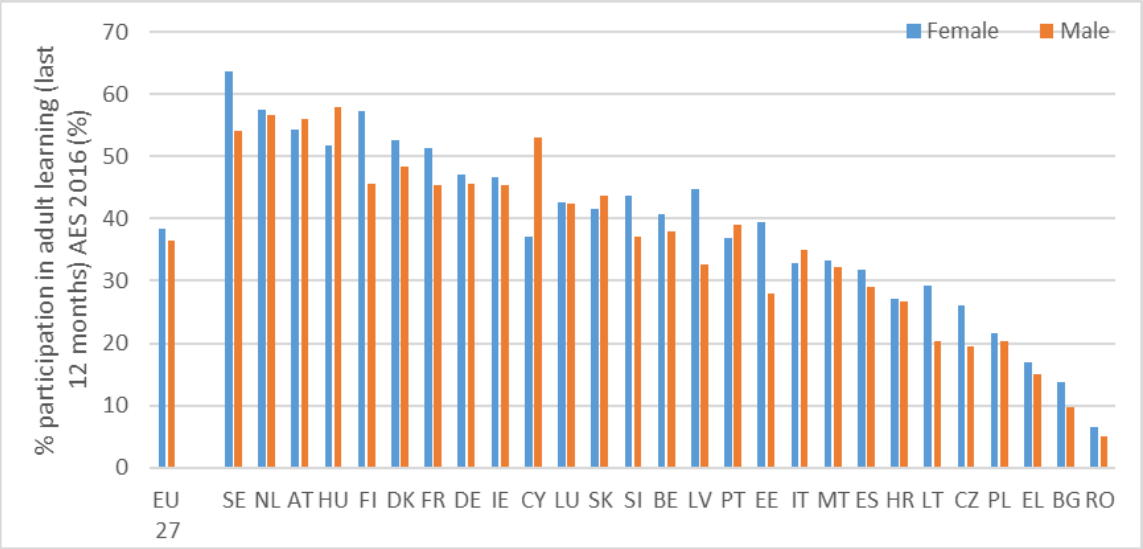
Source: Adult Education Survey 2016[39]

Sex: Women (estimated by LFS2020 as 119.4 million, or 50% of 25-64 population) seem to participate more (38.4%) in adult learning than men (36.4%, group size estimated by LFS2020 as 118.4 million, or 50% of 25-64 population) at the aggregated level, although the differences in percentage are small. In some Member States larger differences can be observed such as in SE (considerably more women than men participating in adult learning) or CY (considerably more men participating in adult learning). While these statistics do not suggest major differences in participation, larger differences exist in the types of adult learning that men and women participate. A total of 83.2% of non-formal learning activities of men was job-related, compared to 74.6 % for women. This pattern was found in almost all EU, and is most profound in EL; 90.5% of non-formal learning activities of men was job-related, against 73.5% for women. Only in CY the trend is reversed, where the share of job-related non-formal learning activities was higher for women than for men (79.3 % against 66.3 %)[40].

[39] Participation rate in education and training – formal and non-formal, 25-64 years old. Excluding guided on the job training (GOJT).

[40] Adult learning statistics - characteristics of education and training - Statistics Explained (europa.eu)

Figure 16 Participation in adult learning – by sex



Source: Adult Education Survey 2016[41]

Persons with disabilities: Data also suggest that persons with disabilities (estimated by EU-SILC as 14%, or roughly 33.2 million of the 25-64 EU adult population) participate only half of the average amount of individuals without disabilities[42]. While such data is not collected systematically in the Adult Education Survey, transposing the estimates about participation in adult learning from the Survey on Income and Living Conditions to the averages presented in this section would be equivalent to roughly the participation figures of the inactive population (21.7%)[43]. The average employment rate at EU level among persons with disabilities is also considerably lower (52.0%) than for other adults (76.2%), as a result of which they also are less likely to receive support from an employed to enrol in training[44].

2.4. Calls for action to improve participation in adult learning

Analysis of the Country Specific Recommendations over the years 2019/2020 shows that all countries received a recommendation related to skills development, mostly related to basic and digital skills. The contents of each recommendation were classified and summarised in Table 2. It shows how recommendations also referred to the need for strengthening lifelong learning; and improving the performance, quality labour market relevance, inclusiveness and flexibility of education and training systems addressing skills

[41] Participation rate in education and training – formal and non-formal, 25-64 years old. Excluding guided on the job training (GOJT).

[42] S. Grammenos (2018), Statistics on Persons with Disabilities 2018, EU-SILC 2018. The SILC only classifies fulltime training, or working less than 30hours in combination with training, so is relatively insensitive for the types of short and nonformal training that is the object of this impact assessment. Its results with regard to measuring participation in adult learning are therefore not comparable with that of the Adult Education Survey. However, the trends for persons with disabilities compared to others give us some indication of the differences in participation.

[43] Estimate based on the finding in EU-SILC 2016 that 2.4% of population with disabilities reports to have stopped working (temporarily) for training purposes, against 4.1% of the population without disabilities.

[44] S. Grammenos (2018), Statistics on Persons with Disabilities 2018, EU-SILC 2018.

mismatches[45]. While references to the education system or inclusive education may not explicitly refer to adult learning per se, such recommendations still have a bearing for adult learning. In 19 Member States, adult learning was highlighted specifically as an area to focus system-level reforms. The table below compares Member States on their existing level of participation in adult learning (the main benchmark for this study) and categorise these in three groups. The table shows that despite the variety of different adult learning systems, Recommendations single out adult learning in most Member States, both in Member States where participation is above the EU average and below.

Several Country Specific Recommendations refer to specific target groups like low qualified/ skilled, job seekers, inactive people, older workers, people with a migrant background, Roma, and disadvantaged groups in general. In these cases, the Country Specific Recommendation generally address the need for increasing adult learning and improve coverage of education and training systems and the need to strengthen quality and labour market relevance of training offer, on which the ILA initiative could contribute.

Table 2 Overview of Country Specific Recommendations 2019/2020 on skills, adult learning and performance of education and training systems

		Attention in CSR		Attention for system-level reform				Attention for skills	
MS	Participation in AL	2019	2020	Performance of education systems in general	Adult learning specifically	Inclusive education in general	Skills in general	Digital skills	Basic skills
AT	High	X	X		X		X		X
DK	High		X		X		X	X	
FI	High	X	X	X	X		X	X	
FR	High	X	X				X		
DE	High	X	X		X		X	X	X
HU	High	X	X	X	X	X			
IE	High	X	X	X	X		X	X	X
NL	High	X	X		X	X	X	X	X
SE	High	X	X				X	X	
BE	Medium	X	X	X			X		
CY	Medium	X	X	X	X		X	X	
EE	Medium	X		X	X				
IT	Medium	X	X	X	X		X	X	
LV	Medium	X	X	X	X		X	X	
LU	Medium	X	X	X	X		X	X	
PT	Medium	X	X	X	X		X	X	

[45] An analysis was made of all Country Specific Recommendation to MS for 2019 and 2020. Where recommendations focused on skills and explicitly pointed to adult learning as a way to improve such skills, these were classified in multiple categories.

		Attention in CSR		Attention for system-level reform				Attention for skills	
MS	Participation in AL	2019	2020	Performance of education systems in general	Adult learning specifically	Inclusive education in general	Skills in general	Digital skills	Basic skills
SK	Medium	X	X	X	X	X		X	
SI	Medium	X		X	X			X	
BG	Low	X	X	X			X	X	
HR	Low	X	X	X		X	X		
CZ	Low	X	X	X	X	X	X	X	
EL	Low	X	X	X	X	X		X	X
LT	Low	X	X	X	X	X	X	X	
MT	Low	X	X	X	X	X	X		
PL	Low	X	X	X	X		X	X	
RO	Low	X	X	X		X	X	X	
ES	Low	X	X	X			X	X	
TOTAL:		26	26	21	19	10	22	20	5

3. Analyses of the problem definition

3.1. Driver 1: Gaps in financial support

This section further explores how the existing financial support for adult learning forms a first driver that limits progress in increasing participation rates of adults in learning and produces inequalities. Gaps in financial support are identified due to an overall insufficient level of investments in adult learning, as well as limited coverage and fragmentation of existing support for adult learning. Each of these three elements is explored in more detail below.

3.1.1. Level of investments in adult learning

A first factor that contributes to gaps in financial support is related to the overall level of support available, i.e. the existing level of investments in adult learning. This refers to any type of financial support, which can include the supply-side coverage of the formal education system (if relevant), or specific public policies that subsidise individuals or firms in taking up adult learning courses (which may be formal or non-formal). Investments in adult learning are made by employers, public authorities as well as by individuals themselves. In most Member States, formal adult education is fully subsidised by the State until upper secondary level, while higher education and VET for adults are usually subject to fees, which are often paid by individuals. Non-formal education activities are more widely subsidized (in most cases by employers) than formal education activities[46].

The variety of different systems, contributions and actors makes it difficult to compare actual investments over time and across Member States. The collection of coherent and

[46] OECD (2019), Getting Skills Right: Future-Ready Adult Learning Systems, based on Adult Education Survey 2016.

comparable data is further complicated by the fact that public funding for adult learning is the responsibility of the central or state level in around half of the Member States; in the other half regional or local governments also play a significant role in supporting adult learning[47]. One of the few existing estimates puts the share of investments in adult learning in the EU for 2014 between 0.8%-1.2% GDP, of which public investments in most Member States tends to be less than half[48].

This estimate was updated with more recent and accurate data, by combining information from the Adult Education Survey and Continuing Vocational Training Survey, and the ALMP database[49]. No data is available to estimate the investments of publicly financed non-formal adult learning outside the domain of active labour market policies. The estimates provided are based on data from 2015 and 2016, given that its main data sources (Adult Education Survey and Continuing Vocational Training Survey) are conducted once every five/six year and the newest waves are still ongoing at the time of this study. Despite these methodological caveats, this measure comes closest to an EU-wide mapping of financial investments in adult learning. The estimates were validated the estimates for each Member by the adult learning network.[50]

The results of these estimates are presented in the figure below. This methodology estimates the total investments in adult learning at a total of 1.7% of GDP for the EU27. Because these estimates are primarily based on self-reporting, we assume that these tend towards the higher-end of estimations; actual total investments may be below these estimates, but are unlikely to be higher. This is also confirmed when compared to earlier aggregated estimates of adult learning investments, which suggested a range of 0.8%-1.2% of GDP[51]. The maximum level of estimated financing in adult learning across Member States varies substantially, from less than 0.5% in RO to almost 2.5% of GDP in Scandinavian Europe.

[47] European Commission (2020), Achievements under the renewed European agenda for adult learning (2011-2018). Report of the ET 2020 working Group on adult learning (2018-2020), page 37.

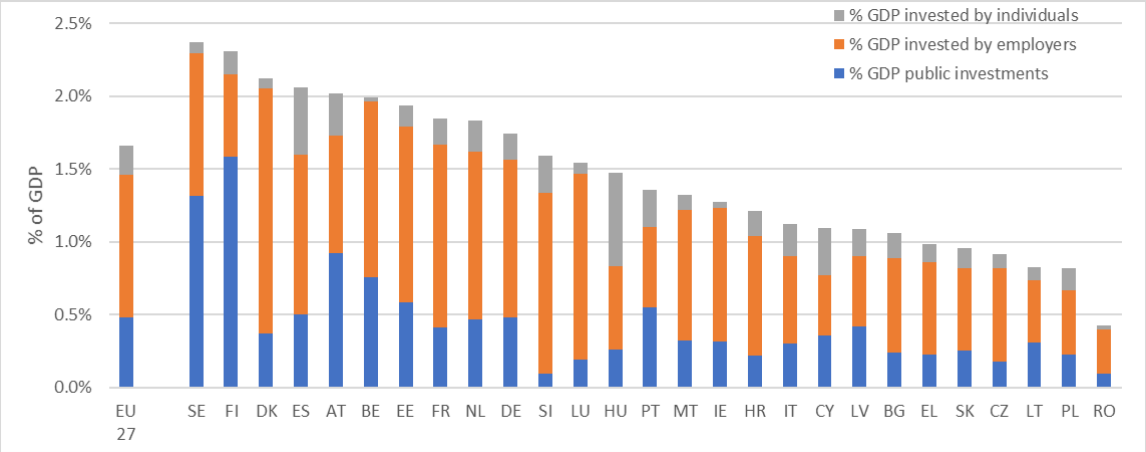
[48] Dohmen, Dieter (2014), Final Report DEVELOPING THE ADULT LEARNING Sector: Financing the Adult Learning Sector Prepared for the European Commission/DG Education and Culture.

[49] Analysis follows the approach of a recent JRC paper that explored the possibilities of further estimating investment in job-specific skills. This allows providing a more detailed and updated estimate of investments in adult learning, which cannot be derived from other sources. The JRC estimates for investments outside the scope of this impact assessment were not included. See Sekmokas, M. et al (2020), Workforce skills and innovation diffusion: trends and policy implications, R&I Paper Series, Working paper 2020/21, May. Annex 8.

[50] Mapping of available instruments conducted by the adult learning expert network for the purpose of the IA on ILAs. See Annex 4 for more information.

[51] Dohmen, Dieter (2014), Final Report DEVELOPING THE ADULT LEARNING Sector: Financing the Adult Learning Sector Prepared for the European Commission/DG Education and Culture.

Figure 17 Overview of investments in adult learning as % of GDP



Source: Based on estimates suggested by Sekmokas et al. (2020), for individuals' and household expenditures on formal and non-formal learning (Adult Education Survey 2016), expenditure on employee training by public and private employers (Continuing Vocational Training Survey 2016), public investments based on expenditures in training as part of active labour market policies (Labour Market Policies database).[52]

Figure 17 confirms the relative importance of private contributions to adult learning, most particularly by employers[53]. Substantially over half of the estimated investments can be linked to employer contributions. This is estimated at over two-thirds of the total investments in CZ, DK, FR, HR, IE, LU, MT, RO, and SI. The figure also highlights how member states with the highest levels of adult learning investments also have considerably larger shares of public investments in adult learning than member states with lower levels of investments in adult learning. Finally, Figure 17 above presents the overall share of public investments in the entire education sector, as a rough comparison of the size of the adult learning sector. It is estimated all investments (public and private) in the adult learning sector add up to roughly one-third of the total public education investments. There are considerable differences between Member States; particularly in ES, DE, and AT the overall share of investments in the adult learning sector are comparatively high against overall public investments in education. In LT, PL and RO on the other hand, the investments in adult learning remain comparatively small, also when compared against the share of total public investments in education.

A review by experts suggested that the current levels of investments in adult learning remain inadequate for ensuring sufficient quality and access in adult learning in 23 out of the 27 Member States. The research literature also confirms that actively encouraging all adults to learn would require additional investments, both of public and private nature[54]. One in five European firms for instance also indicate themselves to have underinvested in training of their workforce.[55] National experts deemed investments only adequate in four Member States (AT, EE, MT, NL). In EE, for instance, the considerable uptake in

[52] Sekmokas, M. et al (2020), Workforce skills and innovation diffusion: trends and policy implications, R&I Paper Series, Working paper 2020/21, May. Annex 8. See also European Commission (2020), Adult Learning Statistical Synthesis Report: DG EMPL, pp. 22-34.

[53] These estimates for public investments in principle include EU support for active labour market policies, in the form of ESF/YEI or otherwise. However, the extent to which these are fully reflected in the LMP database figures and are reported as active labour market policies vary per MS and per year, depending both on data availability and definitions used. For the purpose of the analysis we assume that the figure includes all relevant EU support. See for a detailed discussion for instance European Commission (2020), Labour market policy Expenditure and participants.

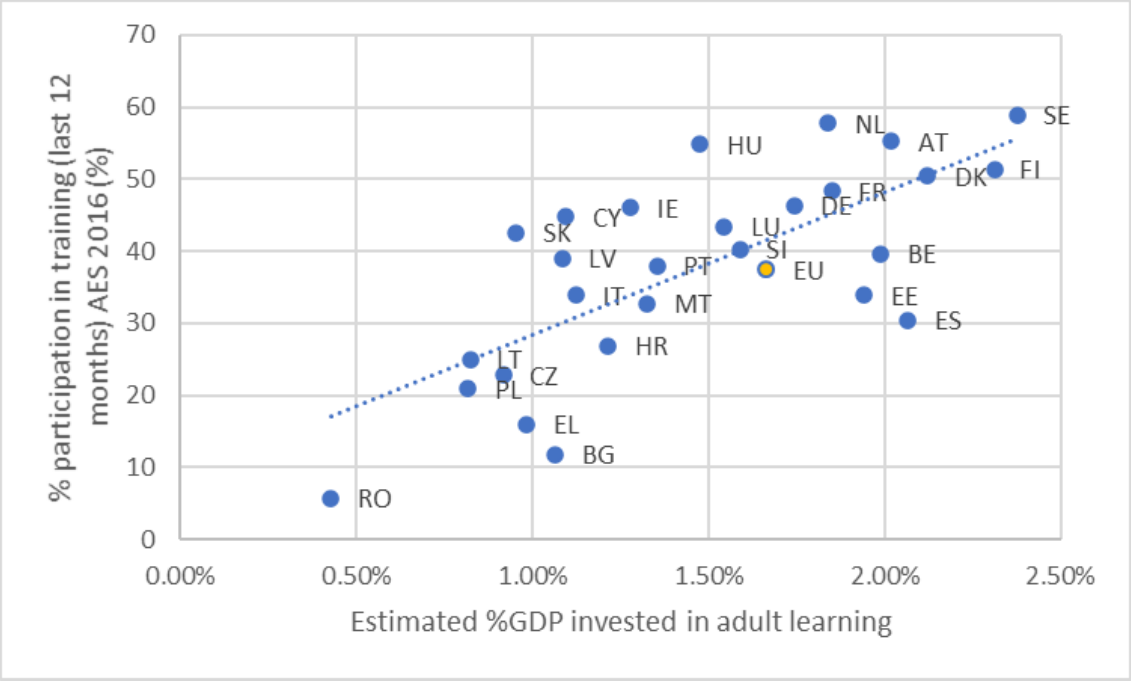
[54] G. Brunello (2020), Employer provided training in Europe: determinants and obstacles, IZA DP no 12981, f

[55] European Investment Bank, (2018), Retooling Europe's Economy.

participation since 2010, particularly among groups usually excluded from learning, is taken as evidence for the adequacy of the current level of investments to meet upskilling and reskilling needs of adults[56]. Experts in AT and the NL mentioned other challenges to participation, but highlighted that the level of investment was largely in line with the needs.[57]

The importance of investing in adult learning – be it public, private or by individuals – is further highlighted when comparing its relation to participation figures. Both elements show a statistically significant correlation (Pearson's r of 0.724 at p<.01); higher investments move together with higher levels of participation. Moreover, the level of investments does not only correlate with participation in adult learning overall but also correlates with the relative difference in participation between those in more atypical employment as a percentage of the participation of other working-age adults (Pearson's r of -0.65 at p<.01). Higher differences in participation between these groups indicate the relative share that atypical workers participate *less* than workers with permanent contracts. This means that **Member States with higher investments in adult learning** (by public authorities, employers and individuals together) **have lower inequalities in participation between permanent workers and other adults aged 25-64**, as presented in the figure below. Member States that mobilise higher overall amounts of funding for adult learning therefore not only see more often higher participation rates but also lower inequalities in the participation rates between full-time permanent employees and other adults.

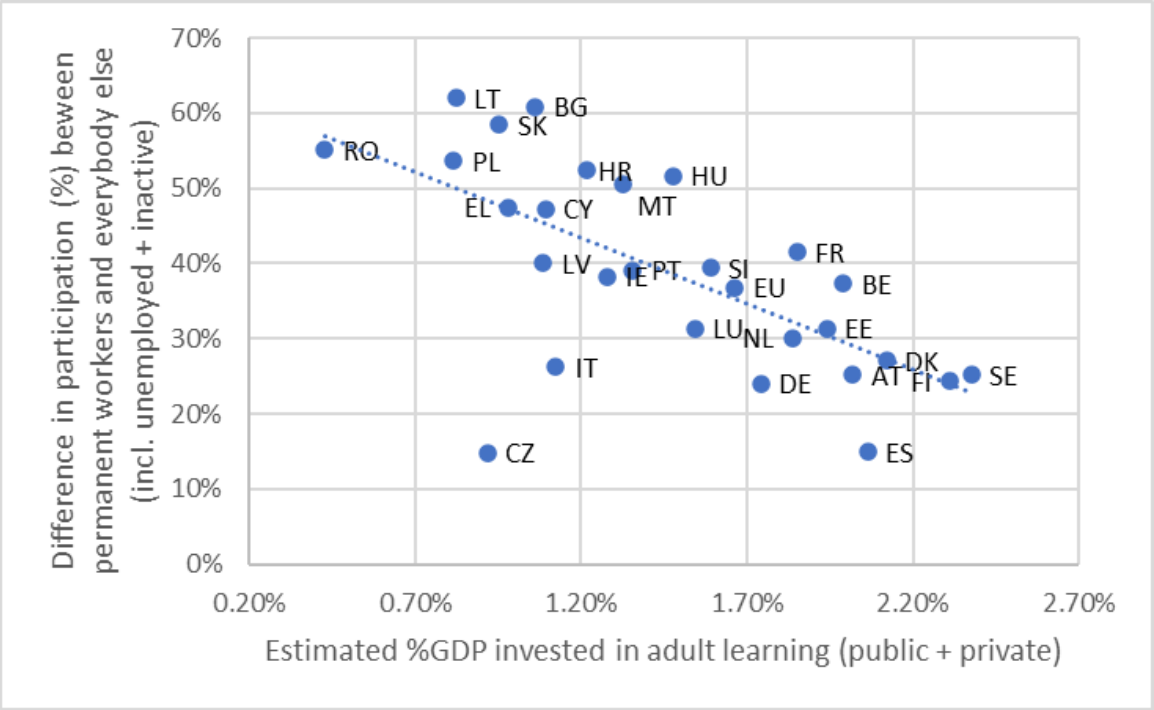
Figure 18-A Correlation between % GDP invested and participation in adult learning



[56] Ministry of Education and Research (2020) Haridus- ja Teadusministeeriumi 2019. aasta tulemusaruanne [Report of the 2019 results of Ministry of Education and Research] Tartu: Ministry of Education and Research.

[57] Individual (unpublished) country reports by Adult Learning expert network 2020, supporting DG EMPL.

Figure 19-B Correlation between % GDP invested and differences in participation of key groups



Source: AES2016 for participation figures, financial estimates based on Sekmokas et al. (2020), who estimate for individuals' and household expenditures on formal and non-formal learning (Adult Education Survey 2016), expenditure on employee training by public and private employers (Continuing Vocational Training Survey 2016), public investments based on expenditures in training as part of active labour market policies (Labour Market Policies database).[58]

3.1.2. Coverage of existing sources of support in terms of groups of adults and types of training

In addition to the overall level of investment available for adult learning, systematic gaps in coverage can be identified for specific target groups. The stakeholder consultation highlights that the costs of training is among the main factors that prevent individuals from participating in adult learning. That warrants additional attention to the coverage of existing support schemes, both in terms of the coverage of specific groups, as well as in coverage for types of training. Both elements are discussed in more detail below.

Groups of adults

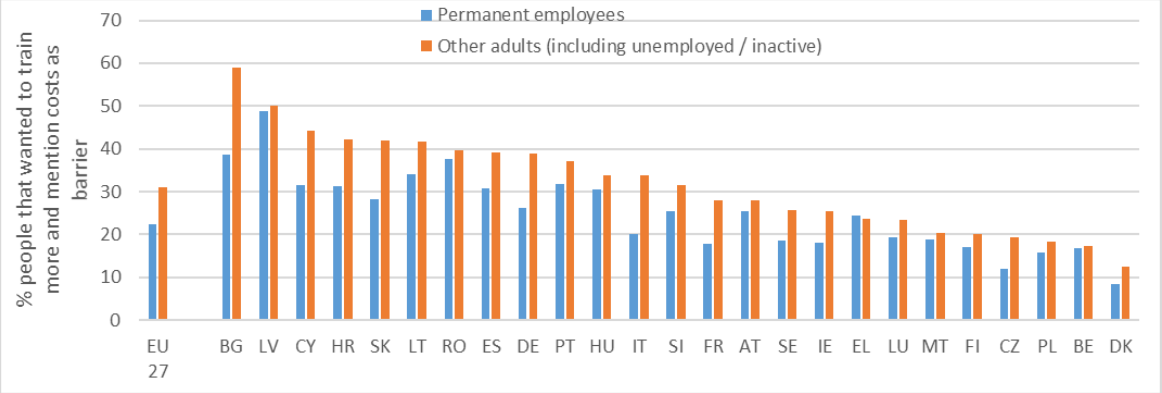
While individuals often contribute (partially) to the costs of (parts of) formal education programmes (see section 2.2), the vast majority of participants in *non-formal* education and training do not have to pay for costs to participate themselves; most often because such costs were covered by employers[59]. Such investments in the skills of staff are done with a view on possible future productivity gains and help explain the importance of the provision of job-related training among the overall share of adult learning. Nevertheless, employers need to weigh possible future productivity gains against (sometimes about returns of investments, for instance due to the risk of poaching of trained workers by

[58] Sekmokas, M. et al (2020), Workforce skills and innovation diffusion: trends and policy implications, R&I Paper Series, Working paper 2020/21, May. Annex 8. See also European Commission (2020), Adult Learning Statistical Synthesis Report: DG EMPL, pp. 22-34. Note that the graph does not display the values for Romania (difference of 69% in Romania) and Czechia (more atypical workers participate than regular), as these are out of bounds of the figure.

[59] European Commission (2020), Adult learning statistical synthesis report, p. 25.

competitors[60]. There is some evidence that such uncertainties increase substantially when investing in training of part-time staff or staff on temporary contracts[61]. The returns of training may not (fully) benefit the enterprise when an individual works only part-time, and are more likely to be negative for staff in temporary contracts. As a result, existing support for training mostly benefits individuals in permanent employment, and tends to reach people without similar stable employment relations less. People without an employer, either because they are self-employed or unemployed and inactive also receive considerably less financial support to pursue adult learning. As shown below at the level of the EU, individuals without a permanent contract consistently mention costs more often as a reason for not participating in adult learning (30.9%) than those with such a contract (22.3%).

Figure 20 Share of respondents that want to train more and mention cost as a reason



Source: Authors, based on AES2016[62]

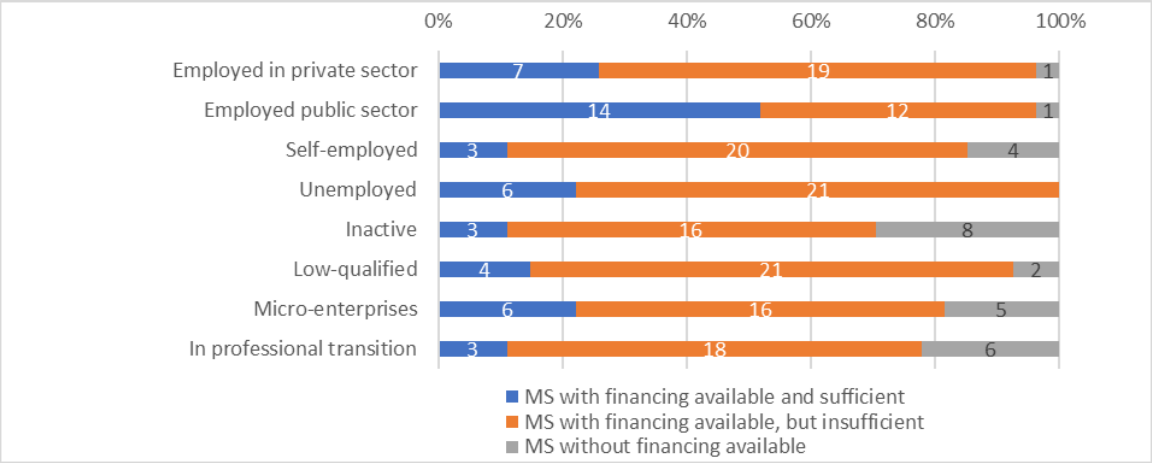
Similarly, Figure 20 below summarises an expert judgment of the extent to which available financing measures are an adequate support for different target groups. It confirms that financial support for employees with regular contracts is more often in place than instruments for other groups, such as self-employed, unemployed and inactive, as well as individuals in professional transitions.

[60] See for instance: J. Mohrenweiser, T. Zwick, U. Backes-Gellner (2013), Poaching and Firm-sponsored Training: First Clean Evidence, Discussion Paper No. 13-037.

[61] D. Poulissen, A. de Grip, D. Fouarge, and A. Künn-Nelen, (2021), Employers' Willingness to Invest in the Training of Temporary Workers: A Discrete Choice Experiment, No 14395, IZA Discussion Papers, Institute of Labor Economics (IZA).

[62] Other adults include other employees (employees with a temporary contract, self-employed and family workers), as well as unemployed and inactive.

Figure 21 Overview of adult learning expert mapping – adequacy of support per target group



Source: Authors, based on mapping of available instruments conducted by AL expert network for the purpose of the IA on ILAs

The size of an enterprise is also a relevant factor for the level of support for training its workers. Data consistently shows that larger enterprises more often offer training opportunities to workers than smaller enterprises[63]. The OECD estimates that staff in SMEs participate in 50% fewer training activities than those of larger firms[64]. Most recently, the European Company Survey also confirmed this, showing that small establishments were most likely to train less than 20% of their workers during working time, while large establishments were least likely to do so[65]. SMEs often find it difficult to financially support learning activities and ensure replacement of staff, due to their small size and the relatively high costs for training. Larger companies more often have explicitly developed career plans and internal growth opportunities, linked to training budgets and specific training programmes.

Without the financial support from an employer, an individual who wants to pursue training will need to mobilize other means of support, by themselves, family members, or – where available – public support measures. In case they do not succeed, participation in adult learning can become too costly, which is reflected in the lower participation in training of atypical workers (see section 2.1). An analysis of Eurofound's Survey on Living Conditions for instance highlights how people at risk of poverty mention the costs of training as barrier for participation almost three times as much as other respondents[66].

This finding offers further evidence that the available public support measures, which in theory are designed to make up for the differences in coverage, insufficiently help reducing cost barriers to participation. Across the EU, the most common public support measures available to individuals to encourage participation in adult learning are (1) tax incentives, (2) vouchers, and (3) subsidised loans. The presentation of the baseline scenario explores more in detail how each of such public support measures is implemented across the EU (see section 5.1). This section focuses on the adequacy of these measures to cover the groups not covered by employer-sponsored training.

[63] Cedefop (2019), Continuing vocational training in EU enterprises: Developments and challenges ahead.

[64] Martinez-Fernandez, C. and S. Sharpe (2013), "Overview of training and skills development in SMEs", in Skills Development and Training in SMEs.

[65] Eurofound and Cedefop (2020), European Company Survey 2019: Workplace practices unlocking employee potential, European Company Survey 2019 series, page 92.

[66] Based on 2016 SILC module, available at Eurostat.

First of all, tax incentives allow adults to deduct costs for continuing vocational training or adult learning from their individual income tax base or tax due. However, by design this type of instrument is not particularly effective for the groups that are not covered by employer-sponsored training. Most workers without permanent contracts are also more often located at the lower end of the income distribution. Tax incentives for these individuals are often less effective because their tax contribution is also toward the lower end or even zero – depending on their income. Moreover, tax incentives are often not used to their potential, usually because individuals are not always aware of all opportunities of tax deductions[67]. Primarily individuals that are supported by tax advisors can make the most out of these initiatives, which tends to further favour those found on the higher end of the income distribution. Thirdly, tax incentives generally offer refunds *after* filing tax returns, but still require the individual to finance the costs for training themselves. Because of this built-in bias, deadweight losses of tax incentives are generally relatively high; while it supports individuals to participate in training, it has a limited effect on increasing participation because the measures support those that would have entered into training programmes anyway.

Training vouchers are used to offer individuals a targeted means to overcome costs of training as a barrier to participation. Individuals receive a voucher, which can be used to cover the cost of selected training programmes. However, vouchers are not in place in all Member States, and existing voucher schemes usually have narrow target groups. For undifferentiated support, the evidence suggests that higher qualified people are over-represented among training voucher users.[68]

Thirdly, public support can also take the form of (subsidised) loans. Subsidised loan schemes allow individuals to borrow financial resources on favourable conditions against their future income to cover part of their (education and training) expenditure. The state may support the availability of loans and co-finance loan-related costs to encourage participation in adult learning. As a public support measure, subsidised loans are more common for higher education and are less common for job-related adult learning[69]. Loans are more adequate for longer duration of (formal) higher education programmes, while adult learning programmes are often quite different. Its contribution to increasing participation in adult learning is therefore relatively limited, also because loans do not always address the uncertainties related to the benefits of upskilling. Where the provisions for repayment of loan schemes are not tied to (increases in) future income, contracting these comes with personal financial risk, for instance that a started programme is not completed successfully or that a programme does not effectively contribute to sustaining or achieving a better-paid occupation. Particularly for individuals with uncertain incomes (temporary employment, self-employment), such loans – even if subsidised – can remain too risky and therefore not adequately support those not supported by employers. More details about the adequacy of (subsidised) loan schemes are discussed in section 6, where the discarded measures are presented in more detail.

Types of training

The dominance of employer-sponsored training as shown above has implications for the types of training supported. Employer-sponsored investments in the skills of staff can be expected to prioritise the types of training that directly benefit productivity levels of the enterprise. This is reflected for instance in the relatively small share of employer-sponsored training dedicated to more transversal skills of employees, such as general IT

[67] For instance for the Netherlands CPB (2016), Evaluatie aftrekpost scholingsuitgaven.

[68] Dohmen, D., et al. (2007), Aktuelle Trends der Weiterbildungsfinanzierung – Eine Übersicht über die Entwicklungen in ausgewählten europäischen Ländern, Berlin.; Dohmen, Dieter (2010), Bildungsgutscheine zwischen Theorie und Praxis, in: Heiner Barz (ed.), Handbuch Bildungsfinanzierung, Wiesbaden.

[69] Cedefop (2012). Loans for vocation education and training in Europe. Research paper.

skills[70]. The selective coverage of specific types of training among a select group of permanent employees risks limiting the resilience of European labour markets, and insufficiently allow individuals to prepare for future shifts in skills demands.

Evidence from the OECD suggests that job stability has decreased in most EU countries (particularly when controlling for ageing of the workforce), which is a trend that reflects increases in job mobility[71]. This trend is particularly evident among workers with lower qualifications and is not exclusively concentrated among youth. Against these findings, the inadequate levels of supporting training for individuals in professional transitions (see above) particularly calls for attention. An individual that is considering changing occupations or sectors is unlikely to be financially supported by his employer to pursue training towards such transitions. This is particularly relevant from the perspective of the green and digital transitions, which will require considerable re-skilling of workers, within and across occupations and sectors. An effective response to these transitions requires support for individuals to make the professional transitions necessary to respond to future skill demands on the labour market.

The above shows the extent of existing gaps in support for individuals in atypical employment and others that do not receive support from employers (unemployed, inactive) to participate in training. The persistent differences in participation trends show that existing public support measures have proven inadequate to extend coverage more evenly to a broader population. For among those that are supported by training, this has implications for the type of training as well. The importance of employer-sponsored training creates a bias towards training to meet short-term skills demands, which do not necessarily coincide with the longer-term skills demands of individual and changing economies.

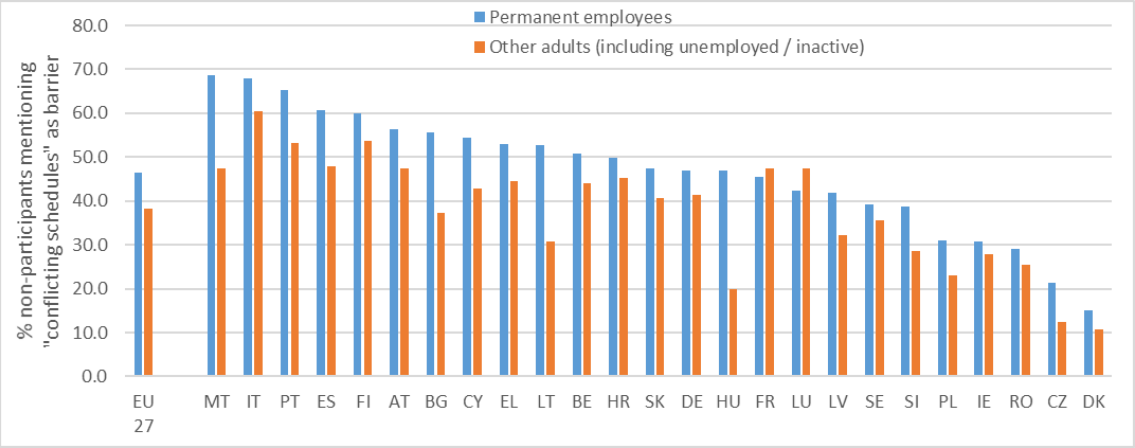
3.1.3. Barriers to devoting time to training

Conflicting commitments of individuals and insufficient time available for training are other important barriers to participation, as shown in the figure below. Time is one of the most often mentioned barriers by permanent employees (46.3%), and to a lesser extent by other adults (38.1%). This section delves further in understanding barriers to devoting time to training from the perspective of employers. Personal reasons that limit individuals from devoting time to training also affect participation and are discussed in more detail under driver 2 (motivation).

[70] European Commission (2020), Facing the Digital Transformation: are Digital Skills Enough? The Continuing Vocational Training Survey in 2015 for instance shows that only 13% of training by employers is focused on more transversal skills, such as general IT skills, and less than 1% on numeracy and literacy skills.

[71] OECD (2019), Employment Outlook: The Future of Work.: chapter 3.

Figure 22 Share of respondents that want to train more and mention conflicting schedules as a reason



Source: Authors, based on AES2016[72]

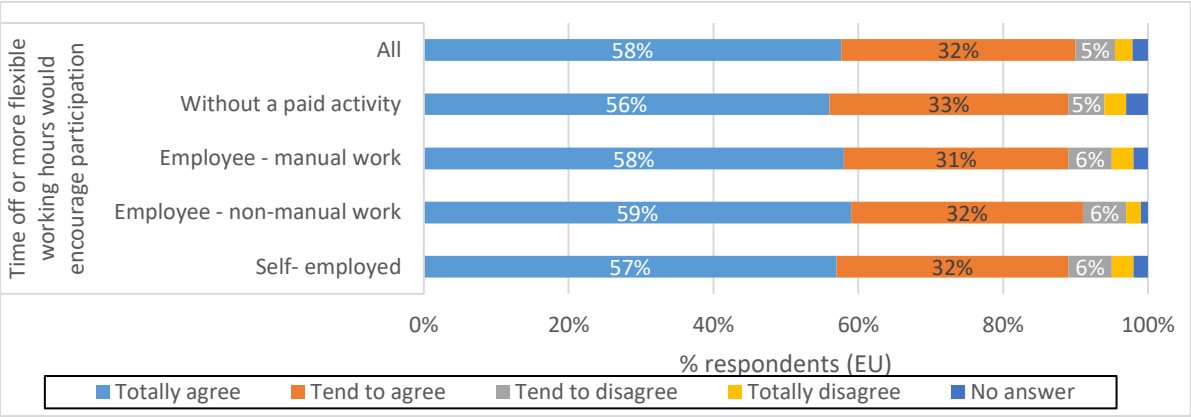
The relatively high short-term costs of freeing an individual from the workplace to learn, and investing in an employee's training contributes to a possible misalignment of incentives for employers, and can act as important barrier to participation in adult learning. A Cedefop mapping exercise shows how access to training leave provisions was much more restricted based on the features of the employment relationship (i.e. more available to workers with open-ended employment relationship, with some minimum work experience or minimum duration of the employment relationship)[73]. Employees in SMEs are also found to be at a disadvantage. Smaller organisations face more often considerable difficulties in organising the training leave practice, i.e. in terms of organisation of the work and possible (temporary) replacements[74]. This is reflected in the lower participation rates in education of employees in SME. Respondents to the 2020 Cedefop perception survey confirm this possible relation to participation; 90% of respondents at the EU level respond affirmative when asked whether flexible working hours or time off work can encourage more adults to participate in work-related learning and training. Employees responded most often that time off from work or more flexible hours would encourage participation.

[72] Other adults include other employees (employees with a temporary contract, self-employed and family workers), as well as unemployed and inactive.

[73] Cedefop (2012), Training leave. Policies and practice in Europe.

[74] Cedefop (2012), Training leave. Policies and practice in Europe.

Figure 23 Respondents in agreement that flexible working hours would encourage participation – by employment status



Source: Cedefop Perception survey (2020)

In addition to more flexible working hours, the existence of a right to training leave can also reduce the timing constraints that acts as barriers to training. Such provisions may be agreed between employees and their employers directly, but may also be granted as a right in certain sectors through collective agreements. Where individual or sectoral agreements are not sufficient as a guarantee to ensure training opportunities, public authorities can step in through the introduction of a statutory right to training leave, which may refer to paid or unpaid leave.

In 2020, a total of 22 of 27 EU Member States had some form of national legislation on paid training leave according to national adult learning experts[75] and 24 of 27 had such provisions according to the preliminary updated version of Cedefop's "Financing of adult learning" database (see section 4.4.4), while only twelve out of 27 EU MS have ratified the 1974 ILO convention on paid training leave[76]. Despite such attention in legal form, actual implementation of the provisions for training leave varies considerably. An evidence review shows how the take-up of paid education leave schemes across the EU has been rarely above 1 per cent[77]. This is confirmed by European trade unions in particular, who highlighted the limits of practical implementation of training leave provisions across most Member States in the public consultation. Furthermore, adult learning experts underline how the current way (paid) training leave provisions are organised further contribute to the existing differences in participation between permanent employees and individuals with other types of contracts (see for a more detailed discussion section 4.2). Inequalities in participation between permanent workers and atypical workers are the logical consequence if the first can take a (paid) leave from work to study, and atypical workers cannot.

3.1.4. Fragmentation of existing support

Adult learning is a complex policy field, and does not only fall within the competences of Ministries of Education across the EU. Responsibilities for adult learning policy is often divided across several ministries and agencies (e.g. education, social affairs, labour,

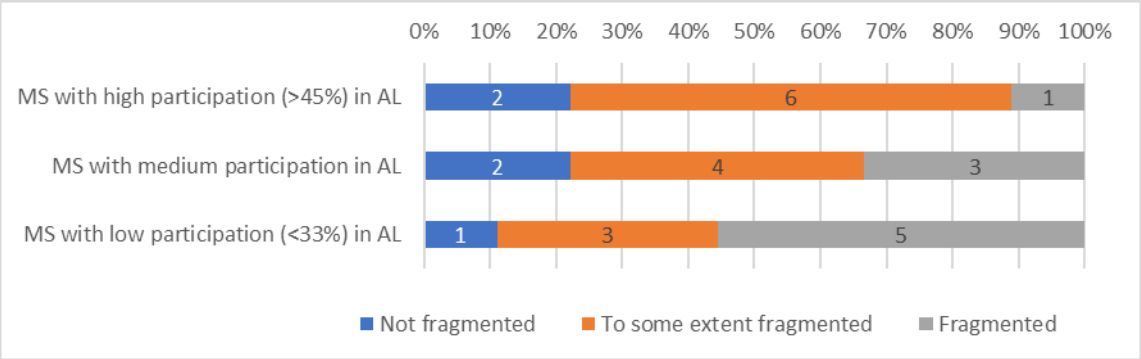
[75] Mapping of available instruments conducted by AL expert network for the purpose of the IA on ILAs.

[76] ILO, C140 - Paid Educational Leave Convention, 1974.

[77] Cedefop (2012), Training leave. Policies and practice in Europe.

migration, justice) and several levels of policy making (municipal, regional, national)[78]. This often results in a situation where adult learning policy is fragmented across these various levels, which has implications for the effectiveness of support measures that focus on increasing participation.

Figure 24 Overview of adult learning expert mapping – fragmentation of financial support



Source: Authors, based on mapping of available instruments conducted by AL expert network for the purpose of the IA on ILAs

Fragmentation of support measures is a challenge in a majority of Member States, and is more common in Member States with lower participation rates. Particularly in CZ, EL, IT, LT and LV, the fragmentation of responsibilities across different governmental levels reduced the effectiveness of existing support measures; experts point to a negative effect on participation. These Member States all have support measures in place for adult learning, but these are either very specific financial measures or project-based support mechanisms, which together make up an incoherent patchwork of support, with - at best - specific measures for specific situations, and in other cases gaps in coverage (see above). The impacts of the fragmentation that results from too specific support measures become obvious when individuals do not neatly fit into the predefined categories of that policy. For instance, the case of DE and IT shows that support mechanisms for unemployed individuals may consist of access to guidance and training, provided by PES or related services. However, the moment this individual enters short-term employment, he/she loses the entitlement to this support measure, even if the initial training needs still need to be satisfied. Related to this are limitations to the types of training that are often attached to support measures; support measures for training unemployed generally do not cover the cost of longer-term and/or formal education programmes, regardless of the specific needs of that individual[79].

The issue of fragmentation is apparent for the complex adult learning sector as a whole, but it is also highlighted as a specific challenge for the sub-sector of adult learning in the workplace. A 2016 mapping by experts in adult learning shows that only two member states (HU and LU – both with participation rates above the EU average) have comprehensive policies in place supporting adults learning in the workplace, whereas 11 member states have different policies in place that are not sufficiently coordinated or only partially cover the area of learning in the workplace[80]. Combining this with the broader field of adult learning, which extends to outside learning in the workplace, both for formal and non-formal education, thus paints an even more fragmented picture.

[78] European Commission (2018), Promoting adult learning in the workplace - Final report of the ET 2020 Working Group 2016 – 2018 on Adult Learning.

[79] See for instance the German and Italian country reports of Adult learning network.

[80] European Commission (2017), Analysis of self-reported country factsheets from Member States on adult learning in the workplace. Produced by ET2020 working group.

The fragmentation of supporting policies for adult learning poses a problem to effectively encourage participation of learners from all target groups into learning, but particularly those in more vulnerable situations. An isolated policy measure may address a single barrier to participation, but if it does not help lifting the multiple barriers at the same time, it may not effectively help improve participation. Participation in training requires not only the coherent financial support for training, but especially more vulnerable groups also depend on support for other types of costs, such as those related to subsistence, childcare or transportation. Such differences are mostly visible through different levels of participation by individuals across different types of welfare regimes. Systems where support is not coherently offered are less able to support individuals reconcile private family responsibilities with work and/or training responsibilities, which leads to lower participation rates in training, of both women and men[81]. Note that fragmentation is not necessarily the same as decentralisation. Decentralised support measures do not necessarily fragment support from the perspective of individuals. As long as individuals can apply for complementary support measures in a single place (where funding may come from the central authorities, or be decentralised), fragmentation is not an issue.

Where this is not the case, and an individual depends on multiple support measures, with different responsible agencies and differences in eligibilities, the complexities for potential learners limit the potential to make effective use of these. Vulnerable groups in particular, who would benefit the most from training, may depend on a variety of support measures to reduce their barriers to training. However, in order to benefit from such measures, such measures need not only be in place, but they also need to be aware of them. Fragmented support policies make this even more challenging and risk excluding target groups that would benefit most. As such, fragmentation of support complicates not only policymaking, but also communication efforts when developing an approach to specific target groups. This is for instance highlighted in the case studies conducted for this study. In EL, one of the main challenges of the existing voucher schemes, is that these were not visible enough; many unemployed were not aware of the existing support and did not make use of these instruments. A similar issue was pointed out in our case study about the implementation of the Training Card in EE. Its take-up was lower than expected, which the Unemployment Insurance Fund explained by pointing to a low awareness of the target group about the existence of the measure. While a general information campaign was launched, no specific outreach strategies were in place, and the policy assumed that individuals would contact the Unemployment Insurance Fund themselves. Also recall, as mentioned above, that two-thirds of employees in NL were not aware of the learning budgets available in their sectoral training funds, the single-most finance modality of adult learning in NL[82].

3.2. Driver 2: Motivation of individuals

A second driver that limits participation in training is the **lack of incentives and motivation** to take up training. More than anything else, the willingness of an individual determines the likelihood of anyone to enrol and to finish training. Studies consistently identify a population of roughly 80% of non-participants that are *not willing* to participate in training (which corresponds to an estimated 45% of the adult population)[83]. This makes

[81] Massing, Natascha, & Gauly, Britta. (2017). Training Participation and Gender: Analyzing Individual Barriers Across Different Welfare State Regimes. Adult Education Quarterly (American Association for Adult and Continuing Education), 67(4), 266-285.

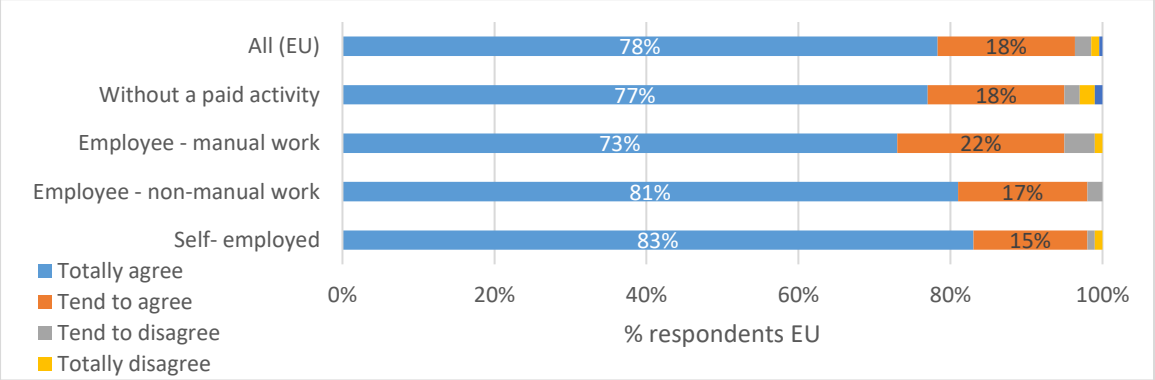
[82] https://ldmonitor21.studytube.nl/rapport-4-leerbudgetten-en-tools/welkom/#block-63621515.

[83] We draw mainly on the Adult Education Survey, conducted among all EU Member States. However, similar shares are reported by the *OECD Survey of Adult Skills (PIAAC)* survey, see for instance OECD (2021), Skills Outlook 2021, Chapter 4.

it particularly relevant to better understand the factors that contribute to individual's motivation.

At first sight, the low shares of participation and the limited motivation of potential learners to take up training pose somewhat of a puzzle. The value of learning is largely uncontested, not only in terms of its potential to contribute to economic growth and social inclusion, but also at the individual level, in terms of labour market position, wage growth, job satisfaction and wellbeing. The various benefits of learning are already explored in the section above, and these are widely recognised by European workers. As shown in figure 24 below, no less than 96% of individuals across the EU agreed that learning throughout life is an important value. While some minor differences can be observed in the intensity to which respondents agree to this statement across member states, the lowest values can be found in LV, and still reach 88% of all respondents. There are some minor differences when comparing the intensity with which employees doing predominantly manual work agree (73% totally agree) compared to employees whose work is not predominantly manual (81% totally agree). Self-employed appear to value the importance of learning throughout life the most (83% totally agree).

Figure 25 Importance of learning throughout life – by type of work



Source: Cedefop Perception survey (2020).

If almost all adults in the EU agree that learning is important, why do so many still not be interested to engage in training themselves? This section seeks to further explore this question and build our understanding of the various factors that can influence the motivation to take up training. There are some limits to such an analysis, as existing survey data and evidence from the literature do not allow to determine conclusively if disengagement from training stems from lack of interest in any form of training opportunity or rather indicates a mismatch between the preferences and interests of the individual and the existing supply of training[84]. An assessment of the former would require considering an individual's prior learning experiences, which largely shape one's expectations for and interest in participation in future adult learning. Such factors have been a traditional focus of the literature on psychological barriers, and this study – with its focus on policy measures and their effects on preference – has little to add to this existing body of literature[85]. Instead, this study focuses on the mismatch between preferences and interests of individuals to engage in training with particular attention to policy responses to reduce this. This attention is justified by the high importance adults give to training *in general terms*. Therefore, it can be assumed that at least a relevant share of disengaged individuals could be motivated to engage in training if certain conditions are right, i.e. if

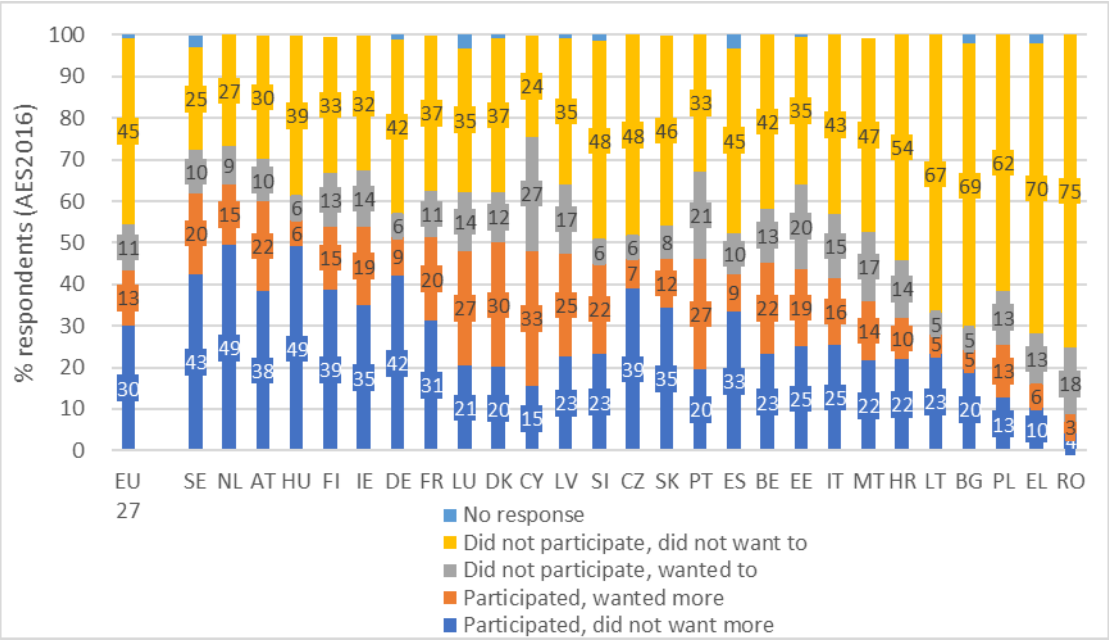
[84] OECD (2021), Skills Outlook 2021, chapter 4.

[85] Cross, 1981; KNAPPER, Christopher K., and CROPLEY, Arthur J. 2000. Lifelong Learning in Higher Education. 3rd ed. London: Kogan Page; Pont, B. (2004), Improving Access to and Participation in Adult Learning in OECD Countries, European journal of education, Vol.39 (1), p.31-45.

the various barriers that contribute to a mismatch and limit their participation are addressed. This is corroborated by the large cross-country differences shown in Figure 25.

This section starts by reviewing in more detail the willingness to participate across Member States. The figure below points to considerable differences across Member States. Intuitively, the lower the participation rates in training per country, the higher the share of individuals that are not willing to train. However, the share of *non-participants* that are not interested in training also varies substantially, with BG and LT standing out particularly on the end of least interested, and on the other end CY, PT, EE with relatively low shares of non-participants that are not interested in training. While these differences between Member States are considerable, these could not be explained by looking only at macro-level characteristics of Member States' education and training systems. Instead, it is important to zoom in on micro-level behavioural aspects and how existing policies affect these.

Figure 26 Willingness to participate in adult learning – by Member States



Source: Adult Education Survey data 2016.

A recent OECD publication that analysed the OECD Survey of Adult Skills (PIAAC) survey found that workers with atypical contracts were significantly less likely to be willing to participate than workers with a permanent contract[86]. Other individual-level factors that influence willingness to train include education level, job tenure and contract status. Individuals that are not in stable employment may not immediately be able to transform the benefits training into wage increases; for them the benefits of training are more diffuse and possibly less visible and offer therefore less of an incentive for participation. This suggests how a lack of motivation to engage in training also serves as explanation for low participation, particularly for more vulnerable groups.

There are a number of reasons that can help explain why the willingness to train is lower among individuals in atypical employment and lower skilled. Below we explore the main factors that can influence the motivation of individuals to participate in training, such as **limited awareness of own skills needs, limited information and transparency** about

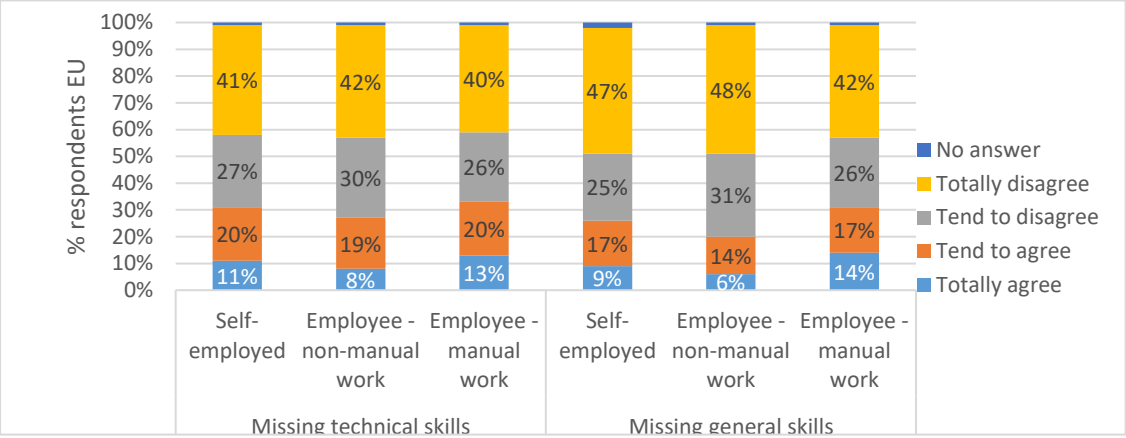
[86] OECD (2021), Skills Outlook 2021, chapter 4.

the available support and training offer, uncertainty about their **quality and recognition in the labour market**, and **insufficient tailoring of training offers to individual needs**. As highlighted above, this review focuses on those factors that are the result of the interplay of public policies and the willingness to train; the study does not delve into more individual-level psychological explanations for such participation patterns, for which we refer to the academic literature.

3.2.1. Awareness of own skills needs

Without sufficient information about the types of training available and the support available to enrol in it, individuals struggle to assess what training could be relevant and how they could benefit from training. It can be difficult for individuals to recognize their own learning needs, which makes it even more challenging to subsequently identify relevant training programmes[87]. In a recent Cedefop Survey, individuals that do not want to participate in training often indicate not to see the benefits of possible training programmes and do not feel that their competences fall short for their work. If someone does not see the need for training, it is difficult to imagine that he/she will become motivated enough to look and take part in training. Some 28% of all respondents in work say that they lack some technical skills and 22% some general skills to carry out their job at the required level, as presented in the figure below. There are some minor differences between workers, depending on their type of work; manual workers in higher numbers indicated that they lack both technical skills (33%) and general skills (31%).

Figure 27 Self-reported missing skills – by type of work



Source: Cedefop Perception survey (2020).

These findings are also replicated in other sources. Eurofound's Working Conditions survey shows that 14% of respondents for the entire EU believe that they need further training to cope with daily duties in their work[88]. On the employer's side on the other hand, only 16% of employers report that their workers have all the required skills[89] and in 2019 77% of companies mentioned the scarcity of skilled staff as the most frequent reason to limit long-term investments[90]. When interpreting these findings, it is important to be aware of the possible bias of such surveys among both employees and employers. There

[87] H. Windisch (2015), Adults with low literacy and numeracy skills: A literature review on policy intervention. OECD Education Working Papers.

[88] Eurofound European Working Conditions Survey 2016, online data viewer.

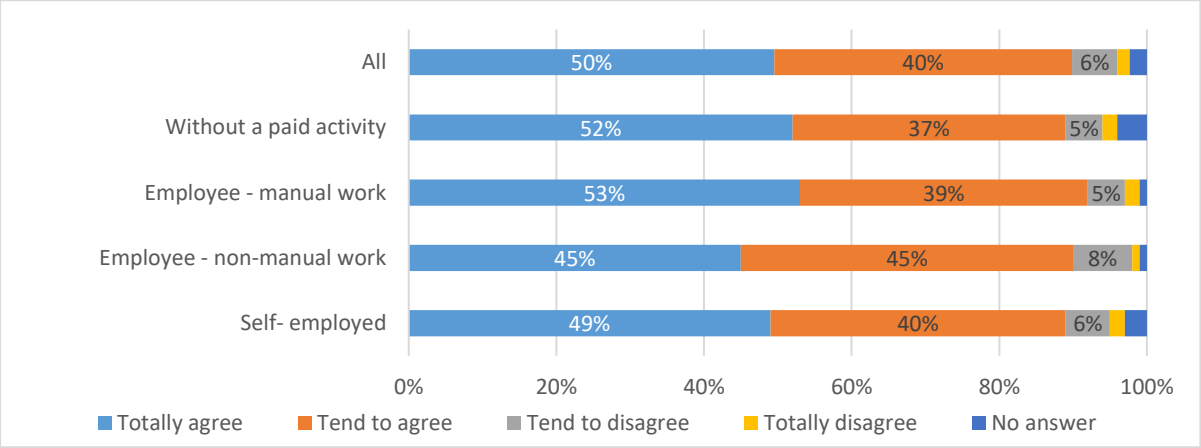
[89] See Eurofound and Cedefop (2020), ECS 2019- Workplace practices unlocking employee potential.

[90] European Investment Bank Group Investment Survey 2019, p. 19.

is always the possibility that employees exaggerate their skill levels (either deliberately or by lack of actual comparison)[91]. Employers on the other hand may have an incentive to overstate skill shortages, or may experience difficulties in identifying the required skills for other – unrelated – reasons (such as the terms and conditions of its employment offer, instead of the actual supply of skills in the labour market)[92]. Still, the overall trend suggests that increased attention for information and guidance on future skills is desirable. Without adequate guidance, workers face challenges determining their own training needs. An individual may not be aware of the types of skills needed, or could for instance review their skills needs based on a relatively short time horizon[93]. It is also suggested that this perceived lack of urgency can be exacerbated by the fact that even less is known about the alternatives; if it is difficult to assess how future developments will affect their own jobs, it is even harder to gauge what impact these will have on skills needs in other occupations or sectors[94]. Guidance and support help influence such attitudes, and the existing support structures in (larger) enterprises for employees are one explanation of the differences in attitudes between individuals in permanent employment and those in more atypical employment situations[95].

Workers themselves confirm this; according to Eurofound and taken across the EU, a total of 90% of respondents agree that more information and guidance would encourage more adults to participate in work-related learning and training, with limited differences between respondents from different Member States. The share of manual workers report in slightly higher numbers that more guidance and support to them would encourage participation (53% totally agree), while the group of non-manual employees does so less often (45% totally agree); possibly this group already receives better guidance than manual workers and therefore looks for other types of support.

Figure 28 Importance of information and guidance for increasing participation– by Member States



Source: Cedefop Perception survey (2020).

[91] Cedefop (2021), Understanding technological change and skill needs: skills surveys and skills forecasting. Cedefop practical guide 1, page 21.

[92] Gambin, L. et al. (2016). Research to understand the extent, nature and impact of skills mismatches in the economy. London: Department for Business Innovation and Skills. BIS research paper; No 265.

[93] Grijpstra, D., H. Bolle en T. Driessen (2019). Belemmeringen voor deelname aan Leven lang ontwikkelen. Zoetermeer: Panteia.

[94] Maslowski, R. (2019). Grenzen aan een leven lang leren.

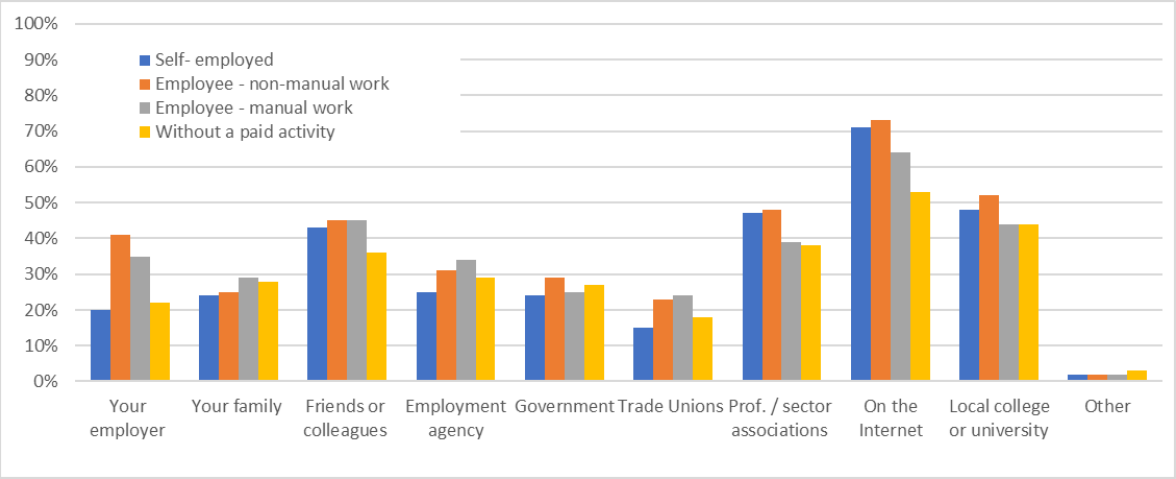
[95] See for instance Green, A. and L. Martinez-Solano (2011), "Leveraging Training Skills Development in SMEs: An Analysis of the West Midlands, England, UK", OECD Local Economic and Employment Development (LEED) Papers, No. 2011/15.

3.2.2. Transparency and information about training offers

Once an individual is aware of her or his training needs and wants to act on them, the next challenge is to identify training programmes that match such needs. Again, individuals without concrete support from employers or other forms of guidance face more uncertainties in doing so. Without such additional guidance, they have no clear career path with menus of training and need to identify relevant training programmes themselves.

60% of respondents in the EU totally agree or agree that they are well-informed about organised work-related training activities, against a total of 34% that (totally) disagrees[96]. Self-employed and non-manual employees most often point to the internet as the best source (71% and 73% respectively), which is considerably lower for manual employees and individuals out of employment (64% and 53% respectively) (see figure 28 below). Those with an employment relation are more positive about the available information on training activities. Interestingly, guidance by employment agencies (such as PES, or other types of counselling) is mentioned less often as a good source for guidance by unemployed (29%) than individuals in manual work (34%). As can be expected, people in an salaried position (either in manual or non-manual work) considerably more often turn to their employers for advice and guidance. This is also confirmed by results from the Adult Education Survey, which shows that employees slightly more often report to receive support in guidance than other types of workers[97]. Employees also indicate that they are less often required to financially contribute than others as well.

Figure 29 Possible sources of guidance about adult learning



Source: Cedefop Perception survey (2020).

Most individuals pointed to internet as the best source about adult learning and CVET.[98] While this highlights the potential of internet to empower individual citizens in taking control of their own learning trajectory, it does not always ensure that individuals actually find the types of training they are looking for.

Figure 29 below shows the extent to which different groups of individuals are able to find a suitable training offer. In some cases individuals may not be able to find a suitable offer because it is simply not there; there may be certain supply-side constraints in certain

[96] Cedefop Perception survey *(2020)*. The remaining 6% did not provide an answer.

[97] Not presented in figure here. Based on analysis of special extract of Adult Education Survey 2016.

[98] Cedefop (2020). Perceptions on adult learning and continuing vocational education and training in Europe. Second Opinion survey – Volume 1. Member States. Cedefop reference series; No 117.

Member States that reduce the availability of relevant training. However, the differences between different groups in the same Member States suggest that at least to some extent, the ability to find relevant training is also related to the types of support in place. A total of 14.7% of individuals with a permanent contract refer to the lack of a suitable offer as reason for not participation in adult learning, against 18.4% of all adults without permanent contracts.

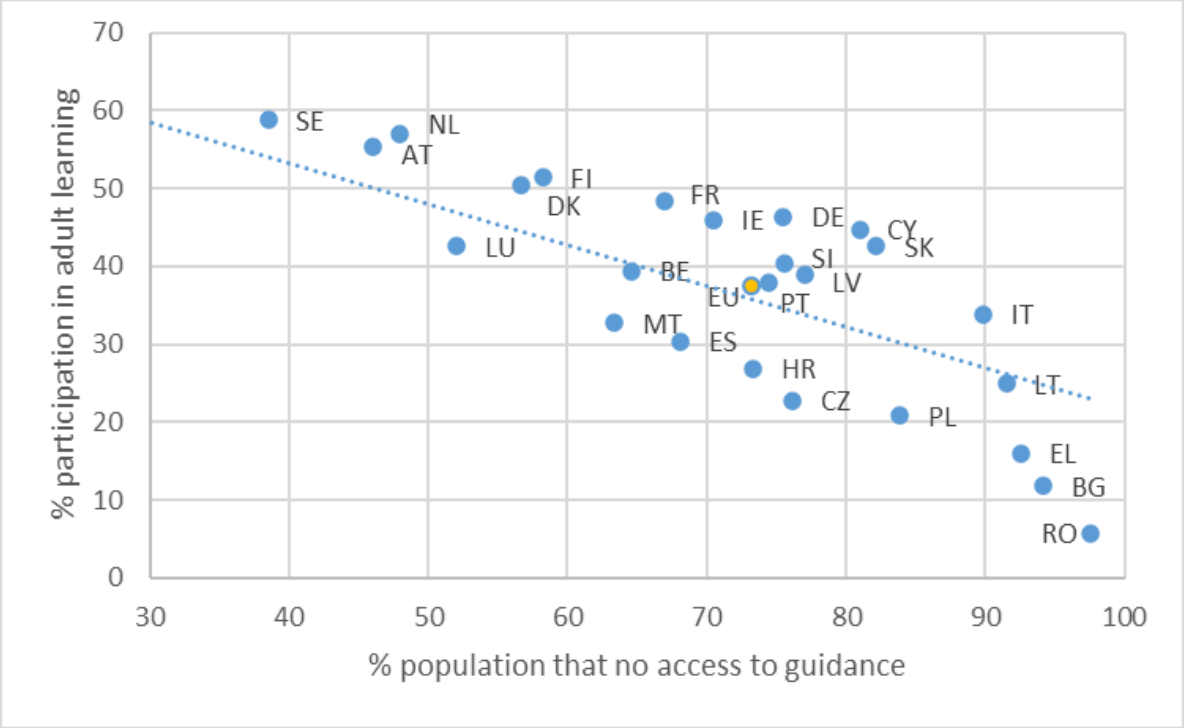
Figure 30 Share of respondents that want to train more and mention lack of suitable offer as a reason

Source: Authors' analysis, based on custom extract AES2016

The relevance of ensuring the provision of guidance as a way to contribute to participation in adult learning is further underlined in the figure below, where we compare the overall participation rate in adult learning against the share of individuals that had not received information or advice on learning possibilities, also based on the Adult Education Survey. The result is a strong negative correlation, showing that Member States with lower shares of individuals that did not receive advice/guidance are generally the ones where participation rates are higher[99].

[99] Recall how a correlation does not equal causality. This figure merely establishes that the two country-level characteristics move together. Also note that this concerns aggregated values, based on microdata; no correlation or regression analysis was conducted on the basis of microdata.

Figure 31 Comparison of MS scores on participation (last 12 months) and access to free guidance on learning possibilities



NOTE: Correlation presented for aggregated MS-level values with Pearson's r of -.752 (significant at P<.01). Participation in adult learning in last 12 months, 2016 (excluding guided on the job training).

Source: Special extract from AES2016

Policies and practices in the field of career guidance have undergone considerable changes over the last years and increasingly receive policy attention[100]. A recent mapping by adult learning experts identified that public or legally mandated offers for career and guidance in learning were present in almost all Member States, as presented in the figure below[101]. Only in CZ and CY no such offers were identified. In CZ there are some good regional examples, but the guidance at the national level is considered underdeveloped, largely unknown to individuals and insufficiently linked to the validation of non-formal learning. For CY, no guidance service or mechanism was identified that targets the entire adult population. Despite the broader introduction of such an offer for guidance, the findings above show that there is still considerable room for improvement, particularly for adults not in permanent employment.

A practical example of how guidance can be offered in direct response to the prominence of the use of the internet in looking for training offer can be an online database that lists training opportunities. As shown in figure 31 below, such a database is available in roughly half of the Member States and more often in Member States with higher participation rates. A review of guidance practices across shows how the offered support is fragmented and does not always benefit all target groups equally[102]. This underlines the need for additional guidance and support in the identification of training needs, and subsequently in the

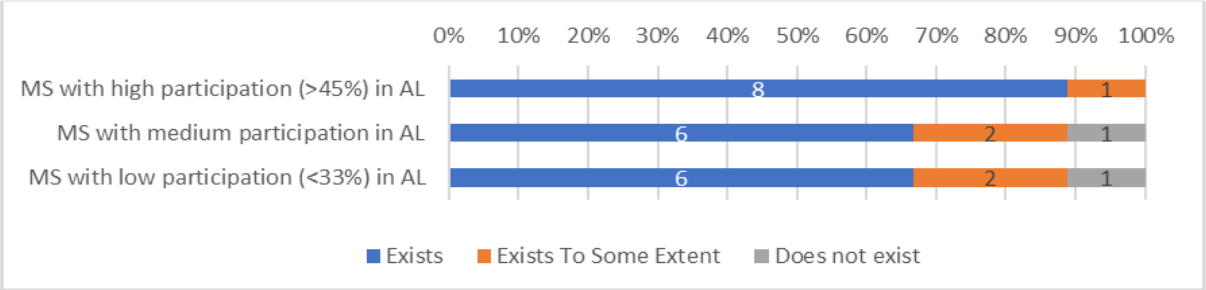
[100] See for instance European Commission (2020), Lifelong guidance policy and practice in the EU: trends, challenges and opportunities.

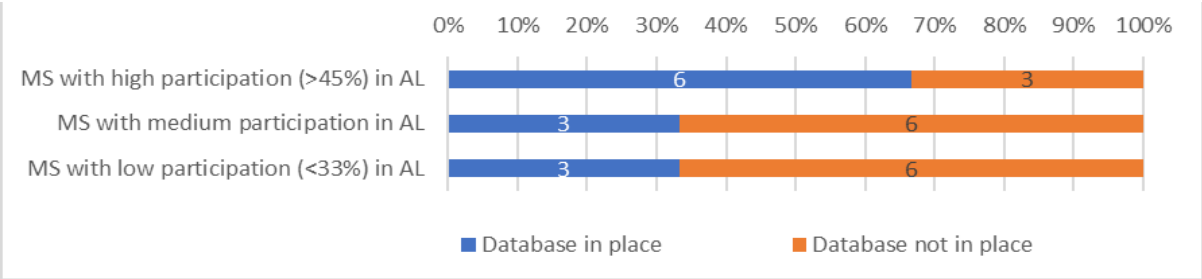
[101] DG EMPL Adult Learning network expert mapping in 2019 / 2020 in preparation for the IA.

[102] See for instance European Commission (2020), Lifelong guidance policy and practice in the EU: trends, challenges and opportunities.

finding of relevant training offer to help increase the transparency on navigating the complex world of training offer.

Figure 32 Overview of adult learning expert mapping – availability of guidance (above) and database (below)





Source: Authors, based on mapping of available instruments conducted by AL expert network for the purpose of the IA on ILAs

3.2.3. Uncertainties about quality and recognition

To provide potential learners with information on content, quality and recognition of training programmes, quality assurance systems have an important role to play, and contribute at least indirectly to participation in learning[103]. 87% of respondents across the EU are of the opinion that increased quality standards would encourage participation in work-related training; particularly in MT, EL, RO and ES – all of which score the European average for participation in adult learning - respondents were particularly outspoken about this link (more than two-thirds totally agree with the statement, against roughly half at EU level)[104].

For this reason, attention for quality standards and quality assurance systems has been on the European agenda for years[105]. Member States have increasingly implemented regulations and policies to improve quality assurance in adult learning. Particularly under the influence of EQAVET, considerable development and improvements in terms of quality assurance can be identified across the EU[106]. However, EQAVET developments tend to be restricted to IVET programmes, and a majority of EU countries has not put in place a system-level quality assurance framework for non-formal training[107]. While this is partly by

[103] European Commission (2019), Adult learning policy and provision in the member states of the EU: a synthesis of reports by country experts: p.119.

[104] Cedefop (2020). Perceptions on adult learning and continuing vocational education and training in Europe. Second Opinion survey – Volume 1. Member States. Cedefop reference series; No 117.

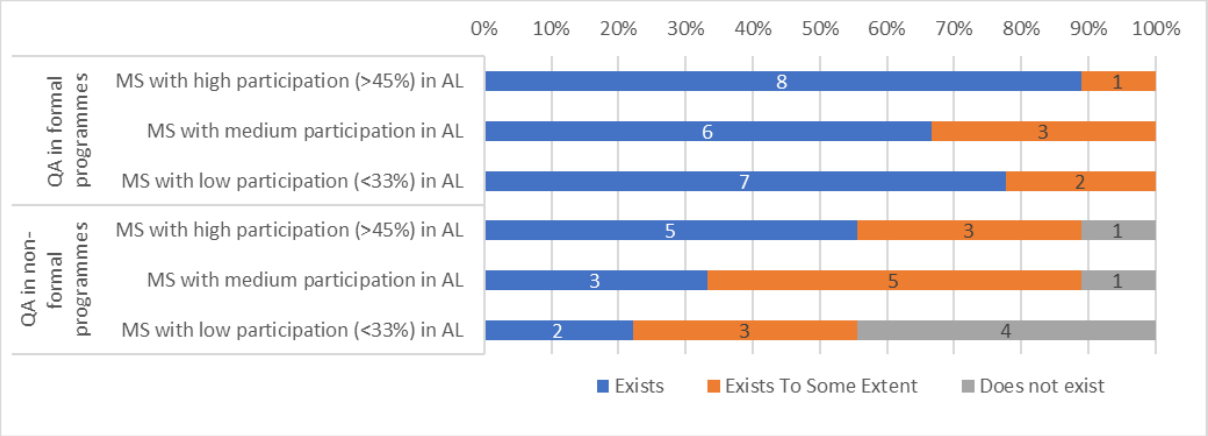
[105] European Commission (2013), Developing the adult learning sector: Quality in the adult learning sector.

[106] EQAVET (2020), Peer Learning Activity on Quality Assurance in continuing vocational education and training: background paper.

[107] EQAVET (2020), Peer Learning Activity on Quality Assurance in continuing vocational education and training: background paper.

virtue of being non-formal (i.e. outside the formal education system), which typically comes with less regulations, requirements, and standards, it does point to differences in quality approaches across the EU[108]. The recent mapping of formal and non-formal learning by DG EMPL's Adult Learning Expert Network further highlights these differences. As shown below, quality assurance for formal programmes is consistently more established than in non-formal programmes. At the same time, quality assurance is also more often found for nonformal programmes in Member States with higher participation rates in adult learning.

Figure 33 Overview of adult learning expert mapping – availability of quality assurance mechanisms in formal and non-formal programmes



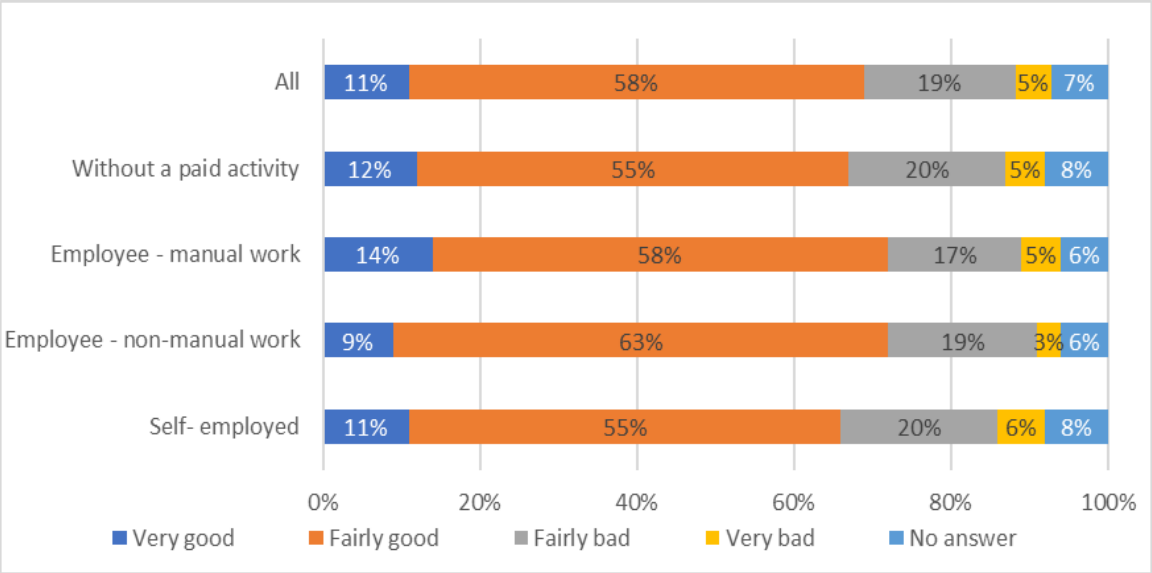
Source: Authors, based on mapping of available instruments conducted by AL expert network for the purpose of the IA on ILAs

The availability of quality assurance for adult learning programmes can increase transparency and communicate trust in the quality of the education on offer. The absence of such provisions is sometimes reflected in individual's perceptions of the quality of adult learning in their countries. Cedefop's recent perception survey shows that, although people more often describe quality of adult learning as good (69%) rather than bad (24%), substantial number of citizens in several EU countries are not confident about the quality of their national adult learning system. Perceptions on training quality among respondents are negative in EL and HR, which also do not have quality assurance provisions for non-formal learning programmes. In ES, SK, and IT, despite such provisions, respondents were also negative (between 30%-40% were critical[109]). No significant differences appear between different types of workers and workers with different types of contracts.

[108] OECD (2021), Improving the Quality of Non-Formal Adult Learning: Learning from European Best Practices on Quality Assurance, Getting Skills Right.

[109] Cedefop (2020), Perceptions on adult learning and continuing vocational education and training in Europe. Second Opinion survey – Volume 1. Member States. Cedefop reference series; No 117.

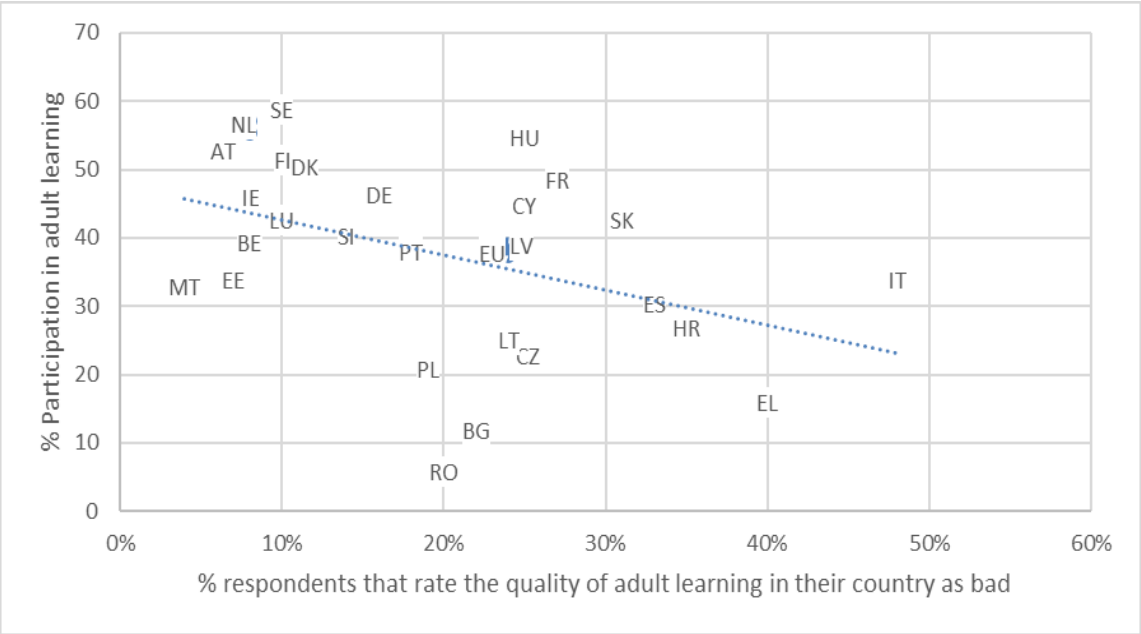
Figure 34 Perceptions about quality of adult learning – by type of employment situation



Source: Cedefop Perception survey (2020).

Member States with higher participation rates in adult learning are also by and large the Member States where learners are more positive about the quality of adult learning system. However even if we do not have the data to determine the exact causal mechanism, we can conclude from the figure below that quality is a relevant factor.

Figure 35 Comparison of MS scores on participation and share of respondents that rate quality of adult learning as bad



Note: correlation analysis shows Pearson's r of -.412, significant at p<.05)

Source: Authors' analysis, based on custom AES2016 extract (participation in the last 12 months, excluding guided on the job training) and Cedefop Perception survey (2020).

In addition to the quality assurance, it is just as important that the learning outcomes of training programmes are recognised, and that future learners know in advance how the anticipated learning outcomes will be assessed by their (future) employer.

Particularly in non-formal training however, uncertainties about the recognition of learning outcomes are common. A recent OECD working paper for instance points to the fact that the productivity gains for companies from non-formal training of employees substantially outweigh the wage effect for individuals, partly because individuals are not able to communicate the value of this training to other employers[110]. If such uncertainties about the value of learning outcomes persist, these can have a demotivating effect on individuals to participate in training, particularly if they have to cover (part of) the costs themselves. Without a common standard to signal the value of training, individuals may not fully be able to recoup their investment of time (and possibly money) in the form of higher wages or better career prospects more generally.

Systems for the validation of prior learning can be a way to offer such a 'common standard', allowing individuals to prove that they acquired certain competences/learning outcomes. However, like quality assurance, provisions for and access to such systems of validating prior learning vary considerably across and within countries. Individuals and employers are too often unaware of the potential value of newly acquired learning outcomes[111].

In this respect, the recent evaluation of the Council Recommendation on the validation of non-formal and informal learning points to substantial progress, but also identified the limits of its support for individuals to ensure a better use of validation opportunities. Progress has been particularly fragmented in terms of the provision of information on available validation opportunities. In response, the evaluation highlights how for disadvantaged groups, the costs, complexity and length of validation processes, service fragmentation (e.g. offered to for certain qualifications, or certain groups), and the perceived low value of validation in certain countries continue to limit opportunities for individuals to take advantage of them[112]. In just over half of member states experts identified relevant policies, with one-third where these existing initiatives for recognition of prior learning were identified as a strength[113].

3.2.4. Tailoring of training to individual needs

The training offer may insufficiently respond to specific individual needs, for instance in terms of form and length and is unlikely to make further positive contributions to individual enrolment in such training, *even if they are actively looking* for that training. Another perspective is that the *content of adult learning* programmes is insufficiently tailored to individual needs. Adult learning needs to be specifically tailored to trigger adults to engage in learning, particularly when addressing more disadvantaged learners. Both perspectives, which can equally pose personal barriers to participation are explored below.

Difficulties to combine training with other commitments – such as work, family responsibilities, or other – is consistently among the most cited reasons of individuals that

[110] Fialho, P., G. Quintini and M. Vandeweyer (2019), "Returns to different forms of job related training: Factoring in informal learning", OECD Social, Employment and Migration Working Papers, No. 231.

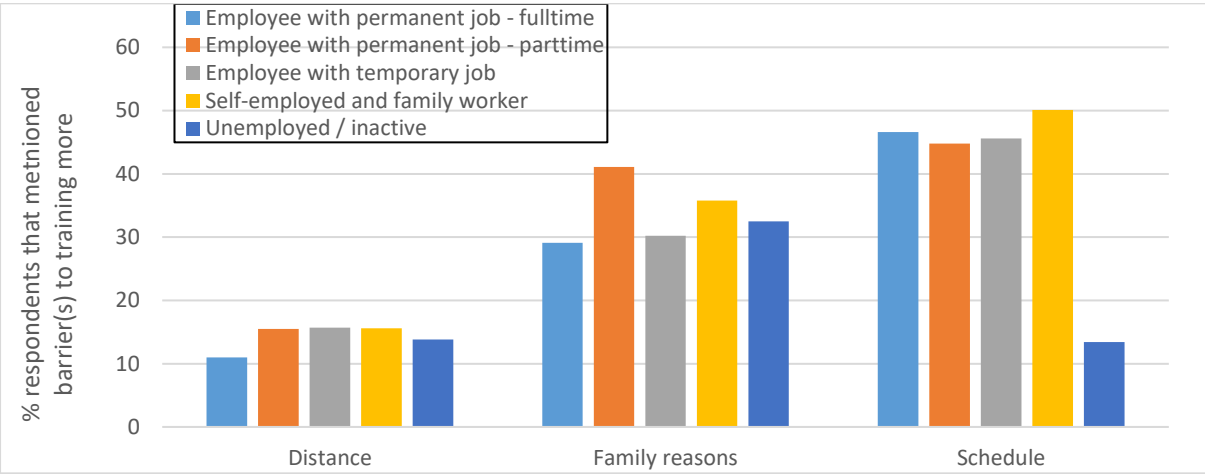
[111] Werquin, P. (2010), Recognising Non-Formal and Informal Learning: Outcomes, Policies and Practices.

[112] European Commission (2020). Study supporting the evaluation of the Council Recommendation of 20 December 2012 on the validation of non-formal and informal learning.

[113] European Commission (2019), Adult learning policy and provision in the member states of the EU: a synthesis of reports by country experts: p.114.

do not participate in training[114]. These difficulties are more commonly found among atypical workers, who as a consequence participate less in adult education programmes[115]. The challenges for individuals to enrol in adult learning because of limited support by employers is already highlighted under driver 1. This section focuses on the individual aspects, where particularly conflicting family responsibilities feature as an important barrier to participation in adult learning. Family responsibilities reasons are particularly pertinent for part-time workers (41.1%) and to a lesser extent for self-employed as well (35.8%), as shown in the figure below. Self-employed also mention scheduling conflicts more often (50.1%). Intuitively, scheduling problems are mentioned considerably less often by unemployed/inactive individuals (13.4%), compared to other groups.

Figure 36 Share of respondents that want to train more and mention distance, family and/or schedule as a reason



Source: Authors' analysis, based on custom AES2016 extract

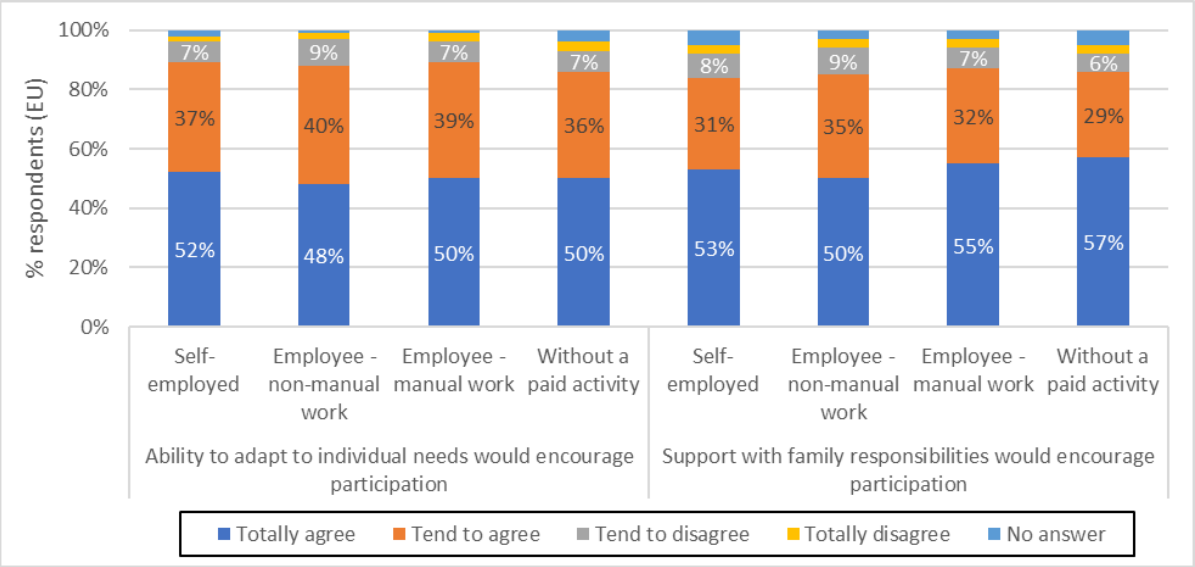
Other practical reasons, such as the distance of the training location from home or workplace are also relevant, yet are mentioned less often. Learners indicated in Cedefop's most recent perception survey on adult learning and CVET in Europe that better adaptability of training to individual learning needs would encourage participation in work-related training[116]. Self-employed individuals were slightly more pronounced about the potential to encourage participation (52% totally agree) than employees (48% of non-manual workers and 50% of manual workers totally agree). Attention for family responsibilities as a way to encourage participation in adult learning is highlighted most by individuals out of paid employment (57% totally agree), and slightly less so by non-manual employees (50% totally agree).

[114] Cedefop (2020), Perceptions on adult learning and continuing vocational education and training in Europe. Second Opinion survey – Volume 1. Member States. Cedefop reference series; No 117.

[115] OECD (2019), Individual Learning Accounts: Panacea or Pandora's Box?.

[116] Cedefop (2020). Perceptions on adult learning and continuing vocational education and training in Europe. Second Opinion survey – V. 1. Member States. Cedefop reference series; No 117.

Figure 37 Factors that could encourage participation – by type of work



Source: Cedefop Perception survey (2020).

Difficulties in tailoring delivery mode to trigger adults to engage in learning. Tailoring the mode of delivery requires an understanding of the practical barriers potential participants in learning encounter. This requires understanding and responding to that what makes learning easier or more difficult for some, and what can make learning a desirable activity[117]. To overcome this challenge, some Member States have already worked on increasing flexibility of training offer, for instance by introducing structures that encourage the offer of different forms of distance learning, forms of blended learning, modular and part-time learning provision, allowing providers to offer the types of training that best fit their learners' needs. Others put in place new forms of entrance exams for those who do not fulfil the traditional entrance criteria but who have gone through VET and apprenticeship routes. A review of recent policy developments by the Adult Learning Expert network shows that the results of these efforts are not uniform, and some Member States have not shown much progress in supporting the introduction of more tailored training programmes. In a functioning market, education providers would have a clear incentive to offer programmes tailored to the needs of individuals. However, in the current context, it is not the individual, but their employer or Public Employment Services that choose training programmes. As a result, adult learning programmes are still primarily offered in more traditional forms of training. For just under half of Member States examples were identified of introducing innovation in the delivery of learning[118].

Also, an increase in the use of digital learning tools should further address this particular barrier, for instance through blending innovations with more traditional forms of adult learning. Such developments come in response to persisting differences between Member States in adult skill levels, access to ICTs, the availability of relevant content, and in the development of educators' innovative learning skills and competences[119]. Such differences have considerable implications for the possibilities of increasing flexible training offer for adult learning. In recent years, attention for digital tools to increase the

[118] Ecorys (2019), Adult Learning policy and provision in the Member States of the EU, A synthesis of reports by country experts: page 118.

[119] European Commission (2015). Adult Learners in Digital Learning Environments - Final Report. DG EMPL

flexibility of adult learning has considerably increased, for instance reflected in the EC's first Digital Action Plan, adopted in 2018 and its successor launched in 2020.

The response to COVID-19 restrictions and school closures forced a shift to emergency modes of digital education, which may well turn out to have profound implications for the rollout of digital education in the near future. While it is too soon to draw firm conclusions on the impacts of this response on participation figures, the first findings are a reason for concern; large number of adult learners dropped out during the – often hastily arranged – transition to online learning[120]. The sudden break in growing participation trends across Europe in 2020 as recorded by the Labour Force Survey provides further evidence for this (see for instance in section 3.1). This underlines the importance of further policy attention to the development of digital literacy among all adult learners, and underlines the potential for improvement that policymakers across the EU still have in relation to expanding digital learning as a means to increase their flexibility of training provision.

4. Baseline scenario

This section presents relevant existing or planned instruments and initiatives at EU and Member State levels, and discusses the extent to which they can be expected to make progress towards the specific objectives of this initiative in the baseline scenario, i.e. in the absence of additional policy efforts resulting from the present initiative. It concludes with a discussion of how adult learning participation rates and inequalities across groups are expected to evolve until 2030 in the baseline scenario, against which the expected impacts of the policy packages are assessed.

4.1. The existing EU instruments

Adult learning has always been part of the EU vocational training policy, though for a long time it has only meant skills development of adult workers. The 1963 Decision on a common vocational training policy[121] stated that its ten "general principles must deal with the training of young persons and adults" (first principle) in the workforce and promoted vocational training "suitable for the various stages of working life" (second principle, paragraph (f)). Adult vocational skills development retains all its relevance today: while the concept of vocational education and training (VET) has evolved, the 2020 Council Recommendation on VET[122], an action of the European Skills Agenda, "aims to equip young people and adults" with the skills required on the labour market. The Recommendation is likely to generically contribute to increase participation in training, including adult participation. However, while it invites Member States to make use of EU funds and programmes for reforms or investments in VET, it does not address the issue of financial support to individuals, which would therefore not be part of its implementation.

Since 2000, several European policy initiatives have however highlighted the relevance of adult learning in a wider sense, including, but not limited to vocational skills development: the memorandum on lifelong learning in 2000[123], the Barcelona Council

[120] European Commission (2020), Digital Education Action Plan 2021-2027 Resetting education and training for the digital age. COM (2020):624.

[121] Council Decision 63/266/EEC of 2 April 1963 laying down general principles for implementing a common vocational training policy, OJ 63 of 20.4.1963.

[122] Council Recommendation of 2 November 2020 on vocational education and training (VET) for sustainable competitiveness, social fairness and resilience, OJ C 417, p.1.

[123] Commission of the European Communities (2000), COMMISSION STAFFWORKING PAPER: A Memorandum on Lifelong Learning, SEC (2000) 1832.

conclusions of spring 2002[124], the Communication on making lifelong learning a reality in 2002[125] and the Council Resolution of 27 June 2002 on lifelong learning[126], the 2006 Commission Communication and the 2007 Action plan on adult learning[127], the Council conclusions on adult learning of 2008. [128] In 2011 the Council adopted a resolution on a renewed European agenda for adult learning[129], which aimed to bring fresh impetus to this important area of education, setting out a long-term vision in this field up to 2020, integrated in the ET 2020 strategic framework for policy cooperation in education and training[130], and established several short-term priorities to be achieved by 2014, then revised in 2015. The agenda has been the EU policy framework for adult learning in the last decade[131]. In these documents, the concept of adult learning is extended to the entire adult population, going beyond those active in the labour market. The baseline scenario hence covers well EU policy support for the provision of adult learning, ie. the "supply side". However, this EU policy support does not directly address the need to support the demand for participation in learning, which is why the policy options presented in this report focus on the demand for learning.

One EU initiative that was aimed among others to support the demand in learning is the **Council Recommendation on validation of non-formal and informal learning**[132], which was adopted in 2012. It called for Member States to take action by 2018 to ensure that everybody had access to validation opportunities. Such opportunities can support the demand for adult learning. On the one hand, when validation opportunities are available their main beneficiaries are adult workers, who may then be more motivated to join organised learning opportunities; on the other hand, the lack of validation opportunities is one of the reasons why people may not engage in learning pathways, as the skills, they would develop risk not being recognised. While good validation opportunities might encourage more adults to participate in learning, engaging in validation may be a burden for individuals, demanding time, effort and often money. Indeed, the evaluation of the 2012 Recommendation on validation found that "if there is no active support to individuals, such as paid leave or a financial contribution, they may not be able to engage in validation".[133] The Recommendation does not include any provision about financial support to individuals for the validation of skills or any other purpose and hence the baseline scenario here also differs from the policy options presented in this report, which are complementary to the existing provisions on validation.

[124] Council of the European Union (2002), Council conclusions of 16 March 2002.

[125] Commission of the European Communities (2000), Communication: Making a European are of lifelong learning a reality, COM(2001)678 final.

[126] Council of the European Union (2002), COUNCIL RESOLUTION of 27 June 2002 on lifelong learning (2002/C 163/01).

[127] Commission of the European Communities (2006), Communication from the Commission on adult learning: it is never too late to learn, COM (2006) 614 final; Commission of the European Communities (2007), Action Plan on Adult Learning: it is always a good time to learn, COM (2007) 558 final.

[128] Council of the European Union (2008), Council conclusions of 22 May 2008 on adult learning (2008/C 140/09).

[129] Council Resolution of 28 November 2011 on a renewed European agenda for adult learning, OJ C 372, 20.12.2011, p. 1.

[130] Established through the Council Conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training (ET 2020), OJ C 119.

[131] Cf. the Report of the ET 2020 Working Group on Adult Learning (2018-2020), Luxembourg: Publications Office of the European Union, 2019, doi: 10.2767/583401.

[133] Commission Staff Working Document, Evaluation of the Council Recommendation of 20 December 2012 on the validation of non-formal and informal learning, SWD (2020) 121, p. 41.

Under the baseline scenario, the EU will continue to support Member States in their provision of guidance, which can be a major factor in increasing demand for learning, helping individuals and organisations to analyse their learning needs, find reliable information on available opportunities and choose the most appropriate pathways. Since 1996 the Commission supports the Euroguidance network, which provides local counsellors with assistance, training and information resources, so that they can better advise people taking into account European opportunities, namely learning or working in another Member State. Euroguidance is also a forum for exchange of ideas and mutual learning. Good guidance, as promoted at policy level by the 2008 Council Resolution on lifelong guidance[134] and in practice by the Euroguidance network, may generically lead to increased participation in training and reduction of skill gaps, and may help individuals take advantage of financial support, if such support is available. Good quality guidance is therefore an enabling factor to better implement the policy options here proposed. However, the policy options would both enable a better integration of guidance into adult learning systems than the baseline scenario.

The **2016 Council Recommendation on Upskilling Pathways[135]**, an action of the 2016 New Skills Agenda for Europe[136], is the major latest EU legislative action in adult learning policy. With it, Member States agreed to adopt a strategic and coordinated approach to providing joined-up learning opportunities to the EU's 61 million low-skilled adults. It aims to support adults with low levels of qualifications to enhance their basic skills, that is literacy, numeracy and digital skills, and/or to acquire a broader set of skills by progressing towards higher qualifications. Upskilling Pathways provide for low skilled and low qualified adults to have access to upskilling opportunities built around the concept of an easily accessible pathway comprising three steps: (1) skills assessment; (2) tailored learning offer; and (3) validation and recognition. The recommendation also addresses enabling conditions, such as outreach, guidance and financial support should be an intrinsic part of this process. The 2019 report on implementation of the Recommendation shows the variety of policy responses that can be identified at the national level. Some Member States are integrating the principles in existing (reviews of) lifelong learning policies, employment strategies or national skill strategies, or for instance in the context of existing policies in the field of adult education. Some Member States have put in place dedicated pilot projects and initiatives, sometimes funded through European funds. The report shows that there is there is often a lack of emphasis on outreach and guidance and underlines the importance of involving a wider range of actors, including social services for people furthest away from the labour market who face multiple barriers. It was also indicated that the three basic skills on which the Upskilling Pathway focuses, namely literacy, numeracy and digital skills are not often explicitly addressed. Instead, vocational and job specific skills for employment emerge most prominently.

While the Council Recommendation on Upskilling Pathways also aims to increase participation in adult learning, it is focused on basic skills and has a narrow target group (low skilled adults). The policy options presented above hence offer an opportunity to extend the scope of action currently foreseen in the baseline scenario under the Council Recommendation on Upskilling Pathways. Also, while in its invitation 14 to Member States it mentions that support measures could include "direct support to learners", the Recommendation does not mention the opportunity for financial support to individual

[134] Resolution of the Council and of the Representatives of the Governments of the Member States, meeting within the Council of 21 November 2008 on better integrating lifelong guidance into lifelong learning strategies, OJ C 319, 13.12.2008.

[135] Council Recommendation of 19 December 2016 on Upskilling Pathways: New Opportunities for Adults, OJ C 484 of 24.12.2016.

[136] Commission of the European Communities (2016), Communication from the Commission on a New Skills Agenda for Europe: Working together to strengthen human capital, employability and competitiveness, COM(2016)0381 final.

learners. The baseline scenario hence differs from the policy options presented in this report, which both aim at empowering individuals to learn through financial support.

In addition to the instruments presented above, the baseline scenario foresees a number of political documents, which call upon the EU and Member States to upscale skills policies.

- The **European Pillar of Social Rights** presented by the Commission and endorsed by Member States in 2017[137] includes as its very first principle the right of everybody to good quality and inclusive education, training and lifelong learning, enabling people "to participate fully in society and manage successfully transitions in the labour market", while its fourth principle, focusing on employment, states that everybody has a right to re-qualification.
- **The Commission Communication on a European Skills Agenda**[138] for Sustainable Competitiveness, Social Fairness and Resilience published in July 2020, after the COVID19 pandemic had started having a major impact on the European economy and society, was largely organised around the need for upskilling and reskilling adults to convert the huge societal challenges brought by the digital and green transitions into opportunities for a prompt recovery and sustainable growth. The European Skills Agenda specifically envisaged four targets to be achieved by 2025, all related to adult skills development; participation in learning in one year of adults in general (50 %), of low qualified adults (30%) and of unemployed (20 % with a four week reference period), as well as the share pf adults with at least basic digital skills (70%). The European Skills Agenda specified that the targets should be monitored within the framework of the European Semester process and by disaggregating data per gender.
- The **European Pillar of Social Rights Action Plan**[139], released by the Commission in February 2021, sets as one of its three headline targets that by 2030 that share of adults participating in learning in one year should be 60 % and, as a complementary target, 80% of adults should have basic digital skills. Confirming the relevance of adult learning to support resilience and recovery in a time of transitions, the EU Heads of State and Governments on 8 May 2021 in their Porto Declaration and then the European Council on 25 June 2021[140] welcome the headline targets of the Action Plan. Following the crisis generated by the COVID19 pandemic, increasing participation in adult learning has become one of three main objectives of social policy, together with increasing employment and reducing poverty.
- In March 2021 the Commission adopted a **Recommendation on effective active support to employment**[141], which invited Member States to develop policy packages organised around three components. The second component aims to foster upskilling and reskilling opportunities and support measures.

Some of the policy options presented in this report are called upon in the following initiatives, yet the baseline scenario does not offer a concrete suggestion for Member

[137] Interinstitutional Proclamation on the European Pillar of Social Rights, OJ C 428.

[138] Commission of the European Communities (2020), Commission Communication on a European Skills Agenda for Sustainable Competitiveness, Social Fairness and Resilience, COM(2020) 274 final.

[139] Commission of the European Communities (2021), European Pillar of Social Rights Action Plan, COM(2021) 102 final.

[140] "the European Council welcomes the EU headline targets of the European Pillar of Social Rights Action Plan, in line with the Porto Declaration", Council of the European Union (2021), European Council conclusions, 24-25 June 2021.

[141] Commission Recommendation of 4.3.2021 on effective active support to employment (EASE) following the COVID-19 crisis, C(2021) 1372 final.

States' implementation of these calls to the same extent as the policy options presented in this report do:

- The European Skills Agenda is the first EU policy document that suggests the opportunity for individual learning entitlements. In its action 9 the Commission declares its intention to assess how a possible European initiative on individual learning accounts can support participation of working age adults in training and how this could be complemented by enabling factors.
- The Council 2020 employment guidelines, under guideline 6 on access to employment and skills, invites Member States to "strengthen the provisions on individual training entitlements and ensure their transferability during professional transitions"[142].
- The Council Recommendation on VET mentioned above (Action 4 of the European Skills Agenda) and the Osnabrück Declaration[143] included among the short-term deliverables 2020-2025 at EU level the exploration of "financial and non-financial incentives for IVET and CVET addressing adult learners".
- The European Pillar of Social Rights Action Plan announced the Commission's intention to present in Q4 2021 "an initiative on Individual Learning Accounts to overcome barriers to access to training and to empower adults to manage career transitions".
- In March 2021 the Commission Recommendation on effective active support to employment suggests Member States to provide adults "with entitlements for quality-assured training and career guidance".

Other recent EU initiatives in the area of education, training skills and qualification do not overlap with the policy options presented in this report but complement them:

- The 2017 Council recommendation on the **European Qualifications Framework for lifelong learning**[144], bringing forward the instrument first established in 2008, promotes the transparency and quality of qualifications.
- The 2018 Decision on a common framework for the provision of better services for skills and qualifications (**Europass**), supports the transparency and understanding of skills and qualifications acquired in formal, non-formal and informal settings and facilitates information flows among learners, learning providers, workers, employers and other actors.

Both initiatives can support the effectiveness of the policy options presented in this report, by facilitating the understanding of the learning outcomes acquired in the learning opportunities foreseen by these policy options. However, these initiatives do not address the issue of financial support to individuals for learning purposes and would not allow the baseline scenario to reach the specific objectives of this initiative.

[142]Council Decision EU52020)1512 of 13 October 2020 on guidelines for the employment policies of the Member States, OJ L 344 of 19.10.2020, p.22.

[143]Endorsed on 30 November 2020 by the Ministers in charge of vocational education and training of the Member States, the EU Candidate Countries and the EEA countries, the European social partners and the European Commission.

[144] Council recommendation of 22 May 2017 on the European Qualifications Framework for lifelong learning and repealing the recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning, OJ C 189 of 15.6.2017.

Another recent major initiative, the **Pact for Skills**[145]**,** launched in November 2020, aims at mobilising private and public stakeholders to take concrete action for the upskilling and reskilling of people of working age, and, when relevant, pool efforts in partnerships.

In the baseline scenario, the EU will continue to support adult learning through its **funding instruments.** Throughout the 2021—2027 period, the European Social Fund Plus, with a budget of EUR 88 billion, will remain an important funding source for national up- and reskilling activities. Other programmes such as Erasmus+, Horizon Europe, Digital Europe, European Regional Development Fund, the Just Transition Fund, the Brexit Adjustment Reserve, the Modernisation Fund and InvestEU will also support this objective. These will complement the support provided under the Recovery and Resilience Facility. However, they cannot promote reforms in all Member States with a common framework that facilitate the set-up of effective support systems that maximize the positive effect on increasing participation on training.

Finally, under the baseline scenario, the **European Semester and the Employment Committee of the Council (EMCO)**, will continue to provide recommendations for Member States to act in this field. However, they are not specific enough to guide the action of Member States towards an integrated policy set up to address the problem drivers with sufficient impact and in an inclusive way.

Concluding, under the Baseline scenario, there is no EU instrument yet that promotes financial support to individual adults in line with their learning needs in the same way the policy options presented in this report do, giving a broader choice for the type of skills and target groups supported. However, the baseline scenario foresees extensive coverage of EU action to support the provision of education and training and of EU financial support in this area, which is why the policy options presented in this report do not cover these aspects.

4.2. Baseline situation by Member State

The baseline assumes that current national policy responses continue, as do national variations in policy choices. The baseline also takes into account recent reforms proposed and how these will evolve having an impact on the general and specific objectives of empowering adults to participate in training and closing gaps in financial support and increasing incentives and motivation of individuals to train. This section provides the following information:

- Baseline of policies and reforms in EU Member States
- Baseline of financial instruments used in EU Member States
- Baseline of individual entitlement and supporting infrastructure and services

4.2.1. Existing policy frameworks and recent reforms

Several Member States have taken steps to address the general and specific objectives of the initiative, but overall progress is uneven across Member States and target groups (see Table 3 below). Most Member States identified increasing participation of adults in learning as a clear priority in legal acts, policies, or strategies at national level.[146] This is mainly the case for Member States reporting higher participation figures and in several of these countries new policy plans are erected addressing the importance of adult learning

[145] Pact for Skills - Employment, Social Affairs & Inclusion - European Commission (europa.eu)

[146] Based on mapping done in 2020 on financial instrument by the Adult Learning Expert Network of the European Commission.

and re- and upskilling throughout life. In only 3 Member States increasing participation is not or somewhat identified as priority, mostly in the Member States reporting lower participation figures. In 13 Member States, these relevant legal acts or strategies aim to increase the demand for adult learning offers by individuals *directly*. This mostly concerns the group of Member States already reporting higher participation figures (e.g. Austria, Belgium, Bulgaria, Germany, Denmark, Estonia, France, Italy, Malta, the Netherlands, Romania, Sweden and Slovenia).

Table 3 Overview of national policy (reforms) on incentivising individual participation in adult learning: document and strategies on increasing participation & reference to demand side instruments for individuals [147]

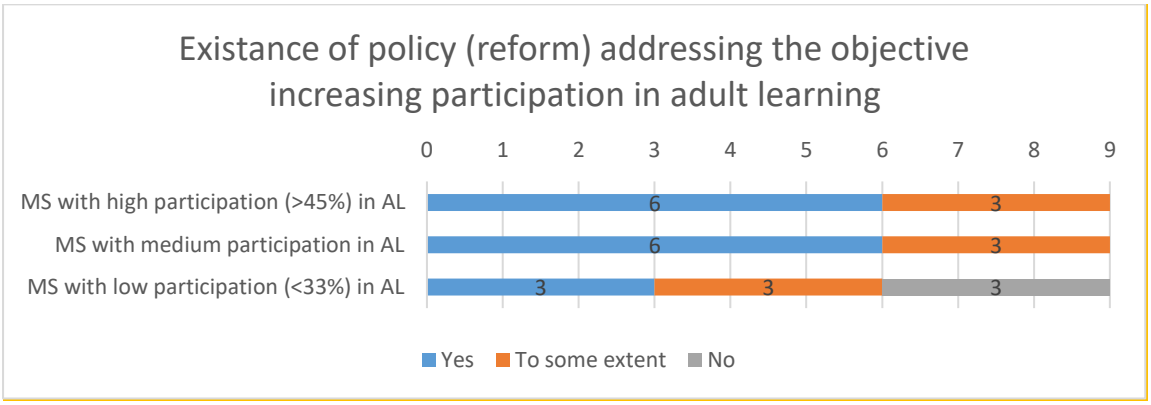
Cluster	Country	Documents and strategies on increasing participation	Aim to increase demand for learning by individuals directly
MS with high participation (>45%) in AL	**AT**	Yes	Yes
	DE	To some extent	Yes
	DK	To some extent	Yes
	FI	Yes	No
	FR	Yes	Yes
	HU	To some extent	No
	IE	Yes	No
	NL	Yes	Yes
	SE	Yes	Yes
MS with medium participation in AL	**BE**	Yes	Yes
	CY	Yes	No
	EE	Yes	Yes
	IT	To some extent	Yes
	LU	Yes	No
	LV	To some extent	No
	PT	Yes	No
	SI	Yes	Yes
	SK	To some extent	No
MS with low participation (<33%) in AL	**BG**	Yes	Yes
	CZ	No	No
	EL	No	No
	ES	To some extent	No
	HR	No	No
	LT	To some extent	No
	MT	To some extent	Yes
	PL	Yes	No
	RO	Yes	Yes
TOTAL		**Yes = 15** **To some extent = 9** **No = 3**	**Yes = 13** **To some extent = 0** **No =14**

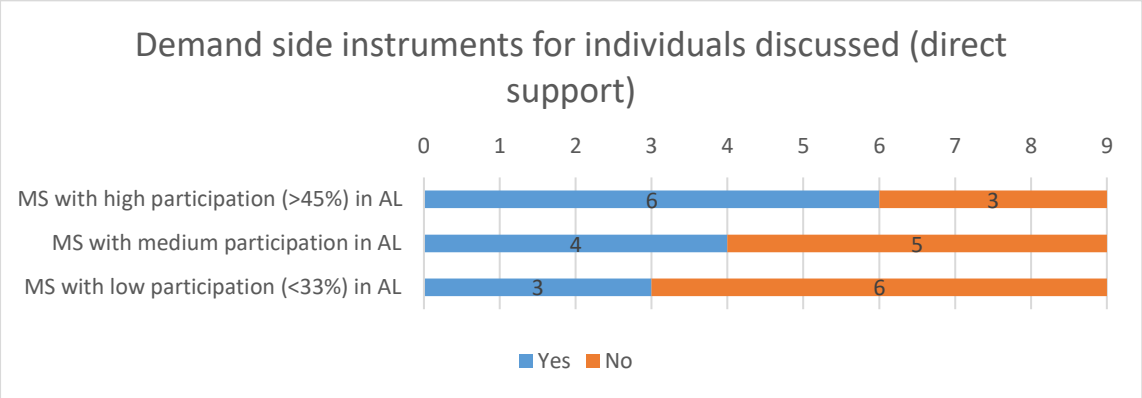
[147] Based on mapping done in 2020 on financial instrument by the Adult Learning Expert Network of the European Commission.

Source: Authors, based on mapping of available instruments conducted AL expert network for the purpose of the IA on ILAs.

Table 3 is summarised in the figures below, showing a clear pattern. Those countries reporting lower participation figures are mostly also the countries that do not aim to increase the demand for adult learning offers by individuals directly in their legal acts and strategies, while countries reporting higher figures, mostly address demand side instruments in their policies. Moreover, the group of countries reporting the lowest participation rates also represent the countries that do not give clear priority to participation of adults in learning in legal acts, policies, legislation, or strategies at the national level.

Figure 38 Overview of national policy (reforms) on incentivising individual participation in adult learning per cluster of countries





Source: *Authors, based on mapping of available instruments conducted AL expert network for the purpose of the IA on ILAs*

In the table below more details are provided on national policies and reforms on incentivising individual participation in adult learning in each of the EU Member States.

Table 4 Existing policies/instruments/policy reforms in Member State[148]

Member State	• Policies and reforms
Austria	• Lifelong Learning Strategy LLL 2020 (Strategie zum lebensbegleitenden Lernen in Österreich LLL:2020): aims to increase the participation rate in

[148] Based on mapping done by AL expert network on financial incentives for adult learning to individuals in 2020 and a report on national developments in adult learning with specific reference to the Recovery and Resilience Facility,

Member State	• Policies and reforms
	lifelong learning. It foresees several measures to help increasing participation rates, some of which also relate to individual support for learners. One of the measures proposed is the development of an individual education account as an incentive for private investment in education. • The government programme 2020-2024 more concretely also follows up on the ambition to further develop the financing of adult learning through the introduction of learning accounts and training vouchers. • Social partners are advocating for strengthening individual learning entitlements. In a "Post Corona Working Group", the Federation of Austrian Industry (Industriellenvereinigung) recommended the establishment of publicly financed temporary vouchers or token systems for disadvantaged population groups, which can be used for example for training. The Chamber of Labour (Arbeiterkammer (AK)), being the legal representation of the employees' interests, is also advocating training vouchers and accounts. These are not intended to replace the existing structural subsidies for adult education, but to supplement them. The AK supports that every employee should have the right to update his or her qualification or to acquire a new qualification after a certain period of employment. For this purpose, the AK proposes a new model, namely the "qualification budget" (Qualifizierungsgeld). This bundles already existing instruments (training leave, part-time training and scholarships for skilled workers) and advocates a training time account supported by a qualification budget. The Chamber of Commerce (Wirtschaftskammer (WKO)), as the legal representative of the interests of the business community, advocates that all formal training up to the Matura level (equivalent to the higher education entrance permission) should be free of charge, including for adults who are preparing for it as part of second-chance courses. For non-formal continuing vocational education and training, direct funding is favoured. Costs should be shared between learners, employers and the public sector. Political parties differ in their approaches.
Belgium	• Adult learning participation has been identified as a priority in the new policy plans introduced by the Flanders and Wallonia governments. The importance of re- and upskilling throughout life is recognised by the Flemish Vision 2050 plan and the Walloon Marshall Plan 4.0, especially in the areas of STEM and digital. In both regions, formal adult education is regulated in separate decrees. Public Employment Services are regulated to guide adults towards employment, by focusing on training in skills in line with labour market needs. This includes the stimulation of the uptake of adult education opportunities. Separate plans, like the Flemish Literacy Plan, aim to help adults increase their levels of proficiency in reading and writing. • The focus of legal acts and strategies in both parts of Belgium is to arrive at a stronger 'culture' of lifelong learning. Policy documents make no specific reference made to the possible role of individual entitlements towards this objective.
Bulgaria	• The most recent national strategical document, which refers to lifelong learning and adult education, is the National Development Programme Bulgaria 2030, adopted in January 2020. The Programme outlines the importance of lifelong learning as a key principle in the sphere of education and defines it as a national

produced early 2021, including suggestions for reform & investment priorities with respect to flagship 7 "Reskill & Upskill".

Member State	• Policies and reforms
	target goal for 2030 to reach 7% participation rate in lifelong learning of people aged 25-64. The programme envisages that "[a] system of incentives and effective mechanisms will be put in place to improve the skills of the population (including the elderly) to enable the reintegration of the unemployed into the labour market, including structurally unemployed, long-term unemployed and economically inactive low-skilled workers". The programme does not give priority to direct or indirect incentives and schemes. • The major policy documents related to adult learning are annual national employment action plans and earlier years, as well as the action plan for the Implementation of the National Strategy for Lifelong Learning 2014-2020. These plans outline several concrete measures targeting unemployed people with low levels of education (ISCED 2), long-term unemployed, unemployed without professional qualifications and inactive persons to acquire professional qualifications and key competences. Recently several important policy documents have been adopted in the sphere of digitalization and development of digital skills. Another important policy document is the national programme "Digital Bulgaria 2025" and associated Roadmap with more concrete policy measures. In the sphere of adult learning, it envisages improving the digital skills of the workforce, including financing of vocational training and key ICT competences, increasing the number of young employed and unemployed people trained by the ICT professions, teachers' training in digital skills, raising the skills of ICT professionals in the perspective of lifelong learning.
Cyprus	• Increasing participation in adult learning has been identified as a priority by the national strategy on Lifelong Learning 2014-2020. • Besides this strategy, the remaining acts/reforms offer mainly indirect motivation to adults to participate in learning activities/programmes. For example, the Human Resources Development Authority (HRDA) offers basically free of charge training opportunities to the inactive population and to employees through subsidised training programmes. The only exceptions are some schemes targeting the inactive population —the unemployed or the unemployed Guaranteed Minimum Income (GMI) recipients— for which the HRDA grants the participants with a small weekly or monthly allowance (90€ -125€) for their expenses. Moreover, the Evening High Schools and the Evening Technical and VET schools also offer their programmes free of charge to all adults (18+). Additionally, in the framework of the implementation of the Digital Strategy for Cyprus, since 2017, the Cyprus Productivity Centre (CPC) of the Ministry of Labour and Social Insurance has launched a series of free short-courses and workshops designed to enhance digital literacy and to promote the use of e-government.
Czech Republic	• When reviewing the national policy framework on attention for adult learning, no major reforms or policy initiatives were identified. • In August 2020 the Strategic Framework for Employment until 2030 was approved by the Cabinet. Only a draft version from 2019 was publicly available in January 2021 (foreseen to be published in December 2021). In it, no concrete measures for adult learning are proposed. The Strategy of Education Policy until 2030+ was approved by the Cabinet in October 2020, but it addresses only initial formal education.

Member State	• Policies and reforms
Germany	• In mid-2019, the new National Strategy for Continuing Education was presented. It aims to improve funding opportunities, information, and a counselling system. It aims to support individuals in their education and development, but also small and medium-sized enterprises. Action goals include improving the transparency of continuing education offers, adapting and optimising public funding systems, expanding advisory services and increasing the quality of education. • The strategy also specifies its ambition to strive for a new skills culture which sees continuing education and training (CET) as a normal part of life. The strategy supports (1) the transparency of CET opportunities and programmes by developing a central gateway for individuals with information about the support available for CVET ; (2) closing the gaps in support systems; (3) ensuring joined-up lifelong CET counselling nationwide and strengthening skills development counselling; (4) strengthening the responsibility of the social partners; (5) review and enhance the quality and quality assessment of CET; (6) increasing the visibility and recognising the sills acquired by worked through VET; (7) developing further training qualification and continuing education and training programmes; (8) strategically developing educational institutions into centres of excellence for CVET; (9) supporting CET staff and equipping them with the skills required for the digital transformation; and (10) strengthening strategic forecasting and optimising statistics on continuing education and training. • Various schemes and policies are already in place, such as an education voucher scheme within the framework of the Federal Employment Agency's "Förderung beruflicher Weiterbildung" (FbW) programme, and a so-called Bildungsprämie" (training premia), which is called the "savings voucher". This savings voucher is implemented under the legal framework of a so-called "Capital Formation Act" (Vermögensbildungsgesetz), and allows individuals to accrue savings into a savings account, which are complemented by a small public benefit.
Denmark	• Recently, the government has launched two plans for upskilling the workforce, both based on tripartite agreements. One is a programme for boosting the competencies of unemployed adults during the period of crisis. The focus is on educating unskilled workers to skilled level, and the main instruments used are economic benefits for individuals. Unemployed adults participating in education usually get a wage compensation amounting to 80% of the unemployment benefit. The upskilling programme increases this to 100% of the benefit for all types of vocational education and 110% for types where labour is especially in demand. The focus of the other programme is on secondary vocational education. The main element here is also economic, an increased compensation to employers for the wages that they pay trainees. The source is not directly state funds but based on training levies paid by employers. The vocational students benefitting from this programme are mainly young people, with some adults. The strategies and legal acts include both direct and indirect measures. The direct measures include especially (1) economic support for individual students and (2) information and guidance regarding education opportunities for adults, including recognition of prior learning. • The idea of introducing an individual learning account was one of the recommendations from an expert group on adult and continuing education in 2017, established by the Danish government after consultation with the social partners. The reception of the proposal was generally not positive, neither among political parties nor among labour market actors. Quite recently, in the context of the Covid-

Member State	• Policies and reforms
	19 investments in education, the Social Liberals have relaunched their proposal for individual learning accounts. The reactions from other political parties and labour market actors have been the same as earlier.
Estonia	• The Estonian education strategy for 2014-2020 already set adult participation in learning as one of the key indicators to monitor the lifelong learning system. It particularly highlights the need to support learning among people with low qualifications. The strategy also introduced an annually revised Adult Education Programme which sets out specific measures to promote learning among adults. Promoting participation of adults in learning is also prioritised in Estonia 2020 – the document outlining strategic aims in the European Semester framework. In addition, as described in the work plan for 2021, the Ministry of Education and Research has planned to develop the principles of the skills portal and digital story (täiskasvanute oskuste digilugu) for adults and the concept of micro-credentials by the end of 2021. Furthermore, the ongoing formulation of future policy strategy (see for instance Smart and Active Estonia 2035) already considers updating the Adult Education Act. The Ministry intends to specify the principles of quality assurance of continuing education and make it compulsory for training institutions to enter data on training participants into the Estonian education information system. This is a prerequisite for the development of the web-based skills inventory database for adults. • While the overall strategic or legal documents do not prioritise the provision of financial incentives directly to individuals, such measures are introduced in Estonia. Hence, the aim is not to increase the demand for adult learning offers directly by individuals but to increase the demand through a combination of measures. Providing financial incentives directly to individuals is one of a combination of measures that are introduced to raise participation of adults in learning. Several research results have pointed out the need to introduce a training voucher or individual learning accounts scheme in Estonia to motivate learning among those individuals who are in need of training but tend to participate less or are among particular risk group.
Greece	• Following consultations with relevant stakeholders, the Ministry of Education and Religious Affairs passed a bill in December 2020 (254/2020) to completely restructure the overall system of Vocational Education and Training and Lifelong Learning (LLL): The main changes revolve around three pillars. • (i) Unified strategic planning of VET and LLL. It introduces a new framework with distinct levels of qualifications to avoid overlapping structures and services. In this context, a national VET system is established, which is developed at levels 3, 4 and 5 of the National Qualifications Framework, in line with those of the European Qualifications Framework. As part of the overall reform, the law introduces new post-secondary training leading to EQF 3, which was previously not provided. Additionally, the new law allows progress from the institutes of Vocational Training and Vocational Lyceum to Universities (for up to 5% of University entrants); • (ii) Direct and effective connection of VET and LLL with the labour market. Introduction of a new system of institutional governance at central/sectoral and regional level with substantial involvement of social partners in identifying the needs of the labour market as well as in specific aspects of the design, implementation and governance of the vocational education and training system;

Member State	• Policies and reforms
	• (iii) Upgrade of the provided education and training (initial and continuing) in terms of structures, procedures, curricula and certification. The law re-introduces some quality dimensions in the operation of LLL centres - for example, by introducing minimum requirements for scientific and administrative staff, minimum quality specifications in the implementation of theoretical, practical and distance learning, introducing certification for the educational content of co-financed programmes etc. Additionally, the law creates a framework of regular control/inspections by the General Secretariat for Vocational Education, Training, Lifelong Learning and Youth.
Spain	• An integral reform of the professional training policies has been announced in December 2020. It will follow a consultation process with social partners and other relevant stakeholders. The focus of the reform is proposed to be in "permanent" training, upskilling and reskilling. • It will build on the modernization Plan for Professional Training launched in July 2020, with a foreseen investment of EUR 1 900 million in four years. Besides reinforcing VET, it aims to boost the validation of skills for up to 40% of active population less than 55 years old, which means over 3 million people, until 2023. It will also increase the number of actions for adult learning in scarcely populated areas. The Plan also foresees more flexible ways for training enhancing cooperation between firms and the education systems. • It will also benefit from the newly created coordination bodies on professional training with the regions, established in November 2020 and with social partners in December 2020. • Professional training as part of life-long training has been highlighted as a priority for the National Resilience and Recovery Plan, including the aim of providing digital skills to 80% of the population, with particular emphasis on women and vulnerable groups. • Simultaneously, there are plans for enhancing the tailoring of training for jobseekers as part of the reform of active labour market policies. While these initiatives do not prioritise the provision of financial incentives directly to individuals, they aim to increase the demand through a combination of measures..
Finland	• Recent debates on lifelong learning are reflected in three documents on adult learning, namely the Programme of Sanna Marin's Government 2019, the recent Education policy report 2030, and the upcoming parliamentary reform proposal of continuous learning. There are substantial expectations linked to this upcoming Education policy report 2030 report, as it has been touted as a major overhaul of the lifelong learning policy and direction in Finland for the coming years. The upcoming parliamentary reform proposal of continuous learning builds in part on an outline published by The Finnish Innovation Fund (SITRA) on continuous learning, suggesting a frame for future development of the educational system of Finland. These reforms do not aim to increase the demand for adult learning offers by individuals directly. • The focus in Finland is currently on **increasing access to paid training leave, guidance (targeting specified vulnerable groups) and participation in learning**. The adult education allowance was reformed in August 2020. The reform seeks to encourage students to work part-time and to make the adult education

Member State	• Policies and reforms
	allowance scheme appeal to new kinds of applicants. It includes a new two-stage application process by using an online portal. Moreover, the amount of allowance is changed making it possible for applicants to receive an educational allowance of 753 EUR if they earn up to 50% of their normal wage. Also the accumulation of months towards the maximum allowance period, and the study performance requirements. The eligibility criteria remain the same as before focusing on those having an employment history of at least eight years, have been employed by their current employer in a full time capacity for at least one year, those that study towards a qualification that complies with the scheme, have been granted study leave, and is eligible for social security in Finland. Specific provisions also allow for self-employed to request a similar (though slightly lower) education allowance. The idea of an individual learning account was discussed in in 2018 as an initiative from 9 labour unions, advocating for a model funded through employer and employee taxes (a sort of insurance model, like the unemployment insurance currently collected this way) and employee tax deductions. They call their model Competence accounts and the currency is vouchers.
France	• In France, increasing adult learning participation through conferring funds directly to the individual is identified as a priority. This challenge is addressed by the "Law for the Freedom to Choose an Occupational Future" (Loi sur la liberté de choisir son avenir professionnel) of 2018. France therefore aims at providing learning opportunities to all so that all are given an opportunity to (re)enter the labour market, or to benefit from upward occupational mobility. The individual is made responsible of her/his learning pathway, as opposed to the employer, the State and/or the Public Employment Service (PES). The Individual Learning Account (Compte personnel de formation, CPF) is the tool for this emancipation. In section 5 more information is included about this specific measure. • Finally, education and training are at the heart of the recovery plan (France Relance) launched by the government to address the major economic downturn caused by the Covid crisis (mid 2020). Only for employment and competences development, the plan has set aside 15 billion EUR. Some of the measures announced are: education and training for young adults, the National Fund for Employment earmarked for training, and facilitating reskilling and occupational transition.
Croatia	• No new policy papers in adult education have been published since 2014. A small change to Ordinance on Public Documents in Adult Education (Official Gazette 61/14) was adopted, but it was not crucial for the general adult education policy. In May 2020 the draft of the Adult Education Act was withdrawn from the parliamentary procedure. Croatia still has a Law of Adult Education from 2007. • There are not enough measures to motivate individuals for learning or employers to invest more in training. It is important to point out that the adult education system in Croatia is not part of the regular education system, but it is a special category. This is also evident in the way of financing – there is no regular system of financing adult education as is the case with regular education (from primary school to university). In Croatia, the national education policy debate does not focus on incentivising adult learning participation.
Hungary	• The need for increasing the participation of adults in learning and the need for competence development have shown up in some strategies in the last few years.

Member State	• Policies and reforms
	In Hungary, the increase in adult learning participation was mainly supported by EU resources while state funding remained limited. The main overarching problem remains the lack of a comprehensive adult learning policy framework or strategy at national level. Despite this, over the past few years the Government has launched several projects in adult learning, in most cases the effectiveness of these projects has not been measured. This was recognised by the Government, that launched the 2020 Vocational Education Law that serves as a basis for the mid-term strategic policy plan called Vocational Training 4.0 Strategy. The reform includes system-wide changes, which includes the concept of VET, structure, institutional structure, finances, and curriculum content. The Adult Education Act was comprehensively amended in several stages, most recently in July 2020 and then January 2021. The adopted new Adult Education Act and related implementing regulations are a significant step towards rethinking the adult education system: a more transparent, simpler system, more clear terms of reference and with fewer types and exceptions. Furthermore, in June 2021, a new form of Student Loan named a "training loan" will be introduced as a type of adult-education version of the Student Loan for higher education students. The training loan will be available for those who are between 18 and 55 years of age and participating in adult education and vocational training. According to preliminary estimates, the training loan could reach more than 150,000 people: more than 50,000 in school-based VET and up to 100,000 in adult training. • The 'life-wide' aspect of the lifelong learning (LLL) concept has not been in the focus of the government yet, and important aspects of adult learning (e.g. general adult learning beyond labour market oriented learning, promoting active citizenship, health literacy, family learning, as well as increasing the social recognition of adult learning's values) have not been covered in an articulated, distinguished LLL policy approach. Nevertheless, the government provides all citizens with the opportunity to acquire a state-recognised vocational qualification on the first and second level ("alapszakma"). The latter can be obtained free of charge in school-based vocational education as well as in a so-called vocational training ("szakmai képzés"). The topic of providing incentives for learning directly to individuals has not represented an element of the current political debate recently.
Ireland	• Participation in adult learning is a policy priority in Ireland and increasing engagement in Lifelong Learning is a key objective of Ireland's National Skills Strategy 2025. The strategy set the ambitious goal to increase the adult learning participation rate to 15% by 2025. In the national debate, there is little evidence on providing incentives to learn directly to individuals. Individuals are nevertheless the focus for intervention in relation to activation.
Italy	• The general strategy which drives public policy in Italy aims at strengthening policy areas where delays persist in the formation of human capital, in productivity and infrastructures, supporting them with appropriate macroeconomic stimuli. This is accompanied by a sort of dual strategy for adult learning. On the one hand, for vulnerable groups achieving adult learning objectives is postponed until the resumption of economic growth, and the negative effects that ensue are mitigated with the strengthening of social policies. On the other hand, developing and increasing the skills of high skilled workers - the individuals and companies that autonomously provide investment in training - are supported by the state both

Member State	• Policies and reforms
	through opportunities for tax deduction on expenses, and through public interventions to support research and innovation. • In 2020 the Italian government introduced an important measure aimed at promoting firm-level training and workers' reskilling. Coming into force in 2021, the Fondo Nuove Competenze (FNC – New skills fund) provides companies with monetary and organizational help to implement training and re-skilling programmes explicitly oriented at favouring investments in new technologies and reducing the employment impact of restructuring processes. The FNC aims to homogenise regional training policies reducing the asymmetries and extending the good practices developed in some regions. In fact, one of the key weaknesses of the Italian adult learning system concerns the differences between regions given the heterogenous distribution of resources and institutional capabilities. • Funding the individual learning demand has been debated in Italy in the early 2000s. It came on when Tuscany regional government introduced the first Individual Learning Account. Tuscany promoted the adoption of the measure among other regional territories.
Lithuania	• The Ministry of Education, Science and Sports delegated distribution of funds for non-formal adult education programs to the local municipalities since 2017, but these do not possess the funding necessary to make a substantial impact on the increase of participation in adult education. The lack of central coordination of funding and actions deployed by different ministries and programmes further decrease the impact on the rates of participation in adult education.
Luxembourg	• Increasing the participation rates in adult learning is given attention in legal acts, policies, legislation and strategies at the national level. The current legislation assures that a wide and accessible provision (including financially) is offered to individual learners. In addition, the new government coalition announced to further develop the lifelong learning and to improve the quality and flexibility in learning pathways. The relevant legal acts and strategies focus on supporting the provision of adult learning by subsidising it extensively at the level of the public employment service, public training providers and working closely with the professional chambers. All the measures aim to encourage individual adult learning through a wide and accessible offer of opportunities for formal, non-formal and informal adult learning.
Latvia	• In the Guidelines for the Development of Education for 2014-2020, lifelong learning is mentioned, but rather as indirectly linked to adult learning. No other relevant adult education legal acts or strategies exist that aim to increase the demand for adult learning offers to individuals directly.
Malta	• There is limited political debate on providing direct incentives to individuals to engage in adult education in Malta. Debate on direct incentives also did not attract much attention, with no interventions with respect to education and training as part of adult learning by the social partners last year.
The Netherlands	• In 2018, the inter-ministerial programme for lifelong development was introduced. The approach aims to increase the demand for adult learning by individuals directly by, on the one hand, offering individual financial incentives and

Member State	• Policies and reforms
	on the other hand, amongst others, increasing the flexibility of the VET and HE offer. This is expected to lead to higher demand from learners for education programmes. The approach seeks to increase awareness of individuals, and help individuals decide for themselves which training they want to pursue. This development must be seen in the context of the existing system, in which employers and sectoral funds are responsible for the largest share of adult learning. The approach seeks to increase awareness of individuals, and help individuals decide for themselves which training they want to pursue. • A key instrument in this strategy is the introduction of a new training allowance scheme, the STAP budget (Dutch acronym for Stimulering Arbeidsmarktpositie, or Incentive Labour market Position). The STAP budget is introduced to replace an existing tax incentive scheme, in which individuals can request tax credits for costs for participating in adult learning. The objective of the scheme is to better empower individuals to take control of their learning careers more actively. To do so, it offers all adults the possibility of spending up to 1,000 EUR once a year on training. The funds can be used on trainings that are included in a training register.
Poland	• Poland has implemented numerous strategies aiming to increase adult learning participation. Funding is directed to the supply side and traditionally the training offer was decided by public administration and training institutions, rather than employers. Two national strategies have a perspective to 2030; the Human Capital Development Strategy (Strategia Rozwoju Kapitalu Ludzkiego)– aiming to raise the competences and qualifications of citizens – and the Strategy for Responsible Development 2030, that links skills development to changes in the education system.
Portugal	• In Portugal, participation in adult learning is considered a policy priority. Since 2016, the Adult learning and education policy has observed changes. The existing offers are aimed at increasing demand indirectly. • The demand-side-funding instruments of adult learning targeting individuals did not have a relevant discussion in recent times in public arenas.
Romania	• In Romania, the low participation rate was identified as a problem and the Lifelong Learning Strategy 2015-2020 set the goal to increase it to 10% by 2020. Such strategy is part of a package of three strategies adopted in 2015 on lifelong learning, on access to higher education, and on reducing early school leaving. The incentives to increasing participation are directed towards institutions and services, despite the non-functionality of the system has been recognised as a barrier to training.
Slovenia	• Increasing the adult learning participation is considered a policy priority and the main document is the Adult Education Master Plan (AEMP), adopted by the National Assembly. In the latest AEMP, 2021-2023, individuals are directly addressed through the formal recognition of their skills and knowledge. Besides the AEMP, the Slovenian Development Strategy 2030 sets a goal in adult learning participation of 19% by 2030 (11.6% in 2016, according to LFS).

Member State	• Policies and reforms
Slovakia	• In Slovakia, there has been an ongoing effort to prepare a new law and strategy on lifelong learning to increase adult participation in learning. To incentivise training, in 2018 the Ministry of Finance introduced a tax incentive for employers to motivate them to invest more into training. • In the meantime, the Implementation Plan of the National Programme for Development of Education that was adopted by the Slovak Government in June 2018 specifically refers to the piloting and possible introduction of individual learning accounts. It budgets with 1,955,000 EUR per year for the period 2020-2027
Sweden	• According to the government, the goal of the municipal adult education (komvux) is for adults to be supported and stimulated in their learning. They should be given the opportunity to develop their knowledge and skills in order to strengthen their position in work and social life and to promote their personal development. The starting point for education should be the individual's needs and conditions. Those who have received the least education should be given priority in komvux. • There is a general understanding in Swedish politics that it is good both for the individual and the society that komvux is free of charge and open to anyone who needs it. The issue of study support (in Swedish studiemedel or CSN) in the form of a mix of soft loans and subsidies to the learners (or individual training subsidies) is also not questioned by any party.

4.2.2. Existing financial support instruments for adult learning

The following tables are drawn from the information provided by the Financing Adult Learning database of Cedefop that has recently been updated with information of 2020. This information has been cross-checked with information provided by the national experts of DG Employment's Adult Learning Expert Network[149].

Box 1 Definitions used

Grant for individuals: Adults may receive public funding to cover (part of) the costs related to their participation in education and training. Such co-funding schemes are implemented under various names: grant, training voucher, training account, individual learning account (ILA), etc. They are part of a shift away from simply financing training providers to a more demand-led approach that finances learners.

Tax incentives: Tax incentives for the purposes of personal income tax, may allow adults to deduct their costs for continuing vocational training or adult learning related to their current or future occupation from their individual income tax base or tax due.

Subsidised loans: Loan scheme allows individuals to borrow financial resources (on favourable conditions) from their future income to cover part of their (education and

[149] The review in this study makes use of country reports drawn up by country experts in the field of adult learning. This network has published various comparative studies over the last years, and has been managed by DG EMPL in support of specific policy question.s See for instance Ecorys (2019), Adult Learning policy and provision in the Member States of the EU.

training) expenditure. The State may support the availability of loans and co-finance loan-related costs to encourage participation in adult learning

(Paid) training leave: The training leave is a regulatory instrument which, either by statutory right and/or through collective agreements, sets out the conditions under which employees may be granted temporary leave from work for learning purposes. Furthermore, the training leave allows the employee to be absent from the workplace for education and training purposes without losing the right to return to work later on or other social rights connected to a current employment. Training leave may be paid (the employer fully or partly covers the employee's salary, supported by the government or not) or unpaid (the employee isn't paid during the training leave period, but they are guaranteed to maintain their position once the period ends). The below mapping only considers paid training leave schemes.

Tax incentives and grants for companies: Concerning tax incentives for the purposes of corporate income tax, countries typically regard company expenditure on training as a business cost which is 100% deductible from the taxable income. In some countries, companies may also receive additional tax incentives related to their training activities. Companies may also receive public funding (grants) to cover (part of) their training costs.

Training fund: "A 'training fund' is a dedicated stock or flow of financing outside normal government budgetary channels for the purpose of developing productive skills for work.". Training funds in the EU are very heterogeneous. The differences concern the governance models (bipartite or tripartite nature), the number of funds established per country, the type of (education and training) activities and target groups supported, and the way the money is collected and redistributed.

Source: Financing Adult Learning Database of Cedefop. Preliminary updated version as of June 2021.

Table 5 Overview on the use of funding instruments in the EU Member States [150]

		Financial support for individuals					Financial support for companies		
	Country	Training voucher/ grants	Individual learning account	Tax incentives	Subsidised loans	Paid training leave	Paid training leave with public co-funding[151]	Tax incentives / grants / vouchers	Training funds
MS with high participation (>45%) in AL	**AT**	V		V		V	V	V	V
	DE	V		V	V	V	V	V	V
	DK	V		V		V	V	V	V
	FI	V		V	V	V	V	V	
	FR	V	V		V	V	V	V	V
	HU	V			V			V	V
	IE	V		V				V	V
	NL	V		V	V			V	V
	SE	V		V	V	V	V		
MS with medium participation in AL	**BE**	V				V	V	V	V
	CY					V	V	V	V
	EE	V		V	V	V		V	
	IT	V		V	V	V		V	V
	LU	V		V		V	V	V	V

[150] Based on the Financing Adult Learning Database of Cedefop, Preliminary updated version as of June 2021. Data has been cross checked with data provided by the national experts of DG Employment's Adult Learning Network. For example, the Cedefop database does not provide a distinction between paid and unpaid educational leave, and whether this is (co-)financed by public sources or not. In this case, information is used from the AL expert network for completing the table.

[151] According to the adult learning expert network.

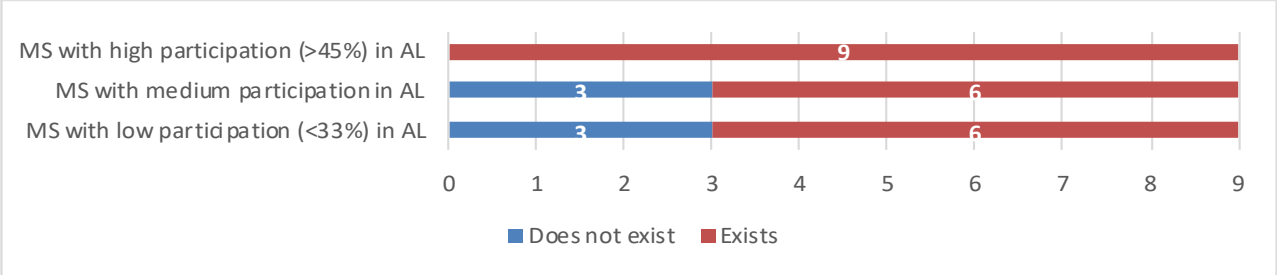
		Financial support for individuals					Financial support for companies		
	Country	Training voucher/ grants	Individual learning account	Tax incentives	Subsidised loans	Paid training leave	Paid training leave with public co-funding[151]	Tax incentives / grants / vouchers	Training funds
	LV			V	V	V		V	
	PT	V		V	V	V		V	
	SI			V	V	V		V	V
	SK	V			V	V		V	
MS with low participation (<33%) in AL	BG	V				V		V	
	CZ			V		V	V	V	
	EL[152]				V	V	V		V
	ES	V			V	V	V	V	V
	HR	V				V		V	
	LT	V		V	V	V		V	
	MT	V		V	V	V		V	
	PL	V			V	V		V	
	RO					V		V	
	TOTAL	21	1	16	17	24	12	25	14

Source: The Financing Adult Learning Database of Cedefop. Preliminary updated version as of June 2021.

[152] In the mapping of the national experts of DG Employment's Adult Learning Network for Greece in total 20 voucher schemes were identified that are running since 2015, all of which are co-funded by the ESF. These were not included in the Cedefop database, since these vouchers represent a particular type of service (a type of course) provided by one or a small number of providers, so that the scheme is more similar to a supply-side funding arrangement.

Table 5 shows that the most commonly available financial instruments are financial incentives for employers for employee training (available in 25 Member States), followed by paid training leave (24 Member States- whereby public co-funding is available in half of them according to the adult learning expert network, and often with low effective outreach as discussed in Annex 7) and training vouchers (21 Member States). The Member States that report high participation in adult learning all have voucher schemes in place, while this is not the case for Member States that report low to medium participation, of which in one-third of countries schemes does not exist (see figure below).

Figure 39 Overview of Cedefop Financing Adult Learning Database & adult learning expert mapping – existence of voucher/grant schemes



Source: A*uthors, based on mapping of available instruments conducted by Cedefop Financing Adult Learning Database and by AL expert network for the purpose of the IA on ILAs.*

Having voucher systems in place does not mean vouchers are available for all adults. Only 8 schemes out of 86 in the Cedefop database are open to all adults. Only a few target all adults, the self-employed or the inactive. In the case vouchers address employees, in several cases this is restricted to employees that are working a minimum number of hours a month, like the training vouchers in Belgium that apply to persons with a working contract of less than 80 hours per month, the continuing education grant in Germany that apply for people that are employed 15 hours or more per week, or the adult education allowance in Finland that apply for persons having a full-time employment relationship with the same employer for at least one year. Most of the schemes have a national scope (47) and only limited number have a regional scope (14). **Available participation data also point to a limited outreach to adults** as measured by participation rates in the adult population, limiting vouchers' impact on increasing adult learning participation rates or reducing inequalities in the access to training opportunities. For instance, the REPAS training voucher scheme in the Slovak Republic reported 13 398 participants in 2018, and the training card for employed people in Estonia reported around 5 700 participants in 2020. Effective outreach of most voucher schemes is hence smaller also in comparison to income tax incentives.

4.2.3. Existing infrastructure and supporting services

The table below provides an overview of infrastructure and supporting services for increasing incentives and motivation of adults to participated in Adult Learning. This includes infrastructure and services like:

- **Register of training providers** is a user friendly and up to date database of adult learning opportunities that are also including non-formal training opportunities at national level
- **Digital platform for citizens** where they can identify themselves securely and access public services (e-government platforms)
- **Quality assurance for formal and non-formal adult learning provision** that could be applied or built upon to safeguard the quality of the training demanded by individuals. Quality assurance. This could for instance be a list of certified providers and training that qualify for some already existing support schemes.
- **Career and adult learning guidance** including public or legally mandated guidance offer.

- **Skills validation mechanisms** are in place to validate skills obtained through non-formal and informal learning, modular training etc

It shows that existing **practice to increase incentives and motivation of individuals** varies across Member States. According to the assessment of the AL expert network almost all countries have a publicly or legally mandated career guidance systems (25 Member States of which 5 Member States to some extent), quality assurance systems for non-formal learning (21 Member States of which 11 to some extent), and skills validation systems (26 member States of which 16 to some extent) in place. Nevertheless, **these generally do not fully cover all types of learners and not always linked to financial instruments in a systematic and integrated approach.** A concrete example in this respect is the availability of guidance systems. In most countries the public employment services play a major role providing guidance services, limiting the services only to the unemployed and job seekers. In other cases, guidance services are fragmentated, not having a centralised institution for career guidance for all adults but provided by different subsectors (such as Public Employment Services, guidance centres in the education system, and youth services). Only a few countries have a national guidance system providing support to all adults. Examples of countries that have more elaborated guidance systems is Austria that provides educational guidance free of charge in all provinces, which can be used on a voluntary basis. Another example is the Netherlands that recently developed a voucher system for guidance and counselling services for all adults (Nederland Leert Door!).

Although some countries invested in the last years in digitalising services in portals, only 12 Member States have education registers in place or databases with training opportunities addressing the lack of transparency about available support and training offer. All Member States have digital platforms in place where they can identify themselves securely and access public services (e-government platforms). In almost all Member States there is a legal right to training leave.

Table 6 Existing infrastructure and supporting services for increasing incentives and motivation of adults to participate in adult learning (based on mapping done by AL expert network on financial incentives for adult learning to individuals in 2020)

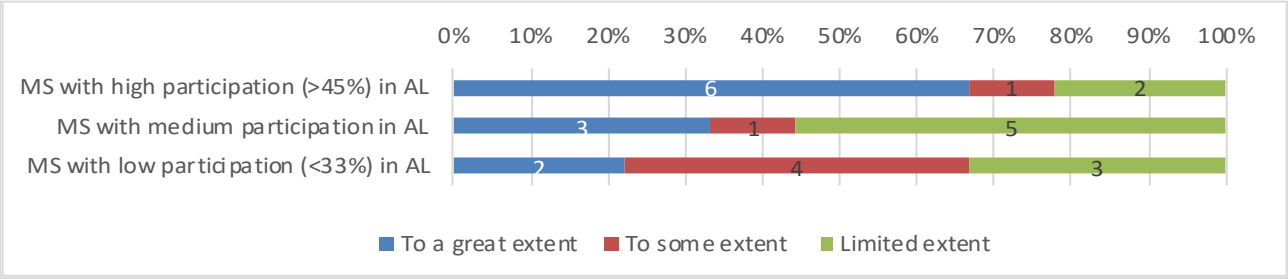
Cluster	Country	Register of training providers	Digital platform	Quality assurance in non-formal AL	Career guidance	Skills validation
MS with high participation (>45%) in AL	**AT**	Yes	Yes	Yes	Yes	To some extent
	DE	Yes	Yes	Yes	Yes	To some extent
	DK	Yes	Yes	Yes	Yes	yes
	FI	Yes	Yes	Yes	Yes	yes
	FR	Yes	Yes	No	Yes	yes
	HU	No	Yes	To some extent	To some extent	To some extent
	IE	No	Yes	To some extent	Yes	To some extent
	NL	No	Yes	Yes	Yes	yes
	SE	Yes	Yes	To some extent	Yes	yes
MS with medium participation in AL	**BE**	Yes	Yes	To some extent	Yes	yes
	CY	No	Yes	Yes	No	To some extent
	EE	No	Yes	Yes	Yes	To some extent
	IT	No	Yes	To some extent	To some extent	To some extent

Cluster	Country	Register of training providers	Digital platform	Quality assurance in non-formal AL	Career guidance	Skills validation
	LU	Yes	Yes	To some extent	Yes	yes
	LV	No	Yes	To some extent	Yes	To some extent
	PT	No	Yes	No	Yes	yes
	SI	Yes	Yes	To some extent	Yes	To some extent
	SK	No	Yes	To some extent	To some extent	To some extent
MS with low participation (<33%) in AL	**BG**	Yes	Yes	Yes	Yes	To some extent
	CZ	No	Yes	To some extent	No	To some extent
	EL	No	Yes	No	To some extent	To some extent
	ES	Yes	Yes	Yes	Yes	yes
	HR	No	Yes	No	Yes	No
	LT	No	Yes	No	Yes	To some extent
	MT	No	Yes	No	To some extent	To some extent
	PL	Yes	Yes	Yes	Yes	To some extent
	RO	No	Yes	To some extent	Yes	yes
TOTAL		**Yes = 12** **No = 15**	**Yes = 27**	**Yes = 10** **To some extent = 11** **No = 6**	**Yes = 20** **To some extent = 5** **No = 2**	**Yes = 10** **To some extent = 16** **No = 1**

Source: *Authors, based on mapping of available instruments conducted AL expert network for the purpose of the IA on ILAs*

By relating the availability of infrastructure and supporting services in Member States to the participation statistics, a clear trend becomes visible. In the figure below scores are provided to individual items (availability of register of training providers; digital platform; quality assurance; career guidance; and skills validation) to assess the general availability of infrastructure and supporting services in the EU Member States in a comparative manner (Yes = 2 points; To some extent = 1 point; No =0 point). The figure shows that **Member States that report the highest participation figures, generally also have the infrastructure and supporting services in place** (see figure below).

Figure 40 Overview of adult learning expert mapping – existence of infrastructure and supported services [153]



Source: Authors, based on mapping of available instruments conducted by AL expert network for the purpose of the IA on ILAs

Member States refer to different good practice regarding the register of training providers, digital platform, quality assurance, career guidance, and skills validation. With regards to the educational register, Denmark serves as good practice having a register with all relevant information on Danish citizens and include records of schools and education institutions. Information on education is linked to the individual citizen codes, which allows linking to other types of individual information, such as income, employment, and health. There are dedicated registers for adult education and training, including information on shorter courses and part-time education. Furthermore, following the 2017 tripartite agreement on adult education and training, the platform 'voksenuddannelse.dk' was established in the fall of 2018. The platform integrates information from previous separate platforms and is designed to give a comprehensive overview of all training opportunities for adults. A good practice example in relation to quality assurance of non-formal adult learning is Ö-Cert in Austria, which is an overall framework of quality ("umbrella label") for adult education providers. It´s a nationwide quality trademark, regulated by law (contract between the Federal Ministry of Education, Science and Research and all 9 provinces) and became effective in 2012. A good example of career guidance is available in Ireland where guidance counsellors and coordinators provide a guidance service to numerous target groups. The Adult Educational Guidance and Information Services are based in the 16 Education and Training Boards and Waterford Institute of Technology. With regard skills validation, Denmark serves as good practice, where assessment of prior learning and skills is a right for adults who want to enrol in some types of adult education and training. The assessment is done by an educational institution and regulated by the official guidelines for the chosen type of education. If the skills obtained through prior learning are recognized for the chosen type of education, the applicant gets a certificate. For persons who are unskilled or have an upper secondary vocational education as highest level, a prior learning assessment in relation to Labour market training courses, vocational educations, general subjects and academy programmes, the assessment is free. For persons with a higher education degree, the schools often charge a fee for prior learning assessment for academy and diploma programs.

4.3. Extrapolating participation in adult learning until 2030

Besides the impact of numerous external drivers, forecasting participation trends is complicated by the limited data availability, as only three AES 12 survey waves with 12 months reference period are available (2007, 2011 and 2016), with statistical breaks due to survey revisions in some Member States.

The JRC has forecasted the evolution of adult learning participation in the EU until 2030 based on past trends only in those EU Member States without any statistical break between the 2007, 2011 and 2016 AES survey waves.[154] The increase in adult learning participation across the three survey

[153] A score is calculate whether there is register of training providers, digital platform, quality assurance in non formal adult learning, career guidance, skills validation and right on education leave.

[154] Biagi et al. (2020), *Adult learning in Europe: An analysis of the determinants and an attempt at forecasting*, analytical input by JRC for DG EMPL. This applies to 13 Member States which account for about half of the EU-27 population and are broadly representative of

waves has been almost linear (consistent with LFS data for participation with a 4 week reference period). Projecting the relative increase to 2030 and applying it to the 2016 participation rate for EU-27 yields a predicted increase from 37.4% in 2016 to 48.6% in 2030. The EU-level targets for 2025 (50%, European Skills Agenda) and 2030 (60%, European Pillar of Social Rights Action Plan) are hence not met under the baseline scenario.

Table 7 shows the resulting assumed changes in average participation rates of adults aged 25-64 between 2016 and 2030 under the baseline scenario for EU-27 and by Member State.

Table 7 Projected baseline participation rate in 2030, based on AES 2016

Country	Participation rate (2016)	Projected baseline participation rate (2030)
EU-27	37.4	48.6
Belgium	39.7	51.6
Bulgaria	11.8	15.3
Czechia	22.8	29.6
Denmark	50.5	65.7
Germany	46.4	60.3
Estonia	33.9	44.1
Ireland	46.0	59.8
Greece	16.0	20.8
Spain	30.5	39.7
France	48.4	62.9
Croatia	26.9	35.0
Italy	33.9	44.1
Cyprus	44.8	58.2
Latvia	39.0	50.7
Lithuania	25.0	32.5
Luxembourg	43.4	56.4
Hungary	54.8	71.2
Malta	32.8	42.6
Netherlands	57.8	75.1
Austria	55.3	71.9
Poland	20.9	27.2
Portugal	38.0	49.4
Romania	5.8	7.5
Slovenia	40.3	52.4
Slovakia	42.6	55.4
Finland	51.4	66.8
Sweden	58.9	76.6

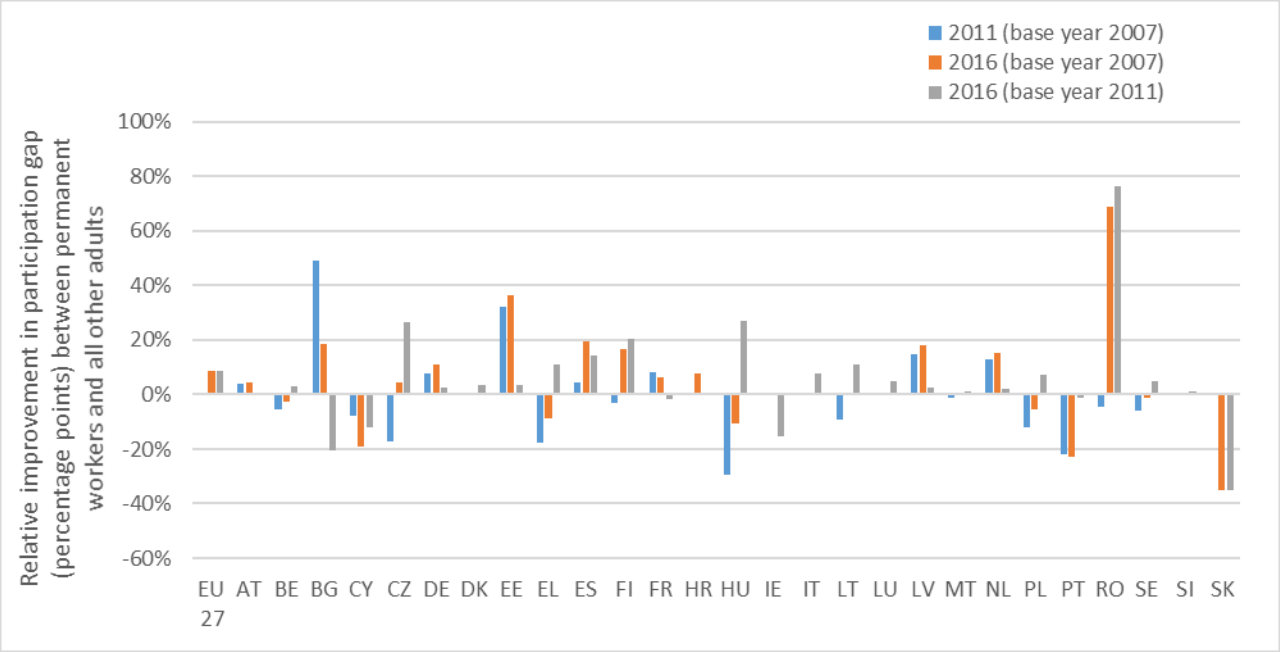
Source: Authors, based on AES2016

To arrive at the extrapolation in the table above, we assume that existing differences in participation patterns between groups remain constant. This is necessary because the limited comparability over time of AES data and more idiosyncratic factors influencing (the measurement of) such differences in participation between groups within Member States do not allow for reliable extrapolation into the future. When cautiously trying to identify such trends, we compared participation figures of

the EU-27 in terms of their average adult learning participation rate in 2016. Participation rates in all but 3 Member States (BG, LT, ES) increased between 2007 and 2016.

permanent employees and other adults in 2011 and 2016, and found that the differences in participation between such groups have decreased in most Member States (21 out of 27). Only in BG, CY, FR, IE, PT and SK such differences in participation have in fact increased since 2011. However, no clear trend is visible when comparing 2016 to 2007, with a decrease of the participation gap in 13 out of the 22 Member States for which data is available and an increase in BE, CY, EL, HU, MT, PL, PT, SE and SK[155].

Figure 41 Participation gaps across EU



In most Member States, observed decreases in the participation gap are primarily influenced by improved participation figures among unemployed and inactive; only in AT, BG, DK, EE, EL, IE, PT, SI, and SK, the share of participation among atypical workers (i.e. workers with temporary contracts or self-employed) improved more than that of all adults without permanent contract (including those unemployed or inactive). Again, it is underlined that the measurement of such differences as presented here can be influenced by substantial breaks in the consistency of time-series of the AES, and that such tentative findings need to be treated with due caution.

When measured in absolute terms, the EU-level differences in participation between these two groups seem to have slightly increased since 2007 (compare a percentage point difference between the two groups of 15.1 in 2007 – 36.1% of permanent employed participated in adult learning and 21% of other adults did, against a percentage point difference of 18.2 percentage points in 2011 – 43.6% against 25.4%). From 2011, the gap in participation between these groups measured in absolute values narrowed again (16.7 percentage point difference in 2016 – 45.4% against 28.7%)[156].

5. Individual learning accounts – the French experience

The section is prepared based on the available literature and information shared by the programme managers for the French ILA (Caisse des dépôts et consignations - CDC).

5.1. Summary

- The French Individual Learning Account – the CPF *Compte personnel de formation* – stems from an initiative from 2005 and is subject to continuous reforms, the most recent in 2018 (operational in 2019), enshrined in employment laws. The ability to learn operational lessons and adapt as required is a key feature of the CPF.
- The online training accounts are accessible to all adults of working age, with recent reforms extending coverage to the self-employed volunteers and school leavers, provided they work more than half time. A time-based discount applies for part-timers below half time.
- The CPF can be held and used until retirement. The CPF is not tied to employment contracts, although training leave – for employees – has to be agreed with employers, with no loss of wage.
- Training has to be purchased from accredited training providers, authorised for the CPF; and it has to lead to a qualification or recognized certificate. There are currently 19 000 registered accredited providers (the list is reviewed periodically). For users, there is a search engine to help select courses and a helpdesk.
- The CPF is largely funded through taxes on employers and allows additional contributions by individuals, their employers or public authorities (e.g., the Public Employment Service).
- The 2018 reform was intended to strengthen the autonomy and choice of the individual, thus improving flexibility, strengthening employment rights and increasing the number of training actions and learners, as the previous measures did not have the desired effect.
- One of the features of the reform is the monetisation of the learning accounts. Individuals can now access credits of 500 EUR per year, while the low-skilled benefit from additional financial entitlements (amounting at 800 EUR per year), which they themselves can spend for training.
- Another key innovation is to make the account details available to users online, via PC, tablet or mobile. The aim is to increase transparency and improve user access.
- Since November 2019 (until January 2021) there have been 6.5 million activations of the CPF, linked to a total of 1.77 million registrations for training activities. Participation figures for the revised CPF highlight a continued bias towards higher qualified individuals. So far, young and older people (below 19 and over 55) have also been under-represented in participation figures.
- Only about 10% of training are complemented with individual contributions, for an average value of around 485 EUR (3.9% of the total training costs[157]). The possibility of top ups from businesses is relatively new (2020) explaining their relatively low number (0.5% - see Table 8).
- The operational budget for the CPF for 2020-2022 (3 full years) is EUR 100 million, but subject to monitoring and additional investment.
- An evaluation/impact assessment of the CPF was due to be undertaken later in 2021. This may follow later to ensure that the results are not distorted by the Covid-19 pandemic and its impact on businesses and individuals.

5.2. General Description, Key Features, and Achievements

This section highlights the key points of individual learning accounts in France, by focusing on the portal “Mon Compte Formation” (MCF - my learning account). This portal combines the entitlements

[157] It depends on the share of total trainings where individual contributions play a role (about 10%). 3.9% refers to the total costs for ***all*** trainings.

from multiple training schemes into a single portal. Most attention is subsequently given to the provisions of the CPF (Compte Personnel de Formation), the largest and most visible training entitlement scheme included in the portal that covers all workers in the private sector and unemployed.

Currently, there are between eight and ten thousand[158] learning activities starting up every day that are partly or fully financed by the training funds accessed through the online training portal[159]. This makes it an interesting case to further study. The organic growth and dynamic adjustments of the scheme in response to changing needs and political priorities gives an interesting insight into the implementation process of such a scheme for other Member States.

5.2.1. Key Features of the Current System (The Extended CPF)

Rationale

The law that underpins the current shape of French Individual Learning Accounts seeks to explicitly address the challenge of increasing participation in adult learning ("Law for the Freedom to Choose a Vocational Future" (*Loi sur la liberté de choisir son avenir professionnel, a.k.a. Law "Pénicaud 2*[160]*" or Law "Avenir"*). The 2018 Law came into force on 1 January 2019 and was effectively implemented by November 2019.

The MCF seeks to improve the economic opportunities of citizens by giving them training rights, regardless of their professional status, and ensuring their accessibility in one location. The online training portal offers every individual information about his/her rights/responsibilities and offers information about the amount of money available on the website or the smartphone application (respectively moncompteformation.gouv.fr and *moncompteformation*, CPF Platform for short in the rest of this section).

With the MCF, individuals are made responsible for their own learning pathway, instead of depending on their employer, the State and/or the Public Employment Service (PES) to initiate training. In practice, the CPF allows all individuals, without intermediaries, to decide on which learning activities they would like to participate, from a list of training activities provided by accredited institutions. The objective is that this contributes to a higher completion rate of training, increases user satisfaction, and help individuals to find learning activities that correspond to their vocational and occupational aspirations.

Coverage

The online learning portal offers a unified point of entry for the selection and purchase of training for all citizens. Within the account, the multiple existing entitlement schemes (that of employees in the private sector; CPF, public officials and volunteers; early school leavers with the *Compte d'Engagement Citoyen*, (CEC[161])), are presented into a single location, which offers a unified approach to the selection and purchase of training for all citizens.

The CPF is in principle open to all salaried workers in the private sector. In addition, any self-employed, freelancers, liberal and non-employee professions, collaborating spouse, artists, authors can sign up for the CPF by paying their *Contribution à la formation professionnelle* (CFP, Contribution to Training).

In principle, under the CPF, all participants are eligible for 500 EUR per year, cumulable up to 5 000 EUR over ten years (part-timers working between 50 and 100% of the time receive the corresponding fraction of these amounts[162]). Specific additional contributions are in place for lower-qualified (Below CAP/EQF level 3), who are eligible for 800 EUR, cumulable up to 8 000 EUR over ten years (here

[158] This figure from May 2021 relates to effective enrolments in formal learning activities thanks to the CPF (the dropout rate is around 10%). There is a difference between creating an account (or opening a CPF) and actually using it for engaging in formal learning.

[159] CPF for short in the rest of this document unless the point is to differentiate the 2014 version from the 2018 version of the CPF.

[160] After the name of the Minister at that time.

[161] A Citizen Commitment Account (*Compte engagement citoyen*, CEC).

[162] https://travail-emploi.gouv.fr/formation-professionnelle/droit-a-la-formation-et-orientation-professionnelle/compte-personnel-formation.

too part-timers receive the corresponding fraction). Self-employed that worked less than fulltime are eligible to a share of the annual 500 EUR that is proportional to the time they worked.

Practical implementation

With the introduction of the portal, users know exactly at any point in time how much money they have on their account and what amount they may spend for learning activities. Creating and consulting one's entry on the online training portal requires a social security number that is unique for each person and provided by the National Statistical Institute (INSEE in France) at birth (a.k.a Physical Person Registration Number, NIRPP), composed of thirteen digits.

Users may add money on their learning account with a credit card. Only about 10% of training are complemented with individual contributions, for an average value of around 485 EUR (3.9% of the total training costs). The system also allows for additional sponsors (e.g., employers, and public authorities can use the same mechanism to target specific groups) to provide extra funding to an individual CPF. So far, this has not been done in great numbers. Employers have contributed so far 0.5% of the total costs of the training actions paid for by the CPF. It is noted that this is only possible since July 2020, so it is still early to draw conclusions about this. The lockdown and other COVID-19 related measures may have substantially influenced this figure.

The CDC also asks providers to publish their existing provision on the website. The "market" is therefore fully transparent for all end users.

The CDC describes the online portal in terms of an e-commerce site; individuals 'shop' for training opportunities, add these to their 'cart', and pay for these with their training credit (to which additional credits can be added automatically, depending on specific eligibility), supplemented – where necessary – by their own contribution. Once a learner signs up, the training providers receive the request for participation, validate the registration and are subsequently paid.

If potential users want to, they may receive free guidance through the Professional Evolution Guidance (*Conseil en évolution professionnelle*, CEP[163]).

All in all, the system is developed to make it as easy as possible for the end-users. The online platform has a helpdesk for users that have questions.

Registration of training providers

The *Caisse des dépôts et consignation* (CDC) is responsible for the hosting of the web portal, and functions as the central point of coordination towards training providers. The registration of all 19 000 providers is managed by the CDC, which now uses a common contract with standards and identical terms and conditions for every provider. This is a rather radical change compared to the past whereby providers drafted their own contracts and conditions. Training providers can include training programmes in the system that are either included on certified national, regional or sectoral interprofessional lists of training provision.

In interviews, the CDC highlighted that it wants to avoid the online portal to become a search engine that produces popularity-based results, i.e. that some providers would appear more often than others on the basis of 'clicks', instead of their intrinsic quality. In practice, individuals need to define and select the trade/sector the users are looking for. From there, they find learning activities corresponding to the selected trade. The CDC standardised how information on existing providers is displayed. No information is available about the user-perspective, i.e., how user friendly the chosen approach for users.

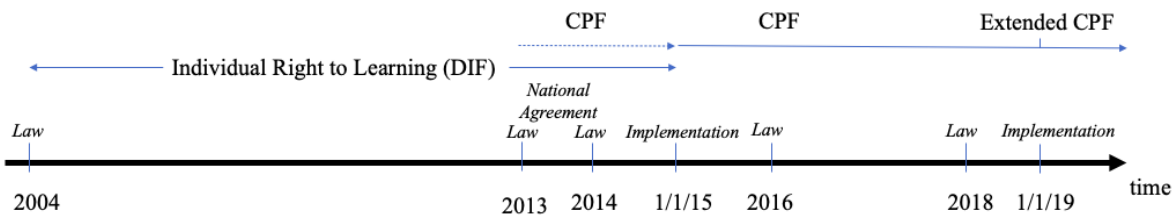
As the regulatory body for the registry of training opportunities, *France Compétences* has the responsibility to add new entries. It has the responsibility to accept new trainings within the registry as long as they comply with the necessary quality standards.

[163] See: https://www.service-public.fr/particuliers/vosdroits/F32457. However, awareness of the CEP remains relatively low. See: https://www.studyrama.com/pro/formation/dispositifs-de-formation-continue/cpf-et-cep-des-dispositifs-de-formation-et-d-accompagnement-professionnels-encore-trop-meconnus-22051.html.

5.2.2. A Brief History of individual training entitlements in France

The first version of the current ILA was introduced in 2004 and was called the Individual Right to Undertake Formal Learning Activities (DIF – *Droit Individuel à la Formation*). Since then, it has been revisited several times and the last reform (Law passed in 2018, implemented in 2019) led to the Extended CPF (*Compte personnel de formation étendu*, CPF *étendu*). The most recent reforms brought new elements such as the digitalisation and the monetisation of the ILA. In addition, individual users do not need an agreement from the body managing the money before buying learning activities, which was the case until then (when the CPF was in number of hours (not in EUR) and it was managed by the OPCAs (the bodies collecting the money, *Organisme paritaire collecteur agréé*; the OPCAs now discontinued and it is the CDC that manages the money, Caisse des dépôts et consignations).

Figure 42 The development of the French ILA



The Law of 2004 – Creation of the DIF (implemented in 2005)

The Law of the 4th May of 2004[164] on "Lifelong Vocational Education and Training and Social Dialogue" provides the legal basis for the establishment of the Individual Right to take part in Formal Learning Activities (DIF, *Droit Individuel à la Formation*[165]). It was implemented on 7 May 2005 and the DIF existed between 2005 and 2014.

- **Reason for the legislation**: The main objectives of the law were to reduce inequalities in access to training, with particular attention for lower-qualified workers and workers in smaller enterprises166.
- **Coverage**: The DIF targeted individuals in employment in the private sector (*salariat*)[167], and was embedded in labour contracts, signed between the employer and the employee. By design it therefore excluded anyone not in an employment relation, such as freelancers, self-employed, or individuals that were fired from that enterprise. Young people entering the labour market could also not benefit from the provisions if they did not secure an employment contract.
- **Value of entitlements**: The law requires enterprises to pay for 20 hours per year, cumulable to up to six years, of learning activities.
- **Financing**: The law introduces a mandatory contribution for enterprises to a newly created national training fund, effectively introducing a 'training tax' of 1.5-1.6% of the total salaries paid. The tax levied on smaller enterprises was lower ranging from 0.25 to 0.4% of the salary base.

[164] LOI n° 2004-391 du 4 Mai 2004 relative à la formation professionnelle tout au long de la vie et au dialogue social.

[165] The term "formation" in French has a very broad meaning and may range from academic training to purely vocational training, or both. In addition, it could be formal or not. Nevertheless, in this particular case, it is formal learning that is meant, i.e., organised in a formal context, in particular with learning objectives (Werquin, OECD, 2010).

[166] https://www.legifrance.gouv.fr/dossierlegislatif/JORFDOLE000017759490/

[167] Strictly speaking, i.e., workers earning a wage paid by a regular employer (fixed term or unknown duration contract, full- or part-time). The DIF was linked to the status of employee.

- **Portability**: There was a "portable" version of the DIF (DIF portable in French) but the acquired right to learning activities was only valid for two years.

Review of the measure: The DIF was limited in scope, focussing only on employees and companies (leaving out unemployed, self-employed and young people) and with a limited duration of the portability of rights (two years).

The Laws of 2013 and 2014 – Creation of the CPF (1 January 2015)

The Law of the 14th of June 2013[168] on "securing employment", further supplemented by the law of the 5th of March 2014[169], introduced an individual learning account to all persons active on the labour market. Together these laws offered the foundation for the implementation of CPF as of the 1st of January 2015, when it replaced the DIF. It combined multiple existing sectoral schemes into a national universal system. -

- **Reasons for the legislation**: The law is part of a broader package on innovating employment and combating precarious work. Learning rights are extended from employees to all individuals active on the labour market.
- **Coverage**: CPF was open to anyone aged 16 or more *active on the labour market* (i.e., workers in the private sector, job seekers, being involved in a guidance and reintegration project or hosted in an institution that is providing assistance to 'at risk' groups through work). Upon retirement, the individual account is closed and no longer offers training rights.
- **Value of entitlements**: The account defined a certain number of hours of learning activities. The learning activities that are eligible to financing from the CPF are all those leading to a vocational qualification or those listed on one of the lists established by the sectoral branches, or interprofessional ones.
- **Financing**: The law does not alter the existing structure of financing training. The 2014 law introduces a common contribution of 1% based on the salary base for every employer, to which the national government complements to cover for the unemployed now introduced in the system.
- **Portability/Transferability:** The main innovation compared to the previous system (the DIF) was that the training hours on the account of the newly created CPF was made transferable: hours on the account remain available in the event of a change in labour market status or switching employers; essentially they become credits for the individual, instead of the employer. Someone that loses their employment keep their rights to learning activities. The CPF allows to accumulate up to 150 hours, at a rate of 24 hours per year up to 120 hours, and then 12 hours per year.

Review: The use of the rights acquired in the context of the CPF is on individual's initiative: in case individuals are employees, learning activities are generally connected to enterprise needs, but this is not necessarily the case. In the event of an agreement between the employer and the employee regarding the use of the CPF, the learning activities may take place during working hours for all or part of the learning. The employer organises the training and registers the individual for the training, using the credits in the individual's account. In the absence of an employer-employee agreement, employees can still use credits in their CPF the way they want but this must be done outside working hours and without additional funding. To enrol in training, they depend on the infrastructure of Public Employment Service (*Pôle emploi*), or with the regional authorities that regulate the learning activities.

The Law of 2016 – Opening up the CPF

The Law of the 8th of August 2016 (a.k.a Law "Labour", Loi "Travail") provided the legal ground for the creation of the Occupational Activity Individual Account (*Compte personnel d'activité*, CPA), which offers an approach to group different individual accounts, including the CPF, together. As

[168] https://www.legifrance.gouv.fr/loda/id/JORFTEXT000027546648/.

[169] https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000028683576.

such, it opens the learning beyond only employed and jobseekers and now comes to encompass other categories of individuals: e.g., public officials, volunteers and early school leavers. The former may open a Citizen Commitment Account (*Compte engagement citoyen*, CEC) which allowed them, for instance, to undertake training or a Competences Audit (*Bilan de compétences*, BC) or to engage into recognition of prior learning (RPL), i.e., Validation of Experiential Learning Outcomes in France (*Validation des acquis de l'expérience*, VAE).

- **Reasons for the legislation**: While the CPF is open to all employees in the private sector and jobseekers, it did not include the inactive population, public servants, volunteers and early school-leavers. The 2016 reform combines other existing schemes, so that the training entitlements are unified from the perspective of citizens. This reinforces the universal nature of the training accounts. It explicitly defines that learning is a right for every citizen.
- **Coverage**: The CPA brings together the various existing accounts and ensures training entitlements to the workforce.
- **Financing:** No changes to the financing of training.
- **Portability/transferability:** No changes.

Review: The law offers yet another step towards a 'universal learning entitlement', by combining multiple training accounts into a single heading (each of the training accounts continue to exist legally, but from the perspective of the individual are all combined into a Personal Activity Account). Individuals' rights in the activity accounts are registered centrally by the CDC. Any requests to engage in training continue to be organized through the Public Employment Service (*Pôle emploi*), or with the regional authorities in charge of learning activities.

The Law of 2018 – The Major Reform of the CPF

The Law of the 5th of September 2018[170] for the Freedom to Choose a Vocational Future is considered as a major reform of the CPF. Its major innovation is to put learners at the centre of the process, and better empower these individuals in selecting training opportunities. This avoids learners getting stuck between the organisation that purchases the learning activities (e.g., the enterprise) and the providers that deliver it. The reform directly transforms the training credits (previously expressed in hours) in money.

- **Reasons for the legislation**: While all individuals had a theoretical right to training, and access to their activity accounts, initiative most often came from the employer. Individuals that wanted to use the credits for training of their choice depended on the Public Employment Service (*Pôle emploi*), or the regional authorities so their credits could be monetized and used as compensation for the selected training.
- **Coverage**: The law does not change coverage. Under the CPF, workers are eligible for 500 EUR per year, cumulable up to 5,000 EUR over ten year. Specific additional contributions exist for lower-qualified (Below CAP/EQF level 3), who are eligible for 800 EUR, cumulable up to 8 000 EUR over ten years. Public civil servants continue to be part of the CEC training scheme which is expressed in hours.
- **Financing:** No major changes to the financing of training. The rules for the financing of VET by enterprises is adjusted and is conducted on the basis of a single levy.
- **Portability/transferability:** No changes.

This reform makes it easier and better understandable how and what trainings individuals can select and what financial means they have to support their purchase. The responsibility of using the training entitlement is now fully in the hands of the individuals, who are made responsible for purchasing the training (compare against earlier years, where the employers or PES were the ones purchasing the training, using the individual's credits). This shift in responsibility also facilitates the organisation of additional contributions by the individual, as it is immediately clear how much money is available on

[170] Loi pour la liberté de choisir son avenir professionnel.

the account, and how much additional contribution would be necessary. Under this new approach, users are able to buy the learning activities directly from the providers of their choice, on line.

5.3. Performance of the CPF

It is somewhat difficult to provide accurate and complete data regarding the functioning of the CPF at this point. There are at least two reasons for that:

- The CPF system and the Platform in particular, as it is operating now, is rather new (November 2019) and the CDC is still developing its data collection system. Data collection is based on an Oracle powered database, but CDC is not yet able to provide up-to-date relevant statistics[171].
- The start of the online portal and changes to the CPF coincide with the outbreak of Covid-19. As a result, any early conclusions and insights may not necessarily be representative for the next years[172].

5.3.1. Headlines

The demand from 21 November 2019 to 30 June 2021

In term of demand (i.e., individual consumption), the key figures from November 2019 to June 2021 (CDC, 2021a and CDC, 2021b[173]) are:

- 8.5 million personal accounts have been activated/created/opened (compared to 29.6 million of individuals in the labour force),
- 2.31 million validated registrations for a learning activity (this number can include multiple registrations per individual); i.e., 7.8% of the labour force, to be compared to 18.8% of the population aged 25 to 64 participating in education and training (Eurostat, 2018[174]). A drop-out rate of 10% was reported for these 2.31 million; this share did not complete the training activities,
- 3.1 million downloads of the smartphone application *moncompteformation*,
- 232,990 users (roughly 10%) have made a individual top-up to their accounts to complement their funds available to be able to purchase training (via their credit card). The amount added varies from 4 to 500 EUR (data available only until January 2021).
- 1 263 EUR is the average price of a learning activity purchased through the CPF.
- 2.92 billion EUR is the total cost (2.31 billion x 1 263).
- 13.5 million unique clicks on the CPF platform.
- There is no significant difference by gender.

These figures show that most of the users so far have consulted their balance, but have not yet used their accounts to buy learning activities. Among the users that have actually registered for a learning

[171] However, CDC and Dares have published analyses of the evolution of CPF usage between 2019 and 2020, also documenting a strong increase in use over this period.

[172] Regarding the figures measured in 2020, they may be affected by some bias: The period from November 2019 to March 2020 saw the start-up and the rise of moncompteformation; Covid-19 interrupted this rise, which only resumed during the summer 2020: third parties funding was not covered by moncompteformation at the opening in November 2019. This possibility was first reopened in July 2020 for the Public Employment Service (Pôle emploi) and in September 2020 for companies. There were two presentations from CDC, hence a and b.

[173] CDC, 2021. Presentation of the Device *moncompteformation*, PowerPoint presentation, CDC, Paris, 29 January.

[174] https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Archive:Statistiques_sur_l'apprentissage_des_adultes&oldid=410024.

activity with support of the CPF through the portal, the most frequently undertaken learning activities are:

- Languages (mostly English): 12.5% of all learning activities,
- Driving licence (car): 13%,
- Entrepreneurship (for creating or buying an enterprise): 7.9%, and
- Competence Audit (*Bilan de compétences*): 4.3%.

The supply from 21 November 2019 to 30 June 2021

In terms of supply (i.e., the providers), the key figures from November 2019 to June 2021 (CDC, 2021b) are:

- 22 130 accredited training providers (of whom 18 670 have at least one training action readily available).
- A pool of 338 940 different training actions on supply (of whom 30% relate to languages).
- A pool of 5 741 different qualifications on supply (of whom 40% do not mention a specific level in relation to the national qualifications framework).

Demand by Unemployed People from 8 July 2020 to 30 June 2021

For unemployed people, the key figures from July 2020 to June 2021 (CDC, 2021b) are:

- 656 741 validated registrations (of whom 601 287 are autonomous, not prescribed by the Public Employment Service for example). This is 34.5% of all validated registrations.
- 777 million EUR is the total cost (630.44 million for autonomous learners). This is 31.8% of all validated registrations.
- The financing comes from France Compétence (83.9%), the Public Employment Service (10.3%) and others (5.8%).
- From 1 992 validated registrations in July 2020 to 50 911 in June 2021, (respectively 3 million EUR and 80 million EUR), with a steady trend upward.

Co-funding by Enterprises from 8 July 2021 to 30 June 2021

Enterprises have contributed to the CPF in the following way from September 2020 to June 2021 (CDC, 2021b):

- 3 659 enterprises have contributed.
- These enterprises have added money to 6 108 CPF.
- The total amount of this co-funding is 22.7 million EUR.

5.3.2. Insights in the (development of) registration and take up of training through CPF

The take-up rate may be seen from two points of view:

- The number of personal accounts created (or activated), and
- The number of learning activities actually bought (and validated) thanks to the CPF.

*Monthly number and cumulative number of CPF's profile activation (*Figure 42*)* – is an indication of the interest in the approach among the population. It displays the number of individuals that have been interested in checking how much money they own for training purposes, from the inception of the CPF on. The graph shows a strong interest at the time of the inception of the first version of the CPF, in 2015, when it replaced the DIF; and then some sort of seasonality, with "calm' summer months, and a renewed interest when job seekers – not necessarily unemployed – are active

searching the labour market; typically, at the beginning of each calendar year, and at the beginning of each academic year, after the summer break.

The progress in the number of activated profiles also indicates a strong sustained renewed interest when the New or Extended CPF (*CPF étendu*) was created. The monetisation of accounts and the new portal (since 2019) clearly fostered interest, even if this graph is not very conclusive as checking the amount available on the CPF is not a good predictor of its actual use for engaging in training.

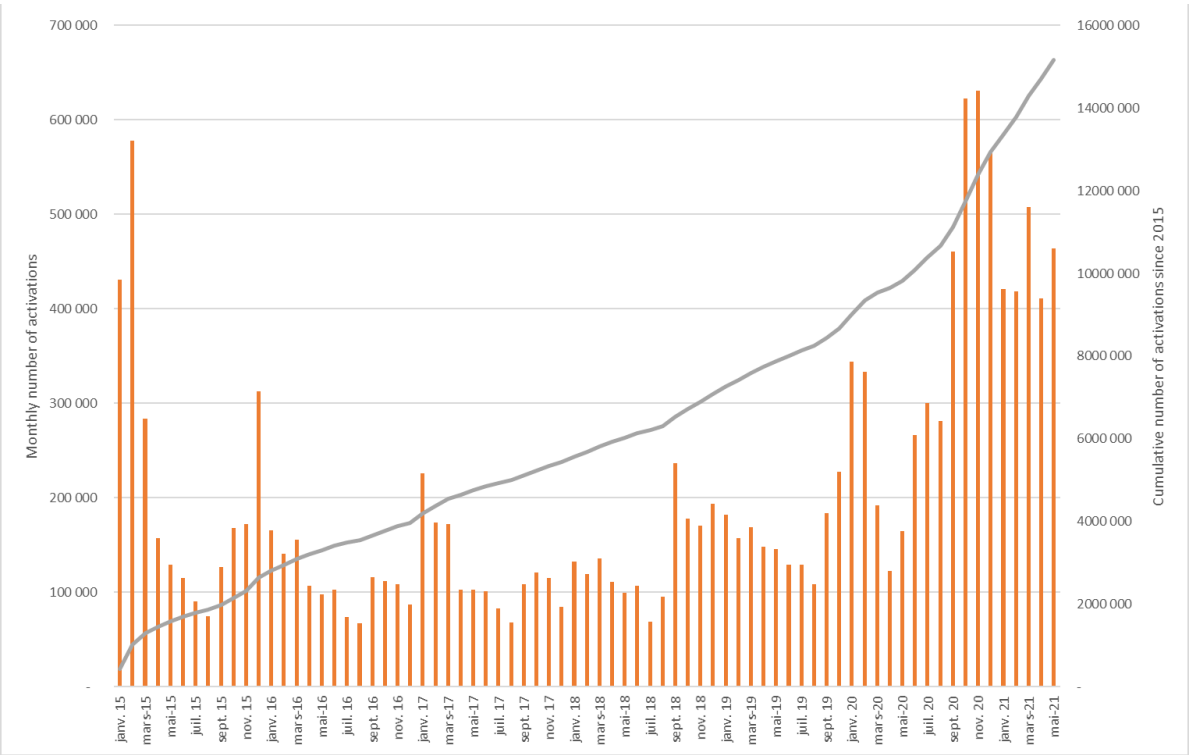
Monthly number and cumulative number of training undertaken with CPF (Figure 43)– confirms the interest for the initial CPF, in 2015, and for the New CPF, in November 2019. There is an inflexion point in the cumulative distribution after the inception of the New CPF, as can be seen in the previous graph. This appears to confirm that there is not only curiosity regarding the Extended CPF but a real use for buying training actions, although there is an absence of longitudinal data. The impact of Covid-19 is also not fully measured at this stage, except in qualitative terms.

Worthy of note is the time lag that exist on the second graph, as if potential users had checked their balanced on their CPF, and then took some time – nine to twelve months – to organise themselves and engage in learning activities.

The seasonality is even clearer on the second graph than on the first graph, with the months after the Summer break being the most “active”.

The somewhat significant peak in, and shortly after, March 2017 may indicate a specific use of the CPF, for taking the driving licence for car, as this became possible with the CPF in March 2017.

Figure 43 Monthly number and cumulative number of CPF’s profile activation



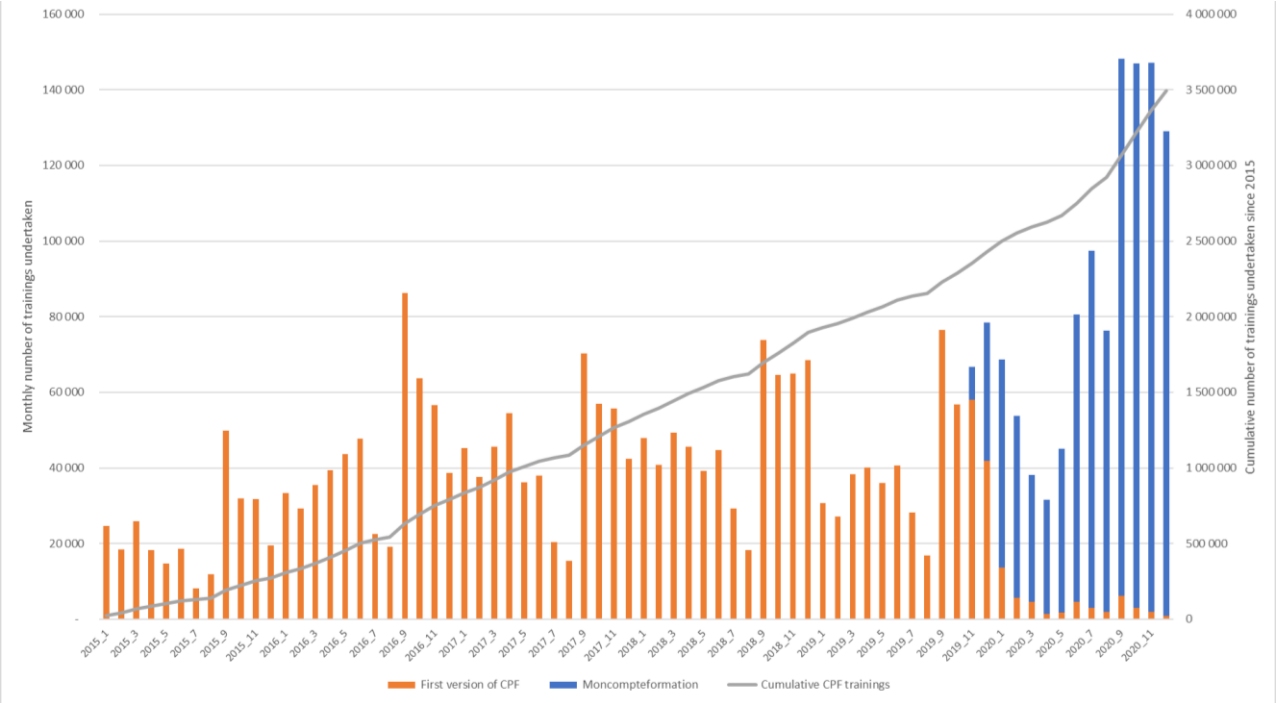
The most significant finding remains that the number of training activities undertaken thanks to the CPF nearly doubled between 2019 and 2020, which coincide with the opening of the smartphone

application “moncompteformation”. This suggests an important effect of adequate tools and portals to communicate individual learning rights to individuals.

The number of training validations nearly doubled between 2019 and 2020 with the opening of moncompteformation.

5.3.3. Insights in the (development of) unit costs of training through CPF

Figure 44 - Monthly number and cumulative number of training undertaken with CPF



The monetisation of the CPF[175] (in 2019) led to better visibility of the budget spent on training by the employees in employment (*salarié·es*). For example, at the end of October 2019, the employees in employment had, on average, 1 040 EUR on their CPF. Since not all employees have transferred their rights in hours from the time of the DIF to the Extended CPF in EUR, the theoretical average estimated for these accounts is around 2 000 EUR (CDC, 2020[176])[177].

The average hourly cost of CPF-funded training is about €15. There is some evidence that the average price of more standardised training offers such as skills assessment (-9.5%), English language certificates (-41%) or driving licences (-29.6%) has decreased since November 2019. While this may reflect the impacts of more competition due to higher transparency, further evidence regarding the unit cost of training undertaken in the context of the CPF needs to be consolidated as the numbers collected during the year 2020 are atypical. It is somewhat early to provide conclusive pieces of evidence regarding the unit cost of training through the Extended CPF.

[175] Correspondence between the European Commission and the French authorities that latter stated that “hours” were not the most appropriate data to make comparison. With the switch in monetary value, anyone can swiftly and easily have a better understanding of the cost of any training and be in a position to make an informed choice. It improves clarity and transparency of the market’.

[176] https://retraitesolidarite.caissedesdepots.fr/sites/default/files/QRS_29.pdf.

[177] Note that workers had until July 1st 2021 to transfer their DIF rights to CPF accounts. Those that did not apply for a transfer will have lost their training rights. It will have to be seen to what extent this will have been done.

5.3.4. Insights in cost-sharing

The possibility for other stakeholders – typically employers, individuals themselves and the Public Employment Service – to add money to individual CPF appeared only recently: in 2019 for the individuals themselves, and in July 2020 for the others: employers, the Public Employment Service and other stakeholders. Evidence suggests that *France compétence* remain the main sponsor of the CPF (see the Graph and the table below, respectively the *Monthly and cumulative purchases through the Smartphone App moncompteformation*, and *the table about the cost sharing over period July 2020 – April 2021*).

The second largest contributors are the individuals themselves and the Public Employment Service, on par for 3.9% each. Employers and the Regional Councils (which have some responsibility in terms of vocational training) are marginal contributors.

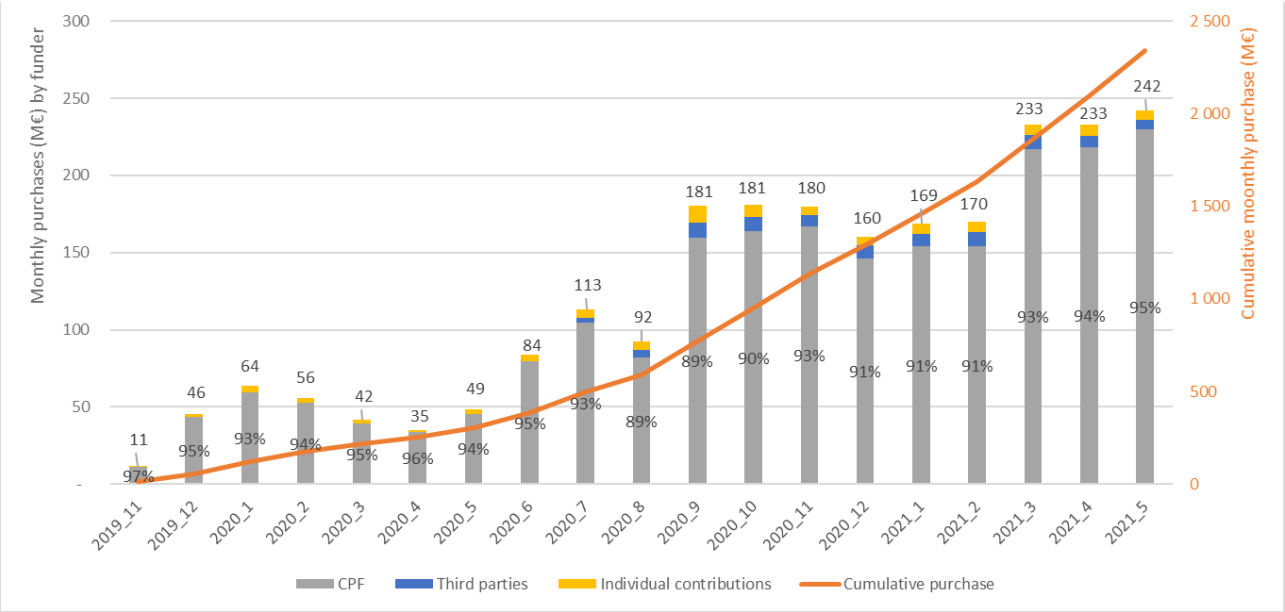
This global picture hides some difference to the extent that the Public Employment Service, for example, has a rather intensive approach: when it does support training, it does it at a rather high level (1,575 EUR on average). On the contrary, individuals may be more numerous to contribute, but their contribution is three time less: 485 EUR on average.

In addition, the figure shows that most of the training actions are not co-funded anyway; which make these number somewhat tricky to analyse. This is the total share of the contribution that is displayed in the figure below. It remains true that *France compétence* is so far the main overall contributor (91.5%). When the rights of the CPF owners are not sufficient to cover the cost of the training, they may apply for a contribution to supplement their rights. Contributions can be done by a list of funders defined in II of Article L. 6323-4 of the Labour Code.

In detail, co-funding may be done by:

- the individual owners of the CPF themselves (to finance targeted training only)
- employers, where the account holders are employees
- competence operators (OPCO)
- the National Health Insurance Fund
- occupational branches
- the State
- the Regional Authority
- the Public Employment Service (Pôle emploi)
- AGEFIPH (Association for the management of the fund for the professional integration of persons with disabilities)
- training insurance funds for self-employed
- chambers of trades and crafts
- local and regional authorities other than regions
- the National Agency for Public Health

Figure 45 Total volume of spending for eligible activities via the CPF Monthly data, since 2015, including funding from all sources



Monthly amounts are indicated on the above graphic, as well as the monthly part of CPF funding (%).

The average cost breaks down as follow, on training bought between the 8th of July 2020 and the 25th of April 2021, that is the period when third parties began to finance CPF training in moncompteformation.

Table 8 Contributions

Funders	Part of cost funding
France Compétences (CPF)	91.5%
Individual contributions	3.9%
Pôle Emploi (PES)	3.9%
Companies	0.5%
Others (mostly Regions)	0.2%

- Only 10.1% of the trainings are financed on individual contributions, but the individual contribution is on average 485 EUR.
- Only3.3%% of the trainings are financed by Pôle Emploi, but Pôle Emploi contribution is on average 1 575 EUR.
- This possibility of tops-ups is a new opportunity launched in 2020, built around social dialogue and collective decisions, which explains the low percentage. Given that the launch came at a time of the pandemic with many businesses in an emergency position there were not high expectations from the French government. It is indeed very recent and explain this low percentage.

5.3.5. Insights into operational costs

A budget of EUR 100 million has been allocated to a goal and performance contract (*contrat d'objectif et de performance*) for the years 2020, 2021 and 2022. The budget includes the development of the CPF App, the website, the online portal, the management of the portal, the search engine. It includes all the needed costs. This 3 years-contract is monitored and, if necessary, adjusted every year. It can be renewed every three years[178].

5.3.6. Ensuring training for those that need it the most

The CDC explicitly states that one of the objectives of the Extended CPF was to ensure that individuals that benefit most from training would be able to access it. This is important also as closing access gaps is one of the key objectives of the initiative discussed in this study.

Previous studies on early-stage data (2015-2017/2018) for the first version of the CPF point to mixed or even negative results in this respect. In particular:

- In Perez and Vourc'h (2020)[179] individuals with below ISCED 2 educational attainment were deemed to be significantly underrepresented, based on 2015-2017 data. More specifically, the study reports that employees with no qualification (below ISCED 2) account for only 5% of the validated trainings purchased via the CPF against 12% of employees with the same educational attainment level. The breakdown by educational attainement level is however not available for the jobseekers.
- In OECD (2019),[180] a similar situation is described again based on 2015-2018 data, although the trend, as indicated in Balmat & Corazza (2020)[181] pointed to an increase in the take up of the low qualified, representing 4% of all training validated in 2015 and 7% in 2018. However, according to the study, in 2018 56% of the training were still validated by inviduals with tertiary education, although they only represented 37% of the labour force.

Based on such evidence, the underrepresentation of the low qualified in 2015-2018 would seem quite apparent. However, no study has yet assessed possible changes occurred after the introduction of the portal and mobile app Mon Compte Formation. Furthermore, according to the CDC, in the first version of the CPF, many users had an unknow level of educational attainment. This is a possible source of bias, if low qualified individuals were overrepresented among them. It is also important to stress that these studies do not consider the educational attainment level of the unemployed, where the low qualified are likely to be overrepresented, as well as their take up.

Hence, a more updated picture is needed to draw some conclusions. Before presenting an assessment that is based on data up to 2020, it is worth explaining how this new assessment is made. In general, the take up rate is defined as the ratio between:

- Individuals who sign up to the CPF, and use their funds to purchase and carry out a training; and
- Individuals who are offered training entitlements via the CPF (eligible population)

Whilst data is available for the former (number of training validated) measuring the pool of eligible individuals is more complex as their eligibility might vary over time along with their condition in the labour market.

[178] The information follows a request from the European Commission to the French national authorities. Further cost breakdowns are not available and the contract with the national operators, CDC, is subject to confidentialty clauses.

[179] Perez, C. and A. Vourc'h (2020), "Individualising training access schemes: France – the Compte Personnel de Formation (Personal Training Account – CPF)", *OECD Social, Employment and Migration Working Papers*

[180] OECD (2019), *Individual Learning Accounts: Panacea or Pandora's Box?*, OECD Publishing, Paris, https://doi.org/10.1787/203b21a8-en

[181] Balmat, C., & Corazza, E. (2020). Le compte personnel de formation en 2018, DARES

For instance, inactive individuals are in principle not offered training entitlments via the CPF. So, one would think that it is sensible to compare CPF users who have validated training, with the active population. However, based on Eurostat experimental data on labour market transitions,[182] about 6% of the inactive become unemployed every year in France and an additional 4% find employment. This means that around 10% of the inactive become eligible for the CPF every year. If we consider that the CPF run for 6 years until 2020 (latest available data), it is fair to assume that about half of the inactive have been entitled to some training entitlements in their CPF over time, although the accumulation is arguably more limited for them. As there are labour market transitions also from employment and unemployment to inactivity, some will have also ceased to accumulate CPF entitlements as they became inactive. This is to say that in comparing the background features of CPF users and the eligible population there is no perfect proxy for the latter, and a balanced assessment is needed.

Below we review the extent to which various target groups have made use of their training entitlements via the CPF, based on updated 2020 data and two different proxies of the eligible population: the active population and the general population. When the distribution of CPF users by occupation is discussed (i.e. in Table 9), the comparison is necessarily limited to those in employment.

Table 9 Qualification Level in the Active Population and among the CPF Users

Highest Qualification Level before using the CPF (EQF)	% in the active population 25--64	% in the total population 25-64	% among CPF users	Difference between CPF and overall population	Difference between CPF and active population
1-2	14	18	17	-1	+3
3-4	41	42	43	+1	+2
5-8	45	40	40	0	-5
Total[183]	**100**	**100**	**100**	**100**	**0**

Source: CDC, Eurostat,[184] INSEE,[185] preparation by the author. As of November 2020.

Legend: In the French active population aged 25-64, 14% of the active population are EQF level 1 or 2. Among the CPF users, they are 17%. Individuals with a low level of qualification are slightly overrepresented among the CPF users (by 3 percentage points with respect to the active population in France). If we consider the overall population 25-64 y.o., and not just the active population, there is a slight (1 percentage point) underrepresentation of the low skilled among CPF users.

Table 10 Age Group in the Population and among the CPF Users

Age Group	% in the active population 15	% in the overall population 15+	% among CPF users	Difference between CPF and active population 15+	Difference between CPF and population 15+
15-19 for population, 16-19 for CPF users	2	8	0	-2	-8
20-29	18	14	20	+2	+6
30-39	24	15	34	+10	+19
40-49	25	15	27	+2	+12

182 Eurostat, Labour market transitions – annual data [LFSI_LONG_A]

183 May not be 100 or 0 due to rounding errors.

184 Author's elaboration on Eurostat, Active population by sex, age and educational attainment level (1 000) [LFSA_AGAED]

185 https://www.insee.fr/fr/statistiques/2416872#figure1_radio2

Age Group	% in the active population 15	% in the overall population 15+	% among CPF users	Difference between CPF and active population 15+	Difference between CPF and population 15+
50-54 for population, 50-55 for CPF users	13	8	11	-2	+3
55+	18	41	8	-10	-33
Total[186]	100	100	100	0	0

Source: CDC, INSEE, preparation by the author. As of November 2020.

Legend: In the active French population aged 15+, 18% of the people are 55 or more. Among the CPF users they are 8%. Individuals above 55 are underrepresented among the CPF users by 10 percentage points.

Table 11 - Social Category among Workers and among the CPF Users

Social Category	% among workers	% among CPF users	Difference between CPF and workers
White Collar High Skill	20.4	17	-3.4
White Collar Low Skill	25.8	49	23.2
White Collar Medium Skill	26	8	-18
Blue Collar	19.2	10	-9.2
Craftsman, shopkeeper, and business owner	6.8	2	-4.8
Farmer	1.4	0	-1.4
Unknown	0.4	14	+13.6
Total[187]	100	100	0

Source: *CDC, INSEE, preparation by the author. As of November 2020.*

Legend: Among the workers in France, 20.4% of the people are WCHS. Among the CPF users they are 17%. WCHS are underrepresented among the CPF users by 3.4 percentage points.

The figures in the table above show that the distribution of CPF users who validated their training compared to the distribution of those who might be eligible does no longer seem to be skewed toward the individuals with a high level of qualification. In fact, focusing on the active population only, there seem to be a slight overrepresentation of the low and medium qualified and a slight underrepresentation of those with tertiary education.[188] This conclusion departs from previous studies indicating an underrepresentation of the low qualified. In terms of the trend, there is some evidence of a positive trend in this respect already over 2015-2018 and likely a break in 2019. However, it is not possible to conclude whether such break is due to a change in the profile of CPF users that is due to the introduction of the Mon Compte Formation. This is because changes to the monitoring system of the CPF meant that in the new data there no longer are training validated by individuals with “unknown educational attainment level”. In general, it should also be considered that although the low qualified are currently not underrepresented in the scheme, they receive higher

[186] May not be 100 or 0 due to rounding errors.

[187] May not be 100 or 0 due to rounding errors.

188 One small caveat to this is that the comparison is limited to those up to 64 years old. If individuals over 65 years of age were taken into account in the distribution of educational attainment levels for the eligible population, there would be some underrepresentation of the low qualified, as these are overrepresented in this age bracket. However, considering the low take up rates of individuals above 55 years old, this should not be the case.

entitlements than the general population, so it is not possible to assess what would happen had they received the same amount of the other target groups.

As per the breakdown by age, a slight overrepresentation of those aged between 20 and 50 continues to exist (Table 10). Blue collar workers use their CPF less than their share in the labour force (19.2 and 10%) but this is also the case, for instance, for some white-collar workers, especially the white collar medium skill workers (26 and 8%). Table 11 does not allow us to conclude about the use of the CPF by self-employed workers since they are present in several, almost all, categories of the table. However, they are probably most present in the category "Craftsman, shopkeeper, and business owner" which displays a rather clear underutilisation of the CPF. Most likely, this is related to the financial contribution these individuals have to make in order to be eligible for the CPF; the financial contribution is a share of the salary base, and in many cases is not much lower than the annual entitlement made available.

Information on the size of enterprise (e.g., small and medium-sized enterprise or else) and on the nature of the job (e.g., regular or marginal, full time or part time) are not available either. Therefore, it is not possible to assess whether the CPF was also a success in terms or attracting workers in SME and/or having an atypical job.

5.3.7. Types of training selected by CPF users

Easy access to CPF seems to have contributed to different patterns in requests for training, possibly signalling the reaching of new target groups. Before the launch of the Smartphone App, *moncompteformation*, a lot of learning activities were related to language courses (40%). Now, more recent figures after the launch of the App shows that the choice of users are somewhat changing, and the top five areas of learning activities are given in Table 12 below.

Table 12 The top-5 learning areas selected by CPF users

Learning Area	% before the inception of the Smartphone App	% since start of the Smartphone App	Difference
Logistic (Including driving license)	14	30	+16
Guidance for integration in the labour market	10	19	+9
Languages	40	18	-22
Computer Science	11	7	-4
Security	4	5	+1

Source: CDC (as of November 2020).

5.3.8. Current plans for the future

The CDC is planning to produce additional aggregated data for the broader public (there is work to be done to define how monitoring will be done and how data protection issues will be resolved). For instance, their database contains:

- Description of all periods worked (thanks to monthly reports with employment status, actual working time, wage etc.),
- Data on situation in relation to disabilities.

By the end of 2021, the CDC is planning to launch a "competence passport" on LinkedIn.

The CDC also implements other projects with a data collection component, such as the Agora Project:

- Data on entry into any kind of learning activities, whether in the context of the CPF or not (e.g., sponsored by the Region, the Public Employment Service, or paid by the Operator of Competences – OPCO – for employees),
- Data on any qualification achieved at the end of the CPF, and at the end of any adult learning process (including qualifications achieved in the RPL/VAE system),
- Data on the entire occupational history of individuals.

6. Evidence on the discarded policy measures

6.1. Review of information

Section 4 has reviewed the baseline scenario and the implications of a situation without a new EU-initiative on ILAs. The baseline scenario includes various initiatives at EU and Member State level to support the "supply side" of education and training provision as well as a further strengthening of employer-organised training. This section reviews further instruments to provide financial support for training to individuals which are not included in the policy measures analysed in detail in the impact assessment.

Funding systems vary across the countries as the overview in the section 4 has shown. This section describes different financial instruments, how these affect the identified drivers of the problems, strengths and weaknesses of each instrument, and lessons learned for further designing policy options. Vouchers and ILAs will be addressed in section 8.

In addition to providing additional information concerning the baseline scenario it also provides background information for instruments with which the individual learning accounts may show complementarities.

6.1.1. Tax incentives for individuals

General description

According to Cedefop[189], tax incentives are the concessions in tax codes that mean a conscious loss of government budgetary revenue because they reduce either the tax base (tax allowance) or the tax due (tax credit). Concerning tax incentives for the purposes of personal income tax, they may allow adults to deduct the costs for continuing vocational training or adult learning related to their current or future occupation from their individual income tax base or tax due.

As defined in section 4.2.2 (Box 1) tax incentives for individuals may allow adults to deduct their costs for continuing vocational training or adult learning related to their current or future occupation from their individual income tax base or tax due. Recent mapping by Cedefop identifies 16 Member States where tax incentive schemes for training, for individuals (as opposed to business incentives) are available[190]. It has therefore been one of the more prominent financial tools used by Member States to incentivise individuals to participate in adult learning[191].

[189] Cedefop (2009b), Using tax incentives to promote education and training, Panorama Series, Luxembourg.

[190] Cedefop (2020), The financing of adult learning, database of Cedefop (2020, update)

[191] 'Vouchers, grants and subsidies and tax incentives are by far the most common measures. In particular, individual tax incentives are the most longstanding type of instrument. On the contrary, soft loans and saving accounts are quite uncommon'. From Baiocco (2019), The state of play of evidence about the conditions under which individual-oriented instruments for incentivising adult participation in learning are effective

The following tax incentives may be distinguished (OECD[192]):

- tax allowances – allowing deduction from the gross income to arrive at taxable income (i.e. tax base), for individuals;
- tax credits – allowing deduction from tax liability (i.e. tax due or tax payment), for individuals.
- Tax incentives have been used as a mechanism to help individuals fund the cost of training with selected examples highlighted in the work of Dohmen and Timmermann[193]and outlined in the figure below (from Germany, the Netherlands and Austria – the proposal in Sweden was not implemented). Some of the literature is a bit dated, reflecting in part policy considerations of training entitlements as an alternative to tax incentives and evidence of impact is somewhat limited[194].

Table 13 Some examples of tax incentive schemes

Member State	Tax incentive
Austria	Has operated schemes where companies and individuals can deduct training expenses from their tax as income related costs or business expenses. For companies the precondition was that training advanced occupational skills. Employees could deduct income related or operating costs from tax on a retrospective basis. Tax could be deducted for fees, learning materials, travel and accommodation. Private individuals could be reimbursed for tax costs up to 50% of course costs.
Germany	There have been different rules for training and further training/education with tax incentives more generous for the latter (all expenses could be deducted as expenses) whereas restrictions were in place for tax incentives for training. Tax relief was pegged at a maximum of 42% (e.g. for EUR 1 000, EUR 420 could be reimbursed but EUR 580 must be privately financed). An estimate for Germany suggests that 1.9 million people have made use of these tax incentives in Germany in 2010, or some 8.5% of all adult learning participants, which would suggest that the reach of this instrument – in terms of adult participation - is approximately 50% larger than that of all other instruments together.[195] No evaluations have been conducted on the effectiveness of the scheme to increase participation in adult learning.[196]
Netherlands	The Dutch example of tax incentives provides useful evidence and a relatively rare example of a scheme that has been evaluated. The evaluation of the training expenditure deduction in the income tax in the Netherlands by the Bureau for Economic Policy Analysis shows that 2.6% of all tax payers between 25 and 60 years of age (equivalent to 5% of adults participating in adult learning, made use of this deduction, for an average of EUR 1 700 per year. The deduction possibility seems to be used mostly for the purchase of books and for tuition fees. Three-quarters of the users of the deduction for education expenses are following a learning programmes that are not supported with public funds, or in private training institutes. Most of those who follow a government-funded course are enrolled in a bachelor's or master's programme in higher education. The users are often highly educated and/or employed. The evaluation estimates that the deadweight loss - i.e. the part of an extra euro training deduction that does not lead to extra training - amounts to between 73 and 100%, depending on the group and the tax rate. One of the reasons for a low uptake amongst lower-educated and unemployed adults can be partly explained by the fact that training still has to be paid out of the individual's pocket in advance of any tax incentive

[192] https://www.oecd-ilibrary.org/economics/experience-and-the-returns-to-education-and-skill-in-oecd-countries_eco_studies-2015-5jrs3sqrvzq5

[193] Dohmen and Timmermann (2010): Financing Adult Learning in Times of Crisis, Conference Paper

[194] This point is highlighted by Hessel Oosterbeek who claims that the only rigorous evaluations of tax incentive schemes relate to the Netherlands (see Oosterbeek (2013), the financing of adult learning

[195] Cordes and Dohmen (2019): Verbreitung öffentlicher Förderinstrumente in Deutschland und der Blick in die Länder.

[196] Leuven and Oosterbeek (2004). Evaluating the effect of tax deductions on training. Journal of Labor Economics.

Member State	Tax incentive
	with the uncertainty as to whether it can be actually deducted from tax payments (especially in case of low or no income). Even if eligible, beneficiaries typically consider future tax deductions as less attractive or valuable, considering the time value of money. As a result, the Netherlands is replacing the tax deduction to introduce a scheme based on individual training entitlements ("STAP – Stimulating Position on the Labour Market-budget", see the NL case study in Annex 13), to improve the outreach to learners

Source: Dohmen and Timmermann (2010): Financing Adult Learning in Times of Crisis, Conference Paper

The effectiveness of tax incentives

Empirical evidence on the effectiveness of tax incentives in terms of their impact on levels on participation in training is limited. Leuven and Oosterbeek[197] concluded that a 10 percentage point increase in the tax deductibility rate of direct training expenditures increased participation by 0.33 percentage points[198]. A second approach also covered by Leuven and Oosterbeek estimated increased participation by 0.8 percentage points for the same 10 percentage point increase in the tax deductibility rate. However, it appears deadweight loss - i.e. the part of an extra euro training deduction that does not lead to additional training - is significant. The marginal deadweight loss in the Dutch case– can amount to between 73 and 100%, depending on the income group and the tax rate (also Leuven and Oosterbeek). Given the lack of evaluations of tax incentive schemes there is an absence of evidenced deadweight loss calculations although a high level is plausible given that beneficiaries are more likely to be from higher skilled, higher income groups.

The Dutch example of tax incentives provides useful evidence and a relatively rare example of an evaluated scheme.[199] The evaluation of the training expenditure deduction in the income tax in the Netherlands by the Bureau for Economic Policy Analysis (CPB, 2016) shows that **2.6% of all tax payers between 25 and 60 years of age (equivalent to 5% of adults participating in adult learning), made use of this deduction,** for an average of 1 700 EUR per year. The users are often highly educated and/or employed. At one point there was an additional tax incentive for adults older than a certain age, which appeared to have the unintended effect of some adults postponing training until they reached that age.

The deduction possibility seems to be used mostly for the purchase of books and for tuition fees. Three-quarters of the users of the deduction for education expenses are following a learning programmes that are not supported with public funds, or in private training institutes. Most of those who follow a government-funded course are enrolled in a bachelor's or master's programme in higher education.

One of the reasons for a low uptake amongst lower-educated and unemployed adults can be partly explained by the fact that training still has to be paid out of the individual's pocket in advance of any tax incentive with the uncertainty as to whether it can be actually deducted from tax payments (especially in case of low or no income). Even if eligible, beneficiaries typically consider future tax deductions as less attractive or valuable, considering the time value of money. As a result, the Netherlands is currently preparing the ground to introduce a voucher system (STAP – Stimulating Position on the Labour Market-budget – see also section 9) replacing the tax deduction policies, to improve the outreach to learners.

For example, **an estimate for Germany (in 2010) indicates that 1.9 million people may have used tax incentives in Germany**, or some 8.5% of all adult learning participants (Cordes/Dohmen

[197] Leuven, E. and Oosterbeek, H. (2004). Evaluating the effect of tax deductions on training. Journal of Labor Economics, 22:461–488.

[198] See Falch and Oosterbeek (2011): Financing lifelong learning – funding mechanisms in education and training

[199] An income tax deduction for individuals appears to have substantially positive effects on training participation. This may be due to the fact that this instrument is available to everyone while the other policies are typically aimed at specific groups of low skilled workers. See Falch and Oosterbeek (2011): Financing lifelong learning – funding mechanisms in education and training, European Expert Network on economics of education and FiBS/DIE (2013): Developing the adult learning sector.

2019), which would suggest that reach of this instrument – in terms of adult participation - is approximately 50% larger than that of all other instruments together.[200] Tax relief depends on the individual marginal rate of tax up to 42%. This means that for a EUR 1 000 spend a maximum of EUR 420 can be claimed back as a tax saving. There remains a cost to the individual, in this example it would be EUR 580.

Private individuals in Austria (as well as companies) can retrospectively deduct training expenses from their taxable income but on the condition of advancing the employee's occupational skills in their place of employment (therefore a limitation on usage, although expenses are not limited to fees and can also cover travel, learning materials and even some accommodation costs). Individuals can claim 38.33% or 50% depending on their rate of tax, with tax relief increasing in line with income. The scheme is for individual above the tax exempt limit.

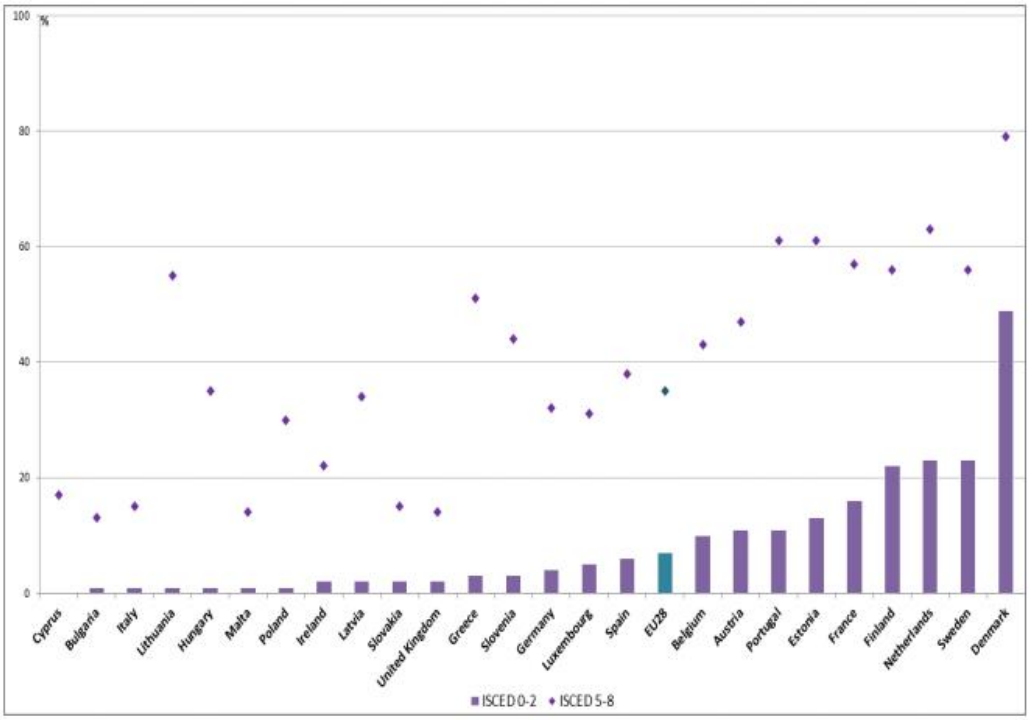
Table 14 Strengths and weaknesses of tax incentives

	Strengths	Weakness
Tax incentives	• Allows cost-sharing for costly programmes and items (e.g. books and equipment) • Easy to administer/limited administrative burden • Often not restricted to fees, but covers other costs, e.g. travel, accommodation, learning materials etc. • For public purse: share of co-financing is often lower (and limited to the upper marginal tax boundary) than for other instruments (where co-funding can be 50% or even more)	• Pre-financing requirement; liquidity constraint not resolved, especially for lower income groups (therefore a limited incentive to these groups) • Cost recovery (public co-financing) increases with income • No integrated support in existing schemes (e.g. guidance services, registry of training offers) • High risks for those with low skills/low levels of awareness (better suited to individuals with knowledge of the tax system (or with advisors who can assist) • High level of deadweight loss • Limited coverage of existing schemes • Insufficient tailoring of training offers to individual needs

Tax incentives have proved to be an effective mechanism for reaching larger groups of adults (as evidenced in Netherlands and Germany), more so than other mechanisms also discarded. However, tax incentives are unlikely to close gaps in training systems – and can have the opposite effect - nor provide sufficient motivation and incentives except for a relatively small percentage of those who are equipped to navigate training systems and take advantage of training offers.

[200] Cordes and Dohmen (2019): Verbreitung öffentlicher Förderinstrumente in Deutschland und der Blick in die Länder

Figure 46 Proportion of the population who submitted an income tax declaration using public authority websites (2013), by education



Note: ISCED 0-2: below upper secondary education; ISCED 3-4: upper secondary and post-secondary (non-tertiary); above ISCED 4: tertiary.

Source: Eurostat.

Source: Taken from EENEE_AR42.pdf.

6.1.2. Subsidised loans for education

General description

Loan schemes allow individuals to borrow financial resources (on favourable conditions) from their future income to cover part of their (education and training) expenditure. The state may support the availability of loans and co-finance loan-related costs to encourage participation in adult learning.

The majority of Member States that have loans in place (BG, DE, EE, FI, HU, IT, LT, LU, LV) use these to support both formal and non-formal education and training programmes, while other Member States (AT, BE, RO and SE) use such loans to support formal education and training programmes only. Loans are provided to adult students in a number of Member States (BG, DE, EE, FI, HU, LT, LU, LV, MT, PT) to fund higher education programmes.

Although the possibility of loans exist in many EU-countries, it should be noted that according many of these support higher education and not adult learning.[201] Nevertheless, Hungary introduced a loan scheme (see section 9) in 2021 to support adult learning.

According to Cedefop's financing adult learning database, various Member States have opened-up standard loans – partly in combination with and adding up to grants - also to educational and training purposes. Most frequently, these schemes are aimed at first-time students in higher education, but are also open for adults (25 and older) up to a certain age limit or without such a limit. Moreover, there are examples of loan schemes designed explicitly for adults for (specific) educational and training purposes (e.g. training loan for unemployed people, job seekers and employees aged 45+ in Poland).

The effectiveness of loans

Loans are particularly useful for the financing of more expensive education programmes, which is not the most common type in adult education. The evidence suggests that loan schemes contribute to the problem driver concerning limited coverage of support, in so far as it they have been focused mainly on formal training.

Without support structures, taking up a loan for education and training involves high levels of personal risk, as the individual cannot be sure that a started programme will be completed successfully or that a programme will allow an individual to sustain or achieve a well-paid occupation. Furthermore, high interest rates and risk premiums might work as a disincentive.

A recent study on the recently established 'Lifelong Learning Credit' in the Netherlands[202] shows a relatively high number of adults that made use of a credit facility to pay tuition fees for following a higher education programme. In the academic year 2017/2018, a total of 6 837 users were granted a total of 7 743 loans. Over half (56%) of the users are women and less than half (44%) are men. Almost one third (31%) are younger than 30 years and over two thirds (69%) are 30 years or older.

In the majority of cases, these are average monthly loan amounts per user of EUR 0-249 (75%) and EUR 250-499 (17%). Loan amounts of EUR 1 000 or more per month are rare. Almost two-thirds (65%) of loans support part-time courses and almost a third (32%) full-time courses. The share of users with an allocation for a dual programme is very small (2%). **A survey amongst participants showed that 45% would not have participated in the training programme without the loan,** pointing on a positive contribution. Respondents indicate that they choose to apply for a loan because it provides money that they would not have available (74%); not willing to borrow money from others; and not able to earn an income while studying. Those who have taken out a loan are more positive about taking out a loan to follow a training programme (63% is positive), compared to non-users (26%).

The study also explored the possibility to expand the Lifelong Learning Credit for other types of training for low qualified participants and vulnerable groups. The study concludes that for these groups, providing only loans is not sufficient to increase participation. These groups must be convinced of the benefits of their financial investment in training. Moreover, these groups are less inclined to look for training opportunities themselves. Reaching and then stimulating these potential users necessitate additional provisions, including easily accessible, independent guidance and training advice ideally at places already used by prospective users (such as employment centres, social facilities etc.). Guidance so needs to be tailored for the intended potential users. The non-use among current potential users is mainly the result of unfamiliarity with the loan scheme.

Table 15 Strengths and weaknesses of loans

	Strengths	Weaknesses
Loans	• Enable financing of costly Adult Learning (in NL 45% would not participate without access to loans) • Flexibility across full and part time courses • Costs of living and other costs can be financed • Can be used for higher cost training depending on ability to repay.	• Overall take-up usually limited, especially by low qualified and vulnerable groups • Current schemes focus on formal learning (limited coverage) • Administration costs can be high, contributing to high interest surcharges • Interest rates may be higher than for savings schemes (see below), disadvantaging (or excluding) loan

[202] Panteia (2019): Onderzoek levenlanglerenkrediet: eindrapportage.

	Strengths	Weaknesses
		takers (especially those from lower income groups)

6.1.3. Educational savings schemes

General description

Saving schemes seek to promote individual saving for future education/training costs. The account holder is required to set aside money over time in a savings account. Such individual savings could be matched by contributions from the State budget and/or employers. There are very few saving schemes in Europe; indeed the only currently operating scheme we identified is used in Austria[203], the education savings scheme[204]. Here, take-up is extremely limited, particularly in relation to adult learning, even though individuals are entitled to a low-interest loan, issued immediately after signing the contract (see section 9 for more details).

"Education savings" is based on a building savings contract. Saved capital can be used for education and training without losing interest or premiums. The savings themselves yield a relatively low return, but the loan is interesting for financing longer and more expensive continuing education (Tölle, 2008). Despite low interest rates, building savings is still an attractive way to save capital in Austria. According to statistics from the Austrian National Bank, there were still around 3.8 million building savings customers in the savings stage at the end of 2020.

The effectiveness of education savings schemes

Saving schemes or incentives for saving may enable individuals to accumulate funds for training and, thus, support participation. However, since low-income earners and other vulnerable groups often face challenges to save on a regular basis for training purposes, education savings schemes are not ideal for this target group. Moreover, it is questionable whether savings for education are economically rational, in view of their potential effect on liquidity required for other investments. If such a liquidity constraint would lead individuals to borrow , for example to buy a new car, the interest rate charged on the latter may be higher than the interest return to educational savings, resulting in a loss. Savings plans for training are also unattractive for commercial banks, because the relatively small amounts saved result in relatively high costs[205].

Table 16 Strengths and weaknesses of savings schemes

	Strengths	Weaknesses
Savings schemes	Allow saving of larger amounts	Saving of higher amounts requires long-term anticipation of Adult Learning needs/plans Low income and vulnerable groups often do not have the means to save money on a regular basis for training purposes High administration costs Interest rates/returns are commonly low Banks/financial service companies are not interested (unless costs are covered by

[203] Romania has a savings fund for children's education and there has been mention of a fund in Bulgaria but no details have been found to date

[204] Another identified saving scheme existed in the Netherlands, but has been closed because of its low take-up.

[205] See Dohmen (2015): Governance und Finanzierung kooperativer Berufsbildung. Die Rolle von privaten Akteuren und Verbänden stärken.

	Strengths	Weaknesses
		individuals via lower interest rates or by state subsidies)

The effectiveness of savings schemes in respect of the objectives

Saving schemes seem to offer a potential to put in place longer-term funding that can be used at the discretion of the individual. In that respect, they could play a limited role in closing gaps but the experience with comparable schemes suggests that savings schemes are unlikely to motivate or incentivise a large number of individuals to take up training, in particular from low income groups.

6.2. Conclusions on measures to be discarded

The previous sections have reviewed further instruments to provide financial support for training to individuals which are not included in the policy measures analysed in detail in the impact assessment.

Income tax incentives for training have a large potential target group and the limited available evidence suggests that where they exist, this often makes them the largest incentive instruments for individuals in terms of public spending volumes (cf. DE example). However, they can only provide incentives for individuals with incomes above the income tax exemption limit (cf. AT example). Evaluations of their effectiveness at increase participation among adults who would otherwise not have participated in training are scarce, and the limited available evidence points to high rates of deadweight loss (exceeding estimates for the deadweight loss of individual training entitlements, cf. NL example). This is consistent with a limited effectiveness of income tax incentives for training for reaching the objectives of this initiatives concerning the closing of coverage gaps & the increase of individual's incentives and motivation to take up training.

Loans are particularly useful for the financing of longer, more expensive and formal education programmes, whereas most adult learning is shorter and non-formal. Moreover, they require significant forward planning and motivation from the side of potential adult learners, limiting their expected attractiveness in view of the problem analysis in section 3. Similarly, savings schemes require significant forward planning low-income earners and other vulnerable groups who often face challenges to save on a regular basis. These barriers are reflected in generally low take-up rates of such schemes, as observed in the NL example and the AT case study in section 9. Subsidised loans or savings schemes for adult learning are hence not expected to make a significant contribution for reaching the objectives of this initiative. Nevertheless, in particular subsidised loan schemes can complement the policy measures under consideration in the context of this initiative by supporting the funding of longer periods of training.

7. Evidence on the benefits of adult learning

The rationale for providing a learning entitlement stems from three inter-related factors:

- changes in the demand for skills resulting from technological change, notably that related to the green and digital transitions, which indicates that some skills sets may be at risk of obsolescence;
- difficulties individuals face in developing their skills, such as being unable to afford to train or being aware of that training which might reduce the risk of skills obsolescence;
- under-investment in skills by employers because they are unaware of the skills they need to invest in, and/or concerns about being able to appropriate the return on any investment they might make.

The danger resulting from the above is that insufficient training takes place, with adverse implications for: (i) individuals' employment and income; (ii) organisational performance; and, in aggregate, (iii)

the overall performance of the economy. The reasons why insufficient skills development – via training – takes place is seen to rest in market failures of what one kind or another. One of the key market failures is related to information about the potential benefits from investing in skills development which might be supported by training. A key benefit is the returns arising from to training or skills development.

This section provides an overview of the benefits which accrue to the individuals, employers, and the State from investments in skills which might be plausibly supported by a training entitlement. It summarises the literature which looks to gauge the impact of training on various measures. In doing so, it touches upon the type of returns with respect to:

- Individuals (the impact on employment and earnings, but also the wider impacts of training);
- Employers (the overall impact on organisational performance); and
- Economy and society generally (e.g. the impact on overall economic performance).

7.1. Data limitations and methodological issues

Before presenting the data on the returns to individuals, employers, and the State, there is a need to consider the limitations of the data available. These are summarised below. The key limitations of the data on the literature concerning returns to training investment are the following[206].

- The treatment of skills or training is sometimes rudimentary. Variables are included in regressions which indicate the incidence of training or skill acquisition but there is often little indication of the duration of training or specific types of skill which have been acquired. This is beginning to change, with evidence available on the returns to key transversal skills increasingly becoming available (e.g. returns to literacy and numeracy skills), but this mostly concerns returns to initial education rather than adult learning.
- As noted by a recent (2019) OECD report, the returns to training might be influenced by multiple factors, the age of the person, their working location (country), business sector, their skills set and labour market position prior to training, the type of training (informal, formal, non-formal) etc., which is a limiting factor on comparative research[207]. The OECD project focused on job-related training and highlighted three forms of training (informal, non-formal and formal training) stating that on average 70% of workers have engaged in informal 'on-the-job' training over a 12-month period, compared to 41% for non-formal and just 8% for formal training leading to a qualification, but with significant variances between countries.
- Analyses are often based on econometric studies which try to match the characteristics of the individuals who received training with those who did not, as far as is feasible. These are often cross-sectional studies or ones with a limited longitudinal dimension (before and after type evaluations). And where longer-term longitudinal studies are available, they are often bedevilled by problems of sample attrition, leading to estimates which can be affected by significant self-selection bias. There is relatively little evidence derived from random control trials (RCTs) or meta-analyses.
- A study published by Cedefop (2017) reviewed the economic and social cost of low-skilled adults in the EU. It is based on scenarios and highlights methodological limitations stating also that the implicit assumption of constant returns on skills of some microeconomic analyses is unrealistic as it does not take into account deadweight losses, substitution and displacement effects[208].

[206] Gambin L. et al. (2014): Methodological Issues in Estimating the Value Added of Further Education, Higher Education and Skills: A review of relevant literature. London: Department for Business, Innovation and Skills Research Paper 166.

[207] Fialho, Qunintini and Vandeweyer (2019): Returns to different forms of job-related training, OECD Social, Employment and Migration Working Papers.

[208] Cedefop research paper 5560 (2017): Investing in skills pays off – the economic and social costs of low-skilled adults in the EU.

- Where training is certificated in some way, such as the award of a qualification, there is a debate about the extent to which it is the skills acquired which achieve the return, or whether acquisition of the certificate signals something about the individual's ability. This is potentially important in deciding the content and duration of training. In practice, it is difficult to separate the returns derived from acquiring a skill versus that of signalling.
- Returns tend to be expressed as average rather than marginal ones. In the context of a training entitlement, a significant increase in training of type *x,* initially considered in short supply, may well reduce the returns. In addition, there is a rich but inconclusive literature discussing issues such as the depreciation of investment in human capital (e.g. due to skills obsolescence or atrophy) and marginal returns to training. Whilst this is discussed further below, findings always vary depending on the underlying macroeconomic paradigm used in the estimations.
- Returns to training on, e.g., overall employment levels are seldom reviewed in general equilibrium terms, also due to the inherent difficulties in producing reliable macroeconomic estimates. This means that the estimates produced tend to focus on the effect of training on the probability of the treated to be employed at a certain distance from the training event, but this might occur at the expense of those not receiving support (displacement effect). Changes to productivity levels might also induce substitution effects (less workers needed to produce the same output). The same applies e.g. to effects on wage: for small policies and in the short term these are not affected e.g. by the likely increase in taxation to fund the support or the way in which changes in productivity affects supply and demand of goods and labour. Hence, these elements are examined separately in section 10.3.C through the BeTa macroeconomic model.

While these limitations are substantial, a consistent set of findings emerge from the literature. In the findings reported below, the preference has been to rely upon the findings emerging from meta-analyses which systematically review the evidence, especially when derived from RCTs. These studies, albeit acknowledging the partial equilibrium nature of the studies they examine, make clear that returns to training tend to materialise only a few years after the training event takes place, due to the prevalence of lock-in effects[209] in the short term. This is also the reason why the literature on the short-term returns to training vouchers reviewed in section 8 and used to identify estimates of the effects on training participation could not be used for evidence on returns to training. As second best, studies employing natural experiments or instrumental variables have been given some priority. This is in line with standard practice according to the so-called "hierarchy of evidence".

7.2. The returns to individuals

The economic benefits for individuals of investing in training and skills are usually measured with respect to:

(a) the probability of entering or remaining in employment; and

(b) wage gains.

Employment effects are mostly examined at the individual level (i.e. as the net increase in chances of the individual to be in employment at a certain distance from the training event and in comparison with the control group) whereas wage effects are also more frequently discussed at the firm or sectoral level. Both estimates are typically partial equilibrium ones. In addition to these a few studies also examined the effect of training on the quality of job matching was discussed.

[209] This is, in general, the negative effect on current employment due to the time that is spent outside work in ongoing training activities.

7.2.1. Returns on employability

In many countries, training is an important component of active labour market policies (ALMP). Card et al (2018), for example, in their review of over 200 recent studies of active labour market programmes found that those which contained a training element might have little to no impact in the short term, but tend to reveal positive impact two to three years after programme completion[210]. Their results show that the mean ALMP effects on the probability of being employed is 2 p.p. in the short term, 6.6 p.p. and 6.7 p.p. in the medium to long term (so almost identical). They do not disclose information on the value or length of training and only test for possible differences in effects for training durations over nine months (without finding any). Similarly, Levy-Yeyati et al. (2019) indicate significant employment effects (6.6 p.p.) resulting from ALMPs where the emphasis is upon training[211]. In the case of the latter, information on the median cost of the training is available, allowing to assume what some average effect from a week of training on employment chances might be.

Similarly, the evidence review from the What Works Centre (2016) generally found that the evidence points to training, of one kind or another, having a positive impact on entering and remaining in employment[212]. The OECD (2019) report on returns to different forms of job-related training highlighted increased labour market mobility for the higher skilled employees, but sometimes used to gain promotions and higher wages at another enterprise.

A more detailed appraisal of the evidence reveals a more complex scenario than the one depicted so far. Furthermore, tailoring the measure to specific priority groups has a differentiated impact on the level of return the programme has. Subsidised training for low skilled and older workers improves the probability of remaining in paid employment and these effects are more pronounced for part-time workers and those aged over 55 years (Dauth and Toomet 2016)[213]. On another hand, when targeting migrants or those with a migrant background, programmes with the aim of enhancing occupation-specific knowledge are more effective than programmes focusing on qualifications which are not of direct use to potential employers (Thomsen, 2013)[214]. In this regard, language training for migrants also play a positive role in increasing their probability of employment[215].

7.2.2. Returns on wages

The literature highlights the positive impact of skills acquisition generating positive returns with respect to wages. For example, the What Works Centre for Local Economic Growth (2016) analysed 71 counterfactual studies - which met a certain minimum quality threshold - about the impact of training programmes[216]. Among the 21 studies which considered the impact of employment training programmes on the wages of participants, 11 found positive impacts (recognising the difficulty in having generalisable findings on impact linked to interventions that are usually highly tailored to a given local context combined with a lack of robust data).

The report goes on to say that where there were increases in earnings these could be substantial. In the case of the evaluation of the US federal Jobs Corps – using an RCT - after four years

[210] Card, D., Kluve, J., & Weber, A. (2018): *What works? A meta-analysis of recent active labor market program evaluations. Journal of the European Economic Association*, 16(3), 894-931.

[211] Levy Yeyati, E., Montané, M., & Sartorio, L. (2019): What works for active labor market policies? CID Working Paper Series.

[212] What Works Centre (2016) ibid.

[213] Dauth, Ch., and Toomet, O. (2016): *On Government-Subsidized Training Programs for Older Workers*. Labour, Vol.30, Issue 4, pp.371-392.

[214] Thomsen, S., Walter, T. and Aldashev, A. (2013): Short-term training programs for immigrants in the German welfare system: do effects differ from natives and why? IZA Journal of Migration.

[215] Lang, J. (2021): Employment effects of language training for unemployed immigrants. Journal of Population Economics.

[216] What Works Centre for Local Economic Growth (Great Britain) (2016): Evidence review: Employment training.

participants on average earned $1 150 (969 EUR) more than similar non-participants (a 12% increase). Additionally, second chance education is seen to have a beneficial impact on wages (OECD, 2008[217] and 2012[218]). The evidence points to substantial private returns for this type of intervention.

Oosterbeek (2013) estimates that the wage returns of a week of private sector training are around 3 per cent (a figure also mentioned in the OECD report on returns to training), which is high compared with 10 per cent obtained after a full-time extra year of formal education[219]. However, these returns may partly be due to the fact that high-ability workers (who have higher earnings) are more likely to be the recipients of training (Algan et. al, 2021)[220]. Panel data studies on returns to training include the possibility that workers tend to be offered training in connection with promotions (i.e. after increases in job responsibilities) or that there are other unobserved factors that are correlated with both wage and training uptake (these are controlled for with different methods – but the estimation is still reliant on assumptions) (Frazis, H., & Loewenstein, M.,2005)[221]. When controlling for non-random selection into training, the returns are lower and sometimes below 1 per cent as found by Leuven and Oosterbeek (2008) for the Netherlands[222]. The importance of relying on valid instruments to reduce sample attrition was confirmed in Brunello et al. (2012) - estimating a rate of 1.36% as the effect on monthly wages of a week of training, slightly diminishing over time due to depreciation of human capital for Italian regions [223] - and by Görlitz (2011) for Germany[224]. Additional evidence is summarised in Table 18 below.

Besides point estimates of average effects, there is a more qualitative and interpretative issue of what skills should individuals (or their employers) invest in. It is increasing apparent over recent decades that external drivers of demand – notably technological change – has required a demand for people with higher level skills. This is reflected in the wage trends across many countries. But the relationship appears to be increasingly breaking down. The relationship between real wage growth and technological change, for instance, is increasingly dependent upon the specificities of the technologies being introduced and the particular types of skills required to use them (Acemoglu and Autor, 2011; Autor et al., 2013; Handel, 2016)[225].

Accordingly, the focus of policy has become increasingly focused on identifying the specific skills that will generate a return. For the most part these seem to be related to a range of cognitive skills (related to literacy, numeracy, and digital literacy at different levels) and the non-cognitive ones which release, in many instances, the potential for cognitive skills to bring about productivity and wage gains. This then raises the issue of the costs of not-training and the penalty faced by those with low or basic level skills (i.e. those who do not possess the basic literacy, numeracy and digital skills considered essential for gaining entry to the labour market and sustaining a position in it).

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[217] OECD (2008): Education at a Glance 2008. Paris.

[218] OECD (2012): Education at a Glance 2012. Paris.

[219] Oosterbeek, H. (2013): The financing of adult learning. EENEE Analytical Report, 15.

[220] Algan, Y., Brunello, G., Goreichy et al. (2021): Boosting Social and Economic Resilience in Europe by Investing in Education. EENEE Analytical Report No. 42. European Commission.

[221] Frazis, H., & Loewenstein, M. (2005): Reexamining the Returns to Training: Functional Form, Magnitude, and Interpretation. The Journal of Human Resources.

[222] Leuven, E., & Oosterbeek, H. (2008): An alternative approach to estimate the wage returns to private-sector training. Journal of Applied Econometrics, 23(4), 423-434.

[223] Brunello, G., Comi, S. L., & Sonedda, D. (2012): *Training subsidies and the wage returns to continuing vocational training: Evidence from Italian regions*. Labour Economics: 19(3), 361-372.

[224] Görlitz, K. (2011): Continuous training and wages: An empirical analysis using a comparison-group approach. Economics of Education Review, 30(4), 691-701.

[225] Acemoglu, D. and Autor, D. (2011): Skills, Tasks and Technologies: Implications for Employment and Earnings in Ashenfelter, O and Card. D.E. (eds.). Handbook of Labor Economics: Volume 4. Amsterdam: Elsevier. Autor, D.H., Levy, F., and Murnane, R.J. (2003): The Skill Content of Recent Technological Change: An Empirical Exploration. Quarterly Journal of Economics. 118:1279–1333. Handel, M.J. (2016a): What Do People Do at Work? A Profile of U.S. Jobs from the Survey of Workplace Skills, Technology, and Management Practices (STAMP) Journal for Labour Market Research. 49:177-197.

The meta review of the benefits of training undertaken by Mason (2010) reported the following benefits resulting from investing in literacy skills[226]:

- literacy has a persistent, positive and statistically significant association with earnings irrespective of other influences;
- overall, a 10-point increase in literacy scores (on a 500 point scale) gives, on average, a 1 to 5 per cent increase in earnings which compares with 7 to 10 per cent from an additional year of education;
- 1 per cent increase in literacy scores increases wages by just less than 1 per cent.

Given these findings, it is apparent that the costs of not training might well be substantial for some groups of individuals (i.e. those with local basic skills).

By way of summary, the table below provides an overview of studies which contain information on cost or duration of training and the impact measured on individual earnings. Adjustments have been made to indicate the impact if a training entitlement was offered to purchase on average 30 hours of training. In this the results are standardised to some extent.

Table 17 Estimated impact of increasing training on wages

Authors	Value of the training	Increase in wages	
		Net	30-hour training entitlement Equivalent
Dearden et al (2006)	Around 80 hours	0.3% at the industry level per each 1 percentage point increase in employees' participation rates in training over the last 4 weeks	11.2% for each individual
Konings, J. & Vanormelingen, W., 2015,	37 hours/1400 EUR	16.1%	Roughly 10% (more hours & higher price)
Leuven and Oosterbeek, 2008	40hours	Based on the review of the literature so far, at least 3%	2.25%
	50hours	17% at first but only 0.6% (when fully controlling for self-selection through instrumental variables)	0.4%
Görlitz, K., 2011	38 hours	0.5% but not statistically significant	0.4% but not statistically significant
Brunello, G., Comi, S. and Sonedda, D., 2012,	40 hours	1.36%	1%
Martins, P., 2020	Avg 267 EUR per worker (30 000 EUR per firm, 112 workers) in PT values, 2007[227]	Not statistically significant	0%
Rinne, Ulf, Uhlendorff, Arne, Zhao, Zhong (2013).	Voucher scheme hartz reform. This provides for "intensive training" avg. length 6 months (hours of training not known)	160 EUR (110 EUR more than pre-reform) per month, daily wage around 60 EUR, so **around 8.8% increase**	Not available
Doerr, A., Fitzenberger, B., Kruppe, T., Paul, M., & Strittmatter, A. (2017).		0	0%

[226] Mason, G., Garrett, R. and Campbell, M. (2010). The Value of Skills: An Evidence Review. Wath-upon-Dearne: UK Commission for Employment and Skills.

[227] From the paper: "*Considering the average number of workers per firm, the approved training hours figure amounts to a mean* number of training per worker similar to the 35-hour figure established in labour law but would exceed it in the likely case that not all workers participate in FIG funded training".

Authors	Value of the training	Increase in wages	
		Net	30-hour training entitlement Equivalent
Doerr, A., Strittmatter, A (2017)		90 EUR more than supply-led (pre-reform) around 5% increase	Not available
Conti, G. (2005)	Hourly effects provided	0.05% per hour	1.5%
Heinrich, Carolyn, Mueser, Peter, Troske, Kenneth, Jeon, Kyung-Seong, Kahvecioglu, Daver. 2013.	2 400-2 700 USD	30% for the first months, 15% after depreciation (for men) slightly higher for women	**3%-5%**
Brunello, G., Gereben, A., Weiss, C. & Wruuck, P., 2020,	20 Eur (10% increase in training per employee)	0.32% (This is 0.09% in northern Europe, 0.27% in southern Europe and 0.048% in central and eastern Europe. These results are considered consistent with decreasing returns to training)	**6-7%**
Levi-Yeyati, et al (2019)	1 500 in 2 010 USD as median cost	median impact of 7.7%	**2.5%**

7.2.3. Variations in returns by gender, age and certified training

Returns to training arose differently across individuals, according to subjective characteristics from a socio-demographic point of view. In addition, such heterogeneity emerged variously according to the perspective adopted in evaluating the returns to training (wage, employability, etc.).

Differences by gender

The literature on heterogeneity of effects by gender is somewhat mixed. However, from recent and comprehensive meta-analyses:

(a) gender is found to have no effect in Levi-Yeyati et al (2019)[228]; however,

(b) Card, Kluve & Weber (2018), identify significant additional positive impacts for women across all time horizons.[229]

The latter is in line with findings on the latest edition of the influential review on 60 years of studies across the world on returns to schooling from e.g. Psacharopoulos and Patrinos (2018)[230], where women are found to benefit comparatively more (around 2 percentage points) from each additional year of schooling.

Therefore, the heterogeneity of returns by gender seems to either be absent or slightly in favour of women.

Differences by age

Unfortunately, not much evidence is available in regard of adult training effects by age on employment and wages. Partly, such absence of findings is justified by the fact that it is difficult to obtain sample sizes for all age groups that could permit a robust and significant statistical investigation. Some empirical evidence is provided by Card et al. (2010).[231] They evaluated the effect

[228] Levy Yeyati, E., Montané, M., & Sartorio, L. (2019): What works for active labor market policies? *CID Working Paper Series*.

[229] Card, D., Kluve, J.& Weber, A. (2018): *What Works? A Meta Analysis Of Recent Active Labor Market Program Evaluations*, Journal of the European Economic Association.

[230] Psacharopoulos, G., and Patrinos, H. A. (2018): Returns to Investment in Education, A Decennial Review of the Global Literature, World Bank Group.

[231] Card. et al. (2010): Active Labor Market Policy Evaluations: A Meta-Analysis, NBER Working Paper 16173

of training programmes on employment, subdividing the population in youth (<25 years old) and non-youth (>25 years old). They found different effects according to the time perspective adopted. Indeed, when considering a short-term approach, youth people had the strongest effect on the probability of employment (2.9 p.p. vs 0.1 p.p.). Instead, when considering a middle-term perspective, the non-youth gain was particularly higher than the youth one, with 4.5 p.p. increase in the probability of employment against 2.7 p.p. for the youth. Such scenario is confirmed and strengthened in the long-term case, where the non-youth individuals experienced an increase in the probability of employment equal to 4.6 p.p. against the 0.2 p.p. for the youth. However, Yeyati et al. (2019) find no significant effects of age,

Differences by certificated training

Considering formal training for adults over 30 in Sweden, Hallsten (2012) found that obtaining a tertiary degree increased their earnings by 12%. Similar results emerged in regards of employability effects, as he found that obtaining a tertiary degree (formal training) increase employment rate by 18 pp. [232]Moreover, the effects were absent in the higher parts of the earnings distribution, and, as emphasized above, females gained more than men. Levi-Yevaty et al. (2019) provide a general overview of several works studying the Active Labour Market Policies, providing average results. They found that independent workers (like self-employed) experienced an increase in salary equal to 16.5%, while those who obtained vocational training were impacted less, around 7.7%. For the same level of training (vocational), Gloster et al. (2016) found lower impacts for wages, which also increased at a decreasing level over time.[233] After 1 year from the achievement of adult training wages increased by 4 p.p., which reduced to 2.7 p.p. after 3 years, and came back to 3-3.3 p.p. after 5-7 years. In one of the most recent Publications (OECD, 2019) the researchers found that once correcting for a number of socio-demographic and job characteristics, and controlling for selection into training of the most motivated workers, participation in non-formal learning is associated with 11% higher wages, compared to 3.5% for informal learning.[234]

7.2.4. Returns to scale and human capital depreciation

One aspect of particular interest for a policy that looks at training from a life-long perspective is that of the interaction between existing levels of skills and the effect of training, further distinguishing for intensity and recurrence of training. The specific interest here is about marginal returns. In addition, to discuss the cumulative effect of a policy that is repeated over time it is important to discuss if and to what extent the stock of human capital depreciates over time. In other words:

- Do returns vary across levels of educational attainment?
- Do returns vary depending on duration or intensity of training?
- Do returns vary depending on the number, frequency or distribution over time of trainings undertaken?
- Do returns to training persist and remain constant over time or they diminish as skills progressively become obsolete?

This is important as, in discussing a structural measure that aims to increase levels of participation in adult learning from a life-long learning perspective, attention should be given to whether each additional unit of training supported every year generates the same returns, and whether the returns from skills acquired in the past, can produce the same additional effects of those just acquired.

Whilst the four elements above are arguably interlinked, they are not necessarily good proxies of one another. For instance, a long, continuous training of, say, one year, might imply strong lock-in

[232] Hällsten, Martin. 2012. "Is It Ever Too Late to Study? The Economic Returns on Late Tertiary Degrees in Sweden." Economics of Education Review 31(1):179-194.

[233] Gloster et. al (2016), Mapping investment in adult skills: Which individuals, in what learning and with what returns?, INSTITUTE FOR EMPLOYMENT STUDIES

[234] OECD (2019), Returns to different forms of job related training, Employment and Migration Working Papers

effects[235] and reduce the quantity of on-the-job training accrued, thus affecting the estimates of returns to training. Hence, a sequence of training events of shorter duration repeated at certain points in time and carried out outside of working hours might potentially lead to different result although the total quantity (or value) of training purchased is the same of the previous situation. Similarly, returns to training for those with high educational attainments might not necessarily be a good proxy of the effect of repeated training undertaken by low qualified individuals that is cumulated over time. The latter category is more likely to have entered the labour market in lower qualified jobs (if any) and might be in an 'over qualification trap'[236] despite the additional training later received throughout their life.

Thus, there are challenges to the possibility of drawing clear cut conclusions on whether returns to training should be assumed as decreasing, constant or even increasing. At the same time, there exists a rich and consolidated literature on returns to education, which could serve as a benchmark. In addition, the literature has investigated with some more coherent findings, the issue of depreciation of human capital. The following sub-paragraphs will shed some light on the individual questions listed above. Some conclusions are offered further below.

Differences by skill level and educational attainment

In the meta-analysis of recent RCTs from Levy-Yeyati et al (2019), educational attainment appears to have no statistically significant effect on the impact of training on wages or employability. This aspect is not directly investigated in the meta-analysis from Card et al. (2018). However, the former finds stronger effects for long-term unemployed, which is suggestive of somewhat higher returns for individuals most affected by skills obsolescence or under-use.

In Chile, Novella et al. (2018) evaluated the overall impact of the "Bon Trabajador Activo" programme. They found an overall 3.2% increase in earnings, although for low-skilled individuals the effect was higher than average (almost 5%)[237]. As well, Brunello (2012) studied the impact of training by labour market experience on earnings growth by skill level. He finds that when people had no previous training experience, starting training programmes increases earnings by 12.8 p.p for people with less than college education and by 21.6 p.p. for college graduates. However, for the latter group the contribution of training falls with labour market experience, being 14% for 10 years of experience and 10.4% for 20 years of experience, while for the former group results remain constant at previous levels. The author concludes that labour market experience is detrimental to the virtuous interaction between training and education in improving wages and human capital. However, in this study, starting training is more beneficial to people with higher educational levels, contrary to Novella et al (2018).

Heterogeneity of workers on training effects is discussed in panel data analyses from Koenings and Vanormelingen (2015), whose estimates decrease when firm level data on firms that provide training to their employees are controlled for workers' skill levels.[238] However, this is not to be interpreted as "*the higher the skill level the higher the effect of training*" but that the high wages of high skill workers in firms that cater for training confound the true estimate of the effect of training. Specific estimates on the returns to training by skill levels are not available in the study. Heterogeneity is also discussed

[235] Individuals remain unavailable for employment as they are engaged in training. See for instance Ham, John C. and Robert J. Lalonde (1996): *The Effect of Sample Selection and Initial Conditions in Duration Models: Evidence from Experimental Data on Training*. Econometrica, 64, 175–205.

[236] See for instance Erdsiek, D. (2020): Dynamics of Overqualification: Evidence from the Early Career of Graduates. ZEW Discussion Paper.

[237] Novella, R., Rucci, G., Vazquez, C., & Kaplan, D. S. (2018): Training vouchers and labour market outcomes in Chile. Labour, 32(2), 243-260.

[238] Koenings, J., Vanormelingen, S. (2015), The Impact of Training on Productivity and Wages: Firm-Level Evidence, The Review of Economics and Statistics, 2015, vol. 97, issue 2, 485-49

in Frazis, H., & Loewenstein, M. (2005)[239], who conclude that managerial and professional positions have strong and positive effects on returns to training with respect to blue collar workers.

In terms of employability, Doerr et al. (2017) found a positive and strong effect for low-skilled (6%), while a negative effect for high skilled.[240] This suggests that training is a powerful instrument to lift uneducated individuals' employment characteristics, but may be less important to support highly educated individuals' careers. Such results enter in contrast with those of Novella et al. (2018), who found negative impacts in Chile (overall -2%), also by individual characteristics (-2% for low-skilled). This is contradicting with what found by Hallsten (2012), who found that obtaining a tertiary degree (formal training) increase employment rate by 18 p.p.

All in all, no clear-cut conclusion can be drawn from the literature, with estimates that vary both in sign and intensity but no clear trend allowing to reliably assume decreasing or increasing returns to training based on different levels of educational attainments.

Differences by duration and or frequency of training

In the meta-analysis of ALMP from Card, Kluve and Weber (2018), no precise information is available on the cost of training. Nevertheless, the authors control econometrically whether the average effects they estimate differ when training duration exceeds 9 months. They find no statistically significant difference in the wage effects of training of longer duration. However:

a) training duration is not necessarily a perfect proxy of cost;

b) the authors only control for duration of support over the full sample of studies they have (including non-training programmes);

c) the authors only control for duration of support focusing on the average effect of the programmes (not disaggregated by short vs long term).

Hence it is not fully possible to exclude that an increasing value of training is associated with higher benefits, as it would be in presence of constant (and even diminishing, non-negative) returns.

A positive correlation between the intensity of support and labour market effects is confirmed by the large RCT carried out in the US on the individual training accounts. In the related study from Perez-Johnson, Moore & Santilliano (2011)[241] three different intensities of support were compared across slightly different delivery modes. The study concluded that in the model with higher average values of training entitlements (approx. 4 600$ versus approx. 2 800$), 4 p.p. more of the group ended up in high paying jobs, and 5p.p. in jobs consistent with the occupation they trained for. This led to a 3-6% increase in the quarterly earnings during the period of observation. This study seems suggestive of positive returns to training, and drives the results of the Cost-Benefit analysis carried out in the same study where the model with higher average values of training entitlements yields a better cost-benefit ratio. This is suggestive of constant or even increasing returns to scale for the first training episode.

Finally, a study by Görlitz (2011), examined the wage-impact of training programmes for Germany, highlighting an increasing effect as the number of courses rises. The first course brought an increase of 0.5 p.p, the second course an increase of 2.2 p.p., while the third course an increase of at most 2.4%[242]. Therefore, as the number of courses and the time spent in additional training increased, the

[239] Frazis, H., & Loewenstein, M. (2005): Reexamining the Returns to Training: Functional Form, Magnitude, and Interpretation. The Journal of Human Resources.

[240] Doerr et al. (2017), Employment and Earnings Effects of Awarding Training Vouchers in Germany, research article

[241] Perez-Johnson, Moore & Santilliano (2011): Improving the Effectiveness of Individual Training Accounts: Long-Term Findings from an Experimental Evaluation of Three Service Delivery Models, Final Report, Mathematica Policy Research.

[242] Görlitz, K. (2011): Continuous training and wages: An empirical analysis using a comparison-group approach. Economics of Education Review, 30(4), 691-701.

returns in terms in wages increased as well. However, such increase does not seem to be constant for each additional training, as it plateaus between the second and third training spell.

Insights on returns to scale can also be drawn from Brunello et. al (2012)[243] and EIB (2020)[244]. According to the former, heterogeneity of returns to wages which favour enterprises below 100 employees could be explained by the fact that *"[..] Policies that induce firms and workers to invest in additional training are likely to produce higher returns in smaller firms because the marginal benefits to training are decreasing in the quantity of training*".

In the more recent work from the EIB (2020), geographical heterogeneity of returns to productivity (higher in Southern and Eastern Europe) is explained along similar lines, indicating that this finding is consistent with decreasing returns to training. In these two papers, the best fitting function for marginal returns is the cube root function, with declining returns to scale. The same specification was discussed as best fitting in Frazis and Lowenstein (2006)[245]. Hence, when it comes to the literature on returns to training for adults, there seems to be a tendency to favour models with slightly decreasing marginal returns.

Depreciation of human capital

Skills obsolescence and human capital depreciation are widely acknowledged and investigated in the literature. Their existence is part of the justification for the importance of lifelong learning. These aspects also have a bearing on the estimation of the medium to long run effects of any training policy, as the focus lies on the cumulative effect of learning on productivity, and via productivity on other macroeconomic variables.

In order to identify some general findings applicable to the current simulation it is important to start from an understanding of the drivers of human capital depreciation and skills obsolescence.

Skills obsolescence might occur in (at least) two different ways:

- a "natural" wear of skills due to the aging process, injuries, changing requirements or working conditions in a sector for individuals in employment;
- the "atrophy of skills" for individuals who fall outside of the labour market or have career interruptions.

There are also different ways of measuring such depreciation both direct (mostly survey based) or indirect (looking at labour market outcomes). To the end of this brief review, the effect on labour market outcomes (wages and productivity) are the most relevant. Clearly these indirect measures are based on observational studies which can be biased by imperfect labour markets rewarding e.g. loyalty of the workers, suffering from low job mobility etc.

As recently estimated in Lentini and Gimenez (2019)[246], on top of substantial additional literature on the theme, there is strong sectoral dimension to human capital depreciation. The intuitive correlation between intensity of skills in a given sector and human capital depreciation tends to be confirmed empirically. In high-skill sectors, the authors identify a rate of depreciation of 6%, whereas this falls to 1% in low-skill ones. An additional source of heterogeneity in human capital depreciation appears to be the individual's educational level and type. According to Weber (2014)[247], academic and concept-based education protects workers from obsolescence better than vocational. This is fully

[243] Brunello, G., Comi, S. L., & Sonedda, D. (2012): *Training subsidies and the wage returns to continuing vocational training: Evidence from Italian regions*. Labour Economics: 19(3), 361-372

[244] EIB (2020): Financing contraints and employers' investment in training. Economics – Working Papers 2020/05.

[245] Frazis L and Lowenstein M, (2006) On the Job Training, Now, The Essence of Knowledge.

[246] Lentini, V. and Gimenez, G. (2019), Depreciation of human capital: a sectoral analysis in OECD countries, International Journal of Manpower.

[247] Weber, S. (2014), Human capital depreciation and education level, International Journal of Manpower.

confirmed in the influential work form Hanushek et. Al (2017)[248]. The latter finding goes on to highlight the relevance of human capital depreciation in the context of vocational training.

In the literature reviewing average returns to training, depreciation of human capital is factored in in the estimates from Conti (2005)[249], Dearden et. Al (2006)[250] and Brunello et. al (2012) at a rate of 1-15%. In particular in Brunello et Al (2012), this entire range of possible depreciation rates is tested to understand which is the better fit to the data available. The results identify a 3% depreciation rate as the best fitting. This value seems to fall in the middle of the range defined by Lentini and Gimenez (2019) taking into account the sectoral variation in the depreciation rates. Hence, this is the value retained for the long-term simulations described in section 10.3.C.

Concluding remarks on returns to scale

As described above, findings from the literature are mixed. Whilst there is a consensus that marginal returns are positive once it is accounted for lock-in effects, their trend (decreasing, constant or increasing) cannot be reliably assumed as it will likely depend on multiple interrelated factors. According to the literature on returns to schooling, returns tend to fall between the low and medium qualified, but remain constant for further increases. Constant returns are also accepted in influential literature on endogenous growth models. When it comes more specifically to adult learning, which may or may not follow a pattern that is similar to investment in human capital through formal / initial education, findings on training at firm or individual level seems to suggest overall declining marginal returns to training. For this reason, and to ensure a sufficiently conservative approach to the long-term macroeconomic estimates, decreasing marginal returns to training accumulation are used in the simulations later described in section 10.3.C.

However, as highlighted above, no conclusive evidence seems to be available and recent meta-analyses find little to no confirmation that initial educational levels matter when the effect of a training episode is assessed. For instance, in one of the few randomised control trials focusing on the long-term labour market outcomes of a training entitlement scheme, 251 more generous entitlements were associated with comparatively higher returns to the individuals and the society. This suggests to employ linear rates when discussing the difference between a one-off 30 and 50 hours training entitlement given to different target groups (i.e. hourly effects are the same for all target groups and only vary pro-rata with the value/duration of the training entitlement), and only consider decreasing returns for the longer-term dynamic of recurring training episodes and their cumulative effect on productivity over time.

Lastly, a 3% average rate of depreciation of the new stock of human capital generated by training is identified for the simulations, as productivity increases from vocational training are consistently found to depreciate in the literature due to skills obsolescence.

7.2.5. The wider benefits of training to the individual

In terms of well-being there is evidence showing improved well-being of individuals, including improved health as a result of participation in learning. Jenkins (2011) shows that participation in evening classes by older adults has a positive effect on their perception of their general well-being[252]. Hammond and Feinstein (2005) demonstrate that adult learning can lead to increased self-

[248] Hanushek, E. et al. (2017), General Education, Vocational Education, and Labour-Market Outcomes over the Life-Cycle, Journal of Human Resources.

[249] Conti, G. (2005) Training, productivity and wages in Italy, Labour Economics.

[250] Dearden, L., Reed, H., & Van Reenen, J. (2006): The impact of training on productivity and wages: Evidence from British panel data. Oxford bulletin of economics and statistics, 68(4), 397-421

[251] Perez-Johnson, Moore & Santilliano (2011): Improving the Effectiveness of Individual Training Accounts: Long-Term Findings from an Experimental Evaluation of Three Service Delivery Models, Final Report, Mathematica Policy Research.

[252] Jenkins, A. (2011): Participation in learning and wellbeing among older adults. International Journal of Lifelong Education, 30:3, 403-420.

confidence for participants[253]. A report for the UK's Mental Health Foundation (2011) showed that community-based learning courses for adults were successful in improving the subjective mental wellbeing of adults[254]. Feinstein et al (2003) analysed the contribution of adult learning to improvements in physical health and showed that it can reduce the likelihood of smoking and consumption of alcohol and increase the likelihood of exercise[255]. Sabates and Feinstein (2006)[256] found a positive association for women participation in adult learning to take up cervical screening. In addition, data analysis in a study of the European Commission on effectiveness of adult learning policies and their effectiveness in Europe (2015) demonstrates a strong positive and statistically significant correlation between an individual's life satisfaction and their participation in learning. This association is stronger for people with lower qualification levels. This suggests that participation in learning is linked to an individual's perception of their wellbeing[257]. Yamashita et al (2017) showed that additional participation in organised education programs was positively associated with life satisfaction[258].

In terms of civic participation, Fujiwara (2012) showed that the social value of increased community participation owing to participation in adult learning is worth about £130 to the learner[259]. Feinstein et al (2003) show that there is an improvement in civic attitudes arising from participation in adult learning, as well as a 3% increase in the number of adults who were likely to join community organisations as a result of participating in adult learning[260]. Moreover, adults with low literacy (PIAAC level 1 or below) are nearly twice as likely as adults with high literacy skills (scoring at level 4 or 5) to say that they trust others very little.

7.3. Returns to employers

Returns to employers who invest in training can be measured primarily in terms of productivity. There are additional benefits including contributions to company innovation, developing skills capacity (to avoid shortages) and business survival.

7.3.1. Productivity

There has been a wide range of research which has sought to demonstrate the link between employer provided training and organisational performance typically measured by productivity. Dearden and Van Reenen (2006) find that a one percentage point increase in the proportion of workers trained brings about a 0.6 per cent increase in value added and an increase in wages of around 0.3 per cent[261]. A review of the situation in the US reveals that the rate of return of investment to the employer can be substantial: from 7 to 50 per cent[262].

[253] Hammond, C. & Feinstein, L. (2005): The Effects of Adult Learning on Self-Efficacy. London Review of Education, 3(3), 265.

[254] Mental Health Foundation (2011): Learning for Life. Adult learning, mental health and wellbeing.

[255] Feinstein, Leon, & Hammond, Cathie. (2003): Health and social benefits of adult learning. Adults Learning, 14(10), 22-23.

[256] Sabates, R., & Feinstein, L. (2006): The role of education in the uptake of preventative health care: the case of cervical screening in Britain. Social science & medicine, 62(12), 2998-3010.

[257] European Commission (2015): An in-depth analysis of adult learning policies and their effectiveness in Europe. Prepared by ICF Consulting Services Limited.

[258] Yamashita et al. (2017): Types of Learning Activities and Life Satisfaction among Older Adults in Urban Community-Based Lifelong Learning Programs. Activities, Adaptation, & Aging, 41(3), 239-257.

[259] Daniel Fuijware (2012): Valuing the impact of adult learning: an analysis of the effect of adult learning on different domains in life.

[260] Feinstein, L. et al. (2003): The contribution of adult learning to health and social capital. London: Centre for Research on the Wider Benefits of Learning.

[261] Dearden, L., Reed, H., & Van Reenen, J. (2006): The impact of training on productivity and wages: Evidence from British panel data. Oxford bulletin of economics and statistics, 68(4), 397-421.

[262] Bartel, A. P. (2000): Measuring the employer's return on investments in training: Evidence from the literature. Industrial relations: a journal of economy and society, 39(3), 502-524.

Brunello and Wruunck (2020) also found an increase in firm productivity by 1.5 per cent due to an investment of 100 EUR per employee in training[263]. Brunello and Bertoni (2021) report that the effect of training on productivity depends on whether training is counter-cyclical (it increases during recessions as firms use it as an opportunity to reorganise their activities) or pro-cyclical (decreases during recessions)[264]. Pooling data from 2005-2018 for EU 27, they find that training is mildly counter-cyclical, while adult learning is acyclical. There is high heterogeneity across countries. Countries where training is counter-cyclical are characterised by: higher public training expenditure, higher union density and employment protection, a lower share of financially constrained firms, higher R&D expenditure and lower product market regulation. After 2009 crisis, the decrease in GDP by 4.5 per cent was followed by an increase in participation and training by 0.17 p.p, and a consequent growth in labour productivity by 0.003%. However, these are average values, and country-specific estimates show higher increase for some countries as Portugal (0.04%), Sweden and France (both 0.03%). Therefore, the authors suggest that the decision to implement training during recession should be country specific to see whether costs are lower than the benefits.

In the theoretical literature a distinction is made between general and company specific training where the former refers to training that only the employer providing the training can obtain a return from. In reality, such a distinction tends not to exist with most skills being transferable to some degree. The evidence points to firms being able to obtain a return from investing in the general skills of their workforce. It has been shown that employer investment in general skills about a 3 per cent increase in productivity[265]. The reason in the productivity result is obtained results from the value that the individual employees see in gaining transferable skills.

The most relevant studies that review in detail the effect of training on firms' productivity which contain information on the value of the related investment in training are listed below. Their "30-hour equivalent" is also calculated.

Table 18 Estimated impact of value of training in increased productivity

Authors	Value of the training	Increase in productivity	
		Net	30-hour training entitlement equivalent
Dearden et al (2006)	Around 80 hours	0.6% at the industry level per each 1 percentage point increase in employees participation rates in training over the last 4 weeks	**22.4% for each individual**
Konings, J. & Vanormelingen, W., 2015,	37 hours/1 400 EUR	27.9%	**Roughly 17%**
Martins, P., 2020	Avg 267 EUR per worker (30 000 EUR per firm, 112 workers) in PT values, 2007[266]	5%	**5% (the cost is slightly lower but it is for PT in 2007)**
Conti, G. (2005)	Hourly effects provided	0.1% per hour	**3%**

[263] Brunello, G. & Wruuck, P. (2020): Employer provided training in Europe: Determinants and obstacles. EIB Working Paper 2020/03.

[264] Brunello and Bertoni (2021), Adult learning during recessions in Europe. EENEE Policy Brief 1/2021.

[265] Barrett, A., & O'Connell, P. J. (2001): Does training generally work? The returns to in-company training. ILR Review, 54(3), 647-662.

[266] From the paper: "*Considering the average number of workers per firm, the approved training hours figure amounts to a mean number of training per worker similar to the 35-hour figure established in labour law but would exceed it in the likely case that not all workers participate in FIG funded training*".

Authors	Value of the training	Increase in productivity	
		Net	30-hour training entitlement equivalent
EIB (2020)267	€20 (10% increase in training per employee)	0.32% (This is 0.09% in northern Europe, 0.27% in southern Europe and 0.048% in central and eastern Europe. These results are considered consistent with decreasing returns to training)	6-7%

From the above, it can be seen that returns to training on firms' productivity can be quite substantial, ranging from 3% to 22.4%. Unfortunately, these studies are not based on experiments nor use instrumental variables to control for self-selection. Their research design tries to account sample attrition but the size of the estimates is particularly large and potentially suggestive of some overestimation. The authors of the recent OECD report (2019) also urged caution based on small sample sizes but point to a correlation between higher investments in training and higher productivity increases. This would be logical given that higher productivity gains are often associated with high-skilled employees, often requiring higher-cost or more specialised (and at a higher cost) training.

Nevertheless, in Dearden and Van Reenen. (2006), Konings et. Al (2015) and Conti (2005), increases in firms' productivity are also coupled with wage increases for the employees. This allows identifying a partial equilibrium relationship between the increases in wages and those in productivity. Based on these studies it is possible to identify a productivity to wages ratio of roughly 2:1. This is helpful as it allows to use increases in wages calculated in studies fully controlling for endogeneity through instrumental variables as a proxy of increases in productivity, to come to more robust estimates.

7.3.2. Innovation Performance

Cedefop's meta-analysis of training and workplace learning on a firm's performance on innovation (2012) finds that the proportion of companies providing training, employee participation in training, and the costs of continuing vocational training (CVT) as a percentage of total labour costs have a positive relationship with innovation performance.[268]

7.3.3. Skills Capacity in Enterprises

The other area where investment in skills can have a pay-off is in relation to avoiding skill shortages or internal skill gaps (i.e. where the existing workforce are not as proficient as required to meet a company's product market strategy). One has to be careful because companies at the cutting edge of technological developments often report skill shortages because of their cutting-edge position and the difficulties the supply-side has in keeping pace with that change. But overall there is evidence that employers which train are less likely to encounter skill shortages and, critically, are more likely to have product market strategies which are oriented towards higher value segments of the market[269]. There does appear to be a symbiotic relationship between investing in skills via training, innovation, and product market strategies.

There has been a longstanding interest in promoting high quality employment and high performance of the workforce. A central element of high performance of the workforce is not only the provision of skills training so that people are equipped to meet the demands of the enterprises, but they are

[267] EIB (2020): Financing contraints and employers' investment in training.

[268] Cedefop (2012): Learning and innovation in enterprises. RESEARCH PAPER No 27.

[269] Mason, G. (2004): Enterprise product strategies and employer demand for skills in Britain: evidence from the Employers Skills. Skope Research Paper No.50, University of Oxford.

granted a degree of autonomy of in exercising those skills[270]. There is seen to be a virtuous circle between employers investing in the human capital of their employees, increasing levels of job satisfaction, and reinforcing the bond between employer and employee all of which feeds into improved organisational performance. It is likely to be the case that high-quality employment and high performance working are dependent to some degree on the provision of training (or human capital development more generally) by the employer.

7.3.4. Business survival

Research from the UK indicates that companies which train are more likely to survive as a result of the training (and by implication the skills they invest in). It has been demonstrated that non-training companies are nearly twice as likely to go out of business than their counterparts who train (other things being equal)[271]. The failure rate of companies not training was 27 per cent over six years compared with 11 per cent for those that did so.

7.3.5. Factors influencing returns to business

The key point of research evidence in relation to training is that for the employer to fully appropriate the returns from their investment in training, there needs to be a range of other human resource practices in place. This is because the evidence indicates that whilst employees might obtain a wage return from engaging in training, it tends to be greater where they move jobs.[272] Additionally, there is also a need to consider the extent to which high performance work practices can be transferred into all companies. A study from the early 1970s demonstrated that measures could be taken to improve the quality of work in a range of routine jobs, such as giving them more autonomy over how they undertook their jobs. But such effects were short-lived because once the novelty of the new working arrangements wore off.[273] The point here is that the employer cannot be counted on in every situation to provide training in the expectation that a return can be obtained from it because that return may not be achievable.

7.4. Returns to society

The wider returns to society can be measured in economic, social and environmental terms, each summarised below.

7.4.1. Macroeconomic returns

An analysis of the OECD (2013) shows that countries with high rates of participation in adult learning are more competitive.[274] This is corroborated by the statistically significant and positive correlation between the participation rate of employed individuals and GDP per resident. PIAAC data illustrate the central role that basic skills play in shaping economic outcomes. In the EU17, an increase of skills by around 40 points (slightly less than one skills level) is linked with an increase in wages

[270] Green, F.et al. (2016): Skills and work organisation in Britain: a quarter century of change. *Journal for Labour Market Research* 49(2), pp. 121-132.; P. Findlay et al. (2017) 'Opportunity Knocks?: The Possibilities and Levers for Improving Job Quality', *Work and Occupations*, vol. 44, no.1, pp.3-22; Gloster, R.. et al. (2016). Mapping investment in adult skills: which individuals, in what learning and with what returns?.

[271] Collier, W., Green, F., & Peirson, J. (2005): *Training and establishment survival*. Scottish Journal of Political Economy, 52(5), 710-735.

[272] Green, F. (2007): Recent Developments in the Economics of Training. Edward Elgar.

[273] Daniel, W.W. and McIntosh, N. (1972): *The Right to Manage?* London: Macmillan. Cotgrove, S. et al. (1969). *The Nylon Spinners: A Case Study in Productivity Bargaining and Job Enlargement*. London: Allen & Unwin.

[274] OECD (2013): *OECD* Skills Outlook 2013: First Results from the Survey of Adult Skills, OECD Publishing, Paris.

ranging from approximately 5% in Denmark, Finland and Italy to more than 10% in the UK.[275] At national and European level, it has been estimated that if Europe achieved its current literacy benchmark, this could lead to an aggregate GDP gain of 21 EUR trillion over the lifetime of the generation born in 2010.[276] These estimates are particularly relevant as they have the advantage of taking into account general equilibrium dynamics, although typically rely on slightly simplified assumptions to account for the complexity of the estimation.

A more recent study (Cedefop, 2017)[277] has reviewed the macroeconomic returns to training low-skilled adults in the EU and has generated significant positive, illustrative effects through its scenario analysis in respect of gross earnings, tax revenues and benefits to individuals in terms of health and crime benefits. In the upskilling scenario (7.4%) of the low-skilled, total net benefits over ten years could equal 2 013 billion EUR[278] and 3,528 billion EUR in a zero low-skilled (0%) scenario with increases in annual GDP (2025-50) at 200 billion EUR and 410 billion EUR respectively die to the reduction or elimination of low skilled adults.

7.4.2. Social benefits

Social benefits in general, arising from adult learning, are largely found from evidence showing relevant statistical relationships between adult learning and community. Countries having high skills levels in literacy and numeracy show a higher participation in volunteer and political activity as well as higher levels of trust[279]. This is confirmed by a positive and statistically significant correlation between participation in learning and voter turnout in the most recent EU elections[280]. In addition to that, an increased participation in learning also affects a reduction in economic inequality (as measured by the Gini coefficient): an increase in the participation rate in learning by 10 percentage points is associated with a decrease of two points in the Gini coefficient (with zero representing equality on Gini coefficient)[281]. Furthermore, the increase in employment achieved through training generates a reduction in welfare dependency and thus a decrease in the cost of social benefits for Public Authorities (see Huber et al., (2011) for a study with German data; and OECD, 2017 for the Netherlands).[282] [283]

Targeted health education allows to reduce chronic illness and increase the quality and years of healthy life of older people. The review of roughly 600 studies found that almost 64% of the studies reported positive health effects on the learners from their participation in a therapeutic education programme[284]. But there also other positive effects about the expenditure on healthcare coming from participation in learning: for example, in the UK[285] the postponement of entry into residential care by

[275] European Commission (2013). The Survey of Adult Skills *(PIAAC): Implications for education and training policies in Europe*. DG-EAC. OECD (2013). OECD Skills Outlook 2013*: First results from the Survey of Adult Skills*. Paris: Organisation for Economic Cooperation and Development.

[276] Hanushek, Eric and Woessmann, Ludger (2011): The Cost of Low Educational Achievement in the European Union, EENEE Analytical Report No. 7.

[277] Cedefop research paper 5560 (2017): Investing in skills pays off – the economic and social costs of low-skilled adults in the EU.

[278] of which 1,030 billion EUR would be health and crime benefits and a further 904 billion EUR in aggregate net income before taking into account opportunity costs.

[279] OECD Skills Outlook (2013).

[280] European Parliament (2014): Results of the 2014 European elections.

[281] Labour Force Survey (2013): *EU Statistics on Income and Living Conditions*, 2012.

[282] Huber et al., (2011), Does leaving welfare improve health? Evidence for Germany

[283] OECD (2017), Financial Incentives for Steering Education and Training

[284] Lagger, G., Pataky, Z., and Golay, A. (2010): Efficacy of therapeutic patient education in chronic diseases and obesity. Patient Education and Counselling 79, 3, 283-286.

[285] Schuller, T. and Watson, D. (2009): Learning Through Life: Inquiry into the Future for Lifelong Learning. NIACE, Leicester.

one month because of participation in learning might lead to potential savings worth between £18.2 million and £36.3 million to the state per annum at that time.

7.4.3. Environmental benefits

Participating in adult learning programmes also leads to an improvement of environmental literacy and a better behaviour in relation to the environment among adults[286] as well as reduction in in reoffending rates[287]. From the outset there seems to be a consensus that there overall is an increasing demand for green skills. For example, the employment and social impacts of climate change policies was recently addressed in the Commission publication "Employment and Social Developments in Europe 2019"[288]. It assessed that efforts to meet the climate targets by 2050, would by 2030 lead to 1.1% higher employment and 0.5% higher GDP compared with a baseline scenario. This amounts to an additional 1.2 million jobs in the EU by 2030, on top of 12 million jobs expected to be created under the baseline from 2015 to 2030. The expected positive impacts are largely due to the investment activity required to achieve such a transition, together with the impact of lower spending on the import of fossil fuels. Furthermore, lower consumer prices, notably of solar photovoltaic electricity, are expected to boost disposable incomes, consumer expenditure and consequently the demand for consumer services, which are generally labour intensive.

Another recent assessment made regarding the need to equip the existing workforce with the necessary green skills to meet the requirements of the green transition is that of the Commission Communication, COM(2020) 662 final, "A Renovation Wave for Europe – greening our buildings, creating jobs, improving lives". It concludes that one of the main developments needed to achieve the EU environmental and climate targets is that of increased energy efficiency renovations of buildings. Furthermore, it finds that renovation works are labour-intensive, create jobs and investments rooted in often local supply chains, can generate demand for highly energy and resource-efficient equipment and bring long-term value to properties. By 2030 an additional 160 000 green jobs could be created in the EU construction sector through a renovation wave.

7.5. Conclusions and selection of the coefficients for impact estimates

The review of the literature above has clarified that a range of studies exist which discuss benefits of adult learning for the individuals, employers and society as a whole, employing a range of different techniques and approaches to the estimation. This variation, in addition to the inherent heterogeneity of effects which depends on the quality of adult learning undertaken, its tailoring to the needs of the labour market, differences in the target groups and in implementation, makes it difficult to identify univocal coefficients. All the more so as these should be suitable to be used as parameters for the estimation of the impact of the policy packages across a range of target groups, Member States and training choices. In particular, whilst benefits for the individuals can be drawn based on highly reliable counterfactual studies producing partial equilibrium estimates, if attention is turned to the societal level, broader and more complex general equilibrium estimates might be necessary to account for the positive and negative externalities of the policies on the society.

Nevertheless, the specific interest is on the identification of coefficients which can broadly reflect the likely average outcomes of the very heterogeneous additional training which is expected to the generated by the provision of individual training entitlements. In this light, the coefficients identified for the simulations carried out in section 10 are listed in Table 20 below.

[286] Digby (2013): The Impact of Non-formal and Informal Learning on Adult Environmental Behaviors. International Electronic Journal of Environmental Education 3, 1, 37-55.

[287] Gordon, H and Bracie Weldon (2003): The Impact of Career and Technical Education Programs on Adult Offenders: Learning Behind Bars. Journal of Correctional Education, 5, 4, 200-209.

[288] https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8219

Table 19 Coefficients identified for the simulation of a 30-hour training entitlement

Variable	Partial Equilibrium (effects on participants/beneficiaries)
Wages	**1% increase**. This is deemed to be a likely **conservative estimate** as: - It is based on widely acknowledged literature[289] employing an instrumental variable approach – hence likely to duly address self-selection issues. - Evidence from Meta-analysis on RCTs place the point estimate for 30-hour /500 EUR training at around 2.5p.p (7.7p.p. for a median value of training of EUR 1300) - Relevant literature on sectoral or firm level[290] increases place indicates point estimates of above above 10p.p.
Productivity	**2% increase** This is deemed to be a likely **conservative estimate** as: - It is drawn at the lower bound of the range of estimates discussed in section 3.1 above. - It is tied (fixed ratio) to the increases in wages, which are, in turn, calculated using instrumental variables and factoring in depreciation of human capital as explained in 3.1. This should increase robustness towards problems of sample attrition and self-selection For the longer-term macroeconomic estimations (i.e. section 10.3.C), this productivity gain: - Depreciates over time at a rate of 3% - Does not fully accumulate year on year. Their cumulative increases over time are factored in based on a cube root function (decreasing marginal returns), to favour a more conservative approach to the long-term estimates.
Employment effects	**2.5 p.p. increase in the medium to long-term probability of being in employment** (for the beneficiaries) This is deemed to be a robust estimate, as: - Partial equilibrium effects on employment chances have been reviewed in a rich literature employing a range of techniques. They have been summarised in meta-evaluations. The two most influential and relevant[291] converge on their finding of 6-7 p.p. medium to long term increases in employment chances for those receiving training - Although in Card et. Al (2018)[292] there is no specific information on the cost of the training, heterogeneous effects for very long trainings are tested and rejected. In addition, information on the median cost of trainings is available in Levy-Yeyati et al. (2019)[293], which allows to scale down proportionally the measured average effect to the value of the individual training entitlements discussed in this study. However, these studies are partial equilibrium and hence cannot reliably inform on the overall employment effects of large policy initiatives such as those discussed in this study.

Source: Authors' elaboration

These effects are then scaled proportionally for target groups receiving 50-hour training support and, given the inconclusive evidence on heterogeneity of returns, are applied linearly to the different target groups addressed by the policy packages.

These partial equilibrium estimates are used for the short-term detailed CBA analysis (see section 10.2.B, covering direct effects).

Estimates on productivity gains, which is the least likely to produce displacement and can thus be measured quite reliably also at the micro (individual or enterprise) level, are also used as an input to

[289] Brunello, G., Comi, S. L., & Sonedda, D. (2012): *Training subsidies and the wage returns to continuing vocational training: Evidence from Italian regions*. Labour Economics: 19(3), 361-372.

[290] See for instance Konings, J.and Vanormelingen, S. (2015): The Impact of Training on Productivity and Wages: Firm-Level Evidence, The Review of Economics and Statistics, 97 (2): 485-497 and Dearden, L., Reed, H., & Van Reenen, J. (2006): The impact of training on productivity and wages: Evidence from British panel data. Oxford bulletin of economics and statistics, 68(4), 397-421.

[291] Card, D., Kluve, J., & Weber, A. (2018): *What works? A meta-analysis of recent active labor market program evaluations. Journal of the European Economic Association*, 16(3), 894-931 and Levy Yeyati, E., Montané, M., & Sartorio, L. (2019): What works for active labor market policies? CID Working Paper Series.

[292] Ibid.

[293] Ibid.

the macroeconomic simulation described in detail in section 11C. Broader macroeconomic effects (including on structural increases in employment) are assessed in detail in section 11C).

8. Evidence on the policy measures

This section assesses the empirical evidence which addresses how training entitlements affect the take-up of training. It is made up of 5 parts and based on a review of the literature and the case study material.

8.1 – An outline of training entitlements and their implementation through vouchers or individual learning accounts (ILAs)

8.2 – The effectiveness of training entitlements

8.3 – Associated elements of training entitlements including labour market intelligence, career guidance, registries of training opportunities and governance

8.4 – Costs including administrative costs

8.5 – Paid training leave

8.1. Overview of individual training entitlements

8.1.1. Introduction

Individual training entitlements are defined as a personal budget that is at the individual's disposal to cover the direct costs of training/course fees (irrespective of trainees' labour market status) within a set time-period. The aim of training entitlements is to overcome the financial barrier faced by individuals looking to engage in learning/training. A training entitlement is typically accompanied by information about available learning programmes and the value they will confer on the individual. By removing in full or in part the financial barrier the expectation is that training participation rates will increase.

By modulating the provision of training entitlements by target groups, the effectiveness and efficiency of the intervention can be increased. Focus only on priority target groups will, in general, reduce budgetary costs with potentially less displacement of private investments in skills but a drawback of the targeted approach is that it can increase the fragmentation of existing support schemes and exclude other individuals from training support. It is also unlikely to bring about a large increase in the volume of training and associated human capital development.

From a labour market perspective, where assistance is targeted it addresses those who face particular problems in accessing training and where training will have some beneficial impact upon their labour market position. This is subject to the benefits of any intervention exceeding its costs. Targeting increases transaction costs but potentially reduces the scale of any deadweight. In contrast, where a training entitlement is universal the transaction costs are likely to be lower, but the deadweight will be higher.

Training entitlements will increase participation in training where it is able to bring about a return or benefit to the individual that is no lower than the costs faced by the individual. The costs and benefits include direct and indirect, financial and non-financial ones.[294] Where individuals may be particularly

[294] For a more comprehensive analysis covering also subjective issues of individual behaviour, risk aversion, etc., see: Dohmen, Dieter (1999), Integrierte Neuordnung von Familienleistungsausgleich und Ausbildungsförderung - Das Ausbildungs-Realsplitting [An integrated Reorganisation of Family Allowances and Student Support – The Educational Tax Splitting], in: Sozialer Fortschritt, Vol. 48,No. 6, p. 156-163. Dohmen, Dieter (1999), Ausbildungs-Realsplitting - ein integrierter Ansatz zur Reform von Ausbildungsförderung und Familienleistungsausgleich [Educational Tax Splitting – An integrated Approach to Student Support and Family Allowances] in: Wirtschaftsdienst, No. 6, p. 364-371. Dohmen, Dieter (1999), Ausbildungskosten, Ausbildungsförderung und Familienlastenausgleich. Eine ökonomische Analyse unter Berücksichtigung rechtlicher Rahmenbedingungen [Educational Costs, Student Support and Family Allowances. An economic Approach with special Focus on the Legal Framework], Berlin. Dohmen, Dieter (1999), Finanzbedarf und Verteilungswirkungen des kombinierten Finanzierungsmodells: Bildungssparen, Bildungsgutscheine und Bildungsdarlehen [Funding

risk averse/sceptical about the likely returns to training, their discount rate will be higher (in other words, they will want to be guaranteed relatively higher benefits).

The availability of information, advice and guidance (IAG) is important. Individuals may well lack information about the benefits of participating in training, the type of training that is most likely to meet their needs and aspirations, and where it may be accessed. As such, easy-to-use and easy-to-access, free to the user, IAG support increases participation rates. In addition, the lower the quality of IAG the lower the potential for the training entitlement to drive up participation rates and thereby meet skill needs. Often related to the process of offering guidance and the use of labour market information is the construction of a registry which lists the courses an individual may access. In this way, access is limited to those courses which are likely to meet certain criteria such as meeting a labour market need but also offering value for money. This might be considered important in an age when it is relatively easy to develop courses of one kind or another and place them online leading to a proliferation of training offers which the individual might find difficult to navigate and understand.

Whilst training entitlements are generally viewed from the perspective of the state (at local, regional or national level) subsidising an individuals' investments in their skills, there are also private initiatives to consider as well. Large companies/organisations often provide their employees with a training entitlement so that they are able to develop their skills.[295] Increasingly custom learning platforms have become available to allow an organisation's workforce to locate appropriate learning opportunities. Such platforms provide a one-stop shop to identify internal and external learning programmes.

Training entitlements provided by employers to their workforce are likely to encompass a wide variety of activities and it is not always easy to identify which segments of the workforce have an entitlement or, if so, whether the value/size of the entitlement varies by occupational group or seniority. There is also an issue about the purpose of employer provided provision: is it limited to a narrow range of skill development from which only the employer primarily benefits, or is it more broad based providing transferable skills?

8.1.2. Existing provision of training entitlements: vouchers

Training entitlements are typically provided via a voucher (i.e. a coupon with a certain monetary value that subsidises the cost of training) directed mainly at individuals (but also companies) in specific target groups, enabling them to access adult learning services and to choose a training provider of choice, etc. They are usually run by the Public Employment Services.

The central idea behind vouchers is that, instead of allocating budgets to training providers directly, the state directs funding to individuals in the form of a voucher or entitlement, which the individual can then spend. It thereby confers market power on the individual in the education and training market and thereby brings about a shift to a more demand-led education and training system.

Voucher schemes operational in Europe

To date, vouchers have been widely used across Europe, though practice varies regarding the value of the vouchers and what they fund.[296] In 2020, the Adult Learning Expert network identified 13 EU Member States with voucher systems of different kinds, and Cedefop's Financing Adult Learning Database identifies 21 Member States with training voucher schemes (cf. section 4.2.2). Often these voucher systems are established at regional or sectoral levels and, in a limited number of cases, at national level. Voucher schemes vary with respect to the type of training supported, recipients,

Education through Educational Accounts, Vouchers, and Loans: Costs of a Reform of Educational Financing for Students, Parents and the State], Gutachten für den Sachverständigenrat Bildung bei der HansBöckler-Stiftung (Original), FiBS-Forum No. 1, Cologne. Dohmen, Dieter (1999), Ausbildungs-Realsplitting - effizient und verteilungsgerecht [Educational Tax Splitting – efficient and fair], FiBS-Diskussionspapier Nr. 10, Cologne.

[295] Cedefop (2011). The anatomy of the wider benefits of VET in the workplace. Cedefop Research Paper No. 12.

[296] See for example: European Commission (2020). Financial Incentives for Adult Learning in the EU Member States. A Summary Report, Luxembourg; Dohmen, D., Finanzierung beruflicher und betrieblicher Weiterbildung: Stand der Förderung, der Diskussion und Ansätze für die Weiterentwicklung, Studie für die Hans-Böckler-Stiftung, FiBS-Forum Nr. 59 (www.fibs.eu).

quality assurance, and provision of IAG. As shown in Table 21, a diverse range programmes have been funded through vouchers. Often learners are free to decide on the type of training from a pre-selected list and vouchers can be used for company specific skills or more general employability skills (such as job search and job interview techniques).

Table 20 Typology of programmes supported by vouchers

Type of programmes supported by vouchers	
Both formal and non-formal education and training programmes in a number of Member States	AT, BG, DE, FI, IT, LU, NL, PL and RO
Only non-formal education and training programmes in others	EE, EL and LT

Source: Derived from adult learning expert network reports (2020)

Voucher schemes established by sectoral organisations and governments tend to differ, with the former investing more in company/sector specific skills,[297] while governments tend to focus on general employability skills.

Vouchers risk substituting training usually funded by employers. To avoid such a substitution, initiatives in some countries expressly mention(ed) that such training could not be covered by the scheme. For example, in Flanders the voucher scheme explicitly excludes training that is typically financed by employers.

In several cases vouchers focus on basic skills, such as in Estonia where people with poor Estonian language skills can use vouchers for A1 level courses or courses that prepare individuals for an Estonian language examination. In other cases, vouchers can be used for computer related training programmes or training in professions in which there is a growing demand for workers. Similarly, in Belgium, vouchers are used to fund training courses in areas where there is a shortage of workers, e.g. butchers and woodworkers as well as higher skill areas such as Artificial Intelligence (AI). In Scotland (UK), initially training was often taken by inactive individuals to pursue courses linked to their hobbies which resulted in significant diversion of the funding away from its intended purpose. This led to the programme being restricted to training courses linked to labour market needs.

The financial amount for vouchers varies across Europe from EUR 250 to more than EUR 2,000 a year. In some cases, vouchers can be used for covering related expenses in addition to direct training costs. The Carta di Credito Formativo Individuale (CCFI) in Italy, for instance, provides individual support up to EUR 2,500 which can be used to pay for training courses as well as indirect costs (i.e., transport costs, baby-sitting services, etc.)[298].

Eligibility in many cases is restricted to those who are defined as vulnerable or disadvantaged groups in the labour market. For example, vouchers focus on persons with relatively low incomes (e.g. see the Bildungsprämie in Germany[299]), those with a low level of educational attainment, older workers, unemployed people, women returning to work after maternity leave, people employed in SMEs, new entrepreneurs, and those living in certain local areas, etc. Generally, vouchers work with targeted

[297] In practice, the difference between company specific skills and general, transferable ones is difficult to maintain. And the evidence points to employers gaining from the acquisition of general skills (Barrett and O'Connell, 2001).

[298] For more details about national examples, please refer to Chapters 9 and 10.

[299] https://www.bildungspraemie.info/

approaches and most often focus on those who are not inclined to participate in adult learning thereby serving a societal role. Only in a few cases are vouchers provided to all citizens (universal provision).

The Adult Learning Expert Network indicates that most voucher schemes provide vouchers only after the initial onboarding has taken place where individuals discuss with an advisor how the training fits with their professional development needs. In Germany, for example, the WeGebAU voucher scheme that ran between 2006 and 2010 required individuals to obtain advice from a training advisor of the federal employment office. Another example is the training card in Estonia where the use of training vouchers is always preceded by career counselling by the Unemployment Insurance Fund (see below for more details). Here the final selection of the training provider is made by the individual from a list approved by the Unemployment Insurance Fund.

The evidence from the ongoing update of their "Financing adult learning" database[300] shows that adults in more marginal employment often fall out of scope of the entitlements. This is particularly so for those who are formally self-employed but this disguises the fact that they are, to all intents and purposes, in a dependent relationship with an employer (i.e. false self-employment). Related to this most 'platform workers', 'click workers', or 'gig workers' are excluded from instruments designed to provide a training entitlement. Section 9, which provides a series of country case studies, provides further information about country specific interventions.

8.1.3. Existing provision of training entitlements: individual learning accounts

The previous section focused on training vouchers, however another example of training entitlement is an individual or personal learning account. An individual learning account (ILA) is designed to permit individuals to accumulate entitlements potentially allowing them to participate in longer, more expensive courses. The key word is 'account'; it is analogous to a savings account where debits and credits are made over time. This is the principal difference to a voucher which tends to be a fixed amount which needs to be spent within a certain period of time. A further characteristic of the learning account is that they can be co-funded by different sponsors, involving sharing of the financial resources between public authorities, individuals and employers.

At present, only a few examples of ILAs exist such as the French Compte Personnel de Formation – CPF (see section 5) or the Singaporean SkillsFuture initiative (see section 9).

France - CPF

The CPF (Compte personnel de formation) is a training scheme introduced in France in 2015, and reformed to improve uptake and ease of access to training opportunities in 2018. It remains the only operational ILA in the EU (see section 5 for more details) although it is understood that there has been, and still is, active consideration of ILAs in other Member States.

The CPF consists of an individual account provided to people aged 16 or more who were entering the labour market. The account can be used to access training programmes, and can be accessed by employees and job seekers. In 2016, access to the CPF was widened to include volunteers and early school leavers. The individual account is closed when the individual exercises all of their retirement rights. Individuals can access credits of 500 EUR year, with additional financial incentives for the low-skilled (800 EUR), which they can spend for training.

It is also possible to add funds from employers or other sources (e.g. foundations) to the account. The account is owned by the individual and they are completely free to use the funds for training they prefer, provided it is listed in a registry. Eligible training courses are listed on an online platform.[301] The CPF learning account, like vouchers, can also be complemented with other measures, such as advice and guidance, and/or paid training leave regulations.

[300] https://www.cedefop.europa.eu/en/publications-and-resources/tools/financing-adult-learning-db

[301] Additional information on the CPF is provided in Chapter 5.

Between November 2019 until January 2021, there have been 6.5 million activations of the CPF, linked to a total of 1.77 million registrations for training activities. An important feature of the CPF is that the choice of training activity is up to the individual and does not need to be related to the needs of their current employer. Workers can agree with their and employer to undertake the training activity during working hours; otherwise, it must be undertaken at other times.

A major reform of the CPF was implemented in 2018 and led to the account being specified in EUR rather than learning hours thereby allowing users to buy their preferred learning activities directly from the providers of their choice, online. CPF activations have been increasing rapidly following this reform. Further details of the CPF can be found in section 5.

Singapore – SkillsFuture

SkillsFuture Singapore (SSG) was introduced as an ILA in 2016. It is a nationwide initiative, open to all Singaporeans providing them with opportunities to develop their potential through skills mastery and lifelong learning. The idea of SSG is to move towards a workforce equipped with the skills to remain relevant and future ready.

There are four key aims of the SSG (further details can be found in section 9):

- help individuals to make well-informed choices in education, training and careers. This means IAG is provided in schools and throughout people's working life.
- developing an integrated, high quality system of education and training that responds to evolving industry needs. There will be regular reviews of education and training ensuring young people have a broad-based education complemented by continual learning options.
- promoting employer recognition and career development based on skills and training. The involvement of employers is crucial in designing and implementing a framework to develop the skills of their employees.
- fostering a culture that supports and celebrates lifelong learning. This respects every job for its requisite skills, values achievements of those who attain mastery in their field and promotes the habit of learning throughout life.

The scheme aims to empower individuals to develop their skills throughout their working lives. Individuals can decide what their training needs and goals are.

SkillsFuture Credit (SFC) was introduced in 2015 and all Singaporeans aged 25 and above are eligible. The government provides the first instalment of credit (S$500) and this does not expire. The government also provides periodic top-ups. Individuals can use their credits to choose training from a wide range of eligible courses. It can also be used on top of existing government course subsidies to pay for a range of approved skills-related courses.

The SkillsFuture Movement includes the following initiatives: Enhanced Internships, Education and Career Guidance (ECG), SkillsFuture Work-Study Programmes, SkillsFuture Study Awards, SkillsFuture Fellowships, P-Max, and SkillsFuture Employer Awards (see section 9 for more details).

As of end-August 2020, about 600,000 or 23.5 per cent of eligible Singaporeans had utilised their SkillsFuture Credit (SFC). The take up by age group (end of 2019) was: 16 per cent of those aged 60 and above; 22 per cent of those aged 25 to 39 years old; and, 22 per cent of 40 to 59 year olds. There have been adjustments in the light of labour market changes and in particular the fall out from the pandemic with increased emphasis on older adult groups, also more prone to the impacts of digitalisation than younger age groups.

Comparing vouchers and ILAs

In comparing the provision of an ILA versus that of a voucher it would be helpful to have data on:

- take-up/redemption rates;
- recurrent training activity;
- the type of training undertaken (e.g. is it of longer duration);

- the extent to which the skills acquired have economic value;
- the costs and benefits.

However, there is little evidence on which to compare the impacts of ILAs versus vouchers.

In terms of their operation, the key differences of an ILA compared to a voucher are:

- the increased degree of autonomy that individuals usually possess with respect to how and when they spend their available funds;
- the universal nature of the entitlement (i.e. it tends not to be targeted on specific groups);
- the possibility to combine funding from different sources;
- the envisaged longer duration of the scheme.

However, there are many similarities between the two concepts, notably the provision of training entitlements to individuals and the need for a registry of eligible training opportunities.

8.1.4. Private individual learning entitlements

Within some companies, especially large ones, there are personal development schemes where employees have an entitlement to engage in a certain volume of training over a given time-period. This tends to be part of companies' overall corporate human resource development programmes. Usually a nominal amount of money is specified which allows individuals to engage in a wide range of training and/or human resource development activities which could be delivered in-house or externally. The implication is that the company providing the entitlement benefits from improved organisational performance from: direct benefits such as having a workforce better equipped to do their job; and/or from indirect benefits such as a more satisfied workforce which increases staff retention.[302] The individual is seen to benefit from acquiring new skills and thereby avoiding skills obsolescence.

In practice, there is a wide range of activities which might be classified as private learning entitlements for employees. As such, it is difficult to be certain about the overall content and impact of such measures. It might be that such provision is limited to the delivery of company specific skills, though as noted in section 6 employers can and do benefit from the provision of more general skills training.[303] Some companies offer a training entitlement as part of the overall employment package,[304] but it is difficult to generalise about provision.

8.2. Effectiveness of training entitlements

The preceding sections have outlined the concept of a training entitlement drawing on evidence from a number of countries across Europe. In order to assess the effectiveness of the type of entitlement two inter-related factors need to be considered:

1. the overall impact on participation levels (i.e. the gross impact on the intervention, or take up rate of the training entitlements); and

2. the extent of deadweight loss associated with the intervention – i.e. the extent to which training would have taken place in any case (i.e. to provide the basis for estimating the net impact or additionality of the intervention).

[302] Huselid, M.A. (1995): The impact of human resource management practices on turnover, productivity and corporate financial performance. Academy of Management Journal, Vol. 38, No 3, p. 635-672

[303] Barrett, A., & O'Connell, P. J. (2001): Does training generally work? The returns to in-company training. ILR Review, 54(3), 647-662.

[304] Cedefop (2011): The anatomy of the wider benefits of VET in the workplace. Cedefop Research Paper No.11.

8.2.1. Impact on raising participation levels

There are few schemes offering training entitlements with broad eligibility conditions, with no cost-sharing requirements and for which detailed data on take up rates is available. These are the French CPF[305] and Singapore SFC mentioned above (where there are also data limitations), and a large-scale Swiss randomised experiment on adult learning vouchers.

The Swiss experiment was a large-scale randomized field evaluation of a programme which issued vouchers for adult education in Switzerland in 2005-2006. Vouchers were offered to a representative sample of Swiss citizens. The adult learning vouchers varied in value, at EUR 160, 600 and 1 200 respectively, and could be supplemented by individuals' own resources. The vouchers could be redeemed over a six-month period (and supported training activities had an average duration of approximately 40 hours).

Two papers[306] reviewed the experiment giving information on take-up rates and the way these varied and found that the:

- Average take-up rate was 18.4 per cent over the six-month period
- Take-up rates increased with voucher value, but with decreasing marginal increases (12.4 per cent at EUR 160, 21 per cent at EUR 600 and 22 per cent at EUR 1 200)
- Take-up rates increased with educational levels (low qualified 9.5 per cent, upper secondary education 17.1 per cent, tertiary education 26.32 per cent)

The French CPF differs from the Swiss experiment as the training entitlements, instead of expiring, accumulate yearly until a threshold of €5000-8000 is met (see section 5). Therefore, individuals do not have to use their training entitlements immediately and are able to take up longer and/or more costly training spells. Data from the French CPF indicate that the median length of trainings is above 80 hours.[307]

Precise yearly figures of the individual take-up rate of the CPF cannot be calculated. This is because individuals can purchase multiple training over time and data on unique users purchasing training each year is not available. A way of approximating annual take up is to compare the average number of activated profiles[308] in a given period (e.g., at t= -1 considering a lag of 1 year from the activation of the profile and the validation of the training undertaken) and the number of training undertaken at t= 0.

Using this approach (based on the average number of activated profiles in 2019 and the total number of training validated in 2020), the estimated take up rate is around 13 per cent. However, it is important to note that take up in France has seen a steep increase in recent months after the launch of the portal and app *Moncompteformation* (see section 5). Applying the same approach as above (taking the average number of activated profiles in the first half of 2020 and a yearly value of training validated in the second half of 2020), the resulting take up rate is around 16 per cent. Even if we assume there is no lag between profile activation and training validation, the estimated take-up rate is still around 13 per cent.

These take-up rates are slightly below those of the Swiss experiment. However, considering the longer median duration of the CPF and that individuals might be waiting to reach a certain value to purchase more costly training, they seem to broadly confirm the data from Switzerland.

[305] An evaluation of the CPF is planned but not yet implemented

[306] Schwerdt, G. et al. (2012): The impact of an adult education voucher program: Evidence from a randomized field experiment, Journal of Public Economics, vol. 96(7-8), pp. 569-583 and Messer, D. and Wolter, S. (2009): Money matters: evidence from a large-scale Randomized field experiment with vouchers for adult training. CESifo Working Paper, No. 2548.

[307] The information is only available for approx. 80% of the trainings undertaken.

[308] The actual take up rate should be that of target population vs trainings validated, whereas here the reference is only that of activated profiles. This seems however reasonable as the roll out of the system is still ongoing. The number of active profiles is however already over 50% of the employed and unemployed population in FR.

Like the French CPF, the SFC in Singapore accumulated funds do not expire. But they do have a smaller face value (approx. EUR 310). According to data from the Ministry of Education,[309] five years after the scheme was introduced (in August 2020) 23.5 per cent of eligible Singaporean have used their credits. The largest level of take-up was in 2020, with around 190 000 individuals taking up training (7 per cent of the eligible population).[310]

Other schemes provide further insights into the take-up of individual training entitlements.

In the Netherlands, vouchers were offered to low qualified workers in specific sectors.[311] Vouchers could be redeemed over a period of 2 years. The take up was round 41%.

Table 22 summarises the types of scheme and levels of take-up by the four programmes. The Swiss example arguably represents the best source of evidence on yearly take ups as data is provided on precise take-up rates and their heterogeneity. This points to an average take up rate of 18.4 per cent over a period of six months, levels of take-up increase with the value of the voucher and decreases with educational attainment. The French CPF and Singaporean SFC have slightly lower take up rates, but: (i) the rate of take up increases over time; (ii) the lack of an expiry date may delay redemption behaviour; and (iii) the ability to accumulate training hours might imply that people take up less frequent but longer training. In addition, targeted schemes such as the training voucher for low skilled workers in the Netherlands suggest significantly higher take up rates, albeit for people in employment.

On this basis, the value of 18.4 per cent should be considered as a middle estimate. This is for an average yearly take up rate for a training entitlement of approx. 500 EUR/30 hours, with slight increases in take-up for higher value vouchers and reductions in take-up for low skilled individuals.

Table 21 Summary of participation levels by the various schemes

Name	Type of scheme	Scope	Expiring period	Avg. value	Avg. Take up	Heterogeneity in take-ups
Adult education vouchers (CH)	Adult learning voucher	Broad scope (randomly selected sample)	6 months	EUR 600 (worth about 21 hours)	18.4% over 6 months	Low take up at low face values (12% at €160, above 20% for €600 and 1 200) and for low qualified individuals (9.5%).
Compte Personnel de Formation (FR)	Personal training account (yearly accumulation)	Broad Scope	None	€500 or per year (€800 for the low qualified) *(worth about 30-50 hours)*	13-16%* over 1 year	In data since recent reform, no evidence of under-representation of low-qualified (cf. Annex 14).
SkillsFuture Credits (SGP)	Personal training account (no regular provision of additional entitlements)[312]	Broad Scope	None	€310	23.5% over 5 years/ 7% in 2020	Data not available.

[309] https://www.moe.gov.sg/news/parliamentary-replies/20210104-skillsfuture-credits-utilisation

[310] https://www.straitstimes.com/singapore/540000-singaporeans-benefited-from-skillsfuture-initiatives-in-2020-skillsfuture-singapore

[311] Vouchers were issued through the following development funds: Aequor Services in the agricultural sector, the Centre for Knowledge and Development of the Potatoes, Vegetables and Fruit Association, the Training Fund for the Food Industry, and the Natural Stone Centre.

[312] Top-ups for two specific target groups have been granted in response to COVID-19, see Annex 13.

Name	Type of scheme	Scope	Expiring period	Avg. value	Avg. Take up	Heterogeneity in take-ups
Training voucher for low skilled workers (NL)	Adult learning voucher	Targeted to low skilled workers in selected industries *(randomly selected sample)*	2 years	€1 000	41% over two years	

** Estimated values*

8.2.2. Controlling for deadweight

The net effect of the training entitlements on participation rates is typically defined as the take-up rate of the entitlement minus the share of individuals in the control group who participated in some form of training or another during the reference period (i.e. the level of deadweight). This is a narrow definition of deadweight because whilst the training might have taken place in any case, the intervention might have resulted in higher quality training, of longer duration, and/or an increased number of training events, etc. Where evidence is available, attention is drawn to this wider definition of additionality.

A brief summary is provided below of key studies which have assessed the impact of training entitlements based. They are largely (but not exclusively) based on evidence from random control trial experiments.

In Switzerland, Schwerdt, et al. (2012) conducted an experiment where training vouchers were given to employees who could use it for any follow-up or extra training they wanted. Three types of vouchers were available, with a value of approximately EUR 200, 600 and 1 200 respectively.[313] The vouchers were randomly allocated to a heterogeneous group of employees with different levels of education. The control group did not receive a voucher. The training did not have to be company-specific. The study group varied in terms of educational level (low to high), type of contract (permanent or temporary), type of worker (self-employed versus employee), type of industry (IT, administration, marketing, etc.), and age (between 16-64 years). The average duration of the course was 42 hours. The authors calculated that training increased on average by 12.9 percentage points as a result of the vouchers, with the voucher providing the highest financial amount providing the strongest stimulus. The participation effect of the vouchers increased with the education level of the recipients: for those with a secondary level qualification the effect was approximately 7 per cent and for those with tertiary education the effect was 16 to 17 per cent. Such evidence seems to be in line with tentative data from the French scheme, where individuals with EQF levels 4 and 6-8 were overrepresented among the CPF users by 2 and 5 percentage points, respectively.[314]

According to an earlier analysis of the same experiment by Messer and Wolter (2009), these participation effects were the same for that part of the treatment group that was offered consultation about the training to be followed, and for the group that was not offered the consultation. Schwerdt et al. (2012) calculated that vouchers had a deadweight loss of 30 per cent on average. From the evidence it can be deduced that deadweight loss increases with level of educational attainment. But the marginal effect of the voucher programme on training participation is smaller for those with lower levels of educational attainment and the difference in voucher utilisation is even stronger. Those with

[313] 250 750 and 1 500 CHF in 2006 prices.

[314] It needs to be stressed, however, that data from the French CPF does not disentangle the net mobilisation effect of the entitlements from entitlements used for training which would have been undertaken anyways. As deadweight loss is typically higher for those at higher educational levels, this tentative data does not allow to conclude the effect of the French CPF is stronger for those with higher qualifications.

relatively low levels of educational attainment used the voucher much less (9 per cent) compared with those with high levels of attainment (27 per cent).

Other evidence derived from experiments include that of Doets and Huisman (2009) who evaluated four voucher projects in the Netherlands issued by a training fund to employees in a wide range of sectors (including animal husbandry, greenhouse horticulture, flower retailing, and the food and beverage industry). [315] The common denominator of these voucher projects is that they were exclusively aimed at low and medium-skilled workers. Participants were divided into an intervention group and a control group. The intervention group received a voucher of EUR 1 000, while the control group did not receive a voucher. Both groups were followed over almost two years. From this it appears that a training voucher leads to an increase in the number of employees following a training programme by between 21 per cent (for employees younger than 45 years) and 35 percent (for employees 45 years and older), and that vouchers act as a stimulus for employees who are less inclined to train. As a result, Doets and Huisman (2009) concluded that vouchers have a positive influence on the learning behaviour and the learning attitudes of relatively low educated employees over the short and long term.[316] They also concluded that implementation should include: careful preparation and good communication; allowing longer periods in which to use the voucher; insight into and transparency of the offer; allowing the voucher to fund personal development as well as skills training within the work situation; developing a learning culture alongside the voucher; and targeting vouchers at groups underrepresented in training.

The positive effects described above were confirmed in a study by Hidalgo et al. (2014) evaluating a similar type of intervention. In this experiment employees randomly received a training voucher of 1,000 EUR that allowed them to follow their preferred training/course. The authors found an increase in training participation of almost 20 percentage points as a result of the voucher, and this was greatest amongst those who would not usually have accessed training. However, the deadweight loss was approximately 60 per cent. Training participants were more likely to enrol on general, rather than job specific, training.

An evaluation of the Bildungsprämie in Germany provides evidence on participation rates. Participants received co-funding of about 50 per cent up to a maximum amount of EUR 500. Participants had to be employed (with a few exceptions), and their income had to be below EUR 20,000 for single income earners and double that for those who were in partnerships. Only training programmes which cost less than or equal to 1 000 EUR were eligible in most areas. According to the evaluation results, almost 60 per cent of participants would not have participated in training without funding, which at first glance suggests a deadweight loss of around 40 per cent. The authors of the evaluation suggest a mobilisation effect of 85 per cent because some beneficiaries were able enter training earlier than would have been the case without funding, and/or enrolled in more costly programmes than originally planned. Around 70 per cent of beneficiaries were women (a finding in common with that observed for several other voucher programmes - see Dohmen, 2016)[317]. Over recent years, around 20 000 people were granted a voucher, but around 20 to 30 per cent never used it (Kantar/FBB/IAW 2019, Dohmen 2016)[318].

Other studies also refer to the positive effects of vouchers schemes on participation in training. An evaluation of the employability programme of Philips (the company) found that the intrinsic motivation of participants in the voucher programme increased and that they were more engaged with their careers than those employees who did not participate in the programme (Gerards et al., 2014).[319] Polidano, et al. (2021) in their study of a voucher scheme introduced in Australia, found that it not only increased participation in learning, but was also effective in matching training to the needs of

[315] Doets, C. and Huisman, T. (2009): Effectiveness of Individual Learning Accounts. Amsterdam: Expertisecentrum Beroepsonderwijs.

[316] It should be noted that the 'long term' was measured by the intention of participants to follow a course again in the future. It is therefore not clear to what extent a voucher actually has an effect on the long term learning attitude of low educated employees.

[317] Dohmen, D. (2016). Further Education for Vulnerable Groups: Barriers and the Role of Funding.

[318] Kantar/FBB/IAW (2019), Evaluation des Bundesprogramms Bildungsprämie (BIP).

[319] Gerards et al., (2014): 'Employability-miles' and worker employability awareness, Applied Economics, Vol. 46/9

the economy.[320] The authors report that this arose because where adults are given a free choice about what courses to study and where, they will seek out labour market information and choose courses that are suited to labour market needs.

All studies point out that vouchers are associated with non-trivial levels of deadweight. This was also confirmed by a literature review undertaken by Dohmen (2007), the deadweight effect of vouchers was around 50 per cent (indicating additionality also of 50 per cent).[321] Levels of deadweight do vary according to the specificities of the voucher programme. The 2019 report evaluating the German *Bildungsprämie* provided new insights into the issue of deadweight loss. It calculated whether individuals would have trained without the voucher, but also found that other factors should be taken into account, namely: whether participants have undertaken training of higher cost/quality than initially planned; whether they started training earlier than anticipated (due to a shorter saving period); and whether they have undertaken more or longer training courses than anticipated.

Based on the information provided above, Table 23 below summarises the key information on gross impact and deadweight derived from a selected number of key studies.

Table 22 Estimates used to derive estimates of the impact on participation levels

Measure	Estimated impact
Gross impact (i.e. proportion who take up training regardless of any deadweight).	18.4 % (Schwerdt, 2012), but more for tertiary educated people (17%) than lower educated (7% for secondary level educated). Potentially this rises to c. 22%. based on a higher value voucher (based on Messer and Wolter, 2009). Duis and Huisman (2009) indicate that for those with low skills the participation rate is 26%, while it is 21% for those younger than 45 year olds and 35% for those older.
Net impact (i.e. an estimate of deadweight loss (DWL) is required so that it is possible to identify the impact of the intervention on yearly participation rates in any training).	12.9 p.p. (considering a DWL of 5.5 p.p. -Schwerdt, 2012). Hidalgo et al. (2014) suggest that deadweight can be as high as 60 per cent, while Schwerdt et al. (2012) suggest only a 30 % DWL. Dohmen (2007) is in between the two estimates, finding a DWL equal to 50%.
Net impact taking a broader view of additionality (i.e. this modifies the deadweight estimate reported above to take into account that people might have trained more or engaged in higher quality training as a result of the intervention).	14.2 p.p. (considering a DWL of 4.2 p.p. based on a finding from Messer and Wolter (2009) that in the experimental group the probability of following multiple courses was approx. 10p.p. higher as in the control group).

As Table 23 indicates, the key studies are:

- Schwerdt et al. (2012) who evaluated a large-scale randomised experiment where training vouchers were issued to adults in Switzerland. The results revealed that adults with low levels of education were most likely to gain from the training but least likely to use the voucher.

[320] Polidiano, C., van de Ven, J. and Voitchovsky, S. (2021). Are Broad-Based Vouchers an Effective Way to Support Life-Long Learning? Evidence from an Australian Reform. Research in Higher Education.

[321] Dohmen, D. (2007), Current trends in the of demand-led financing of further training in Europe: a synopsis,

- Hidalgo et al. (2014) who evaluated a voucher scheme for low skilled workers in the Netherlands which revealed that vouchers increase training participation by almost 20 percentage points in two years but at the cost of substantial deadweight loss of almost 60 per cent.
- Bauer et al. (2019) evaluation of the education vouchers scheme introduced in Germany in 2017 found that the programme positively influenced the decision of under-represented groups to participate in further training, and provided a more comprehensive investigation of the issue of deadweight loss.
- The discussion paper from Messer and Wolter (2009) who evaluated the same Swiss voucher experiment as Schwerdt et al. provided further insights into deadweight loss by looking at other forms of additionality (e.g. by comparing not only the participation in any training, but also the number of training each group undertook).

The above papers seem to suggest that participation rates increase by at least 13 percentage points but the estimation of deadweight varies substantially (from 30 per cent to 60 per cent). A caveat is that this evidence comes from a small number of countries with relatively high training participation rates: deadweight loss can be expected to be lower in countries with lower participation rates, where less training is taking place without a training entitlement scheme. While there is much information on the characteristics of voucher schemes, the evidence on their effectiveness as reducing deadweight loss is limited. There are few evaluations and they tend not to assess how specific design features (i.e. funding amounts, types of training, as well as the role of accompanying measures such as advice and guidance) impact on participation. In most cases, the vouchers are part of a broader funding system, where other funding instruments are in place, which are likely to affect take-up.[322]. While the existence of additional funding instruments is sometimes reported, this is rarely the case[323] [324].

There are heterogenous effects by country in relation to the characteristics of the participants. Studies and evaluations on voucher schemes tend to show that higher qualified people are more likely to make use of vouchers – as is the case for all non-restricted (targeted) funding instruments – while low qualified people participate disproportionately less (Dohmen/Fuchs 2007; Dohmen 2007, 2010). This points to the challenge to reach out to disadvantaged groups, particularly low-qualified ones who have difficulties making use of these schemes[325]. The evaluation of CCFI in Italy shows that it proved to be an effective tool to promote training among medium to high skilled employees who had the social, financial, and cultural endowment to make use of the CCFI opportunity. But it had lower effectiveness for low-skilled individuals. This is confirmed by the recent evaluation of the German training voucher (Bildungsprämie) which indicated that various other measures need to be taken to reach out to low-qualified and other under-represented groups (Kantar/FBB/IAW 2019). In their systematic review of financial incentives to increase participation rates, Vanderkooy et al. (2019) found that financial incentives have an impact on participation rates and conclude that the

[322] For example, in Germany tax incentives are available to all income earners, whereas some restrictions apply which impact on individual utilisation, and most states have their own funding instrument, commonly vouchers in one form or another, targeting different groups, employing different funding amounts (sometimes complementary to the federal training voucher), different funding shares (sometimes also varying for different target groups) etc. For an overview on those state-level instruments implemented during the period of the last evaluation of the training voucher see Kantar/FBB/IAW (2019), Evaluation des Bundesprogramms Bildungsprämie (BIP) – Endbericht, München, p. 22/23.

[323] See for example Kantar/FBB/IAW (2019): Evaluation des Bundesprogramms Bildungsprämie (BIP) – Endbericht, München

[324] In section 8 (which provides information on the method for estimating the likely impact of a training entitlement on participation rates), estimates are provided on projected levels of participation in training by 2030 from introducing a training entitlement.

[325] For overviews: Dohmen, D. et al. (2007) Current Trends in the of demand-led financing of further training in Europe – A synopsis; Dohmen, Dieter (2010), Education vouchers in theory and practice, in: Heiner Barz (ed.), Handbuch Bildungsfinanzierung, Wiesbaden, p. 443-454; Dohmen, Dieter, Rocío Ramírez-Rodríguez (2010), Recent Trends in demand-driven financing of continuing Education, in: Ekkehard Nuissl, Ingrid Ambos, Dieter Gnahs: Evaluation der Wirksamkeit der Weiterbildungsmittel des Weiterbildungsgesetzes (WbG) Nordrhein-Westfalen im Auftrag des Ministeriums für Schule und Weiterbildung des Landes Nordrhein-Westfalen, Anhang zum Abschlussbericht, Bonn; Dohmen, Dieter, Rocío Ramírez-Rodríguez (2010), The Ethnicisation of poor Education, in: Gudrun Quenzel, Klaus Hurrelmann (ed.): Bildungsverlierer, Neue Ungleichheiten, Wiesbaden, p. 289-312.

benefits are not evenly distributed with the higher educated, those with higher incomes, older individuals, and women being more likely to participate.[326]

Case studies implemented in the course of this study – see section 9 - indicate that the more targeted the training vouchers is to groups that would otherwise not participate, the more likely it is that the scheme has a lower deadweight loss. An example is the case of the training card in Estonia, which is specifically targeted at unemployed people or employed people in risk groups (people who are usually under-represented in adult training). Hence, by design, the measure is available only to those who would usually not participate in training.

8.2.3. Heterogeneity in training entitlements' take up and net effects on training participation

It is important to review the comparative effects that training entitlements have on different sub-groups of the population. This can be measured by:

- differentials in the rate at which training entitlements are redeemed (redemption rates or take up rates); and
- differentials in the net increase in training participation (i.e. the additionality of the training entitlement scheme on training participation for which counterfactual impact evaluations are required.).

This section focuses on heterogeneity in terms of age and gender. Detailed evidence is scarce. The findings from available studies are summarised in Table 24, the main conclusions are:

- Age:
  - **Take up rates:** these are **higher for individuals in the 20-50 age range**, although the difference only widens significantly above 60 years of age.
  - **Net effects:** however, **for older cohorts** deadweight loss is lower. This also suggests that public support contributes to reducing participation gaps in this respect.

- Gender:
  - **Take up rates**: gender-specific information on take-ups is very limited at the moment. Where this is available, rates are **higher for women than man**.
  - **Net effects**: **women** also have **higher net effects.**

[326] Vanderkooy, A., Regier, E. and Lily, M.B. (2019): Investing in inclusive growth: A systematic review of the role of financial incentives to promote lifelong learning. Educational Research Review, Vol.27, pp. 176-190.

Table 23 Estimates of take-up by age and gender

Scheme	Source	Typology	Δ Take-up rates		Δ Net effects	
			Δ Gender	Δ Age	Δ Gender	Δ Age
Voucher for the general population (CH)	Messer and Wolter (2009)	Counterfactual study (working paper)	W: 21.43% M: 14.66%	>40 y.o.: 19.45% <40 y.o.: 17.62%	Omitted	Omitted
Voucher for the general population (CH)	Schwerdt et al. (2012)	Counterfactual study (published in peer-reviewed journal)	n.a. in this study but same experiment as above		W: 15.2 p.p. M: 9.73 p.p. Women also more likely to be a complier	Older age cohorts (40-49 and 50-59) more likely to be a complier[327] than 20-39
Vouchers for certain low skilled workers in NL	Hidalgo et al. (2014)	Counterfactual study (published in peer-reviewed journal)	n.a	n.a.	Women are more likely to be triggered to participate in training by the voucher	Difference not statistically significant
Vouchers for certain low skilled workers in NL	Doets and Huisman (2009)	Counterfactual study (only mean comparison between randomly selected groups)	n.a.	<45 y.o.: 68%[328] >45 y.o.: 65%[329]	No difference	<45: 21% >45: 35% Stronger effect on individuals above 45

[327] Compliers are those individuals who are induced to change participation status by the voucher.

[328] This rate is for the participation in any training, not just the redemption rate of the voucher.

[329] Ibid.

Scheme	Source	Typology	Δ Take-up rates		Δ Net effects	
			Δ Gender	Δ Age	Δ Gender	Δ Age
French CPF	Authors' elaboration	Descriptive administrative data	Only up to 2018 and employees in the private sector Women: 1.8% Men: 1.6%	With respect to the active population, CPF users: >50 slightly under-represented[330] and 30-39 over-represented	n.a.	n.a.
Singapore SkillFuture Credits	Ministry of Education	Descriptive administrative data	n.a.	<60 22% flat >60 16%	n.a	n.a

[330] With respect to the relative shares the age cohorts in the active population the 20-29 y.o. CPF users are 1.9 p.p. more, the 30-39 y.o. 9.9 p.p. more, 40-49 y.o. 1.6 p.p. more, 50-54 y.o. 1.8 p.p. less, >55 y.o. 9.7 p.p. less.

8.2.4. Autonomy on training choices

Personal entitlements vary by the amount of choice recipients have on which training courses can be selected. Some programmes (e.g. the CPF) allow individuals freedom to choose whichever training they feel is useful to them. Other programmes (generally the voucher schemes), limit participants to training which is of value to the labour market (however that is defined).

Schwerdt et. al. (2012) reported that in the Switzerland experiment, even though vouchers could be used on a wide range of education courses, most participants used them for labour market related courses: two out of five (40 per cent) were directly job-related; and one in five (21 per cent) were IT courses. Only one in ten were leisure courses.

In the review of voucher programmes in the United States, Barnow (2009) reported that US voucher schemes (targeted at dislocated and unemployed people) had different restrictions on how they could be used. For example, some could be only used with certain providers, of certain duration, and for particular occupations.[331] The paper concluded that, at a minimum, vouchers be restricted to training for which the participants show aptitude and background. A balance between restricted and unrestricted choice might be 'informed choice'. Allowing people to make their own choices but alongside appropriate counselling and assessment.

Perez-Johnson, Moore and Santilliano (2011)[332] RCT study of a voucher programme in the USA included a delivery model where counsellors could veto the training choices of participants in order to 'steer' them towards training for higher paid jobs. However, the counsellors did not feel comfortable with preventing people from choosing the training they wanted to do. The three delivery models (which ranged form 'structured' choice to 'maximum' choice on the part of participants) did not appear to affect the choice of provision (whether it was 'general' or relate to a specific job or skill).

Doets and Huisman (2009) in their evaluation of the Dutch ILA which was available to employees, found that those with an ILA were much more likely to participate in training (see above) but marginally less likely to participate in job related training compared to the non-ILA control group. Four out of five of the non-ILA group participated in job related training compared to 71% of the ILA group. The ILA group were also significantly more likely to use the ILA for personal development and to improve their current job situation, whilst those in the non-ILA group were more likely to participate in training in order to change their job or improve their salary.

Perez and Vourc'h (2020) found that most employees (just under one third) used their ILA to fund work-related English courses.[333] Training in transport, handling and storage (11%) was the next most frequently identified courses followed by IT training (7%) and undertaking skills assessments. The training choices of jobseekers were also predominantly labour market related: skills assessments and validation; starting-up a business; and materials handling trucks. Jobseekers were more likely to undertake diploma-based training programmes whilst employees were more likely to follow unaccredited training courses.

Therefore, evidence from the studies available, suggests that if people are given freedom of choice then most will choose courses which are related to the labour market and/or personal development rather than leisure or recreational courses. However, there is a broader question of what constitutes labour market relevant training. As shown in section 5 languages and driving skills have been popular amongst CPF users and whilst they may not be strictly vocational they do allow individuals to access jobs that they could not without those skills (the Estonian case study in section 9 is a particularly good example of the importance of language skills).

[331] Barnow, B.S (2009) Vouchers in U.S. vocational training programs: an overview of what we have learned. Paper prepared for conference "Vouchers, Contracting Out, and Performance Standards," October 2008 in Nuremberg. Germany.

[332] Perez-Johnson, Moore & Santilliano (2011): Improving the Effectiveness of Individual Training Accounts: Long-Term Findings from an Experimental Evaluation of Three Service Delivery Models, Final Report, Mathematica Policy Research.

[333] Perez, C. and Vourc'h, A (2020) Individualising training access schemes: France – the Compte Personnel de Formation (Personal Training Account – CPF). OECD Social, Employment and Migration Working Papers No. 245.

A good proxy of labour market relevant training is arguably the effect of vouchers on earnings or employment chances. The intuitive rationale behind it is that if the type of training chosen matters for the labour market then it should generate some changes (i.e. improvements) in the labour market condition of those undertaking it. Hence the importance of discussing freedom of choice not only with respect to the types of trainings undertaken in descriptive terms, but also in connection to any differentials in the labour market outcomes generated by them. Unfortunately, scientific and experimental knowledge in this respect is limited. Nonetheless, two relevant examples exist, namely:

- Counterfactual evaluations of the Hartz reform in Germany, discussing the effect of a reform moving away from a supply-led (PES) training offer for the unemployed to a voucher system with increased freedom of choice (see Rinne et. al (2013)[334] and Doerr and Stirttmatter (2017)[335]);
- The randomised control trial in the US on the Individual Training Accounts scheme, offering an in-depth comparative assessment of three alternative delivery modes, at different levels of freedom of choice for the individuals (see Perez-Johnson, Moore and Santilliano (2011))[336];

Evidence from the Hartz reform seems to converge on the fact that freedom of choice does not reduce employment chances and earnings in the medium and long term. This is evident already in the short to medium term in Rinne et. Al (2013), where increased freedom of choice appears to increase employment chances between 6 and 15 months of the voucher's assignment by approx. 7p.p.. Positive effects are only found in the long term (after three years and until seven years) in Doerr and Stirttmatter (2017), who find small but positive effects on both earnings and employment chances.

The experiment in the US analysed by Perez-Johnson, Moore and Santilliano (2011) yields similar results. When comparing the standard model of providing individual training entitlement through the "guided choice" to the "maximum choice" model (the latter features hardly any guidance, only initial orientation), the authors find slightly higher earnings and larger shares of individuals being employed in occupations they had trained for in the maximum choice model.

In conclusion, there appears to be no evidence that increasing freedom of choice affects learning behaviour in a way that negatively influences the labour market outcomes for the individuals. This is irrespective of a modest shift towards general education types of training. In line with human capital theory and accumulation, effects on earnings and employment chances seems to be either neutral or slightly positive especially in the medium to long term.

8.3. Associated elements supporting training entitlements

This section discusses the efficacy of supplementary elements which can be used to support the take-up and delivery of training entitlements and make them more effective.

8.3.1. Labour market information in combination with training entitlements

From a public policy perspective, the aims of increasing participation in training are to: fill and perform jobs which are currently available in the labour market; fill and perform jobs which are likely to become available in the future (and thereby avoid skills obsolescence); and fully function in society (for example, providing digital skills in order to access a range of services).

[334] Rinne, U., Uhlendorff, A. & Zhao, Z. (2013) Vouchers and caseworkers in training programs for the unemployed. *Empirical Economics*

[335] Doerr, A. and Stirttmatter, A. (2017), Assignment Mechanisms, Selection Criteria, and the Effectiveness of Training Programs, No 1421, Economics Working Paper Series, University of St. Gallen, School of Economics and Political Science

[336] Perez-Johnson, Moore & Santilliano (2011): Improving the Effectiveness of Individual Training Accounts: Long-Term Findings from an Experimental Evaluation of Three Service Delivery Models, Final Report, Mathematica Policy Research.

In order to do this, systems which assess and anticipate skill needs are required. Member States and the EU have invested heavily over recent decades to improve mechanisms to: assess current skill mismatches (what jobs are proving difficult to fill now and why); and, identify future skill demand (anticipating the types of job which are likely to emerge over the medium-term and the scale of likely demand).

These systems can be used to identify which training provision can best meet the needs of the labour market. The examples of Estonia and Hungary provide insights as to how this can be done (see below).

Skills assessment and anticipation in Estonia

In Estonia (see section 9), the training card is based on the analyses of the Estonian Qualifications Authority (OSKA) which investigates the need for jobs and skills over the next five to ten years in all economic sectors. This reduces skills mismatches in the labour market, facilitates stakeholders' cooperation, and supports the development and update of VET, HE and continuing education provisions.[337] The training card is provided to unemployed people registered at the PES and employed people at risk of unemployment due to skill obsolescence or skill mismatch. The impact of the training card was high: 90 per cent of those who undertook training with the card were employed within six months after the course. In a small number of cases, training led some individuals to change jobs (12.5 per cent). This demonstrates that training offers can help with job transitions from occupations which might be unstable (e.g. those jobs at risk of being substituted by automation). Finally, the training card also had an impact on pay. Those who were already employed, and kept their job, experienced on average an increase in their monthly salary of 19 per cent above the Estonian average.

The Hungarian Open Learning Centres

In Hungary a multifaceted adult training programme has been implemented which places an emphasis on the acquisition of vocational and/or digital skills, identified as relevant to the needs of the country. Initially the programme provided free access to courses leading to qualifications in the VET system. Then VET 4.0 was launched providing a loan to allow people to enhance their digital skills in the VET framework. This goes in hand with the "Digital Divide Reduction", an EU-funded government project focusing on the digital skills for disadvantaged individuals. Open Learning Centres have also been developed which provide adults with the opportunity to strengthen key competences relevant in their jobs, for both their career development, and private lives. They operate throughout the whole country and offer adult training loans. Each Centre works out competence development programmes in tandem with the local municipalities to ensure that the training offer matches the needs in the local area. All these measures are designed to tackle the financial constraints on training, especially for disadvantaged groups.

Co-investment can also ensure that investments are made in courses which have economic value in the labour market. The rationale here is that if the individual (or the employer) is meeting at least part of the costs of training, then they are incentivised to ensure that the training investment generates a return.[338] The danger here, of course, is that co-investment especially by individuals may place a financial barrier to their participation in training.

[337] Cedefop (2020): Strengthening skills anticipation and matching in Estonia: capitalising on OSKA's potential to realise national ambitions. Luxembourg: Publications Office of the European Union.

[338] Hogarth T, et al. (2014): Employer Routed Funding: Employer Responses to Funding Reform, London: Department for Business, Innovation and Skills Research Paper number 16.

8.3.2. Training/course registries

A registry of training courses eligible for use with a training entitlement serves three purposes: (i) providing would-be learners with information about the courses available (what, where, when, eligibility and how much); (ii) sifting existing provision to only include those courses relevant to the labour market; and (ii) by virtue of being included in the registry, provide a measure of quality assurance. In so doing, it helps overcome one of the key barriers to participation in training: a lack of information about training opportunities and what they might deliver. The adult learning expert network identifies 12 Member States with public registries of recognised training opportunities (cf. section 4.2.3). In the public consultation, 93 per cent of respondents agreed “fully” or “somewhat” that such registries are effective in increasing incentives and motivation to participate in training.

Recent research published by Eurydice[339] highlights the growth of online databases on education and training opportunities since 2015 although highlighting the caveat that 'most adults, and in particular adults with low levels of educational attainment do not necessarily conduct self-directed research about learning opportunities'. The report goes on to conclude that as in 2015 relatively few online databases are tailored towards the needs of adults with low levels of basic skills or qualifications. Furthermore, the scope of online databases is varied in terms of content and coverage (e.g. formal and non-formal, opportunities leading to HE etc.), with examples specifically focused on adult education and training opportunities found in BE, DE, IE, ES, HR, LU, PL, SI as well as Montenegro and North Macedonia with specific information on low and basic skills found on databases in PT, SE and Iceland, Montenegro and Switzerland.

Whilst online databases can be an effective repository of information covering a wide range of opportunities (the example is given from EL of the PLOIGOS database with 13 000 learning opportunities) the utility value for adults is determined by ease of access and the reliability (including frequent updates) and quality of both the information and the opportunities contained in the database. The Eurydice report highlights examples from Finland maintained by the Finnish National Agency for Education with regular updates and a website maintained by the Spanish Ministry of Education and Vocational Training with additional information on how to access courses, recognition and accreditation procedures, the validation of professional competences and training modes (Where are courses available? Are online courses possible?).

The OECD research[340] focuses on ensuring quality in adult learning through certification and quality labels. This can be linked to databases/registries giving adults reassurance of quality training and if certification is a condition of entry to databases there is an imperative to drive up quality. The report highlights examples including *eduQua* in Switzerland and *EduForm* in France although some cautionary points are made, including the potential confusion (to adults, businesses and providers) if there are multiple quality labels/certificates (e.g in FR there were 32 recognised certificates in 2018) and where the quality criteria vary within Member States.

Overall, the two reports allow us to conclude that online databases will continue to grow and develop and with training providers who wish to participate - and also receive public funding - having to demonstrate quality through certification and/or quality labels. To be effective, training registries need to be easy to navigate for individuals. Some programmes have developed directories of local provision that are available on-line or through dedicated terminals (for example in PES).[341] Given registries will often contain thousands of courses, easy-to-use filtering based on type of course, geographical location etc. are important, next to the availability of in-person guidance if needed.

[339] Eurydice (2021) Adult Education and Training in Europe: Building Inclusive Pathways to Skills and Qualifications

[340] OECD (2021) Getting Skills Right: Improving the Quality of Non-formal Adult Learning

[341] Dickinson, P. (2005) Evaluation of the South Yorkshire Learning and Skills Programme. Yorkshire Forward.

8.3.3. Career advice and guidance

The importance of guidance services in relation to training entitlements is their potential to guide people towards training opportunities which will assist them with to achieve their career aspirations. In the public consultation, 92 per cent of respondents agreed "fully" or "somewhat" that guidance is effective in increasing the motivation to participate in training. A lack of, or insufficient, advice and guidance is considered a barrier by around 85 to 90 per cent of adults in the EU participating in training (see section 2) [342].

Guidance can have different roles, depending on the needs of the individual. For some people it can assist them in selecting the most appropriate training provider or training programme for a very specific purpose or provide them with more general advice and guidance e.g. to inform them about future directions of the labour market and possible implications for job profiles etc. Furthermore, it can be part of education and learning throughout life (educational guidance from school to adult learning) and/or as part of an employment service (careers guidance e.g. from unemployment to work, and occupational or geographical mobility).

Career guidance can be particularly effective at times of crisis when employment becomes less stable and support measure to tackle resulting negative effects increases.[343] In this scenario, career guidance and counselling acquire a major role, due to their effectiveness in developing the right skills and attitudes for individuals' employment path. Guidance may help to tackle many of the phenomena observed among unemployed people and those who are NEET and long-term unemployed.[344] Without effective careers guidance people's talents may be wasted or people will be poorly matched to jobs in the labour market.[345]

Guidance may "offer people a navigational aid in challenging times" [346], i.e. a compass to orient in times characterised by rapid digitalisation, climate change, globalisation, labour market changes. This is the aim of the *European Skills Agenda*, which, building on the *European Pillar Social Rights* and the *European Green Deal*, enables people to build skills throughout their lives. Among the others, like financial incentives, stands the individual career management. The agenda is designed to assist individuals in developing career management skills through counselling and guidance. In this way, people will acquire the ability to foresee and prepare to future challenges improving their skills and adapting to socio-economic changes. Careers guidance will also identify what support is available (financial and non-financial) to meet these challenges and changes. Beyond this, career support and counselling should lead to meaningful employment and engagement in society, with positive impacts on individual wellbeing and life satisfaction.

Based on information in Cedefop's "Financing adult learning" database, guidance services are often free of charge (supply-side funded) such that, demand-side instruments are not expected to cover the costs of guidance.[347]

There are several studies which evaluate the impact of careers guidance on the take-up of adult training generally. In qualitative, mixed method studies,[348] guidance is associated with a range of

[342] Cedefop Perception Survey (2020).

[343] Cedefop (2015): Career guidance in unstable times: linking economic, social and individual benefits.

[344] Not in education, employment or training.

[345] Cedefop (2014): Career guidance in unstable times: linking economic, social and individual benefits.

[346] Cedefop (2020): Empowering people to cope with change.

[347] Financing adult learning database | Cedefop (europa.eu)

[348] See e.g. Phillips, S. & Eustace, A. (2010). Overarching Research on the Adult Educational Guidance Initiative 2000-2006. Dublin: National Centre for Guidance in Education; Hearne, L. (2005). "Opening a Door": Evaluating the benefits of guidance for the adult client; Carpentieri, JD. Litster, J., Cara, O. & Popov, J. (2018) Guidance and Orientation for Adult learners – Final Cross-Country Evaluation report, UCL Institute of Education.

positive outcomes on individuals. For instance, Tyers et al. (2003)[349] report that the Adult Guidance Partnerships (AGP) across the UK were effective in recruiting learners to learning – 30 per cent of clients surveyed reported that they had gained new skills since contacting the AGP. Evaluations of the Irish Adult Educational Guidance services (Hearne [2005] and Philips and Eustace [2010]) showed that clients of the service attributed their progression to further learning or employment to the guidance they had received. In one case, 20 per cent stated that a guidance intervention played an important part in ensuring that they remained in education." Where evidence seems particularly lacking is in the area of the longer-term effects of guidance, particularly educational guidance,[350] whereas the short term effects of guidance (especially career guidance) have been investigated more systematically.[351]

There are two experimental studies assessing the impact of careers guidance – in association with voucher schemes – on participation in training. In Messer and Wolter, vouchers were randomly assigned to a group of 2,400 individuals in Switzerland. The vouchers were assigned to three groups of people based on their educational attainment level. In these sub-groups, some individuals received free advice and guidance over the phone and some did not. The authors found that the offer of advice and guidance had no impact on vouchers' redemption rates i.e. participation in training. The take-up of advice and guidance was voluntary, although it was easy to access over the phone, and free of charge.

Perez-Johnson, Moore and Santilliano (2011), reported on a randomized control trial carried out in 2005 in the US which allied careers advice and guidance with an ILA. Most of the participants in the scheme (69 per cent) were 'dislocated workers' (e.g. people who have been/are being made redundant), and the remainder were in employment. The scheme deployed three different delivery models which differed with respect to: the provision of guidance - whether it was mandatory or optional; the intensity of the advice and guidance; the possibility for counsellors to veto an individual's training choices; and the provision of varying amounts of financial support tailored to the individual's needs. Unfortunately, the evaluation did not have a control group which did not receive any advice and guidance. The authors concluded that the best advice and guidance mode was a flexible model which combined counselling support with higher levels of funding for training that is customised to the individual's needs.

Evidence from other studies which look at the roll-out of active labour market policies (ALMPs) with a training element through the PES suggests that guidance is important and effective. There is only one experimental study suggesting that within a model with intensive guidance and higher financial support for training, beneficiaries tend to find themselves in comparatively (i) higher paid jobs (ii) occupations that are more aligned with the trainings they undertook. It would seem, however, impossible to fully disentangle the role of guidance and higher intensity of training support on this point. Meta-analyses of AMLPs finds that careers guidance led to better job outcomes.[352] [353]

8.3.4. Governance of training entitlement schemes

Quality assurance and governance

When introducing training entitlements, there is a need for them to be suitably governed:

- to deliver high quality training (cf. value for money); and
- to ensure that the programme runs as designed (cf. ILAs in England see section 9).

[349] Tyers, C., et al. (2003) Evaluation of Adult Guidance Pilots. Institute for Employment Studies.

[350] See for instance, Hughes, D. (2013) National, EU & International Literature Review: adult careers information, advice and guidance. Warwick Institute of Economics Research (IER)/ London Assembly Economy Committee.

[351] As underlined also by the OECD (2004) Career Guidance and Public Policy: Bridging the Gap. Paris: OECD Publications

[352] Levy Yeyati, E., Montané, M., & Sartorio, L. (2019): What works for active labor market policies? CID Working Paper Series.

[353] Enhanced services schemes include job-search assistance and regular encounters with caseworkers, sometimes accompanied by sanctions in case the participant does not fulfill certain participation criteria.

Quality assurance means that the course provides the skills it purports to deliver, and that these are assessed and certified appropriately (e.g. with respect to programme content, transparency and quality, procedures for complaint, accountability, etc.). This is important to would-be learners because they require surety that the training they are about to invest in will meet a standard established as acceptable by the relevant authorities. The evidence suggests that, at present, individuals are often unsure about the quality of either a particular course or its provider.

Quality assurance in training entitlements is more difficult to implement because it usually concerns adult training provision which is much more dependent upon private rather than public investment and where governance is spread across a wide range of bodies. Furthermore, with the advent of MOOCs and online provision access to much wider variety of courses than hitherto has become available. While this increases choice, it also means, other things being equal, that the information burden placed on the individual to navigate and assess the range of provision has increased (which suggests even greater need for careers IAG). Since a training entitlement is likely to lead to an increased amount of public money to fund participation in various kinds of training there is a need to ensure that the money is spent appropriately. The mechanisms used to regulate the provision of publicly funded training via training entitlements are those which are used to regulate other parts of the training market which is reliant upon public funding (cf. IVET). In this way, only courses which meet a minimum threshold are eligible for funding.

Within most voucher schemes, the quality of training provision is guaranteed by limiting provision to approved or accredited training providers. This means that new structures and processes do not have to be developed, saving money and time. The Adult Learning Expert network indicates that in Austria, Estonia, Germany, Belgium, Italy, Bulgaria, Romania, Greece and the Netherlands quality assurance exists for these schemes, and that government ministries and/or public bodies/agencies are responsible for providing it. In Germany, quality assurance is regulated by the national regulation on the Accreditation and Approval for Employment Promotion (AZAV). Certified providers - or Fachkundige Stellen - must have a quality management system in place, though the AZAV does not specify what this must be in practice. In Estonia, citizens can use vouchers with training providers who cooperate with the Unemployment Insurance Fund and who meet all the criteria set out in Adult Education Act. In Bulgaria, the National Agency for Vocational Education and Training provides quality assurance, and in Greece and the Netherlands the PES are responsible. National experts from Poland and Lithuania said that there was no quality assurance in place for these schemes.

Moreover, effectively closing support gaps and increasing individual's incentives and motivation requires a durable governance to secure sustainable funding maintain its effectiveness. It involves a constant monitoring and evaluation of the success of the existing support schemes and possible adjustments to them. For instance, priority target groups may change as the labour market evolves. Also, systematically integrating the experience from evaluations can help a support scheme reach the objectives of this initiative more effectively and efficiently. Therefore, effective training entitlements need to be accompanied by setting up durable governance arrangements for an effective integration of financial and non-financial support. In line with the principle of subsidiarity, these governance arrangements would be set at national level, with the view to evaluate and adjust as necessary, for instance, concerning the amount of training entitlements, priority target groups or the registry of recognised training opportunities. Position papers from employer representative organisations and trade unions called for a role in the preparation and governance. This was also raised within the targeted consultations.

Governance structures

With training entitlements governance varies between national and regional levels reflecting the allocation of devolved powers between national and regional governments.[354] At a national level it is ministries of labour and employment which are the principal bodies, but other ministries and agencies can be involved too depending upon the way in which the incentive is structured. For example, where tax incentives are provided this tends to involve the tax authorities. It is also apparent that public

[354] 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. Brussels: European Network on the Economics of Education.

employment services play a vital role in the actual implementation of the incentives, although the PES are more involved in the practicalities of running schemes on a day-to-day basis, whilst ministries have a strategic function. It is also apparent that ministries and agencies which have a responsibility for education and skills are also involved in governance to varying degrees. Depending upon the country, tri-partite social partnerships can also be important.

The evidence on effective governance measures is relatively scarce. Evidence from Italy, for example, suggests that decentralised governance of schemes can result in there being a better match to local/regional needs. That said, if schemes are targeted on meeting local needs this may mean that it is difficult to benchmark against national standards and it may limit people's geographical mobility. There is next to no evidence on the effective measures of governance in relation to public-private partnerships.

What is apparent from this discussion is that governance structures can become complicated. This is not necessarily a problem, but the more complicated governance structures become the greater the risk that co-ordination failures might arise. If the complexity of the governance system is reflected in the way in which the training entitlement is presented to individuals (especially those from more vulnerable or marginal labour market groups) then this is likely to have an adverse impact on participation rates.[355]

8.4. The costs of training entitlements

8.4.1. Training costs

The average cost of continual vocational training (CVT) courses for employees per participant training hour can be found in a study about EU-level Simplified Cost Options (SCOs).[356] Calculating median total costs per training hour, the authors find costs ranging from EUR 0.27 in Romania and EUR 58.02 in Sweden, leading to an average of EUR 21.88 for EU-27. Computing costs based on median hourly labour costs per employee incurred by enterprises, the minimum cost is EUR 1.76 in Bulgaria and a maximum of EUR 32.67 in Sweden, with an EU-27 average of EUR 15.55.[357]

According to Schwerdt et al. (2012) training costs for an hours training would amount to roughly EUR 35 (namely, 750 CHF for a training of 20 hours). A similar estimate of EUR 36 per hour of training can be found in Konings and Vanormelingen (2015)[358] (based on 39.1 hours of training costing 1 414 EUR in total). In 2019 it was estimated that the average expenditure on training provided to CPF beneficiaries was around EUR 15 per hour which is significantly lower than that calculated by the Simplified Cost Options study (see above) which calculated the cost of CVT to be EUR 35.99 per hour. An explanation of such difference is that the indicators are not directly comparable and more restrictive definitions of eligible costs apply to the CPF (i.e. only the costs related to training activities supported).

[355] OECD (2019): Individual Learning Accounts: Panacea or Pandora's Box? OECD Publishing, Paris.

[356] PPMI (2019): 'Off-the-shelf' solutions for post-2020: A study complementing the ESF+ impact assessment / Ad Hoc Report on feasibility of 'off-the-shelf' tools for Individual Learning Accounts.

[357] Training costs for this SCO include the following categories of costs: fees and payments for courses for persons employed; travel and subsistence payments; labour costs of internal trainers for CVT courses; costs for training centre, training premises or specific rooms of the enterprise in which CVT courses take place and costs for teaching materials for CVT courses. This cost is computed in two different ways: the first one is the median drawn from the data sample for CVTS variable 'Total training costs per training hour', while the second one is the median hourly labour costs per employee incurred by enterprises in a particular Member State. In both cases, when data is not available, the values are extrapolated with a regression model. Costs are adjusted to 2015 level.

[358] Konings and Vanormelingen (2015): The Impact Of Training On Productivity And Wages: Firm-Level Evidence, The Review of Economics and Statistics, May 2015, 97(2): 485–497 © 2015 by the President and Fellows of Harvard College and the Massachusetts Institute of Technology doi:10.1162/REST_a_00460.

The study about EU-level Simplified Cost Options also provides the unit cost per one successful exit[359] from an eligible intervention, typically a non-formal VET type training course. The amounts range between the Member states from EUR 424 for a successful exit in Slovakia and to EUR 7 303 for Sweden. The average across the 28 European countries is EUR 2 773[360].

8.4.2. Costs of guidance

It is generally voucher schemes rather than ILAs which tend to incorporate a guidance element. Estimates of the costs of providing guidance are limited. By using the country fiches produced by the PES Business Models study and direct data requests to some PES, it was possible to compute the cost for one hour of counselling as an average of hourly direct labour costs of PES staff providing counselling services.[361] The average hourly cost across member States is EUR 18 but this ranges from EUR 2 in Bulgaria to EUR 39 in Denmark. This is in line with Perez- Johnson, Moore and Santilliano (2011), who found a cost of approximately EUR 16 for one hour of counselling in the US Individual Training Account (ITA) voucher scheme.

Such costs are likely to vary according to the type of organisation providing guidance (e.g. PES, training providers, etc.) and the degree of sophistication they bring to the process. Kantar/FBB/IAW (2019) provide estimates of expenditure on information advice and guidance from the 530 advice and guidance entities engaged in the German Bildungsprämie (training voucher)[362]. They are paid a lump-sum of EUR 30 per session but the total amount depends upon the number of sessions provided to the beneficiaries. Over the last couple of years, direct costs of the Bildungsprämie amounted to about 15 per cent of the direct spending on vouchers.[363] A telephone hotline has also been established to deliver guidance (the cost has varied between EUR 143 000 and 234 000 a year). Kantar/FBB/IAW (2019) calculate that each session of advice and guidance costs EUR 40 to 50. More comprehensive provision of advice and guidance may cost around EUR 100 to 500 per session depending upon the type and length of advice and guidance.

The average hourly direct labour costs of PES staff providing counselling services amounted to EUR 18 on average at EU level, with significant differences among Member states. [364]

8.4.3. Administrative costs

In addition to the direct costs of training entitlements, one-off and recurrent indirect/administrative costs will be incurred for the set up and operation of a training entitlement scheme. One-off costs might comprise the design and set-up of the IT infrastructure (including online registries and tools to allow for the effective search of training opportunities), training of the personnel, the development of the policy and related procedural arrangements, scientific advice, evaluation.

Recurring costs might include the cost of personnel involved in the processing of the applications, interaction with training providers and other relevant stakeholders, ongoing monitoring, ongoing IT

[359] Participant leaving an intervention and obtaining a certificate, accreditation or other national measure providing sufficient assurance that his/her training was successfully completed (based on a national practice of a Member State). Participants may exit an intervention more than once, i.e. a successful exit does not have to be unique.

[360] To compute the average we used the figures obtained after second cleaning of LMP data, where available, and the extrapolated values when such data were not available. For HU and RO the paper provides both the cost obtained using LMP data and the extrapolated one, since the former is probably not reliable, therefore we use the latter to compute the average for EU-28.

[361] PPMI (2019): 'Off-the-shelf' solutions for post-2020: A study complementing the ESF+ impact assessment / Ad Hoc Report on feasibility of 'off-the-shelf' tools for Individual Learning Accounts.

[362] Kantar/FBB/IAW (2019). Evaluation des Bundesprogramms Bildungsprämie (BIP).

[363] In some years, costs for advice and guidance arrived at almost 90 per cent of the direct spending for the vouchers itself (Kantar/FBB/IAW 2019).

[364] PPMI (2018): Developing 'Off-the-Shelf' Simplified Cost Options (SCOs) under Article 14.1 of the European Social Fund (ESF) regulation, DG EMPL.

and policy developments. Also, the montoring and updating of the registry of eligible opportunities is included in these costs.

For both one-off and recurrent costs, economies of scale are expected, e.g. a one-off cost of an IT system for which each additional participant will not raise the cost by the same amount, but also certain recurrent activities (e.g. monitoring, training of personnel, evaluation procedures etc.) that are likely to become more efficient for each additional participant.

The details of such costs inevitably depend on the framework currently in place (or under development) in each Member State, and the different existing administrative arrangements thereof. However, some insights can be drawn based on current or past training entitlement schemes that allow identifying some benchmark delivery costs for training entitlements. Unfortunately, such costs are seldomly presented in detail. However, the following four sources allow for an estimation of administrative costs:

- The education Bonus (BIP or Bildungsprämie) Programme in DE and related evaluation[365]
- The 2000-02' ILA in England and related review from the Parliament
- Evidence from the French CPF
- The new STAP scheme to be introduced in the Netherlands in 2022, but currently under development

These schemes differ under several dimensions. The most notable for a comparative assessment and in order to identify a range of proportions to estimate administrative costs are:

- *The size of the target group:* the number of beneficiaries is largest in the French CPF (as of early 2021, around 15 million accounts created), followed by the ILA in England (around 2.6 million accounts created over 2000-2002) and, at a large distance, the small and targeted educational bonus in Germany (less than 25 thousand annual participants). For the STAP, 200,000 beneficiaries are estimated per annum based on an average entitlement of 1 000 EUR (number of beneficiaries could be higher as average training costs are expected to be lower, although administrative costs have to accounted for).[366]
- *The value of entitlements:* largest in the French CPF (either €500 or 800), followed by the German educational Bonus (between EUR 340-380) and the UK ILA (≃ €200)
- *The running time of the scheme:* the CPF is the scheme running for the longest time (around 7 years, despite several reforms and subsequent updates), followed by the German BIP (5 years) and the English ILA (two years before being discontinued). The STAP has a budget commitment for 5 years but with plans to 'mainstream' the initiative into national training provision by then
- *The type of support:* for the CPF, a personal account was foreseen. In the case of the educational bonus, vouchers are granted yearly and do not accumulate over time.

Table 25 provides a summary of the identified administrative costs, and puts them in relation to the direct spending on training entitlements. Despite some uncertainties in the estimations due to lack of precise figures on the administrative costs, the available data is suggestive of significant economies of scales: administrative costs appear to decrease in the size of target group, entitlement value and running time of the scheme.

Whereas reliable, detailed evidence on establishment and operational costs has been difficult to obtain, the STAP scheme in the Netherlands provides useful insights as such costs are very much

[365] Kantar/FBB/IAW (2019), *Evaluation des Bundesprogramms Bildungsprämie (BIP).*

[366] The STAP forecasts are based on a fixed annual budget – in the region of 200 million EUR annually. Participants can apply for additional support, each year, over a six-year period

the focus of the scheme planners[367]. The estimated recurrent administrative costs for running the STAP scheme is EUR 21.5 million per year for manageing EUR 200 million of training costs. The total estimated administrative costs for running the scheme is estimated at 10.75% of the EUR 200 million of training purchased. These administrative costs include EUR 16.9 million staff costs (for 160 FTE jobs for a new established unit within the implementing agency UWV), EUR 0.7 million housing costs, EUR 3.9 million maintenance costs for the online platform, and EUR 70 thousand maintenance costs for the education register. These structural costs relate to running the client contact centres, enforcement, implementing procedures, maintenance of online portal, education register etc. The total one-off costs for setting up the scheme is estimated at EUR 20.7 million.

The CPF has a three-year goal and performance contract (2020-2022) with a budget of EUR 100 million. This budget includes the development of the CPF App, the website, the online portal, the management of the portal, the search engine etc. It includes all the needed costs. No individual breakdown into the various elements is available.

There is little breakdown of information on the administrative costs of the ILA programme in England. An important element of the scheme was a call centre which provided potential learners with information enquiries about the accounts as well as an administrative centre for registering learners and providers, processing new accounts, maintaining records of learning started and notifying the Department of amounts owing to providers.

[367] See Chapter 5 for details

Table 24 Overview of administrative cost for training entitlement schemes

Name of the scheme	Type	No of beneficiaries /individual trainings purchased	Running time[368]	Value of the training entitlement	Value of training purchased	Total adm costs as a share of training purchased	Recurrent adm costs as a share of training purchased
French CPF	Broad scope	≃ 3.5 million	≃ 7 years	EUR 500-800, yearly (avg. value of training purchased over last 18 months ≃ EUR 2 400)	≃ EUR 2.33 bil over the last 18 months[369]	≃ 2%[370] EUR 100 mil over 3 years (recurring)	N.a.
English ILA	Broad scope	≃ 2 million	≃ 2 years	≃ EUR 200	≃ £ 235 mil	≃ 16%[371]	≃ 10%[372]

[368] Since cost estimate

[369] Monthly and cumulative purchases through Moncompteformation, from 12/2019 to 5/2021.

[370] Based on a rough estimate from actors involved in the implementation of the CPF, approx. EUR 100 mil are needed for the set up and operation of the CPF for three years. The estimate is calculated assuming a total value of training for 36 months that slightly more than double that of the last 18 months, which showed a rapidly increasing trend in expenditure.

[371] This is calculated as total cost paid to the implementing body Capita (37.6 million pounds) over the total training incentives (235.1 million pounds) in 2000-02. Capita was the entity in charge of the design and implementation of the scheme. "*To encourage innovation, the Department adopted a public-private partnership approach for the design and implementation of the scheme. [..] Capita was to operate a call centre for enquiries about accounts as well as an administrative centre for registering learners and providers, processing new accounts, maintaining records of learning started and notifying the Department of amounts owing to providers. [..] Capita's role included developing and testing IT systems and security and its bid acknowledged the need for rigorous procedures to ensure data, programmes and documents were secure from unauthorised access and the importance of making the overall design robust with minimal chance of fraud and collusion. However, Capita did not pursue these points [..]*". Source: https://publications.parliament.uk/pa/cm200203/cmselect/cmpubacc/544/54403.htm

[372] This is calculated based on the 2001 (second year) only, given the first year was likely dominated by set up costs and the third by the closing of the scheme (with much less trainings purchased).

Name of the scheme	Type	No of beneficiaries /individual trainings purchased	Running time[368]	Value of the training entitlement	Value of training purchased	Total adm costs as a share of training purchased	Recurrent adm costs as a share of training purchased
German BIP	Targeted[373]	<25 thousand per year	6 years	EUR 340-380	EUR 34.5 mil	≃ 54%[374]	≃ 20%[375]
Dutch STAP	Broad scope	Target of 200 000 p.a but based on €1 000 per entitlement (the actuall number is expected to be higher)	Initial budget commitment for 5 years (start 1 March 2022).	As requested, up to maximum of €1 000.	€200 million p.a	One-off cost of €20.7 mil ≃ 10.35% against training entitlement budget for one year plus annual running costs of €21.5 mil[376]	≃ 10.75%[377]

[373] Income-tested, for low income individuals, 50% cost-sharing up to 500 EUR

[374] These include: the cost of administration of the leading entity (BVA), Scientific monitoring (BIBB), the IT system, the Hotline and a Final evaluation. Counselling services and related training for counsellors are excluded from the estimate, as they cover a different policy measure

[375] Average cost for the "variable administrative costs", as identified by the authors of Kantar/FBB/IAW (2019), Evaluation des Bundesprogramms Bildungsprämie (BIP). Author's calculations based on the annual variable cost weighted by the number of vouchers used every year.

[376] The total incidental costs for setting up the STAP scheme is estimated at EUR 20.7 million. This includes EUR 18.2 million for setting up the administration of the scheme by UWV (including the EUR 12.12 million for setting up the online platform for the STAP budget) and EUR 2.5 million for setting up the training register (by DUO).

[377] The total annual recurrent cost is estimated at EUR 21.5 million. This includes EUR 21.5 million for running the scheme (by UWV) and EUR 70 thousand for maintenance of the training register (by DUO). The maintenance costs of the training register will gradually decrease to EUR 35 thousand a year, after 2 years of implementation.

8.4.4. Costs of public registries of recognised training opportunities

It has not been possible to find data which will allow the costs of running public registries to be robustly assessed. The cost of the registry in France is part of the overall operational budget and detailed cost breakdowns are subject to confidential contracts with the scheme operator (see section 5). Hence, costs of registries are partly included in the general administrative costs of training entitlements discussed in the previous sub-section.

8.4.5. Costs of validation

According to the most recent update to the European inventory on validation of non-formal and informal learning, carried out by Cedefop in 2016[378], dedicated public funding for validation in one or more sectors of education (notably in VET) can be found in around a third of the countries covered by the inventory.

In most cases funding comes from national sources (sometimes combined with EU sources) but in a few countries (e.g. Belgium-Flanders, Belgium-Wallonia, France, Germany, Italy and Switzerland) regional public funding is used as well.

In Belgium-Flanders, adult and higher education training institutions have to bear the various costs of validation together with individuals who also bear some of the associated costs. In the work sector, the certificates for work experience are funded in part by ESF (60 per cent) and in part by the Flemish Community (40 per cent). A yearly budget of EUR 800 000 is allocated to the assessment centres which issue work experience certificates. Practical, sectoral tests are financed by the sectoral training funds. Assessment centres offering the certificate for vocational experience are given a one-off start-up reimbursement of EUR 15 000 and then receive EUR 5 000 for each additional certificate that they issue. In 2017, the estimated unit cost of validation for providers was 58 hours (EUR 1 700) per trajectory: 3 hours (EUR 87) for introduction, 11 hours (EUR 329) for guidance, 42 hours (EUR 1 225) for assessment and 2 hours (EUR 44) for aftercare. This builds up a total cost at Flemish level of EUR 13.8 million per year. This also includes a single cost for development, ranging from EUR 7 700 to EUR 154.00 per year. On the other hand, for participants the unit cost stood at 67 hours (EUR 1,400) per trajectory: 10 hours (EUR 215) for introduction, 24 hours (EUR 501) for guidance, 32 hours (EUR 669) for assessment and 0.2 hours (EUR 15) for aftercare. This builds up to a total cost at Flemish level of EUR 11.4 million per year.[379] [380] [381]

In almost a third of countries, although validation is financed – at least partly – through public funds, there is no budget earmarked for this activity. This is most notable in the HE sector. Where funding is embedded in this sense, it is very difficult to assess total resources used for validation because providers deliver validation within their existing budgets. This means that validation is difficult to promote to education and training providers. Furthermore, validation can be seen as an expensive, time-consuming process, acting as a barrier to the wider delivery of validation by education and training institutions.

[378] Cedefop (2016): Funding validation A thematic report for the 2016 update to the European inventory on validation of non-formal and informal learning.

[379] Cedefop (2016): Funding validation A thematic report for the 2016 update to the European inventory on validation of non-formal and informal learning.

[380] An de Coen et al. (2017): presentation "*Cost-benefit analysis and financing of RPL (recognition of prior learning)*", presented at the Peer Learning Activity on validation cost organised by the Flemish Ministry, 14 December 2017.

[381] Cedefop (2018): European inventory on validation, update 2018. Belgium-Flanders country report.

In Portugal the validation system for general education and VET, is the RVCC (Reconhecimento, Validação e Certificação de Competências; recognition, validation and certification of competences. In 2017, the total operational costs of the RVCC Network in 2017 totalled EUR 33.6 million, of which EUR 5.55 million was funded by national sources and EUR 28 million funded by the ESF. Public unit costs for each enrolment was estimated at EUR 224 (the yearly goal being 150 000) and each RVCC certification had a unit cost of EUR 1 037.04 in 2017 (the yearly goal being 32 400).[382] [383]

A quarter of inventory countries combine funding for validation from both public and private sources. These include Denmark, France, Germany, Iceland, Italy, the Netherlands, Spain, and Sweden. In Denmark, France and Italy, private funding is sourced from private sector funds (such as training funds), which tend to be administered by social partners. In Germany, the social partners take responsibility for a specific aspect of the process (providing advice and guidance). In some countries, individual employers cover the fees which are charged to employees wishing to undertake validation for example in: Croatia (for sectoral validation practices); the Czech Republic and Germany (for the external students' examination); and Latvia, Romania and Slovenia (for validation carried out by professional/craftsman associations).

In France, validation of prior learning (VPL) has been an individual right since the law on social modernisation of January 2002. Funding of VPL activities is provided by the State, the Regions, social partners, companies and individuals. In 2016, the State contributed around EUR 14 million to VPL (via the Ministry of Labour, and the National Agency for the Unemployed. Social partners contributed EUR 15.3 million and the Regions contributed with EUR 7.5 million. In 2016, estimates report the total cost of information and guidance being EUR 6.5 million (with no costs on the individuals) The total price, covering admissibility, counselling, evaluation and certification varies between EUR 800 and EUR 7,000 per candidate. The average price for employees is estimated in 2016 at EUR 1 660 for those in a fixed-term contract and EUR 2,090 for those with an open-ended contract.

The recent introduction of the Counselling for Professional Evolution (Conseil en évolution professionnelle - CEP) may be an opportunity to reinforce bridges between the different existing tools to increase the level of qualification. In 2014, the implementation of an "open to-all" and free-of-charge CEP has improved access to "regular" skills audits as any "active" individual is now allowed to contact, at their own initiative, one of the five certified organisations (Pole emploi, APEC, Missions locales, OPACIF and CAP emploi) to request personalised career counselling. In this context, a "regular" skills audit (chargeable) or an adapted/simplified assessment of competences (free of charge) can be recommended. In 2015, more than 700 000 individuals were reported as beneficiaries of a Career Counselling Service, of which more than a third were registered with the PES. A skills audit is carried out by an external provider (usually private) and has a cost of between EUR 2 000 and EUR 3 000. Although this cost can be covered by the employer, the social partners (for someone who has a job) or by the Region (unemployed people registered with the PES), it can function as a significant

[382] Cedefop (2016): Funding validation A thematic report for the 2016 update to the European inventory on validation of non-formal and informal learning.

[383] Gonçalo Xufre (2017): presentation "*Portugal: costs and benefits of the national system for RVCC*", presented at the Peer Learning Activity on validation cost organised by the Flemish Ministry, 14 December 2017.

barrier. Nevertheless, the skills audit can be financed by each individual's personal training account.[384] [385] [386]

When looking at validation processes and validation costs across Europe, the range is complex:[387] countries use various funding sources and these may vary within the country (e.g. different sectors may use different funding); in some countries funding is only provided for certain stages of the validation process; European project funding or other time-bound funding provides an important 'start-up' source to enable new developments to be introduced but it can also create uncertainty and questions around sustainability; and where individuals cover some or all of the costs of a validation procedure it raises issues around barriers to access.

8.4.6. Conclusion on costs

The evidence presented above provides a large amount of data the administrative costs of supporting training entitlements. There is substantial variation between schemes and countries and there is a need to make sense of the data to inform the cost-benefit estimates (see section 10.2) and macroeconomic modelling. Based on information from three schemes[388] it is possible to define a range of values administrative costs (for a voucher value between EUR 500 and 800) of between 2 per cent of the broad French CPF and 30 per cent of the targeted, means-tested German BIP. The evidence suggests that economies of scale play a role and help to reduce administrative costs: the longer a scheme runs and the larger it is, the lower administrative costs as a share of entitlements tend to be.

8.5. Paid training leave

8.5.1. Description of paid training leave

Paid training or training leave schemes allow individuals to take time off work for training while still receiving their salary in its entirety or in part, or alternatively an allowance to cover the costs of living from public or social partner funds. They can cover gaps in financial support concerning the indirect/opportunity costs of training that is not covered by regular employee training during working hours, and for individuals with weak or no links to an employer. According to the ILO's convention C140 on paid training leave (1974), training leave refers to regulatory instruments that set certain conditions under which employees can be granted temporary leave from work for learning purposes. Two types of training leave can be distinguished: (i) paid training leave which entitles employees to maintain salary in its entirety or in part, or in some cases compensates it in the form of grants from public or social partner funds; and (ii) unpaid training leave, in which the salary is not paid during the training period but an employee has the right to return to his/her employment.

The Adult Learning Expert Network states that 22 of 27 EU Member States had some form of national legislation on paid training leave, and this is the case for 24 Member States according to Cedefop's Financing Adult Learning database (cf. section 4.2.2). This includes provision for: upgrading or broadening qualifications; language learning; and training in IT. Whether

[384] An de Coen et al. (2017): presentation "*Cost-benefit analysis and financing of RPL (recognition of prior learning)*", presented at the Peer Learning Activity on validation cost organised by the Flemish Ministry, 14 December 2017.

[385] Claude Morel (2017): presentation "*Costs and benefits of the French VAE*", presented at the Peer Learning Activity on validation cost organised by the Flemish Ministry, 14 December 2017.

[386] Cedefop (2018): European inventory on validation, update 2018. France country report.

[387] Cedefop (2016): Funding validation A thematic report for the 2016 update to the European inventory on validation of non-formal and informal learning.

[388] (i) the German Bildungsprämie (BIP), (ii) the English ILA 2000-2002 and (iii) the French Compte Personnel de Formation (CPF).

training leave is available for formal and non-formal education and training programmes varies between Member States. Half of Member States with paid training leave support both types of training. Cedefop (2012) provides a comprehensive overview of paid training leave across Europe.[389] In the public consultation, 82 per cent of respondents agreed "fully" or "somewhat" that paid training leave could add value to an ILA scheme.

Training leave is financed in different ways. In some countries government or training funds compensate for (part of) the costs incurred. Austria allocated EUR 143.6 million in 2018. Finland EUR 89.4 million as of 06/2019. France allocated EUR 51 million in 2016. Spain allocated EUR 1 billion in 2015-16. Belgium allocated EUR 65 million in 2015/16 and EUR 70 million in 2019. Luxembourg allocated EUR 606 570 in 2012. The maximum duration of training leaves varies from a few day days up to two or three years. In the Flanders region of Belgium, a new paid leave scheme was introduced on 1st September 2019, which includes a standard 125 hours of training leave for employees in the private sector.

8.5.2. Effectiveness of provision

Although almost all European countries have training leave regulations in one form or another, their uptake and hence impact on participation rates is small. Table 26 shows levels of participation and take-up for paid training leave schemes. Of the 62 schemes identified across 33 Member States and other countries, data was available for 15 programmes. Where data exists, take up is rarely above 1 per cent of total employment. However, there are exceptions, such as in Sweden (6.2 per cent), Portugal (4.4 per cent), Belgium (1.7 per cent), Latvia (1.4 per cent) and UK (1.4 per cent).[390]

[389] Cedefop (2012a): Training leave – Policies and practice in Europe. Research Paper No. 28.

[390] PPMI/FiBS (2012) Developing the adult learning sector.

Table 25 Number of beneficiaries and take-up of paid education leave

Instrument[391]	Number of beneficiaries				Take-up (% of eligible group)				Take-up (% of total employment)*			
	2007	2008	2009	% change	2007	2008	2009	% change	2007	2008	2009	% change
AT	1,576	2 948	10 253	550.6					0.04	0.07	0.25	625
BE1(a)	68,313	76 114	76 084	11.4	2.06	2.27	2.29	11.2	1.56	1.71	1.72	10.3
BE2		443	~800e	80.6		n/a	n/a	–		0.01	~0.02e	100
DK2		16 000	25 900	61.9		–	–	–		~0.56e	~0.93e	66.1
ES1	1,323	1 721	2 131	61.1	–	–	–	–	0.01	0.01	0.01	0
FR1	n/a	49 947	n/a	–	n/a	–	n/a	–	n/a	0.19	n/a	–
FR2		30 745	n/a	–			n/a	–		0.12	n/a	–
FR3	n/a	8 946	n/a	–	n/a		n/a	–	n/a	0.03	n/a	–
HU2(b)		1 500e	1 500e	0		15e	15e	0		0.04e	0.04e	0
LU1		1 500	1 800	20						~0.74e	~0.83e	12.2
LV1		469	931	–		0.2	0.4	100		0.04	0.09	125
LV2(c)		13 500e	13 500e	–		33	33	0		1.2e	1.37e	14.2
PT2		230 414	222 294	-3.6		38.1e	40.3e	5.8		4.43	4.4	0.06
SE1/SE2(d)		281 600	277 400	-1.5						6.1	6.2	1.6
UK2		n/a	~400 000e	–		n/a		–		n/a	~1.36e	–

(a) For BE1, numbers are provided for academic years (2006-07, 2007-08 and 2008-09).
(b) For HU2, numbers are provided only for teachers in VET institutions.
(c) For LV2, a very rough estimate is provided: approx. 1/3 of all teachers for whom teaching is their main source of income took training leave.

[391] Instrument refers to the type of instrument referenced in Cedefop (2012a) Training leave – Policies and practice in Europe. Research Paper No. 28. Table 3, pages 49-52.

(d) For SE1 and SE2, figures are taken from the Eurostat LFS and indicate the overall number of employees who took training leave (both part-time and full-time students). However, they do not indicate which particular instrument (SE1 or SE2) the person has used. They could also refer to staff training paid for by the employers. The numbers for other years are as follows: for 2005: 251,800 (5.8%), 2006: 256,500 (5.8%), 2007: 269 600 (5.9%) and 2010: 294,600 (6.5%).

Not appl. = not applied; n/a = information not available; 'e' = estimated number/share; unless otherwise indicated, the number/share provided is considered to be exact.

* Figures are calculated in relation to total employment to measure the impact of training leave on the total working population.

Source: Cedefop (2012a): Training leave – Policies and practice in Europe. Research Paper No. 28. and is based on a survey of national experts and stakeholders on training leave instruments in Europe (2010-11), Table 17.

Empirical evaluations of paid training leave programmes are scarce. Kauhanen (2021) studies how using a training leave subsidy for employed people in 2011 affected their labour market outcomes and educational attainment until 2017, using propensity score matching to construct a comparison group from a Finnish administrative panel-dataset.[392] The programme analysed was available for employees with at least eight years of work experience and consists in an allowance of 2-18 month of permit-leave to take part in adult education programmes. Kauhanen finds positive treatment effects on educational attainment and occupation mobility, accompanied by a drop in annual earnings and employment after taking training leave due to more time being spent on education as compared to working ("lock in-effect"). By 2017, annual earnings and employment had approximately reached but did not exceed their 2011 level. Hence, costs exceeded benefits by 2017, although an overall cost-benefit analysis would require a longer time horizon as employment and earnings trajectories were still on an upward trajectory in the years prior to 2017.

Cedefop (2012) provides a descriptive analysis of training leave instruments in 33 European countries and analyses the effectiveness of training leave programmes. Data used in the study come from national surveys. The analysis suggests that the group that benefits most from training leave are low-skilled workers, and that target-group-specific paid training leave schemes tend to be most successful in terms of overall performance.[393] The better-performing schemes applied fewer employment-related eligibility criteria (i.e. requirement of an employment contract, restrictions on the type of contract (e.g. only open-ended); restrictions on the duration of work (e.g. full-time only), requirement of minimum prior work experience, requirement of minimum prior employment with the current employer, and the need to ask the employer for permission to take leave). Moreover, they had instruments had links with incentive instruments to cover other costs of training.

Instruments with a longer duration of leave and those regulated by national law (and not by collective agreements) are less expensive to administer. Training leave has been successful in reducing both the time and the financial constraints that act as barriers to training. Companies considered that training leave instruments helped to alleviate time constraints and employees' financial constraints, which matches the views of the surveyed national stakeholders. Nonetheless, private companies were sceptical about the efficacy of this instrument in reducing the financial barrier; in fact, many companies mention the costs borne for the training leave as a barrier that prevent them from using training leave more frequently.

Other factors that contribute to effectiveness and greater participation include involving social partners more actively in the training leave implementation process, and by providing high quality and widely accessible guidance and information services. Actual decisions as to who goes on training leave depend on employers, who often make decisions based on potential economic/financial benefits for the company and/or content of the training provided (preference for company-specific over transferable or general training). The analysis showed that the social partners may play an important role in this respect, for example by helping to reduce arbitrary decisions, or disagreements between employers and employees regarding the participants and/or content of training. Further, the social partners may also help in solving work organisation problems.

Employees in small and medium-sized enterprises (SMEs) seem to be an important disadvantaged group. SMEs seem to face two major difficulties – (i) a lack of information and, therefore, a lack of understanding of an instrument's usefulness for employees; and (ii) considerable difficulties in organising training leave (e.g. being able to cover for staff on leave). While a lack of information and guidance may be offset by the adoption of relatively well-tried and tested solutions, work organisation problems in SMEs (e.g. being able to arrange temporary cover for staff on leave) require further attention.

The evidence from monitoring/evaluation reports available for the training leave instruments in France emphasises the role of guidance and information services in increasing overall participation of eligible employees. The evaluation of Austrian training leave (Wagner and Lassnigg, 2006) – in

[392] Kauhanen, A. (2021): The Effects of an Education-Leave Program on Educational Attainment and Labor-Market Outcomes. Education Economics. Doi: https://doi.org/10.1080/09645292.2021.1929849.

[393] Cedefop (2012): Training leave – Policies and practice in Europe. Research Paper No. 28.

the Tyrol region – also confirms the importance of information and guidance in explaining the take-up of a given instrument.[394] The investigation revealed that many eligible employees were not aware of the initiative and that not all groups had the same level of access to counselling services.

9. Case studies

In addition to French ILA (in Chapter 5) we present brief illustrative case studies from seven EU Member States plus the UK which has operated training entitlement schemes, and also Singapore, which operates an individual learning account. Each case study highlights particular features which can provide a useful guide if Member States are implementing new demand-led training programmes. In most cases the training entitlement is part of a wider adult learning strategy with a range of measures, including resisters of approved training, adult guidance systems and quality assurance frameworks. Not all the examples are good practice – there are some which did not meet expectations – and the development periods are also different. For example, the STAP voucher in the Netherlands is not implemented until 2022 but nevertheless provides useful information on scheme set-up. Also, the levels of available data vary between case studies and in some cases new monitoring systems are being established and developed to better capture the outputs and impacts of the initiatives.

The seven case studies are as follows:

Table 26 Case studies overview

Country	Featured Scheme	Summary
Austria	Education Savings	The use of saving schemes to help support individuals to overcome financial barriers to training
Estonia	Unemployment Insurance Fund	A fund targeted at the unemployed and those at risk of unemployment to help increase rates of adult participation in training
Greece	Targeted voucher schemes	A programme of vouchers targeted at different groups of unemployed people, different sectors and different parts of Greece, all designed to contribute to improving adult participation in learning
Italy	Regional individual training entitlements	Individual training entitlements developed at regional level and subsequently adopted in other Italian regions.
Netherlands	STAP	The new voucher scheme which becomes operational in 2022, replacing a tax incentive scheme
Singapore	SkillsFuture Credit	Targeted training entitlement scheme that has been developed and applied to changing labour market conditions
UK	Individual Learning Accounts	The short-lived ILA for England and the subsequent training entitlement schemes for Scotland and Wales.

9.1. Austria: Education savings

Education savings in Austria provides lessons in terms of innovative policies to incentivise individuals, and especially to tackle financial barriers, that have not met expectations. The concept was based on the highly popular building savings scheme and was designed to allow individuals to accumulate funds for multiple purposes including vocational education and lifelong learning. However, take-up has been low and skewed towards higher income groups.

[394] Wagner and Lassnigg, (2006), Contradictions in adult education structures and policies in Austria: their interrelation with the professional development of educators, European Journal for Research on the Education and Learning of Adults, 2(1):37-55

Austria has higher than EU-average participation rates in adult learning but these have fallen since 2017 (by 1.1 pps between 2017-19 for adults 25-64[395] and a decline in annual enrolments for vocational training centres of 3.5 pps in the same period[396]) and especially amongst younger age groups where surveys have shown some disillusionment with the benefits of training as well as costs, time and information barriers[397]. The pandemic has also had a further negative impact on adult learning participation with a decrease in overall participation from 14.7% to 11.7% in 2020, according to LFS estimates, although online training has risen in popularity.

Current targets of the Austrian government were published in 2011 in the lifelong learning strategy for 2020[398]. It had ten lines of action[399] and an overall objective of increasing overall investment and adult learning participation rates to 20% and also participation rates in non-formal education, as well as employment rates in the 55-64 age category. There is a strong focus on guidance services for those with lower levels of qualifications, the promotion of lifelong learning, stressing the options for flexibility in terms of how learning could be delivered and acquired and the development of an individual learning account to incentivise training activity. Vulnerable groups, including those with lower level qualifications are prioritised but there is also a concern about middle and higher skilled groups who require retraining and upskilling. They are also the groups that can best afford co-funding schemes for adult education. The Adult Education Initiative, launched in 2012, provides free basic education for adults and an adult-oriented compulsory school leaving certificate.

Education savings are one mechanism to encourage additional funding in adult learning and are typically based on building savings schemes, effectively a low-interest loan for housing and house construction which builds up over time (up to six years) where saved capital can be used for education and training, amongst other priorities, like care. Some 3.8 million citizens[400] are part of the building savings scheme although only some 1% release funds for education and training purposes. The origins of education savings dates back to the start of this century with the aim to create a personal provision for 'people willing to be educated[401]' and to tackle directly the financial barrier to training. There are guidelines for the use of funds with vocational training and continuing lifelong (vocational) learning. Government aspirations were that funding incentives would assist and be taken up by low skill/educational groups, but education savings are not targeted and are open to all. The reality is that funds have been used to fund fee-based learning, and more by higher educated groups.

Statistics on education savings are limited but the National Bank of Austria (OeNB) estimated that some 4 million EUR was held in loan accounts – for education and to support care commitments - for the first three quarters of 2020. Another building and loan association estimated 6.8 million EUR in 2018 in its loan accounts, less than 0.1% of its total portfolio. Based on these figures a total loan value of some 20 million EUR could be estimated[402]. Limited data suggests that of some 5 700 loan agreements in 2018, only 0.75% were concerned with education and training. This innovative approach has not met expectations. The state premiums for building savings, to which education savings are linked in Austria, are very low and therefore do not provide an incentive. In many cases, vulnerable groups are assisted by the Public Employment Service and often receive free training and retraining. A further reason could be the multiple array of training and lifelong learning initiatives at all levels, including training vouchers, whose access is complicated to some extent by regional variations. But education savings can still be one element in a mosaic of adult education funding.

[395] Statistik Austria, [2021-03-15].

[396] Conference of Adult Education Austria.

[397] 12.5% of adults (25-64) find formal and non-formal education too expensive (50% more women than men), 23.7% state that training is not compatible with working hours whilst people with low levels of qualifications have the least access to information on training.

[398] Republik Österreich (2011): LLL:2020: Strategie zum lebensbegleitenden Lernen in Österreich.

[399] Covering school systems, basic skills for adults, second chance education as well as continuing education, and also validation, quality standards and guidance systems.

[400] In a population of just over 9 million.

[401] It could also be used by parents and grandparents to provide training funds for their offspring. The funds are therefore transferable.

[402] Extrapolated from data from one of the four building and loan associations.

9.2. Estonia: Unemployment Insurance Fund

As part of Estonian Lifelong Learning Strategy, a target for 20% overall adult participation in adult learning was set for 2020, and met in 2019, falling back in 2020 as a result of the pandemic and a decline in job-related training. Part of the increase can be attributed to the Unemployment Insurance Fund (UIF), a voucher scheme that targets the unemployed and those at risk of unemployment, combined with counselling and applied to courses that are set by the national agency responsible for forecasting skills needs. Lessons from the UIF are being applied more generally to publically funded training in Estonia, including the role of counselling and guidance.

Participation in adult learning has been a concern of the Estonian government for several years. The Adult Education Survey (AES) highlighted a decline in overall participation rates (from a high of 12.7% to a low of 11.5%) between 2011 and 2016 with the price of training highlighted as a barrier to participation by 20% of respondents[403]. Estonia's Lifelong Learning Strategy set a target of 20% of adults (25-64 years old) to participate– in learning by 2020 and 25% by 2035 as part of the new education strategy for 2021-2035, yet still to be approved by the Estonian Parliament[404].

One policy response was the introduction of the **Unemployment Insurance Fund** (UIF) in 2017 which included targeted training courses for the unemployed in line with the labour force and skills needs forecast done by Estonia's national agency OSKA[405] and funded by the Estonian government. Eligible individuals include those registered as unemployed with the public employment service and those who are employed but at risk of unemployment due to health reasons or have no skills including languages (Estonian), or are 50 years and older[406]. The Fund is implemented through training cards – a voucher scheme to a maximum value of 2,500 EUR which can be used on more than one course although cannot be accumulated over time[407] - for individuals, following eligibility checks by UIF managers and in accordance with the skills deemed eligible by OSKA (the skills list is updated with a new focus on digital and sector specific ICT skills)[408]. The number of participants has increased (until 2020) from 900 in 2017 (just 8 months of the year) to 3,000 in 2018 and 5,700 in 2019. 84% of all participants in the first two years were women and 60% of all participants in this period were aged 25 to 49, 38% being 50 years or older.

Language courses supported by the UIF are popular amongst non-Estonian residents (including Russian speakers) as Estonian is a perquisite to many jobs (68% of all courses in 2017-2019). Courses for digital/ICT skills have also proved popular since the pandemic and increased incidences of working from home while it only accounted for 4% of courses between 2017-2019.

The UIF has yet to be formally evaluated but a new monitoring system is being introduced to see how individuals have used the training card (is it in their own sector for example? Is it in a sector that is deemed to have a lower risk than the one they are/were in?). Careers counsellors play a key role

[403] But much reduced from the 40% who highlighted costs as a barrier in the 2011 AES. There is no detailed explanation of the change but time inflexibility (by employers) is likely to have been a more prevalent factor in 2011.

[404] The 2018 Estonian Labour Force Survey estimated that the state pays for 10% of non-formal learning with individuals paying twice as much. Government money is largely focused on vulnerable groups.

[405] OSKA skills forecast is part of the OSKA programme, launched in 2015 by the Estonian Government as a measure to contribute to the objectives of the Estonia 2020 Strategy, in particular to enhance employment and productivity. The main aim of the programme was the reduction of skills' mismatch and to facilitate stakeholders' cooperation. (Source: https://ec.europa.eu/social/main.jsp?catId=1080&langId=en&practiceId=81).

[406] There is also a category for those working in the oil shale sector.

[407] There has been some debate around the implementation of individual learning accounts but this has not evolved due to concerns about the administrative complexity of operating an ILA. See also Järve, J.; Räis, M.-L.; Seppo, I. (2012). Erialase tasemehariduseta isikute osalemine elukestvas õppes. [Participation in lifelong learning of people with no professional qualifications]. Tallinn: Estonian Applied Research Centre CentAR.

[408] There is a freedom for the individual to choose a course of the type and duration of their preference but it is not a fully free choice and is guided by careers counsellors as well as training that meets the country's skills needs. Languages aside popular courses have included driving skills, hair and beauty and teaching.

on advising and guiding individuals to a training course but the UIF training cards can also be accessed by an online platform.

The 20% overall adult learning target was reached in 2019 (a high of 20.1%) but fell back to 17.1% in 2020, a direct consequence of the Covid-19 pandemic[409]. In the period 2017-2019, there had been increases in participation among the groups targeted by the UIF, twice the increase for the people with low qualifications or educational attainment compared to those with secondary or tertiary level qualifications[410] and whilst a direct correlation has not yet been proven the UIF has claimed a contributory role. There are though additional factors such as awareness raising campaigns encouraging individuals to participate in adult learning – including also specific campaigns to promote the UIF as well as improved information[411]. Growing interest in adult learning has been reported across all labour market groups[412].

Further refinements to publiclly funded training are envisaged as the lessons from the current scheme are learnt. One concern is that the quality and labour market value of courses requires further testing with mandatory guidance under consideration, which is already part of the UIF[413]. In addition, and as described in the work plan for 2021, the Ministry of Education and Research plans to develop the principles of the skills portal and digital story (*täiskasvanute oskuste digilugu*) for adults and the concept of micro-credentials by the end of 2021.[414]

9.3. Greece: Targeted training voucher schemes

Greece has one of the lowest levels of adult participation in learning in the EU and has responded with a programme of training vouchers that aimed to tackle, directly or indirectly, three barriers to training – finance, time and the perceived quality of available training as well as its relevance to the labour market. It is targeted at different groups among the unemployed, such as young people, graduates, former employees of selected enterprises and those who are resident in regions with the highest levels of unemployment. Progress has been mixed but the programme continues with six ongoing voucher schemes. A key feature of the programme is the tailoring of vouchers to different groups and changing the targets in accordance to developments in the economy and labour market in Greece.

According to the Adult Education Survey, participation in adult learning in Greece (as a percentage of the population aged 25-64) is amongst the lowest in the EU. In the 2016 survey, just 23.4% of Greek employees with a permanent job enrolled in some form of training, as against an EU-27 average of 45%. For those with a temporary job it was lower, at 17%, compared to the EU rate of 42.5%. Finance and time are key barriers[415] to training participation, as noted below:

- Financial constraints: the cost of participation remains the biggest constraint over time as in all the years when the study was conducted (2011, 2013, 2016, 2019) more than 80% of respondents identified cost as the major factor preventing them from participating. When

[409] The biggest decreases in non-formal job-related training (-18% in 2020). See also Ministry of Education and Research (2020) Haridus- ja Teadusministeeriumi 2019. aasta tulemusaruanne. [2019 annual report of the Ministry of Education and Research]. Tartu: Ministry of Education and Research.

[410] Some 20% compared to 10%.

[411] 44% of adults rated the availability of information concerning adult learning opportunities to be good or very good. See Räis, M. L., et al. (2014). Põhi- ja tasemehariduseta täiskasvanute tasemeharidusse tagasitoomise toetamine. Eesti Rakendusuuringute Keskus CentAR.

[412] Interview with the Ministry of Education and Research.

[413] A recommendation in the mid-term evaluation of the lifelong learning strategy by the Praxis Center for Policy Studies (2019).

[414] Ministry of Education and Research, (2021). Haridus- ja Teadusministeeriumi ning Haridus- ja Noorteameti 2021. aasta (arendus)tööplaan. (Work plan of the Ministry of Education and Research and the Education and Youth Authority for 2021).

[415] INE GSEE (2020), *Training Voucher: a "tool" for governance, allocation of responsibility, and inequality*, Interventions Texts, available at: https://ineobservatory.gr/human-resources/kalogerakis-panagiotis/

asking respondents to identify a single obstacle to participation, financial constraints were identified as the main obstacle for participation with 34% (according to the 2019 study).

- Time constraints: when asking respondents to identify a single obstacle to participation, the lack of time is in second place with 18.2%. The lack of time due to family responsibilities was the main reason for 11.3% and the lack of time due to other activities/obligations was the main issue for 4.1% of respondents.
- Quality of training: quality of training was identified by respondents as the third main obstacle to participation. The study highlights that the share of respondents considering quality as main barrier to participation has gradually increased from 3% in 2011 to 13.6% in 2019.

The voucher system was first introduced in 2012 and targets specific sub-groups of unemployed by offering vocational training in specific areas.[416] Vouchers were introduced to replace the previous system under which training was provided only by providers who had individual agreements with the Ministry of Labour. That system was considered insufficient due to its complexity, high administrative costs, delivery delays and lack of transparency.

The main objective of training vouchers is to achieve a structured path of training, which could contribute to the entry of the unemployed into the labour market. The means to achieve such an objective consists in a process of education characterized by strengthening and upgrading individuals' qualifications and skills. This would address the mismatch between labour market and individual skills..

Since the implementation of the voucher system, there have been 20 voucher schemes[417], all of which have been co-funded by the ESF and with a combined budget approaching 500 million EUR. Though the format and length of the training offer differ in each scheme, in general training provided by the voucher schemes include theoretical training (typically around 120 hours but up to 600 in some cases) in life-long learning (LLL) centres followed by practical training in a company or in the public sector (typically around 200 hours but up to 800 in some cases). Many schemes also include counselling offered by the LLL centres.

The vouchers cover all training expenditure and provide participants with a training allowance for both the theoretical and practical training; this helps unemployed participants overcome financial constraints. By allowing participants to choose the content of training and the training provider (both need to be certified), it is expected that a higher quality of training and services by providers will be achieved through competition among providers to attract participants. At the same time, although it is not a direct objective of voucher schemes, such a programme can contribute to eliminating time constraints. Indeed, vouchers may help participants to access the needed flexibility by choosing the training provider and training path that best suits their needs. To improve information, details of all voucher schemes can be found on the dedicated website[418] as well as on the website of the national public employment service.[419] The presence of certification can enable unemployed individuals to signal in the labour market their improved skill status, emphasizing the additional competence they acquired and removing a prior asymmetry of skills between themselves and employers.

Overall voucher schemes can be separated into 7 groups with similar characteristics[420]:

- 2 schemes targeting young NEETs aged up to 29, one of which targeted only to the highly skilled. Participants received theoretical training for 80-120 hours in specific sectors, which was followed by practical training of up to 480 hours (no more than 6 months). The duration

[416] The Greek Training Vouchers are most similar to a service voucher. Moreover, they were described as mainly oriented towards the unemployed. For these reasons, these vouchers have not been selected for representation in the CEDEFOP database https://www.cedefop.europa.eu/en/publications-and-resources/tools/financing-adult-learning-db

[417] excluding voucher schemes for the 15-24 cohort

[418] http://voucher.gov.gr

[419] https://www.oaed.gr/

[420] Evaluation reports are not yet publically available

of theoretical and practical training depended on the scheme. Participants were entitled to counselling by the training provider before and during the practical training. The two schemes reached 34 055 participants - 84% and 66% of the participation targets.

- 8 schemes for participants in public works measures mainly in administrative regions with high unemployment rates. Participants in these schemes participate in public works programmes and are employed for a temporary contract in certain municipalities, prefectures or ministries. During their employment, they are provided with 120 hours of theoretical training – 100 hours in ICT and 20 hours in Social economy and entrepreneurship. The ICT training is certified. The schemes reached in total 54 610 participants. Excluding the latest implemented scheme that reached 88% of the participation target (and is still ongoing), the remaining schemes reached about 40% of their targets. Only one more scheme is still ongoing.
- 3 schemes targeting ex-employees of specific enterprises, two of them target also young NEETs. Participants are provided with theoretical training of 300 hours. In one scheme counselling is also provided. In total, 1,610 people participated in these schemes, all of which had a high target achievement in terms of participation (ranging between 78% and 92%).
- 2 schemes offering ICT training to graduates with scientific, technological or economic background. Both schemes are still ongoing. The first scheme is open to those aged 30-45 and has so far reached 1 458 participants (72.9% of target), while the second targets those aged 25-29 and has reached 1 092 participants (35.4% of target). Participants in both schemes are entitled to 2 counselling sessions, 400 hours of theoretical training and 200 hours of practical training. At the end of the training they receive a certification.
- 2 schemes aiming to improve technical skills in certain cutting-edge sectors (i.e. in sectors with growth prospects like trade, logistics, tourism, information and communication technologies, solid and liquid waste management, food/beverages, energy, industry, agriculture etc.). The first scheme was open to those aged 29-64 and the second to those aged 30-49. Participants in the first scheme received counselling, 120 hours of theoretical training and 500 hours of practical training. Participants in the second scheme are entitled to 4 counselling sessions, 200 hours of theoretical training and 380 hours of practical training. At the end of the training, participants in both schemes receive a certification. The first scheme reached 18,689 participants (81.3% of target). Data for the second scheme are not available yet (the scheme started in 2021 and is still ongoing).
- 1 scheme available only to residents of a specific administrative region (Elefsina) targeting those aged at least 45 and who are unemployed for at least 6 months. Participants receive up to 600 hours of theoretical training (depending on their needs) and 800 of practical training. The scheme reached 781 participants.
- 1 scheme focusing on the training and certification of unemployed loaders. The scheme is still ongoing and has so far reached 3 166 participants (63% of target). Participants receive 120 hours of theoretical training and 30 hours of practical training. At the end of the training, they receive a certificate.

The bill of December 2020 aims to upgrade the education and training provided in terms of structures, procedures, curricula and certification. Given that the issue of quality has emerged as one of the major impediments to participation, the changes introduced by the bill could theoretically improve participation rates despite the concerns raised. However, building trust is a long process.

In this context, three main social partners are currently engaged in a public debate on the issue of adult education and especially on continuing vocational training: The General Confederation of Greek Workers' Labour Institute, the Hellenic Confederation of Professionals, Craftsmen & Merchants' (GSEVEE) Institute for Small Enterprises, and the Hellenic Federation of Enterprises. Some issues need to be addressed in the future, namely increasing the interest of workers in their skills development and discussing about the introduction of a system of individual learning accounts.

9.4. Italy: Regional individual training entitlements

The *Carta di Credito Formativo Individuale* (CCFI) training entitlement provides a variable entitlement (up to 2 500 EUR), combined with compulsory guidance, that originated in one Italian region and has subsequently been adopted elsewhere. It is targeted at vulnerable groups, including the inactive as well as unemployed graduates, and unlike other schemes can also be used to cover indirect costs, such as childcare. It has also helped to engage those individuals who are reluctant to return to traditional 'classroom style' training environments.

The *Carta di Credito Formativo Individuale* (CCFI) is an individual training entitlement adopted in Tuscany and later in Umbria and Piedmont[421]. The CCFI is a prepaid credit card (worth up to 2 500 EUR) that allows individuals to receive a financial contribution to cover partially or totally the costs incurred for the implementation of a personal training project.

The key aim is to promote and encourage the training of individuals throughout their life, thus overcoming some of the limitations affecting standard training tools and practices (lack of time to devote to the training, problems related to work-life balance, financial barriers, lack of exhaustive information on the local supply of training, poor efficiency of the training-related public services, lack of community support). In particular, the CCFI is focused on removing (or softening) financial barriers faced by individuals that are willing to enrich or strengthen their competences and increase their employability, productivity, and socio-economic condition. The flexible nature of the CCFI allows cardholders to distribute the resources provided by the card among the courses that they consider most suitable for their needs.

The CCFI works as a reimbursement for the purchase of training courses and addresses the financial barriers that individuals may face in accessing training courses. This is particularly important in the case of unemployed and low-income individuals. On the other hand, the financial support provided by the CCFI can be important to allow individuals select courses that may be particularly suited to them but not accessible due to financial constraints. Such flexibility goes hand in hand with a tailor-made support provided by the public employment centres' personnel in terms of advisory and counselling services, which aim at helping CCFI beneficiaries make best use of the potential of the card. In particular, the employment centre personnel helps people choose the career path to take, set goals that are actually achievable given their background and professional experience, ensure an effective and timely match between demand and supply of training services.

The CCFI identifies priority groups as women, non-standard employees, immigrants, etc. The distribution of resources among target groups is arranged at provincial level. Such approach reflects the attempt to combine, on the one hand, the promotion of personalised training activities and, on the other, the support of social groups having specific needs or facing a higher level of socio-economic vulnerability.

In the case of particularly fragile social groups - including long term unemployed, low-income individuals, migrants and refugees – problems related to a significantly weak socio-economic condition may negatively affect individuals' propensity to effectively use the CCFI for training purposes. To effectively support these target groups, the card, unlike most of the existing tools as the standard training vouchers, has the feature of financing also services which are only indirectly connected to training but that might affect the decision to select and undertake a certain course. For example, the CCFI can be used to pay babysitters or caregivers. This CCFI feature is particularly important to encourage individuals bearing most of the family care burden to seize the opportunity of a training course which can, in turn, increase their employability and/or income.

In addition, to attract individuals who may be reluctant to come back to the traditional classroom-based education, the CCFI can be also used to pay for 'informal' training activities, e.g., non-institutionalized training which can take place almost anywhere within the family, with friends, at work

[421] The measure was introduced in 2004 till 2015. All types of training were allowed in the initial period (between 2004 and 2007), including informal training. Subsequently (2008-2015), training courses were listed on a regional catalogue of approved programmes to avoid misuse of public funds.

or at facilities made available by education and training providers. This represents another element of flexibility characterising the CCFI. By allowing the use of CCFI's fund to pay for informal activities as the ones mentioned above, this tool enlarges the scope of what can be regarded as training. In this way, the attractiveness of the card increases while the individual characteristics and training preferences are enhanced. However, to ensure that the selected activities are consistent with the CCFI's holder background and in line with the very aim of the instrument, participants are guided by employment centre counsellors in charge of validating their choice.

The results[422] of this experimental initiative highlight that, as for the participants' satisfaction, 71%[423] of card holders declared that the training activities met their expectations in terms of quality and effectiveness. The percentage of those reporting a good level of satisfaction concerning the matching between training contents and personal/work needs was also quite high (53%). For what regards the occupational outcomes, 66% of the sample believe that they have improved their professional condition, and of this 66% almost the entire sample recognizes the usefulness of the CCFI for the purpose of improving their professional condition.

Detailed data on the total number of CCFI holders is not available. There were approximately three thousand CCFI beneficiaries between 2006 and 2008 in Tuscany (only the provinces of Pistoia, Arezzo, Prato), about half of the holders (51%) is aged between 25 and 35 years while about 33% is over 35 years old. For what concerns their training level, the most common qualifications of the CCFI holders are the High School Degree (32%) and the Master Degree (36%). It is interesting to notice that, after having benefited from the service, the number of participants with Professional School Diploma and Postgraduate Education Diploma increased, going from 8% to 14% in the first case and from 4% to 27% in the second case. Regarding the employment profile of the beneficiaries, alongside a significant percentage of unemployed (about 39%), a significant share of inactive people (33%) is also included in addition to a 16% of atypical and 8% of workers in transition (on the move or just laid off). The training sectors in which the largest number of CCFI funded courses are concentrated is the post-graduate and high training field including the area of socio-educational services, the foreign language sector, office work and information technology.

9.5. Netherlands: The STAP - from income tax deduction towards individual training entitlements

The Netherlands presented an inter-ministerial programme for lifelong development in 2018, which underlined the ambition to increase the demand for adult learning by individuals directly by offering individual financial incentives and increasing the flexibility of the VET and HE offer. The idea was that every citizen in the Netherlands received the same skills development budget from the government at birth by means of an individual learning account. In the end this individual learning account was not implemented for several reasons related to technical and legal aspects, and available budget. Finally, the government has decided to introduce a training allowance scheme, by means of the STAP budget, that is further discussed in this case study. An important argument of introducing this scheme was that a recent evaluation of training tax incentive scheme did not substantially contribute to stimulating participation of individuals and underperformed particularly for lower income families.

The Netherlands introduced in 2018 an inter-ministerial programme for lifelong development, which sets out the main policy orientations for the coming years. The programme has the ambition to increase the demand for adult learning by individuals directly by, on the one hand, offering individual

[422] Ministero del Lavoro et al. (2008), Carta ILA: i principali risultati della sperimentazione.

[423] The survey has involved all beneficiaries who at the time of the interview had completed training activities financed by the CCFI. It reached a response rate of 66%, i.e. 239 beneficiaries out of a sample made up of 363 recipients initially contacted.

financial incentives and on the other hand, increasing the flexibility of the VET and HE offer, amongst others.

Initially, the previous government planned to give every citizen in the Netherlands the same skills development budget from the government at birth by means of an individual learning account.[424] This budget will be partly spent on initial education, as well as post-initial education. The higher the initial education, the lower the learning rights that remain when entering the labour market (and vice versa). In this way publicly available education and training budgets are more equally distributed amongst citizens, assuring that budgets are allocated to groups in greatest need. It would planned that employers would also be able to provide training contributions into the development account. Already in 2001-2003 a pilot of an Individual Learning Account was undertaken in the Netherlands[425] that reported positive effects on learning behaviour and attitude.[426]

Finally, **this individual learning account was not implemented for several reasons** related to the technical implementation, legal aspect, and available budget. The development of a system of learning rights, in which for every citizen the available budget and training history should be monitored, was considered a very demanding and complex ICT operation. Moreover, the budget available was not considered sufficient to provide every citizen a reasonable amount to increase training take up. In addition, with these small amounts, private banks were also not interested to cooperate and invest, setting up an account scheme. Finally, there were legal concerns about the legal ownership of the learning right. As a result, the government has decided to introduce a new training allowance scheme, the **STAP budget** (Dutch acronym for *Stimulering Arbeidsmarktpositie*, or Incentive Labour Market Position), to better empower individuals to take control of their learning careers more actively.

At the same time the **Dutch government supports existing private individual learning accounts** that are increasingly made available by private parties such as social partners, sectoral training funds and employers. According to recent research, approximately 1.3 million (24%) of the 5.6 million employees covered by collective bargaining agreements had an individual learning and development budget in 2017.[427] The government is encouraging the development of private learning budgets by clarifying the application of the current framework for the fiscal treatment of training costs to these budget, so employers could contribute to the private learning accounts. The Tax Authority has developed an information tool for this purpose.[428]

The STAP budget is introduced to **replace an existing tax incentive scheme**, in which individuals could request tax credits for costs for participating in adult learning. The tax incentive scheme had a comparatively high limit (EUR 15 000 per individual) but did not produce a tax credit for the first EUR 250 spent. An evaluation of the tax incentive concluded that the tax measure did not substantially contribute to stimulating participation of individuals and underperformed particularly for lower income families. A total of 2.6% of the working age population made use of the credit, for an average of EUR 1 700 per year. Applicants were more often higher educated and in permanent fulltime employment

[424] 24% of the 5.6 million employees that are part of the collective labour agreement have a personnel learning and development budget (around 1.3 million employees). These budgets are paid by the employers and employees with the support of the levy.

[425] Anna Geertsema, et al. (2004): Experimenten met individuele leerrekeningen: de balans opgemaakt. 's-Hertogenbosch: CINOP. In the pilot for 2 500 low qualified employees a learning account was established on which the government contributed EUR 450. The employee, employers and others could contribute to this account as well.

[426] In the Netherlands, there are also private companies that provide Individual Learning Account services to individuals, such as the James Learning Account, where employers could transfer budgets on the learning account, and the learner could select a training via de catalogue of learning providers.

[427] Ministerie van SZW (2019) Individuele ontwikkelbudgetten in cao's in 2017.

[428] https://download.belastingdienst.nl/belastingdienst/docs/cao-alg-scholingkost-lh-on7251z2ed.pdf

was mostly used by individuals who would in most likelihood have paid for the training courses themselves anyway (deadweight loss[429]). It was calculated that the marginal deadweight loss - i.e. the part of an extra euro training deduction that does not lead to extra training - amounted to between 73 and 100%, depending on the group and the tax rate. One of the reasons mentioned of the low use amongst lower educated and unemployed is the fact that trainings still need to be pre-financed without certainty whether it can be deducted from tax payment (in case low or no income).

The STAP scheme will **offer all adults the possibility of spending up to EUR 1 000 per year on training**. The financial amount of EUR 1 000 is backed up by a study of the Netherlands Institute of Social Research (2018) *Grenzen aan een leven lang leren* (Barriers to Lifelong Learning), that concluded that in most cases an amount of EUR 500 to EUR 2 000 is sufficient to remove the threshold of the costs of following training activities. Moreover, the average amount for training used in the tax reduction scheme was EUR 1 700, and in view of the personal contribution under the current tax system (dependent on the relevant tax bracket), the maximum amount of the STAP account is higher than the average subsidy for the fiscal deduction of training expenses.[430] Moreover, 82 % of all training costs applied for in the tax reduction scheme is below the EUR 2 500. Many shorter training programmes can be paid for in this way and for those who want to follow an extensive training programme, the personal contribution is reduced sufficiently so that the costs are no longer perceived as a barrier. Although other schemes, such as the temporary scheme for education for occupations that have a shortage of labour (*Tijdelijke regeling subsidie scholing richting een kansberoep*) have a higher amount of EUR 2 500 per person, for the STAP budget it was decided to keep it lower to increase to outreach of the scheme, given the available budget, to 200 000 beneficiaries per year. The actual take up will probably be higher since most training cost less that EUR 1 000. Moreover, it was argued that a larger budget, could also have a negative distorting effect on the market prices for training (this will be monitored and evaluated after some years).

Beneficiaries can apply for the STAP budget once a year during six time periods. **The STAP aims to facilitate multi-year training with multiple payment dates**, but this is not possible yet in the first years of implementation of the scheme in which the STAP budget will be implemented in its rudimentary form, since it takes time by implementation partners to implement additional features. The idea for the future is that the initial application can indicate that it concerns multi-year training, with a maximum budget of EUR 1 000 for each training year. If the initial application is granted, a follow-up application can be submitted for each payment moment during the multi-year training. If the budget for the period concerned is exhausted, the assessment of follow-up applications is postponed to the next period. These applications will therefore be given priority in the assessment of that next period.

A low threshold for applying for the STAP budget is an important starting point. Individuals can therefore apply for this subsidy online (with their digital ID) via a simple digital form, where the various conditions for the STAP budget are immediately checked. Before a participant can apply for the STAP account, it is important that the applicant selects the training activity he or she wants to follow and registers with the trainer. The list of training activities is provided in an online register. The training provider will then give the participant proof of application. This certificate must be enclosed with the grant application. For people for whom it is not possible to go through the application process digitally, there is a provision at the UWV[431] to support these people in the application process (by telephone or at the office). The budget will be directly transferred to the training provider, based on

[429] CPB (2016), Evaluatie aftrekpost scholingsuitgaven.

[430] CPB (2016) Evaluatie aftrekpost opleidinguitgaven.

[431] UWV (Employee Insurance Agency) is an autonomous administrative authority and is commissioned by the Ministry of Social Affairs and Employment to implement employee insurances and provide labour market and data services.

earlier experiences with training vouchers schemes in 2016-2017 where the budget was directly transferred to the bank account of the learner, where it appeared that in 3% of the cases the budget was not used for training, and 6% of the cases it was only partly used for training.

The learner must complete the training activity with a diploma or certificate, or to have attended the course for at least 80% of the duration. This attendance rate must be demonstrated by the certificate of participation that the training institute provides within 6 months after the end date of the training activity. If none of the results are achieved, the subsidy can be reclaimed.

The current STAP budget is presented as a scheme for all. No specific measures are included that assures a match between the skills set of the individual, individual and labour market needs, and the learning offer. Also, no specific measures are proposed to strengthen the outreach to vulnerable groups. During the interviews, it was indicated that this is considered as one of the biggest challenges. Currently, the Netherlands aims to make the online application process as easy as possible, and they will open a call centre for questions. In the future, the government is considering integrating guidance and counselling services in the schemes, but this is currently left out (included in the initial design of the scheme). Currently the government is running a temporary voucher scheme for career guidance (*Nederland Leert Door!*) of EUR 700, though this is not connected with the STAP budget, but can be combined. Interviews point out that obliging participants to undertake guidance and counselling activities before starting the training could also demotivate applicants to apply, especially those not easy to reach. The government is also thinking about adjusting the financial amount in the future for training for professions that have a labour market shortage or for greening professions.

It is to be noted here that neither the STAP, nor the register of training providers is yet operational; the objective is to start implementation in 2022. This also means that possible conditions may still be revised before it is formally launched. The STAP budget scheme will run for 5 years, but the plan is to make it an integral part of policies after 5 years.

At this moment, the financial scope of the STAP budget is planned to be kept like the budgetary reservation of the expiring tax incentive scheme, set around EUR **200 million annually for training costs**. While the STAP budget offers in theory the possibility to all individuals in the Netherlands to make use of the scheme, it is not expected that this will indeed be the case. There are no provisions to increase the allocated budget in case take-up proves higher than expected. Nevertheless, the explanatory memorandum of the STAP-budget indicates that an infrastructure is created allowing for quicker and simpler deployment of any additional public budgets that may become available in the future - for certain goals or target groups. This contributes to further bundling of public resources and reducing fragmentation of implementation modalities in the field of lifelong learning.

To estimate the structural annual costs for implementing the STAP scheme (excluding the 200 million Euro training budget) an analysis was made by the implementing bodies UWV[432] and DUO[433] (uitvoeringstoets' or 'implementation test'). The structural costs for UWV are estimated at EUR 21.5 million a year. This includes the cost for maintaining the **online platform** (EUR 3.9 million), **housing costs** (EUR 0.7 million) and **staff costs** (EUR 16.9 million). For the staff costs, UWV indicated that yearly 161 fte is needed for implementing this scheme (setting up a new dedicated unit within UWV). The annual cost for maintaining the **education register** are estimated at EUR 70 thousand in the first year (2022), EUR 46 thousand in the second year (2022), and EUR 35 thousand from 2014 onwards. **The total estimated structural annual costs of UWV and DUO together are**

[432] UWV (2019). Uitvoeringstoets subsidieregeling leer- en ontwikkelbudget voor stimulering van de arbeidsmarktpositie (STAP-regeling). 5 November 2019.

[433] DUO (2020). Uitvoeringstoets STAP-Regeling.

EUR 21.5 million. This is more than the planned costs of 18 million Euro as included in the STAP regulation. It was agreed between the ministries and implementing agencies that in the end of the first year of implementation, based on actual costs, budgets will be adjusted if needed.

To estimate the **one-off costs for setting up and running the voucher scheme** the analysis of UWV and DUO shows that the one-off costs for setting up the scheme for the UWV are estimated at EUR 18.2 million (EUR 7.2 million in 2020; EUR 10.6 million in 2021; and EUR 0.4 million in 2022)[434]. This is including the costs for setting up the online platform for STAP budget, which is estimated at EUR 12.12 million, but does not include the costs for setting up the training provider register by DUO at EUR 2,5 million (25,159 hours work estimated). **This makes the total one-off costs for setting up the scheme EUR 20.7 million (EUR 18.2 million + EUR 2.5 million).**

Table 27 Value of training purchased

Value of training purchased	One-off costs	Recurrent adm. costs
€200 million p.a	**Total one of costs is EUR 20.7 million** • **UWV:** EUR 18.2 million (EUR 7.2 million in 2020; EUR 10.6 million in 2021; and EUR 0.4 million in 2022) • **Online platform for STAP budget:** EUR 12.12 million (is part of the UWV budget of 18.2 million) • **Training provider register (DUO):** EUR 2.5 million	**Total annual recurrent cost is 21.5 million** • **Staff costs:** EUR 16.9 million (161fte) • **Housing costs:** EUR 0.7 million • **Online platform:** EUR 3.9 million • **Education register:** EUR 70 000 in the first year (2022), EUR 46 000 in the second year (2022), and EUR 35 000 from 2014 onwards

The compliance costs for providers relate to the registration and updating of the necessary information about training in the training register and the production and sending of the certificate of participation per participant by the training provider. The government estimates these compliance costs to be one-off EUR 90 000 (EUR 2 000 X 1-hour costs for the administrative assistant at EUR 45 for registering the training register) and annual EUR 1 965 000 (2 000 X 1-hour costs for the administrative assistant at EUR 45 for periodic costs for keeping the training register up to date + EUR 250 000 X 10 minutes costs for the administrative assistant at EUR 45 per hour for the certificate of participation). Furthermore, it is estimated that it takes the applicant about 10 minutes per application to fill in the required information. Assuming 250 000 applications (based on an average subsidy of EUR 800), the administrative burden comes to EUR 625 000. In cases 40% of the applications involve training that costs more than EUR 1 000, the administrative burden for the trainer is estimated at approximately EUR 3.4 million (100 000 x 45 minutes of administrative assistant time at EUR 45 per hour).

The current conditions considered seek to strike a balance between ensuring quality and preserving flexibility by allowing for a certain degree of decentralisation/creating "alternative routes" into the registry, including, e.g., a recognition by branch or sector organisations. At the

[434] UWV (2019). Uitvoeringstoets subsidieregeling leer- en ontwikkelbudget voor stimulering van de arbeidsmarktpositie (STAP-regeling). 5 November 2019.

moment, the following conditions are set for training providers to be included in the registry: (1) the training provider is recognised by the Dutch Ministry of Education, Culture and Science, (2) the provider has a quality mark (NRTO), (3) the providers offers training that is classified in the national qualifications framework (NLQF), (4) there is a sectoral/branch recognition of the provider, (5) the provider is recognised by the National Knowledge Centre (RPL). The quality framework for STAP is currently being prepared but there will be audits/studies to test compliance. In the meanwhile, a small group of agencies has been accredited as providers of quality assurance to STAP. Given the STAP project is planned to be launched in 2022, it is not possible to provide an assessment of the impact.

When the subsidy applicant fails to meet his/her obligations on the grounds of the subsidy rules (for example by not successfully completing the training and not meeting the attendance requirement), the participant can be excluded for a maximum period of two years from submitting an application for a STAP subsidy. The duration of the exclusion depends on the severity of the offence.

9.6. Singapore: SkillsFuture Credit - Using personal accounts for targeted provision of training entitlements

Singapore has a world-recognised education and training system and amongst the highest adult learning participation, yet challenges remain. Time and finance are barriers to training whilst many workers, including older workers have not kept up with the skills demands of digital transitions and innovation. The Singapore government responded (in 2015) with a major programme, the SkillsFuture Movement which includes SkillsFuture Credit which provides individual learning entitlements to incentivise adults to train, with 188 000 users in 2020. Additional incentives were provided during the Covid-19 pandemic showing the programme's ability to change to new labour market demands.

Singapore has had to depend on a skilled and productive workforce to drive economic progress. This has resulted in a continued emphasis on and persistent commitment to developing human capital through a high-quality continuing education system to stay competitive and succeed.

Work-related structured training participation rate among the Singapore resident labour force, as reported by the Ministry of Manpower Singapore (MOM), increased from 35.5% in 2015 to 49% in 2020[435], the country ranking ninth among 37 PIAAC participating countries/economies, just below the OECD average of 51.0%[436]. Similarly, the number of individuals participating in training activities under the Singapore Workforce Skills Qualifications system (WSQ)[437] increased from 267,655 in 2015 to 327 996 in 2018[438].

Still, there are several barriers to training in Singapore. In the Skills and Learning Study (SLS) conducted in 2017[439], about 55.8% of the Singapore residents aged 20-70 surveyed said that lack of time was the most important reason that prevented them from participating in education and training.

[435] Ministry of Manpower-Manpower Research and Statistics Department (2021), Labour Force in Singapore 2020 (mom.gov.sg).

Tan, B. Z. & Choo, A. (2020). The determinants of adult education: Evidence from an international study. Paper submitted for the Adult Education in Global Times: An International Research Conference (AEGT2020), Vancouver, Canada.

[436] OECD. (2016). PISA 2015: Results in Focus.

[437] The Singapore Workforce Development Agency (WDA) established the Singapore Workforce Skills Qualifications (WSQ) system in 2005, which is a national credentialling system that trains, develops, assesses and certifies skills and competencies. The WSQ is governed by four underlying principles (Figure 1), builds upon the previous work of the Singapore National Skills Recognition System (NSRS), and references the VET systems in the United Kingdom and Australia (IAL, 2017). All WSQ training programmes are based on competency standards that have been developed by WDA in collaboration with industry partners.

[438] Institute for Adult Learning (2017). *SkillsFuture Movement in Singapore*.

[439] Institute for Adult Learning (2017). *SkillsFuture Movement in Singapore*.

Financial constraints, selected by 16.1% of the SLS respondents, represented the second most important barrier to adult training.

In order to provide an effective policy response to such needs, the **SkillsFuture Movement**[440] was launched as a nation-wide initiative, open to all Singaporeans, providing opportunities for skills development and lifelong learning. The target is a workforce equipped with skills to remain relevant and future ready, whilst addressing unemployment in older age due to skill mismatches as a consequence of rapid innovation and digitalisation.

The SkillsFuture Movement includes several initiatives (e.g. Enhanced Internships, Education and Career Guidance (ECG), SkillsFuture Work-Study Programmes, SkillsFuture Study Awards, SkillsFuture Fellowships, P-Max, SkillsFuture Employer Awards), plus individual learning entitlements is the **SkillsFuture Credit** (SFC) introduced in 2015. The central features of the SFC scheme are threefold: (i) *giving individuals the autonomy and flexibility to decide about their training needs and goals* by not prescribing how the credits should be used; (ii) to *encourage working adults to be active learners and to invest in their continued learning journey* - SFC beneficiaries have generally completed their full-time education and are in the workforce or preparing to join the workforce; and (iii) *SFC can be used on top of existing Government course subsidies for a wide range of approved skills-related courses*, hence training is made even more affordable with the use of SFC.

The SkillsFuture Credit of S$500 (312 EUR) is given to all Singapore citizens aged 25 and above. It is not time expired and there are periodic top-ups from the government. Citizens can use their credits to claim from a wide range of SkillsFuture Credit eligible courses as well on top of existing government course subsidies to pay for the range of skills-related courses approved by SkillsFuture Singapore (SSG). In 2020, more than 188 000 Singapore citizens utilised their SkillsFuture Credit, an increase from 156 000 Singapore Citizens in 2019, who could choose among roughly 28 000 SkillsFuture Credit-eligible courses[441] in a wide range of training areas (e.g. Information and Communications, Personal Development, Pharmaceutical and Biotechnology etc.). As of end-August 2020, about 600 000 or 23.5% of eligible Singaporeans had utilised their SkillsFuture Credit (SFC). The latest available data for the breakdown by age groups is as of end-2019: the utilisation rate was approximately 16% among Singaporeans aged 60 and above, and around 22% among Singaporeans aged 25 to 39 years old and also 40 to 59 years old[442]. Since the launch of the SkillsFuture movement, there has been an increase in the annual training participation rate which cannot be attributed to just the SFC initiative but rather the movement as a whole. This is also explained by the ability of such interventions to adapt to the changing labour market scenarios: indeed, the SSG set up the Skills and Training Advisory services to provide skills and training needs support for individuals at various stage of their career, recommending suitable courses and programmes.

[440] The Singapore Government spent a total of $800 million on schemes to support Continuing Education and Training (CET). These schemes include the SkillsFuture measures by the Ministry of Education, and the Adapt & Grow measures by the Ministry of Manpower (Government of Singapore, 2020). The funding sources of the SkillsFuture movement (of which SFC is one of the many initiatives) include the following: Skills Development Fund (Skills Development Levy 0.25% of employee's salary); Government's Annual Education Budget; Lifelong Learning Endowment Fund (budgetary surpluses; initial sum of S$500 million); National Productivity Fund (received a top up of S$1 billion in 2017); SkillsFuture Jubilee Fund (Donations from employers, union and the public, dollar-for-dollar matching grant by the Government).

[441] Data provided by the Ting Sze Yun, Strategic Planning Division - SkillsFuture Singapore, July 2021.

[442] SkillsFuture credits utilisation data (2021).

Courses that are eligible under SFC include open online courses offered by training providers such as Udemy[443], Coursera[444], Udacity[445] and edX[446], which allow individuals to learn at their own pace and convenience[447]. There is a wide range of SFC approved courses offered by both local and online providers listed on the SFC course directory, and all of them have been pre-approved by SkillsFuture Singapore (SSG). SSG has put in place a set of guidelines that must be met before courses can be approved and added to the SFC course directory. Key course eligibility criteria include: (i) courses must be skills-related and have clear and relevant learning outcomes, (ii) courses must be open for individual registration (i.e. not restricted to employer-sponsored trainees), as well as (iii) courses with a total duration of at least 7 hours (excluding assessment and lunch) may be broken down into modules.

As a consequence of the pandemic, two SkillsFuture Credit top-ups were introduced in 2020. Unlike the broad-based SkillsFuture Credit, the top-ups were designed to expire in five years' time to encourage timely actions by individuals in reskilling and upskilling. First, a **one-off SkillsFuture Credit top-up** of S$500 was given to all Singapore citizens aged 25 and above as at 31 Dec 2020. The top-up can be used on a wide range of skills-related courses, on top of existing government course fee subsidies. A further one-time S$500 credit was given in the form of **additional SkillsFuture Credit (mid-career support)** to all Singapore citizens aged 40 to 60 (inclusive) to target citizens who are most likely to require retraining or upskilling. The additional SkillsFuture Credit can only be used on selected training programmes that support career transition (e.g. SGUnited Skills Programme (SGUS), SGUnited Mid-Career Pathways Programme – Company Training (SGUP – Company Training) and Career Transition Programmes).

Although no data is currently available about the utilisation rates of these top-ups, the training participation rate for the resident labour force aged 15 to 64 held up (49% in 2020, similar to a year ago) despite restrictions placed on in-person training due to the pandemic, as more people relied on online learning solutions[448]. Thanks to the above mentioned top-ups and the support programmes for career transition, training industry rebounded and companies increased their efforts to re-train their workers during the pandemic period. Similar to what happened during SARS, the training uptakes is very high whenever there is a downturn, because people go into very intensive training.

The assessment of the SkillsFuture Credit identifies some lessons learnt for future initiatives in terms of i) providing beneficiaries with clear evidence and detailed information in order to make informed decisions about their training choices, and ii) helping citizens, enterprises and training partners (Institutes of Higher Learning) to have the required job-skills insights and training support and iii) being prepared to adapt the initiative in the light of market changes, uneven take-up rates and in this case, the aftermath of the Covid-19 pandemic.

9.7. UK: Individual Learning Accounts

In England, a flexible open system was created which attracted much interest and brought in a range of new providers and learners but which also served many well qualified people. The scheme was brought to an end in 2002 because of concerns of serious misuse. In Scotland and Wales, the ILA

[443] Udemy is a massive open online course (MOOC) provider aimed at professional adults and students. As of April of 2021, the platform has more than 40 million students, 155,000 courses and 70,000 instructors teaching courses in over 65 languages. There have been over 480 million course enrolments. Students and instructors come from 180+ countries and 2/3 of the students are located outside of the U.S.

[444] Coursera is a massive open online course provider (MOOC) founded in 2012, providing online courses, certifications, and degrees in a variety of subjects. As of May 2021, Coursera is partnered with more than 200 institutions around the world and offers over 3,000 courses.

[445] Udacity is an online learning platform with over 160,000 students in more than 190 countries enrolled in 2021.

[446] edX is an massive open online course (MOOC) provider created by Harvard and MIT. s of 20 July 2020, edX has around 33 million[6] students taking more than 3,000 courses online.

[447] https://www.myskillsfuture.gov.sg/content/portal/en/index.html.

[448] Ministry of Manpower-Manpower Research and Statistics Department (2021), Labour Force in Singapore 2020 (mom.gov.sg)

programmes were more tightly targeted, utilised the existing provider base and were directly managed by Government organisations. As such they were much smaller programmes. All three programmes were successful in increasing the uptake of hard to reach groups of people, including labour market returners, people on low income, and those with no or low qualifications. However, comparisons also indicate that more targeted programmes increase additionality, and thereby the level of impact, but support smaller numbers of people.

The main driver of skills policy in the UK is because skills are a key element of productivity and thereby economic success. This was a major underpinning of ILAs: "Investment in human capital will be the foundation of success in the knowledge-based global economy of the 21st Century."[449]. People with lower skills are less likely to train, and incentives are needed to encourage them to do so[450]. Financial barriers are a major barrier to such people training[451].

ILAs were introduced in England in September 2000[452]. Their aim was to increase adult skill levels, and to address inclusion and diversity issues within adult education and training. The UK compares unfavourably to other OECD countries on lower and intermediate level skills, and on adults holding no qualifications[453]. Also, and in line with wider skills policies, there was a desire to create a demand-led system to improve the quality and responsiveness of providers[454], and to increase levels of personal investment in skills training[455] which were comparatively low[456]. Prior to their introduction, different versions of ILAs were piloted in different regions including universal and targeted ILAs. The final versions combined these two elements; ILAs were universally available but marketed to specific population groups[457]:

- young people between 19 and 30 with low qualifications;
- self-employed people;
- women returners to work;
- non-professional school staff; and,
- ethnic minorities.

The pilots also led to a change in the financial model of ILAs. Rather than an actual savings account, ILAs became virtual learning 'tokens'.

There were three incentives offered by the ILAs[458]:

- an initial incentive of £150 towards the cost of eligible learning for the first million account users, with a small contribution of at least £25 from the account holder;

[449] DfEE (February 1998) The Learning Age: a Renaissance for a new Britain. Department for Education and Employment (DfEE).

[450] Hillage, J. et. al. (2000) Adult Learning in England: A Review. The Institute for Employment Studies and National Institute of Adult Continuing Education.

[451] Beinart, S. and Smith, P. (1997) National Adult Learning Survey 1997. Department for Education and Employment.

[452] ILAs were introduced separately, and later, in Scotland and Wales (see later).

[453] OECD (1998) Education At A Glance: OECD Indicators 1998. Paris.

[454] Lee, B. (2010) The individual learning account experiment in the UK: A conjunctural crisis? Critical Perspectives on Accounting 21 (2010) 18–30.

[455] Owens, J. (September 2001) Evaluation Of Individual Learning Accounts – Early Views Of Customers & Providers Technical Report. Department for Education and Skills.

[456] Hillage, J. et. al. (2000) op. cit.

[457] National Audit Office (October 2002) Individual Learning Accounts.

[458] Ibid.

- a discount of 20% on the cost of a broad range of learning capped at £100[459]; and
- a discount of 80% on the cost of a limited list of basic IT and mathematics courses, limited to a total of £200 discount per account from October 2000.

Individuals and employers also received tax incentives if they 'topped up' their accounts. Total funding for 2000-2002 was £150 million. The programme was operated by a private contractor (Capita) who registered learners and set-up their accounts. Capita was also responsible for the register of providers from which learners could choose. There were relatively few programme targets in terms of the types of learners or provision they undertook. Programme objectives were operational, concerned with how the scheme would work rather than what it should achieve. The primary target was opening 1 million accounts by April 2002 which was exceeded. By July 2002 1.5 million learners had been registered. In the same year, 8,910 providers were registered to deliver learning through the ILAs.

English ILAs were withdrawn in 2002 because of concerns over serious misuse[460], and before the scheme could develop and deliver the anticipated impacts. An early evaluation was undertaken in 2001 and showed that there was a broad spread of people registering and redeeming their ILAs. There was a significant uptake from women (58%) and from employees of small firms (43%), as well as those: of non-white ethnicity (20%); in social classes DE[461] (19%); labour market returners (18%); with no qualifications (16%); and the self-employed (10%). However, one quarter were graduates and 40% qualified to at least NVQ Level 4[462]. ILAs were used to fund predominantly entry level courses, ICT in particular. Most learners (57%) had little or no prior knowledge of the subject, 48% could not have paid for the learning without an ILA, and 73% said the ILA increased their learning options[463]. An analysis after discontinuation concluded that the operation of the scheme by a private contractor with insufficient oversight had contributed to a lack of quality assurance and fraud prevention.[464]

It is difficult to assess the legacy of ILAs in England since the programme was curtailed before its planned end date. However, it is interesting to look at the development of **ILAs in Scotland and Wales** and what they learned from the experience in England.

Scottish ILAs (SILAs) began in December 2004 with similar aims to English ILAs i.e. widening participation, increasing participation amongst non-learners, and increasing personal investment in skills. The SILAs's target group was low earners. Unlike in England, SILAs could only be spent within the established provider base (300 approved providers). Furthermore, the programme was managed by Skills Development Scotland rather than subcontracted to a private sector organisation. Therefore, whilst the aims and principles were similar to English ILAs, SILAs were much more targeted, to be used with a narrower range of existing providers, and were directly managed by a Government organisation. In the first two years, SILAs funded around 60 000 learners, most of these undertook provision at a college (63%), and most courses were in ICTs, and leading to a qualification. However, 54% of learners were qualified to at least NVQ Level 4. Over half of learners would not have undertaken the course without the SILAs[465]. Levels of deadweight in Scotland were 27% compared to 44% in England. SILAs ran to 2017 when they were replaced by Individual Training Accounts (ITAs). ITAs are also targeted at those on low income, and in receipt of income related

[459] Those which enhance the learners' employability or increases their vocational skills. The learning need not necessarily lead to the learner achieving qualifications. Recreational courses were not permitted.

[460] The ILA programme was closed in November 2001 due to allegations of fraud (concerning a large number of account numbers that had been extracted from the system and offered for sale).

[461] This is a socio-economic classification ranging from A-E. Social classes DE are the two lowest classes in the classification.

[462] Owens, J. (September 2001) op. cit. and National Audit Office (October 2002) op. cit.

[463] Ibid.

[464] National Audit Office (2002), Individual Learning Accounts: Report by the Comptroller and Auditor General, HC 1235 Session 2001-2002: 25 October 2002.

[465] Cedefop (2009) Individual Learning Accounts.

benefits. Training must be within one of Scotland's priority sectors. By 2020, 47 000 learners had taken up an ITA. Over half (55%) were not in employment, training focused on the: construction (29%); fitness, health and beauty (12%), and transport sectors (9%)[466].

ILA Wales were introduced in 2003, with similar aims to those in Scotland and England. However, ILA Wales were more tightly targeted at people on income related benefits. Participants also had to have a qualification below NVQ Level 3[467]. An independent evaluation undertaken in 2007 reported that ILA Wales generated 7 126 registrations and 5 274 course starts. The evaluation found that there were impacts on participants in terms of employment (53% got a job); earnings (58% received a pay rise); and competencies (88% said their knowledge/skills had improved)[468]. The programme was ended in 2011 due to austerity. However, following a pilot in 2019, a national programme of Personal Learning Accounts (PLAs) was introduced with a similar remit to the original ILA Wales. By March 2021, 6 000 people had applied for a PLA and 3 000 had entered training.

10. Scenario analyses for the quantification of impacts

This section is in three parts and is concerned with the estimation of the impacts of the proposed EU initiative on individual learning accounts.

Section 10A – potential increases in net participation rates drive the estimates of impacts. This part of the section shows how the impact participation rates is estimated, how deadweight is applied, and how impacts could vary across Member States and for different groups.

Section 10B – sets out the results of the cost-benefit analysis, comparing the costs and benefits for the different packages and sub-packages.

Section 10C – provides estimates of the wider economic benefits that might derive from the initiative, based on modelling assumptions.

The estimation of participation rates and impacts is dependent upon the particular policy package under investigation, which are as follows:

Package A – Targeted vouchers on priority groups (50 hours of training delivered)

A1 – training entitlements for the low qualified

A2 – training entitlements for the economically inactive

A3 – training entitlements for the unemployed

A4 – training entitlements for employees of SMEs (less than 250 employees)

A5 – training entitlements for atypical workers (all workers who are not permanent employees)

Package B1 – training entitlements to all adults (30 hours of training delivered)

B1 – training entitlements for all adults

Package B2 – training entitlements to all adults, but with an enhanced package for certain priority groups (30 hours of training delivered to all adults, but priority groups provided with an additional 20 hours)

B2.1 training entitlements for all adults, enhanced for the low qualified

B2.2 training entitlements for all adults, enhanced for the economically inactive

[466] CIPD (January 2021) Skills to grow: the case for enhanced individual learning accounts in Scotland.

[467] Ibid.

[468] BMG Research (September 2007) Individual Learning Account Wales (ILAW): Fourth Main Evaluation Report. Welsh Assembly Government.

B2.3 training entitlements for all adults, enhanced for the unemployed

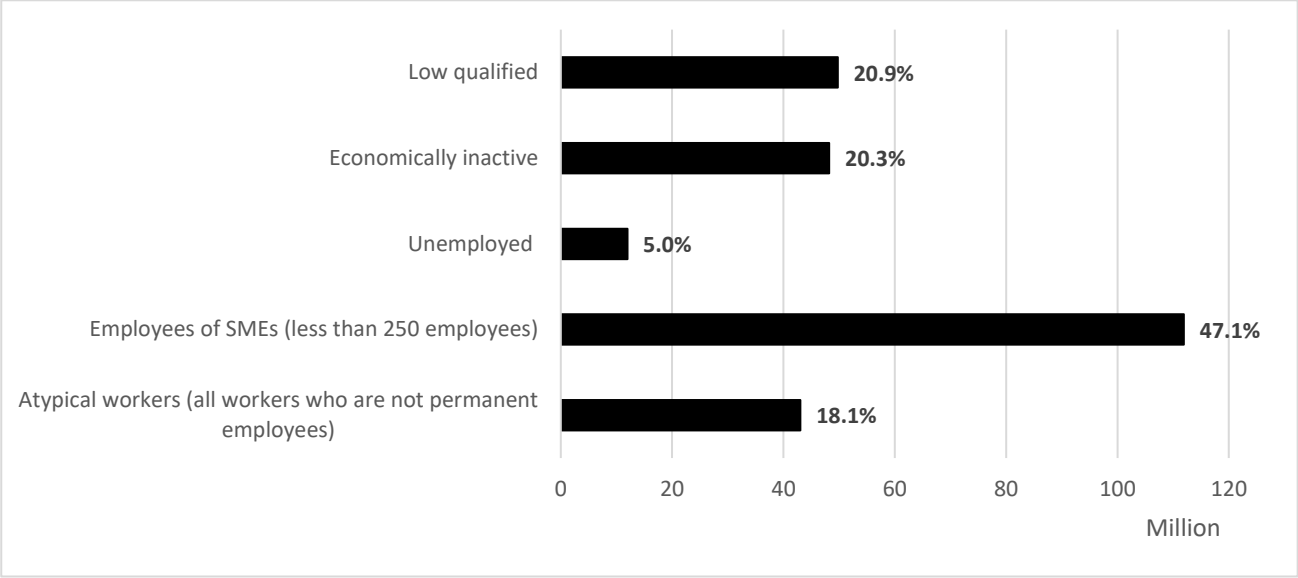
B2.4 training entitlements for all adults, enhanced for employees of SMEs

B2.5 training entitlements for all adults, enhanced for atypical workers (all workers who are not permanent employees)

The targeting of groups would be for Member States to decide in line with their policies and priorities. Additional target groups, based on experience elsewhere, could include workers aged 40/45 and over (a target group in Singapore – see section 9), and/or workers at risk of automation (e.g. plant operators, craft, agriculture, elementary occupations).

Figure 46 below shows the predicted 2030 size of the target group population (25-64 y.o.) at the EU-27 level, in absolute and relative values.

Figure 47 Predicted 25-64 y.o. EU-27 population in 2030 by target group (absolute values and as a % of the overall 25-64 population)



Source: Authors' elaboration based on Eurostat data (cf. chapter 4)

10.1. A. SCENARIO ANALYSES FOR THE QUANTIFICATION OF IMPACTS

10.1.1. Estimating the impact on participation rates

The first step in the methodology is to assess the impact of a training entitlement intervention on participation in training. The steps taken to produce the estimates were as follows:

- Identify the size of the target groups. In other words the total number of people in the population, in employment, unemployed, inactive, low skilled, in atypical employment, working in small and medium sized enterprises (i.e. with less than 250 employees);
- For each target group estimate the extent to which people will be likely to redeem the training entitlement and engage in training (not including deadweight). The proportions are derived from the evaluation evidence (this is explained in more detail below);
- Once the impact on take-up has been estimated, an adjustment is made for deadweight loss so to derive an estimation of the extent to which training is being delivered which would not otherwise have taken place. Two estimates are derived:

- The extent to which people entered training due to the policy packages who would not otherwise have been in any training at all (relevant for impacts on annual participation rates - section 10.1.A);
- The addition to the above estimate of those who trained more frequent or for longer (used in sections 10.2.B and 10.3.C to estimate broader economic impacts beyond yearly figures of participation in training).

Because the estimates of net and gross impacts are initially derived from common parameters for all EU member states, there is a need to make an adjustment to take into account that some Member States have much higher participation rates than others. In member states with low levels of participation under the baseline scenario, deadweight loss is expected to be lower, as there is less scope for displacing already existing training. This is also in line with evidence from the literature, which points to lower deadweight loss for individuals with lower participation rates. This is why it is necessary to modify the estimates to reflect country specificities.

The estimates of increases in participation in training are produced for 2030. To estimate the change in participation rates to 2030, the growth in participation recorded in the AES between 2007 and 2016 is extrapolated to 2030. This provides a new participation rate for 2030 (the 2030 baseline). In order to measure the impact resulting from the introduction of training entitlement, there is a need to estimate the additional number of people in training compared with the 2030 baseline.

Therefore, estimates are produced of the number of people who are likely to be in training in 2030 under each of the policy packages. This derived by looking at the impact on the different groups included in each of the policy packages (see below). These estimates of increases in participation in training are compared to the predicted changes in adult learning participation until 2030 under the baseline scenario

10.1.2. Identification of plausible levels of take up rates for individual training entitlements

The first step was to identify a benchmark estimate (and a range of plausible variation) for the rate of the take-up (or redemption) of a policy intervention providing individuals with training entitlements. As detailed in section 7, disaggregated yearly data on schemes providing individual training entitlements to sufficiently broad target groups hardly exist. One notable exception is a Swiss experiment (randomised control trial) reviewed in the scientific literature (see e.g. Schwerdt, et al. 2012)[469]. In section 7, take-up rates from such experiment were compared with those from other existing schemes for which information is available, including the French CPF and the SkillsFuture Credits in Singapore. An analysis was done controlling for relevant features of the schemes (e.g. cost-sharing, expiration period, target group, value of the training entitlement, accumulation etc.) and of the target groups. The analysis concludes that the Swiss experiment represents a credible middle ground scenario for the take up rate of an individual training entitlement that is similar to what outlined in the policy packages. It also indicates a possible range of variation (described below in section 10.1.8) and some expected differences in take up by educational attainment level and value of the training entitlement. These coefficients are summarised below in Table 28, together with the discussion on deadweight.

10.1.3. The treatment of deadweight

An overview on the issue of deadweight and additionality

As noted above, one wants to estimate the increase in training (or additionality) which takes place as a consequence of the intervention (i.e. the training that would not have taken place without the intervention). From any observed increase in training following the intervention there is a need to

[469] Schwerdt, G. & Messer, D. & Woessmann, L. & Wolter, S.C. (2012): The impact of an adult education voucher program: Evidence from a randomized field experiment, Journal of Public Economics, vol. 96(7-8), pp. 569-583.

control for deadweight (in this case the volume of training which would have taken place in any case without the intervention). There are at least two ways of measuring additionality:

(i) The increase in the number of people who would not otherwise have trained (captured by column II in the table below); and

(ii) The increase in the volume of training which takes place recognising that some people might have trained more or received higher quality training as a consequence of the intervention) This is captured in column III of of the table below.

Table 28 shows the different combinations of additionality and deadweight. While it is possible to derive estimates of the additional number of people who might have trained as a consequence of the intervention, it is more difficult to assess from the empirical evidence the extent to which there is an increase in the duration or quality of training. In addition, the effect of the training entitlement might extend beyond its value, in two other ways: (i) by triggering the use of private resources for training via (mandatory or) voluntary cost-sharing from individuals or their employers (ii) by influencing future training intentions. Whilst some evidence on the latter exists, it is not systematic.

Table 28 Classification of deadweight vs. additionality for an adult using training entitlements

I	II	III	IV
I would not otherwise have participated in training- *and on top, training entitlements crowd-in additional private resources or encourage me to participate more in the future*	I would not otherwise have participated in training	I would have participated in training anyway- *but to less a degree/at lower intensity*	I would have participated in training- *and to the same extent I do now*
Negative deadweight/ *resources crowded in: Take-up of training entitlements underestimates net increase in training participation*	No deadweight: *Take-up of training entitlements corresponds to net increase in training participation & economic additionality*	Partial deadweight: *economic additionality resulting from the higher training intensity*	Total deadweight: *no economic additionality*
Increase in the amount of training undertaken			
		Deadweight in the sense that the number of yearly participants in at least one training (*as measured in the adult learning participation rate*) does not increase	

As indicated above, this conceptual overview – which is of great importance in assessing the costs and the benefits of the intervention – was not systematically adopted in the literature due issues linked to the experimental design of the studies and computational complexities.

Thus, the main estimates described below are based on a conservative approach to deadweight, i.e. considering only the increase in training participation (column II). Proportions are derived from the scientific literature. Because the estimates derived from the scientific literature are from a few countries, an adjustment is made so that a series of member state specific deadweight estimates are derived (see below for an explanation of how these are produced). The estimate of deadweight is subtracted from the gross increase in training to provide a net impact or, in other words, the additionality that is likely to arise from the introduction of the training entitlement.

Table 29 reveals the sources and estimates from which the deadweight estimates were derived for the middle ground scenario – the one that is better supported in the scientific literature from a conservative perspective. Optimistic and pessimistic estimates derived from the variation revealed

in the scientific literature and are described and used for the sensitivity checks further below in section 10.1.8. For now the focus is upon the middle ground estimate[470].

Table 29 Estimates used to derive estimates of the impact on participation levels

	Middle Ground
Gross impact (i.e. proportion who take up training regardless of any deadweight – the redemption rate of training entitlements)	18.4 % for the general population and 9.5% for the low skilled only (Schwerdt, et al. 2012)[471]. All the other target groups use the average rate in absence of more granular and consistent info on heterogeneity (see section 7). This value rises to c. 22% (13.1% for the low skilled) based on a higher value voucher (based on Messer and Wolter, 2009, for a 50-hour voucher)
Deadweight - *for calculating impacts on adult learning participation rates*	30% (Schwerdt et al., 2012)
Deadweight- *for assessing broader impacts of increased participation in section 10B and 10C*	22.8% (Schwerdt et al. 2012 corrected for the share of people who trained more as per Messer and Wolter 2009).

Deadweight taking a broader view of additionality (i.e. focusing on the number of additional trainings undertaken and not the number of new people in at least one training in the same year) is later used in section 10.2.B and 10.3.C, as from an economic perspective all the additional training undertaken generates benefits. In this case, the benchmark level of deadweight considered is 22.8% (Schwerdt et al., 2012 corrected for the share of people who might have trained more as per Messer and Wolter, 2009).

Further details on the treatment of deadweight

For the interested reader this section provides more detailed information on the treatment of deadweight. For those more interested in the results it is suggested that they move straight to section 4.

Important in the study is deriving robust estimates derived from the literature of the impact on participation rates and a nuanced understanding of deadweight as indicated in the figure above.

The concept of deadweight in its simplest configuration (DW) can be measured as:

- DW = Pnt/Pt

Where

Pt = participation rate of the treated group (redemption rate)

Pnt = participation rate of the non-treated group

This configuration is standard practice in the literature given the inherent difficulties to gauge within an experimental design differences in the quality/ extent of the training undertaken. For instance, in Schwerdt et. al. (2012) the variable of interest is drawn from the Swiss Labour Force Survey (SLFS). In particular "*the selected SLFS module was the one that asked participants subsequently whether they had attended fee-based courses within the past 12 months*". Their conclusion is that "[..]*the estimate shows that receiving a voucher increases the probability to participate in an adult education course in 2006 by 13 percentage points*". This can be interpreted as the causal net impact on adult learning participation. This approach is common to other experimental and quasi-experimental

[470] See also section 8.2.2 Controlling for deadweight

[471] Schwerdt, G. et al. (2012): The impact of an adult education voucher program: Evidence from a randomized field experiment, Journal of Public Economics, vol. 96(7-8), pp. 569-583.

studies discussing the impact of vouchers on training participation, including Messer and Wolter (2009)[472], Hidalgo et. Al (2014)[473] etc.

As argued by Bauer et al. (2019),[474] the mere fact that individuals would have undertaken some form of training even without support does not imply the absence of additional – economically valuable – training which was followed by participants thanks to the voucher (i.e. beyond the net effects on adult learning participation). In this more nuanced configuration, participants who would have participated in training activities, but e.g. of lower value/duration or in the same reference year cannot be completely discounted from an assessment of the economic additionality of the voucher. One might also want to consider, in a fine-grained approach, whether there has been an effect in terms of training which have been followed earlier than planned without the voucher.

Unfortunately no clear experimental evidence is available that employs such a nuanced assessment of the deadweight, but one example that delves a little further into the issue of deadweight is the first review of the Swiss experiment from Messer and Wolter (2009), where a set of regressions are applied to the relation between voucher value and number of training activities followed within a year. The number of training activities is a discrete non-standardised measure which does not necessarily inform about the actual economic value of the training undertaken (it is impossible to distinguish between two 20-hour training sessions and one 40-hour one). However, it might, in practice, be reasonable to assume that there is a certain average duration of typical training offers and that therefore the number of training is a proxy to measure additionality of the vouchers beyond the net effects on adult learning participation.

Based on their findings, multiple participation in courses is not widespread (25 per cent of those receiving training). Their estimates though indicate that this is around 9 per cent higher than the control group.[475]

In Bauer et al (2019), participants were posed counterfactual questions asking them to reflect about what would have happened to their training participation in the absence of the educational bonus (voucher). Possible answers included:

- I undertook a training of higher quality/price thanks to the voucher (24 per cent of respondents)
- I was able to participate earlier than planned thanks to the voucher (41 per cent of respondents)
- I was able to participate in additional training beyond what purchased with the voucher thanks to it (45 per cent of respondents)

The conclusion from the research is that the actual full deadweight from this specification of the survey goes down from 41 per cent to 15 per cent.

In addition to the effect on training in the current year, a few studies discussed the impact on subsequent participation in adult learning. The rationale for such an investigation is that a comprehensive review of deadweight loss should also consider if there is a causal effect of public support to participation in adult learning which stretches beyond the year of the support.

In Schwerdt et. Al (2012) the estimates produced with the instrumental variable approach, hence those that should produce the more reliable results in terms of causality, find small positive effects on subsequent private investments in adult education. A similar finding is included in Hidalgo et. Al

[472] Messer, D.,Wolter, S., (2009): Money matters: evidence from a large-scale randomized field experiment with vouchers for adult training. Technical Report, IZA Discussion Paper 4017.

[473] "Relative to a base two-year training participation rate of 45%, receiving a voucher increases training participation by almost 20 percentage points.".

[474] Bauer, P. et al. (2019): *Evaluation des Bundesprogramms Bildungpramie (BIP)* Kantar, Public Division, München.

[475] Such values are however only statistically significant for vouchers of 1,500 CHF (EUR 1,200).

(2014) examining the Dutch experiment on vouchers offered to the low skilled workers. Results from the estimations show that voucher receipt affects the plans to enrol in a course over the subsequent 6 months by 20 p.p. Although this is a measure of the "intention to train further" and not actual and measured additional private investment in training, it is another confirmation that public stimulus might change the attitude of the individuals towards further training opportunities. Perhaps the key point here is that the future intention to continue to train is likely to have some reduce any tendency towards participation rates diminishing in the future.

As noted above, training entitlements can also stimulate private investment in training (i.e. that individuals or their employers top-up the training entitlement in some way). In the case of the CPF in France the incidence of crowding-in funding was low, but in the experiment with vouchers in Switzerland it was as high as 50 per cent. While this will not necessarily affect the number of people engaged in training, it is likely to have some impact on the overall duration and / or quality of the training experience. In order to indicate how this might affect overall participation, zero deadweight has been assumed in the estimation process. In effect, the contribution of crowding-in wipes out any deadweight.

10.1.4. Accounting for differences in Member State's existing participation levels

The discussion above clarifies that, to identify the net increase in participation in training that is caused by the training entitlement (the true effect the policy), an estimate is required of the deadweight associated with it. This estimate needs to be derived from a randomised control trial (RCT) so that it is possible to observe the behaviour of those who were provided with a training entitlement (the treatment group) and those who were not (the control group) while ensuring that like is being compared with like. This is necessary as the motivation to learn might vary substantially across individuals irrespective of any background feature one can observe and measure. This makes it impossible to account for self-selection in training based on the observable characteristics of the participants. Hence the difficulty to identify credible control groups in other studies on training entitlements that are based on quasi-experimental counterfactual approaches. However, there are relatively few RCTs which examine training entitlements or vouchers. Schwerdt et al. (2012) is one of the few RCTs which has been published in a peer reviewed journal, and the only one where an experiment is done with a voucher that is offered to a broad target group (i.e. a randomly selected sample of the whole population aged 20-60).[476] Hence the reliance on this paper as a source of information on deadweight. But is based on the experiences of Switzerland which has a relatively high participation in training rate by EU standards. Accordingly, there is a need to modify the estimates provided by Schwerdt et al. (2012), the most credible source of evidence[477], so that deadweight estimates reflect to some extent levels of participation in each Member State, given that such estimates have to be created as opposed to being derived directly from the literature.

There is also a need to take into consideration differences between member states. Participation rates vary substantially between member states. It seems reasonable to assume that where participation rates are relatively high this might limit the scope for further net increases in participation to take place (or at least increases not subject to deadweight loss). For instance, arguably there is more scope to increase rates in Romania where the AES reported that 6 per cent of individuals had trained in the last 12 months than in, say, Sweden where the corresponding rate was 59 per cent. To correct for this an estimation of deadweight by Member States was imputed as follows.

For the population of the country as a whole, assume that the level of deadweight will be the same as in Schwerdt et al. (2012) – i.e. 30 per cent. Because this estimate was derived from a country with a high level of participation in training, there is a need to correct for this. To do this, the gross

[476] Schwerdt, G. et al. (2012): The impact of an adult education voucher program: Evidence from a randomized field experiment, Journal of Public Economics, vol. 96(7-8), pp. 569-583.

[477] Utilising a random assignment of training entitlements to a representative sample of the working age population.

participation rate in country *x* is divided by that for Switzerland (62 per cent) and multiplied by the deadweight factor (i.e. 30 per cent). For example, if the case of Romania is taken, the calculation is:

- 5.9 (the rate for Romania) /61.9 (the rate for Switzerland) *0.3 (the deadweight reported in the Swiss study). This gives an adjusted estimate for Romania of 0.03, whereas that for Sweden is 0.27.

In essence, one is saying that the deadweight in Romania will be proportionately lower in Switzerland to same extent that its participation rate is proportionately lower. Without this adjustment the rate of deadweight would always be the same as in Switzerland which has a relatively high level of training participation. But it is also the country with the most robust evaluation data. The estimates of deadweight loss for each Member State are shown in Table 31 below.

Table 30 Member State specific deadweight loss estimates

	EU-27 (from	Belgium	Bulgaria	Czechia	Denmark	Germany	Estonia	Ireland	Greece	Spain	France	Croatia	Italy	Cyprus
Population (25 to 64)	0.24	0.25	0.07	0.14	0.32	0.29	0.21	0.29	0.10	0.19	0.31	0.17	0.21	0.28
All in employment (25 to 64)	0.27	0.30	0.10	0.16	0.34	0.32	0.24	0.33	0.13	0.21	0.35	0.23	0.26	0.33
All unemployed (25 to 64)	0.16	0.24	0.02	0.12	0.25	0.18	0.16	0.25	0.07	0.18	0.27	0.09	0.15	0.20
All inactive (25 to 64)	0.13	0.12	0.03	0.10	0.25	0.22	0.11	0.17	0.06	0.15	0.13	0.05	0.12	0.12
All low skilled (25 to 64)	0.11	0.10	0.01	0.03	0.20	0.15	0.10	0.13	0.02	0.09	0.14	0.04	0.10	0.13
All low skilled in employment (25 to 64)	0.15	0.13	0.03	0.04	0.24	0.16	0.12	0.17	0.02	0.08	0.19	0.09	0.14	0.17
All workers who are not permanent employees (25 to 64)	0.26	0.28	0.08	0.17	0.29	0.31	0.25	0.27	0.11	0.20	0.31	0.21	0.25	0.24
All working in enterprises < 250 emps (25 to 64)	0.27	0.29	0.10	0.15	0.33	0.31	0.23	0.32	0.14	0.20	0.35	0.23	0.24	0.33

	Latvia	Lithuania	Luxembourg	Hungary	Malta	Netherlands	Austria	Poland	Portugal	Romania	Slovenia	Slovakia	Finland	Sweden
Population (25 to 64)	0.25	0.16	0.27	0.35	0.21	0.37	0.35	0.13	0.24	0.04	0.25	0.27	0.32	0.37
All in employment (25 to 64)	0.28	0.20	0.31	0.43	0.25	0.41	0.39	0.17	0.28	0.04	0.31	0.33	0.35	0.39

	Latvia	Lithuania	Luxembourg	Hungary	Malta	Netherlands	Austria	Poland	Portugal	Romania	Slovenia	Slovakia	Finland	Sweden
All unemployed (25 to 64)	0.17	0.04	0.25	0.17	0.20	0.35	0.30	0.05	0.16	0.07	0.14	0.09	0.18	0.22
All inactive (25 to 64)	0.12	0.04	0.15	0.12	0.09	0.21	0.22	0.05	0.11	0.02	0.13	0.06	0.30	0.33
All low skilled (25 to 64)	0.12	0.04	0.11	0.26	0.13	0.21	0.17	0.03	0.15	0.01	0.07	0.05	0.22	0.26
All low skilled in employment (25 to 64)	0.16	0.06	0.14	0.42	0.17	0.28	0.23	0.05	0.19	0.01	0.13	0.14	0.25	0.26
All workers who are not permanent employees (25 to 64)	0.26	0.16	0.29	0.36	0.19	0.40	0.38	0.13	0.23	0.02	0.28	0.26	0.31	0.34
All working in enterprises < 250 emps (25 to 64)	0.28	0.20	0.29	0.42	0.26	0.39	0.38	0.17	0.27	0.05	0.31	0.35	0.35	0.39

Source: Own estimates derived from Schwerdt et al. (2012) and AES2016

10.1.5. Producing estimates for 2030

Training participation rates (prior to the intervention) have been increased by a third representing the overall trend in participation recorded in the AES between 2007 and 2016 (see chapter 4). Labour Force Survey data have been weighted by the projected change in population in the EU between 2019 and 2030. [478]

10.1.6. Estimating the impact of additional training entitlements on the take up rate

As part of the analysis an indication is required about what might happen if the value, or the duration of training provided by a training entitlement were to be increased for priority target groups. The evidence from Messer and Wolter's discussion paper, which presents results from Swiss voucher scheme, indicates that if the value of a voucher is increased from a low to middle value (i.e. from approx. EUR 160 to approx. EUR 600 in the Swiss case), this can have a substantial increase on participation rates.[479] But if the value is increased from a middle to high value (i.e. approx. EUR 600 to approx. EUR 1 200) the increase is much smaller. In order to estimate the impact on participation rates of an increase in the value of a voucher worth 30 hours of training (approx. EUR 500 in Western European countries), we assume, for our "middle ground" scenario, that this will have the same level of uplift on participation rates as the average case in the Swiss example (i.e. the participation rate in

[478] LFS data from 2019 were used in case there was a possible temporary effect of the pandemic on participation rates in 2020.

[479] Messer, D. and Wolter, S. (2009): Money matters: evidence from a large-scale Randomized field experiment with vouchers for adult training. CESifo Working Paper, No. 2548. The results from the working paper have been used in the analysis because this is one of the very studies which uses an experimental design which includes the random allocation of vouchers of different value to individuals.

training will be 18.4 per cent). But if the value of voucher is raised from 30 hours (approx. EUR 500) to 50 hours (approx. EUR 750 in Western European countries), it is assumed that this will bring about an increase in training similar to that recorded in the Swiss case where the voucher was CHF 1 200 (i.e. 22 per cent). Due to evidence of a lower take-up of the low qualified, the corresponding assumed take-up rates among the low-qualified are 9.5 and 13.1%, respectively.

10.1.7. Estimated impacts on participation rates

Based on the estimation process described above Table 3132 provides an estimate of the additional number of people likely to be in training – controlling for deadweight – in the EU-27 and each Member State by 2030 for each of the policy scenarios outlined in the previous section. This is based upon the estimates of take-up and deadweight reported in Schwerdt at al. (2012).

Table 31 shows the potential additional participation in training by Member State and for the EU-27 and for the different packages and sub-packages, a possible 33 million participants under B1 (all adults of working age receive an entitlement) representing a marginal gain in participation of 14.1% (see Table 32).[480] The targeted vouchers deliver lower volumes and marginal gains as would be expected whilst the B2 sub-packages deliver higher volumes and rates than B1 as a result of additional financial incentives for priority groups. As increases depend on the size of the target group, these are comparatively larger for target groups that are overrepresented in a given country. For instance, the large proportion of low qualified (A1) in Italy means that, if targeted, they would raise overall participation levels more than in Finland, where they are underrepresented. Increases are also higher in countries with lower levels of participation, given the smaller estimated deadweight loss.

[480] Note that sub-packages cannot be aggregated given overlaps in the target groups

Table 31 Net increases in participation in training in p.p. and absolute values, by Member State and Policy Package

Policy Packages	A1	A2	A3	A4	A5	B1	B2.1	B2.2	B2.3	B2.4	B2.5	
EU-27	**5.8**	**9.2**	**2.2**	**18.2**	**7.1**	**33.6**	**35.0**	**35.1**	**34.0**	**36.6**	**34.8**	**Million people**
	2.4	**3.9**	**0.9**	**7.6**	**3.0**	**14.1**	**14.6**	**14.7**	**14.2**	**15.3**	**14.5**	Percentage Points
Belgium	2.4	4.4	0.6	6.0	2.2	13.8	14.4	14.5	13.9	14.8	14.1	
Bulgaria	2.2	4.2	0.8	9.5	2.1	17.0	18.0	17.7	17.2	18.6	17.4	
Czechia	0.8	3.1	0.4	11.0	3.1	15.7	17.4	16.3	15.8	17.5	16.3	
Denmark	1.9	2.7	0.7	7.0	2.2	12.5	13.2	13.0	12.6	13.7	12.9	
Germany	1.6	2.7	0.5	7.7	2.6	13.0	13.9	13.4	13.1	14.3	13.4	
Estonia	1.1	2.8	1.0	9.6	1.4	14.5	15.7	14.9	14.6	16.0	14.7	
Ireland	1.6	3.9	0.6	6.8	2.7	13.1	14.0	13.7	13.1	14.2	13.5	
Greece	2.7	5.0	2.4	7.7	3.7	16.5	17.2	17.4	16.9	17.8	17.1	
Spain	4.4	3.7	2.0	7.8	1.9	14.9	14.5	15.5	15.2	16.1	15.2	
France	2.1	4.0	0.9	6.5	3.1	12.8	13.4	13.4	12.9	13.8	13.3	
Croatia	1.7	5.4	1.0	9.2	3.3	15.3	16.4	16.2	15.4	16.8	15.8	
Italy	4.4	5.6	1.1	7.3	3.3	14.5	14.1	15.4	14.6	15.6	15.0	
Cyprus	1.9	3.3	1.0	8.6	3.2	13.2	14.0	13.7	13.4	14.6	13.7	
Latvia	1.0	2.8	1.2	9.3	1.4	13.9	15.2	14.3	14.1	15.4	14.1	
Lithuania	0.6	2.9	1.5	9.4	1.8	15.5	17.2	16.0	15.7	17.0	15.8	
Luxembourg	2.4	3.8	0.7	5.9	1.0	13.4	13.9	14.0	13.5	14.3	13.5	
Hungary	1.4	3.7	0.5	6.7	1.8	12.0	12.8	12.6	12.1	13.1	12.3	
Malta	4.8	3.7	0.5	6.9	3.2	14.6	13.9	15.2	14.7	15.7	15.1	

Policy Packages	A1	A2	A3	A4	A5	B1	B2.1	B2.2	B2.3	B2.4	B2.5
Netherlands	1.9	2.8	0.3	4.3	3.6	11.7	12.3	12.1	11.7	12.4	12.3
Austria	1.6	3.4	0.6	6.8	2.1	12.0	12.8	12.5	12.1	13.1	12.3
Poland	0.9	4.7	0.4	8.3	5.1	16.0	17.6	16.7	16.0	17.3	16.8
Portugal	4.9	3.3	0.9	8.7	4.5	14.0	13.2	14.5	14.1	15.4	14.7
Romania	2.6	5.0	0.7	10.3	2.8	17.8	18.5	18.5	17.8	19.4	18.2
Slovenia	1.2	3.5	0.7	5.7	2.9	13.7	14.9	14.3	13.8	14.7	14.2
Slovakia	0.9	4.1	1.0	8.3	2.7	13.4	14.8	14.1	13.6	14.8	13.9
Finland	0.9	2.5	0.9	7.9	3.2	12.4	13.6	12.8	12.6	13.7	12.9
Sweden	1.3	1.6	1.0	7.7	2.9	11.5	12.4	11.8	11.7	12.8	12.0

10.1.8. Sensitivity checks

Given that there is a degree of variation around the level of (i) take-up rates and (ii) deadweight loss, there is an interest in assessing their implications– i.e. to test the sensitivity of the overall of additionality to the assumptions which are made about take-up rates and deadweight.

To this end, it was decided to estimate the impacts of relatively high (pessimistic) and low (optimistic) levels of deadweight and take up rates. The relatively high and low estimates were obtained from looking at the variation reported around the estimates contained in the scientific literature as discussed in section 7 and recalled here below.

Table 32 Sensitivity checks

Sensitivity check	Choice of parameters
Deadweight (high)	**60%**, scaled down by target group and MS as per the procedure described in section 10.1.4. This value is drawn from Hidalgo et al. (2014), which suggest that deadweight can be as high as 60 per cent.[481] [482]
Deadweight loss (low)	**0%** There is evidence from the CPF in France and experiment Schwerdt et al. (2012) report that the provision of entitlements stimulates private investment). There is also evidence of small but statistically significant impacts of training entitlements on future training intentions from both Schwerdt et al. (2012) and Hidalgo et al. (2014). In order to take into account these impacts, a sensitivity check is considered where they offset deadweight losses and reduce them to 0.
High take-up rate	30% scaled by target group and value of the voucher following the same approach of the main estimates
Low take-up rate	10% scaled by target group and value of the voucher following the same approach of the main estimates

The data reveals that if different levels of take up or deadweight arise then the impact on levels of participation can be significant. The baseline data refers to the participation level which is likely to arise in absence of any intervention.

The main estimate is based as in section 7 on the level of take-up and deadweight in the Swiss experiment reported by Schwerdt et al (2012). This clarifies that policy packages which offer individual training entitlements to the whole population (B1 and B2.x) would suffice to reach the objective of at least 60% of the population in training by 2030.

The following rows refer to differing levels of take-up and deadweight as explained above. They show that even in presence of high deadweight loss or low take-up rates, the gap towards the 60% threshold would be significantly cut with policy packages B, with average net increases in training participation of around nine percentage points vis-à-vis the baseline.

[481] Doets, C. and Huisman, T. (2009) Effectiveness of Individual Learning Accounts. Amsterdam: Ecbo; Messer, D., and Wolter, S. (2009): Money matters: evidence from a large-scale randomized field experiment with vouchers for adult training. Technical Report, IZA Discussion Paper 4017.

[482] Hidalgo, D., Oosterbeek, H. and Webbink, D. (2014): The Impact of Training Vouchers on Low Skilled Workers. *Labour Economics* 31, pp.117-128.

Table 33 Overall participation rates at the EU-27 by policy package and target group - baseline, main estimate and sensitivity checks

Policy Packages	Package ID	A1	A2	A3	A4	A5	B1	B2.1	B2.2	B2.3	B2.4	B2.5
	Focus of the package	Low qualified	Inactive	Unempl	Workers in SMEs	Workers not in permanent empl	General population	General + low qualified	General + Inactive	General + Unempl.	General + Workers in SMEs	General + not in perm empl.
Baseline												
Predicted participation rate (baseline)	Target group	23.4	27.7	33.8	54.6	52.9	48.6	23.4	27.7	33.8	54.6	52.9
	Whole population	48.6	48.6	48.6	48.6	48.6		48.6	48.6	48.6	48.6	48.6
Main estimate												
Middle ground take-up and DWL	**Target group**	**35.0**	**46.7**	**52.2**	**70.8**	**69.3**	**62.7**	**35.0**	**46.7**	**52.2**	**70.8**	**69.3**
	Whole population	**51.0**	**52.5**	**49.5**	**56.2**	**51.6**		**63.2**	**63.3**	**62.8**	**63.9**	**63.2**
Sensitivity checks												
Low (0%) deadweight loss	Target group	36.5	52.0	55.8	76.6	74.9	67.0	36.5	52.0	55.8	76.6	74.9
	Whole population	51.4	53.1	49.7	59.0	52.6		67.8	67.8	67.2	68.7	67.7
High (60%) deadweight loss	Target group	33.4	43.5	48.2	64.3	63.0	57.9	33.4	43.5	48.2	64.3	63.0
	Whole population	50.7	51.8	49.3	53.2	50.4		58.2	58.4	58.0	58.6	58.2
High take-up rate	Target group	43.4	65.0	68.8	89.6	87.9	67.0	43.4	65.0	68.8	89.6	87.9
	Whole population	52.8	55.7	50.4	65.1	55.0		79.7	79.6	78.9	81.0	79.5
Low take-up rate	Target group	30.4	42.0	45.8	66.6	64.9	58.6	30.4	42.0	45.8	66.6	64.9
	Whole population	50.1	51.1	49.2	54.3	50.8		59.0	59.0	58.7	59.6	59.0

10.1.9. Estimates on the effects on training participation gaps across countries

Table 34 Cross-MS comparison of changes vs baseline participation rates, by group of country

	Baseline 2030 participation rates	A1	A2	A3	A4	A5	B1	B2.1	B2.2	B2.3	B2.4	B2.5
Countries with high participation	67.8	69.4	70.9	68.5	74.7	70.5	80.2	81.0	80.6	80.3	81.3	80.6
Countries with average participation	51.4	53.6	55.1	52.3	59.1	53.9	65.2	65.8	65.8	65.3	66.4	65.6
Countries with low participation	27.8	30.1	32.0	28.9	36.7	30.8	43.7	44.5	44.4	43.9	45.2	44.2
Gap (high - low)	40.0	39.3	38.9	39.6	37.9	39.7	36.4	36.4	36.2	36.4	36.1	36.4
Reduction in gap (p.p.)		**0.70**	**1.16**	**0.40**	**2.07**	**0.31**	**3.58**	**3.59**	**3.77**	**3.64**	**3.92**	**3.63**
Reduction in gap (%)		**1.8%**	**2.9%**	**1.0%**	**5.2%**	**0.8%**	**8.9%**	**9.0%**	**9.4%**	**9.1%**	**9.8%**	**9.1%**
Country with highest values (SE)	76.6	77.9	78.2	77.6	84.3	79.5	88.1	89.0	88.4	88.3	89.4	88.6
Country with lowest values (RO)	7.5	10.1	12.5	8.2	17.9	10.3	25.3	26.1	26.1	25.4	27.0	25.7

Table 35 above highlights the likely variation in the cross-MS gaps. The average predicted participation rate of the countries having the 9 highest participation rates in 2016 (and 2030) is compared with that of the 9 countries with the lowest participation rates in the same years. This allows an appraisal of the comparative effect of the different policy packages in terms of the evolution of the gaps across Member States.

As apparent from the values highlighted, all policy packages contribute to reducing the gaps in participation rates. However, there is significant variation across the policy options. The largest reduction in gaps is observed for the policy packages B1 and B2, with a relative reduction of around 9%. Policy packages A1-5 ensure smaller reductions in gaps, given the smaller target groups.

10.1.10. Estimates on the effects on training participation gaps across target groups

Table 35 Comparison of changes vs baseline participation rates, absolute values and gaps, by target group and policy package

Targed group	Indicator	Baseline 2030 participation rates	A1	A2	A3	A4	A5	B1	B2.1	B2.2	B2.3	B2.4	B2.5
Low skilled	Abs. Value (participation rate)	23.4	35.0	*23.4*	*23.4*	*23.4*	*23.4*	31.8	35.0	*31.8*	*31.8*	*31.8*	*31.8*
	Gap with overall pop (p.p.)	25.2	16.0	*29.1*	*26.1*	*32.8*	*28.2*	30.9	28.2	31.5	31.0	32.1	31.3
	Gap with overall pop (% variation)		-36%	15%	4%	30%	12%	22%	12%	25%	23%	27%	24%
Inactive	Abs. Value	27.7	*27.7*	46.7	*27.7*	*27.7*	*27.7*	43.6	*43.6*	46.7	*43.6*	*43.6*	*43.6*
	Gap with overall pop (p.p.)	20.9	*23.4*	8.0	*22.4*	*33.0*	*25.6*	19.1	19.6	16.6	19.2	20.3	19.5
	Gap with overall pop (% variation)		12%	-62%	7%	58%	22%	-9%	-6%	-21%	-8%	-3%	-7%
Unemployed	Abs. Value	33.8	33.8	33.8	52.2	33.8	33.8	49.2	49.2	49.2	52.2	49.2	49.2
	Gap with overall pop (p.p.)	14.8	*17.2*	21.0	*-2.1*	*26.9*	*19.5*	13.5	14.1	14.1	10.6	14.7	14.0
	Gap with overall pop (% variation)		16%	41%	-114%	82%	32%	-9%	-5%	-5%	-28%	-1%	-6%
Working in SMEs	Abs. Value	54.6				70.8						70.8	
	Gap with large companies (p.p.)	17.0				0.83						1.33	
	Gap with large companies (% variation)					-95%						-25%	
Workers not in permanent empl.	Abs. Value	52.9					69.3						69.3
	Gap with permanent employees (p.p.)	6.1					**-10.3**						13.8
	Gap with permanent employees (% variation)						**-269%**						-54%

Source: authors' elaboration.

N.B. due to partial overlap between target group and the lack of granular data, the participation rates for the non target groups might be slightly underestimated and their gaps overestimated.

Another important assessment in the light of the policy objectives of the initiative of closing access to training gaps, is the evolution of gaps in training participation across target groups. Table 36 investigates this issue by displaying the absolute and relative changes in the gaps for the five target groups discussed and across all policy packages.

The values presented suggest the following key findings:

- if the focus is on the low skilled, due to their typically low take-up rates, then only by targeting them in A1 it is possible to reduce their participation gaps. This, of course, holds for an average hypothetical scenario that does not consider specific outreach strategies put in place to encourage their participation;
- for the inactive and unemployed, although the main net gains are generated by the policy packages that target them specifically, also B1-B2 are likely to positively influence their participation gaps. This is due to the fact that deadweight loss is on average lower for these target groups;
- whenever a single target group is provided with training entitlements, the related increases in participation raise the average participation rate (for the overall population) thus exacerbating the gaps of any group with lower-than-average participation rates that is not targeted by the same policy;
- when the target of the policy package is workers in SMEs or not in permanent employment, the training entitlements should suffice to completely close (workers in SMEs) or significantly reduce (workers non in permanent employment) their participation gap vis-à-vis workers in large companies and workers in permanent employment, respectively.

10.1.11. Estimated impacts on participation rates for additional target groups

Under both policy packages, it is left to Member States to specify priority target groups for training entitlements, leading to a large number of potential scenarios. This sub-section provides estimates on the impacts on 2030 participation rates of providing a 50-hour training entitlement to three additional groups that are not considered further in the analyses below, but that are plausible priority target groups based on the problem analysis, notably:

- Low and medium qualified: this extends the target group of policy package A1 to the medium qualified, on account for their possible need of specific support as highlighted by the literature on skills polarisation[483]
- Individuals aged 45-64, who may suffer from a higher risk of skills obsolescence;484
- Workers in occupations with a high risk of automation, and especially Plant and machine operators, workers in Craft and related trades, Skilled Agricultural and Elementary occupations[485]

[483] See for instance Cedefop's focus on skills polarisation, stressing that "*demand for medium-skilled intermediate occupations is falling, while demand in both high-skilled and low-skilled occupations is rising*"

[484] See amongst others OECD (2019), Working Better with Age, OECD Publishing. In line with this, as indicated in Chapter 10, specific top-ups are granted in the SkillsFuture credit scheme in Singapore to elder individuals.

[485] ISCO-08, occupations 6, 7, 8 and 9

Table 36 Effects on 2030 participation in training for three additional target groups under policy package A

Focus of the package		Package A - Low and medium qualified	Package A- Individuals aged 45-64	Package A- Workers in occupations at a high risk of automation
Baseline				
Predicted participation rate (baseline)	Target group	37.1	42.0	33.6
	Whole population	48.6	48.6	48.6
Main Estimate (Middle ground take-up and DWL)				
Net increase in AL participation	**Target group**	**17.4**	**17.5**	**18.4**
	Whole population	**10.6**	**9.2**	**4.3**
Overall 2030 AL participation rates	**Target group**	**52.8**	**59.5**	**52.0**
	Whole population	**59.8**	**57.8**	**53.0**

Table 37 above reveals the predicted 2030 participation rates for the three additional target groups of policy package A in terms of baseline values, net (marginal) increases and overall participation rates.

Looking at the baseline values, individuals in the age range 45-64 show the smallest gap from the participation rate of the overall population, but this is still above 6 p.p. Such predicted gap is over 11p.p. for the low and medium qualified and stretches until 15 p.p. for workers in occupations at a high risk of automation.

The net increases in participation are highest for workers in occupations at a high risk of automation, given a predicted take-up rate in line with the average and lower-than-average deadweight loss. This translates into overall participation rates that would come very close to the population average, closing the gap from 15 p.p. to just 1p.p.. However, the impact on the participation rate of the overall population appears modest and not enough to achieve the 60% threshold. This is only due to the comparatively small size of the target group.

For individuals aged 45-64, net increases in adult learning participation remain substantial at 17.5 p.p.. The impact on the overall participation rates is significant, driving the population's 2030 participation rate to nearly 58 p.p. In this scenario, the participation rate of the target group would exceed that of the overall population.

For the low and medium qualified, a comparatively low deadweight loss is offset by the modelling assumption of take-up rates which are below average for the low qualified. The net increases in participation rates for the target group remain substantial (17.4 p.p.). The net (marginal) impact on the population's 2030 participation rates is very significant too, driving overall participation rates to around 60%. The gap between the population and target group's participation rate would fall from over 11p.p. to 7p.p..

10.2. B. COST-BENEFIT ANALYSIS

This sub-section presents the costs and benefits for different stakeholders that can be expected to result from the policy packages in comparison to the baseline. The cost-benefit analysis (CBA) has been undertaken in accordance with the Commission's Better Regulations Guidelines. It focuses on those costs and benefits that can be monetised, in order to calculate an overall benefit-cost ratio. The CBA therefore does not take into account the full range of benefits that can be expected to arise from increased participation in training, for example, in terms of increased personal wellbeing and satisfaction. The CBA is based on a number of assumptions, derived from the evidence base in sections 6 or 7 or from other evidence, as indicated.

The funding source for entitlements would be left to Member States as Member States are best placed to make these decisions in light of differences in national costs for training and existing arrangements for the funding of training. The costs of training entitlements are therefore presented here as falling on public authorities, but in practice Member States might choose to require participating individuals or their employers to provide co-financing. Similarly, the choice to provide any entitlement to paid training leave (PTL) would be left to Member States. On that basis, the CBA can only be undertaken on the "core" proposal, i.e. the training entitlement, however, some estimated of the impact of training taking place during working time are given in sub-section 6 of this section.

10.2.1. Costs and benefits for individuals

Costs

As take up of training entitlements is optional, no costs are imposed on individuals. Instead, any indirect costs (such as additional travel or childcare costs associated with participation in training) or opportunity costs are taken into account in the calculation of participation rates. A key point to note is that the costs to participating individuals will never exceed the benefits as perceived by those individuals. Since participation is voluntary, if individuals perceive that the costs to them will exceed the benefits that they expect to gain, they will simply choose not to participate.

Benefits

Participation in relevant, quality learning can also be expected to generate many non-monetary benefits above and beyond the monetary benefits analysed here, for example, in terms of increased skills, confidence and motivation of individuals that are not assessed here.

A number of monetary benefits can be expected to arise from the training entitlement schemes.

First, it can be expected that participation in training will lead to an increase in wages for some employed participants. As noted in the evidence review (section 8), the literature suggests it is reasonable to assume that the increase in wages that might arise for employed participants in ILA schemes will be 1 per cent on average after 30 hours training and thus 1.67 per cent after 50 hours (although it is likely to vary widely across the cohort of participants). These values already account for the depreciation of human capital over a 20-year time span. As shown in section 9, no clear-cut conclusion can be drawn from the literature as to whether the length of training will generate increasing or decreasing returns; estimates varied both in sign and intensity and no clear trend is apparent. For that reason, a "middle-ground" approach is taken, which assumes constant returns between 30 hours and 50 hours.

For the purposes of this CBA, it is also assumed that:

- Members of the overall working population earn 100% of average annual net earnings per person on average.
- Non-permanent employees and SME employees earn 100% of average annual net earnings per person on average.
- Low-qualified persons in employment earn 80% of average earnings.[486] Detailed data are not available on the earnings of low-qualified persons. However, Eurostat notes that 27% of employees with a low education level earn two-thirds or less of the national median gross hourly earnings.487 Based on this, it is assumed that low-qualified employee would earn 80% of average annual net earnings on average[488].
- Non-low-qualified persons in employment earn 125% of average annual net earnings on average. If low-qualified people are assumed to earn less than the average (e.g. 80%), it

[486] Eurostat provides earnings figures at 50%, 67%, 80%, 100%, 125% or more.

[487] https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Earnings_statistics#Low-wage_earners

[488] Eurostat provides earnings figures at 50%, 67%, 80%, 100%, 125% or more.

follows that other workers must earn more than the average. Since Eurostat provides data at 100%, 125% or more, the figure of 125% is chosen.

- A certain proportion of participants would have participated in training in the absence of ILA schemes. The benefits are thus based on net participation rates rather than gross participation rates, i.e. taking deadweight loss into account.

Given the expected net increase in participation in learning (i.e. taking into account deadweight loss), the expected increase in wages for different types of employed persons and for each policy package is as presented in the tables below.

NB: the tables only include wage increases for those in employment prior to participation in training. Wage increases for unemployed of inactive people entering employment are considered later.

Table 37 Annual wage impacts for persons in employment (EU27)

Target group	Annual net earnings (€)*	Increase in earnings	Average increase in annual earnings per person (€)	Net participation of people in employment (m)	Increase in annual earnings for all employed participants (€m)
Low-qualified (50 hours)	20 029	1.67%	334	3.1	1 041.5
SME employees (50 hours)	24 005	1.67%	401	18.2	7 295.9
Non-permanent employees (50 hours)	24 005	1.67%	401	7.1	2 836.7
Working age population (30 hours)	24 005	1%	240	23.9	5 731.6

**Source: Eurostat (online data code earn_nt_net)*

Table 38 Annual wage impacts of policy packages (EU27)

Package / Target groups	Net participation of people in employment (m)	Increase in annual earnings for all employed participants (€m)
A.1 Low-qualified	3.1	1 041.5
A.2 Inactive	0.0	0.0
A.3 Unemployed	0.0	0.0
A.4 SME employees	18.2	7 295.9
A.5 Non-permanent employees	7.1	2 836.7
B.1 Working age population	23.9	5 731.6
B.2.1 Working age + top-up for low qualified	24.4	7 170.0
B.2.2 Working age + top-up for inactive	23.9	5 731.6
B.2.3 Working age + top-up for unemployed	23.9	5 731.6
B.2.4 Working age + top-up for SME employees	26.9	9 373.6
B.2.5 Working age + top-up for non-permanent employees	25.0	7 147.6

Second, it can be expected that training will lead to an increase in employment amongst unemployed and inactive people. Based on the evidence in section 7, the increase in employment that might arise for previously unemployed or inactive participants in ILA schemes is assumed to be 2.5 percentage points after 30 hours and 4.175 percentage points after 50 hours. As with impacts on wages, a

"middle-ground" approach is taken, which assumes constant returns between 30 hours and 50 hours, given that no clear-cut conclusion can be drawn from the literature as to whether the length of training will generate decreasing or increasing returns (see section 6).

The increase in employment would also lead to increased income, as unemployed or inactive people move from benefits to salaries. For the individuals, the net increase would consist only of the difference between wage income and income from benefits. Given that unemployed or inactive people tend to enter low-paid rather than high-paid jobs, it is assumed that they receive 80% of average annual net earnings in their respective countries.

The table below presents the estimates for the employment impacts and consequent income impacts of ILA schemes after one year of operation. It shows the total incomes as well as the increase after accounting for the removal of benefits that would otherwise be paid to the unemployed or inactive. Annual benefits for the unemployed or inactive are based on the EU27 average of EUR 10 343.[489] Income impacts in future years (for the Year 1 cohort) would most likely be lower, as some of the unemployed or inactive would eventually enter employment anyway, even in the absence of a training entitlement. This is taken into account in the calculation of the benefit-cost ratios below, as explained below (see "Scenario analysis" in sub-section 10.2.4 below).

Table 39 Increased annual income for those entering employment (EU27)

Target group	Net participation of those not in employment (m)	Number entering employment (m)	Annual net earnings per person (€)*	Increased wages for persons entering employment (€m)	Savings in benefits (€m)	Increase in incomes (after benefit reduction) (€m)
Inactive (50 hours)	9.2	0.4	20 029	7 722.58	3 987.9	3 734.6
Unemployed (50 hours)	2.2	0.1	20 029	1 849.46	955.1	894.4
Inactive (30 hours)	7.7	0.2	20 029	3 867.6	1 997.2	1 870.4
Unemployed (30 hours)	1.8	0.0	20 029	926.2	478.3	447.9

**Single person without children earning 80% of the average earning*

Source: Eurostat (online data code earn_nt_net)

Table 40 Annual income effects of packages (EU27)

Package / Target groups	Number entering employment (m)	Total income of persons entering employment (€m)	Savings in benefits (€m)	Increase in incomes (after benefit reduction) (€m)
A.1 Low-qualified	0.1	2 254.5	1 164.2	1 090.3
A.2 Inactive	0.4	7 722.5	3 987.9	3 734.6
A.3 Unemployed	0.1	1 849.4	955.1	894.4
A.4 SME employees	0.0	0.0	0.0	0.0
A.5 Non-permanent employees	0.0	0.0	0.0	0.0
B.1 Working age population	0.2	4 793.8	2 475.5	2 318.3
B.2.1 Working age + top-up for low qualified	0.3	5 130.8	2 649.6	2 481.2
B.2.2 Working age + top-up for inactive	0.4	8 648.8	4 466.3	4 182.5

[489] Eurostat (2020): Social protection statistics - unemployment benefits.

B.2.3 Working age + top-up for unemployed	0.3	5 717.0	2 952.3	2 764.7
B.2.4 Working age + top-up for SME employees	0.2	4 793,8	2 475.5	2 318.3
B.2.5 Working age + top-up for non-permanent employees	0.2	4 793.8	2 475.5	2 318.3

10.2.2. Costs and benefits for employers

This sub-section lists the main effects for employers whose staff participates in the ILA schemes through Packages A or Package B.

Costs

The European Commission's proposal allows Member States the choice as to whether to require employers to co-finance training or not. For the purposes of this CBA, it is therefore assumed that the the direct costs of training entitlements will be borne by public authorities and that there is no compulsion on employers to meet any costs. The direct costs for employers will therefore be zero. Whilst Member States might choose to require employers to co-finance training entitlements, this would reduce the costs for public authorities (considered below) and hence not affect overall benefit-cost ratios.

Employers may also incur costs due to staff absence during training, either because they voluntarily allow to participate in training funded by individual entitlements during working hours, or because such obligations result from strengthened paid training leave provisions. These potential costs are considered separately in sections 10B.6 and 7 below

Benefits

It can be expected that increased skills, confidence and motivation of employees participating in learning will generate direct economic benefits for employers in terms of increased added value from higher productivity.

Based on the evidence in section 7, the gross increase in productivity that would arise for employed participants in ILA schemes is assumed to be 2 per cent on average after 30 hours and 3.33 per cent after 50 hours (although it is likely to vary widely across the cohort of participants). Net increase in productivity is calculated by deducting wage increases from the value of gross productivity. As with impacts on wages, a "middle-ground" approach is taken, which assumes constant returns between 30 hours and 50 hours, given that no clear-cut conclusion can be drawn from the literature as to whether the length of training will generate decreasing or increasing returns (see section 7).

Comprehensive, up-to-date and accurate data on labour productivity was not available to inform the CBA. In order not to overstate the benefits to employers, a cautious approach is therefore taken to estimating the increase in value added to employers arising from increased productivity. It is therefore assumed that added value prior to participation in training is equal to wages, although in practice added value would usually exceed wages.

As with the benefits for individuals, it is assumed that a certain proportion of participants would have participated in training in the absence of ILA schemes. The benefits to employers are thus based on net participation rates rather than gross participation rates, i.e. taking deadweight loss into account.

Given the expected net increase in participation in training amongst employed persons (i.e. taking into account deadweight loss), the expected increase in productivity for each type of employed person and for each policy package is as presented in the tables below.

Table 41 Annual increase in productivity for persons in employment (EU27)

Target group	Increase in productivity per employee participating (€)	Net participation of people in employment (€m)	Total increase in productivity (€m)	Net increase in productivity (€m)
Package A (50 hours)				
Low-qualified	661	3.1	2 058.0	1 016.5
SME employees	792	18.2	14 417.0	7 121.1
Non-permanent employees	792	7.1	5 605.4	2 768.7
Package B (30 hours)				
Working age population	480	23.9	11 463.2	5 731.6

Source: Eurostat.

Table 42 Annual increase in productivity for policy packages (EU27)

Package / Target groups	Net participation of people in employment (m)	Total increase in productivity (€m)	Net increase in productivity (€m)
A.1 Low-qualified	3.1	2 058.0	1 016.5
A.2 Inactive	0.0	0.0	0.0
A.3 Unemployed	0.0	0.0	0.0
A.4 SME employees	18.2	14 417.0	7 121.1
A.5 Non-permanent employees	7.1	5 605.4	2 768.7
B.1 Working age population	23.9	11 463.2	5 731.6
B.2.1 Working age + top-up for low qualified	24.4	14 315.0	7 145.0
B.2.2 Working age + top-up for inactive	23.9	11 463.2	5 731.6
B.2.3 Working age + top-up for unemployed	23.9	11 463.2	5 731.6
B.2.4 Working age + top-up for SME employees	26.9	18 572.4	9 198.8
B.2.5 Working age + top-up for non-permanent employees	25.0	14 227.3	7 079.7

10.2.3. Costs and benefits for public authorities

Based on the theory of change, this sub-section lists the main impacts for public authorities in terms of financing the training entitlement schemes and savings on benefits expenditures.

Costs

First, there is the cost of the training entitlements for individuals. Since the unit cost of the training entitlements is fixed, the total cost is simply the unit cost multiplied by the number of participants. Again, it should be noted that the European Commission's proposal allows Member States the choice as to whether to require individuals or employers to co-finance training or not. For the

purposes of this CBA, it is therefore assumed that the direct costs of training entitlements will be borne by public authorities.

Package A: It is assumed that the training entitlement is 50 hours of learning. Based on the evidence in section 7, it is assumed that the average unit price for one hour of learning is EUR 15 in France (as per review of evidence in section 7). The cost of equivalent training entitlements in other countries is calculated using national price deflators for the education sector presented in a report by the European Commission.[490]

Package B.1: it is assumed that all adults (aged 25-64 years) receive a training entitlement of 30 hours. Again, the unit price in France would be EUR 15 per hour, whilst the cost in other countries is calculated using the same national price deflator.

Package B.2.1 to B.2.5: the various target groups would receive a training entitlement of 50 hours, whilst the rest of the working age population would receive a training entitlement of 30 hours. Costs per hour are the same as in the other packages.

Second, there is the administrative cost of operating ILA schemes. Based on the evidence in section 7, the annual costs of operating schemes are assumed to account for 15% of costs of training entitlements within Package A. Since Package B is estimated to have higher levels of participation, some economies of scale can be expected in respect of administrative costs; for that reason, the annual costs of operating schemes in Package B are assumed to account for 8% of training entitlements.491 The examples of previous schemes (section 7) did not provide evidence of set-up costs separate from recurring costs. Administrative costs are therefore assumed to include both set-up costs and recurring costs. After the first year, operating costs might be expected to fall slightly depending on the extent to which any one-off set-up costs are incurred. However, in order to avoid understating annual operating costs, it is assumed that they remain constant beyond Year 1.

The table below presents the estimated cost of each package for EU27. From the table, it can be seen that the total cost as a percentage of GDP varies from 0.01% for Package A.3 (50 hours entitlement for the unemployed) to 0.20% for Package B.2.4 (30 hours entitlement for all working age adults, with 20-hours top-up for employees of SMEs).

These totals for EU27 hide significant variations between Member States in respect of the cost of each training entitlement (i.e. taking into account the relative costs of education and training provision in each country).

The estimated cost of a training entitlement of 30 hours is lowest in Bulgaria (EUR87), Romania (EUR99) and Lithuania (EUR145). It is highest in Luxembourg (EUR1 214), Sweden (EUR813) and Denmark (EUR628). The average across EU27 is EUR381.

The estimated cost of a training entitlement of 50 hours is lowest in Bulgaria (EUR145), Romania (EUR165) and Lithuania (EUR241) and highest in Luxembourg (EUR2 023), Sweden (EUR1 356) and Denmark (EUR1 046). The average across EU27 is EUR631.

[490] Sánchez-Barrioluengo, M. (2016): Expenditure on education in Purchasing Power Standards: A comparison of three alternative deflators. EUR 28261 EN. doi:10.2791/690227. European Commission.

[491] As shown in Annex 10, evidence from France suggested an administration cost equal to 2% of the training entitlement, whilst in Germany it was 30%. On that basis, a middle ground is taken here, i.e. 15% for the targeted schemes in Package A and 8% for the comprehensive schemes in Package B.

Table 43 Annual cost of training entitlements (EU27)

Package	Target group	Gross participation (m)	Cost of training entitlements (€m)	Administrative cost as a percentage of training entitlements (€m)	Administrative cost (€m)	Total cost (€m)	Total cost (% of GDP*)
A							
A.1	Low-qualified	6.6	4 229.0	15%	634.3	4 863.3	0.04
A.2	Inactive	10.7	6 579.8	15%	987.0	7 566.8	0.06
A.3	Unemployed	2.6	1 707.5	15%	256.1	1 963.7	0.01
A.4	SME employees	24.8	15 617.5	15%	2 342.6	17 960.1	0.13
A.5	Non-permanent employees	9.5	6 044.1	15%	906.6	6 950.7	0.05
B							
B.1	Working age population	44.0	16 758.6	8%	1 340.7	18 099.3	0.14
B.2.1	Working age + top-up for low qualified	45.8	19 147.5	8%	1 531.8	20 679.3	0.15
B.2.2	Working age + top-up for inactive	45.8	20 036.6	8%	1 602.9	21 639.5	0.16
B.2.3	Working age + top-up for unemployed	44.4	17 609.3	8%	1 408.7	19 018.0	0.14
B.2.4	Working age + top-up for SME employees	48.1	24 539.0	8%	1 963.1	26 502.1	0.20
B.2.5	Working age + top-up for non-permanent employees	45.6	19 769.6	8%	1 581.6	21 351.2	0.16

**EU27 GDP at market prices, 2020 (Source: Eurostat)*

Benefits

Increased participation in training can be expected to improve the public finances, as estimated in the table below. This improvement would arise in two ways.

The first monetary benefit for public authorities would consist of increased tax revenues, which would arise in two ways.. First, the increased added value for enterprises (arising from higher productivity) would result in increased tax revenue (from taxes on employers or employees). Second, part of the new wages of unemployed or inactive people entering employment would be paid in tax. Multiplier effects would arise from taxes on consumption, e.g. value added tax, duties.

The level of tax revenue will vary widely depending on the structure of business and personal income taxes and social security contributions in each Member State, the income level of individuals (i.e. higher paid participants would often face higher tax rates). For the CBA, it is assumed that proportion of increases in incomes (of employers or employees) that is paid in tax is equal to the overall proportion of tax revenue to GDP in each country.[492] On that basis, the expected increase in tax revenue for each policy package is as presented in the tables below.

The second monetary benefit for public authorities would consist of savings on benefits paid to inactive or unemployed people who enter employment. As noted above, the proportion of unemployed or inactive participants in ILA schemes that would enter employment is assumed to be 2.5 per cent after 30 hours and 4.175% after 50 hours. Data from Eurostat suggests that the level of benefits paid to each unemployment person in EU27 is on average EUR 10 343.[493] Taking this average, an estimate of the total savings on benefits is offered in the table below.

The table below presents the estimates for the improvements to the public finance attributable to ILA schemes after one year of operation, the costs of training entitlements and thus the net effect on public finances. It should be noted this is a one-year “worst case scenario” that assumes that public authorities bear the full cost, whereas in practice Member States will be free to decide how to finance schemes, e.g. whether to require employers or individuals to meet any of the costs or whether to fund schemes through levies, taxation, borrowing or cutting other forms of public expenditure.

The table shows that schemes are unlikely to be self-financing within the same year. However, while the costs of training entitlements are incurred only in the year of operation, the benefits (e.g. improved productivity, more people in employment) can be expected to last into future years. This creates the potential for schemes to become self-financing in time. The scenario analysis in the next sub-section provides the detailed analysis of this question.

In future years, the increased tax revenue from those entering employment and the savings on benefit (for Year 1 participants entering employment) would most likely be lower, as some of the unemployed or inactive might have displaced other hires and the higher productivity levels might imply a lower number of workers needed to produce the same output. This is however left to the general equilibrium analysis in 11C to assess.

[492] Source: Eurostat (Online data code: GOV_10A_TAXAG)

[493] https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Social_protection_statistics_-_unemployment_benefits

Table 44 Year 1 net effect on public finances (EU27)

Package / Target group	Increased tax revenue (€m)	Savings on benefit expenditure (€m)	Total improvement to public finances (€m)	Cost of training entitlements (€m)	Net effect on public finances (€m)
A.1 Low-qualified	1 772.4	1 164.2	2 936.7	4 863.3	-1,926.6
A.2 Inactive	3 174.0	3 987.9	7 161.9	7 566.8	-404.9
A.3 Unemployed	760.1	955.1	1 715.2	1 963.7	-248.5
A.4 SME employees	5 925.4	0.0	5 925.4	17 960.1	-12 034.7
A.5 Non-permanent employees	2 303.8	0.0	2 303.8	6 950.7	-4 646.8
B.1 Working age population	6 681.6	2 475.5	9 157.2	18 099.3	-8 942.1
B.2.1 Working age + top-up for low qualified	7 992.2	2 649.6	10 641.8	20 679.3	-10 037.5
B.2.2 Working age + top-up for inactive	8 266.0	4 466.3	12 732.3	21 639.5	-8 907.2
B.2.3 Working age + top-up for unemployed	7 061.1	2 952.3	10 013.4	19 018.0	-9 004.6
B.2.4 Working age + top-up for SME employees	9 603.5	2 475.5	12 079.1	26 502.1	-14 423.0
B.2.5 Working age + top-up for non-permanent employees	7 817.7	2 475.5	10 293.2	21 351.2	-11 058.0

10.2.4. Estimation ratios of benefits to costs

This section presents an overall comparison of the costs and benefits of the different packages against the baseline. The costs presented above would arise in Year 1, whilst the benefits would mostly arise in future years. The analysis presents total costs and benefits to society. It is therefore not necessary to introduce any assumptions about the distribution of benefits between employers, individuals and public authorities.

In order to calculate the overall benefit-cost ratio, the following assumptions are made:

- Schemes operate for one-year with all learning taking place within the year;
- Costs of training entitlements arise within Year 1;
- One year's administrative costs are incurred;
- There is a lag of up to 12 months between participation and increases in productivity (for employed participants). All productivity impacts occur at the end of Year 1 (i.e. wages increase from the start of Year 2);
- There is a lag of up to 12 months between participation and entry into employment (for previously unemployed or inactive people). All employment impacts therefore occur at the end of Year 1 (i.e. the newly-employed enter employment at the start of Year 2), to account for lock-in effects;

- Productivity impacts are sustained for 5 years, i.e. from start Year 2 to end Year 6, consistently with a productivity rate that already accounts for depreciation of human capital over a long time-span;
- Employment impacts are included for 18 months after the end of the year of operation (i.e. to the middle of Year 3). This is a cautious approach that assumes that unemployed or inactive participants would have eventually found work in the absence of any training entitlement.
- Social discount rate is 4% (as recommended by the Better Regulation Guidelines).

The table below presents the summary of the scenario analysis. From the table, a number of conclusions can be drawn:

- Benefits will exceed the cost of ILA schemes for all policy packages, provided that productivity impacts are sustained for 2 years (i.e. end Year 3) and employment impacts are sustained for 1.5 years (i.e. middle of Year 3).
- The highest benefit-cost ratios after one year (i.e. end Year 2) are offered by Policy Packages A.2 (inactive 50 hours)).
- The highest benefit-cost ratios after five years (i.e. end Year 6) are offered by the various sub-packages within Policy Package B, as well as by Policy Packages A.4 (SME employees 50 hours) and A.5 (non-permanent employees 50 hours).
- If constant returns are assumed, then the costs and benefits of operating schemes in future years (and thus the benefit-cost ratios) would be identical to those in Year 1.

It should be noted that the CBA is based on a partial equilibrium analysis. Some caution will therefore, be required when extrapolating the benefits over several years. Over time, it could be expected that those entering employment would gradually receive further increases in wages, as they gain skills, experience, etc. The initial participation in training (funded by the ILA scheme) might stimulate some individuals to participation in additional training, thus generating further positive impacts on wages and productivity. Long-term wage impacts in future years might thus be greater than estimated here for Year 1, due to the progressive accumulation of human capital investments and its cumulative effects on productivity, output and, in turn, aggregated demand. Conversely, some of those entering employment might be made redundant at some point in the future. Moreover, some of those entering employment after participation in Year 1 might be hired instead of and not in addition to other individuals not taking up training (displacement effect). Impacts on incomes and public finances in future years might thus be different than estimated here for Year 1.

Given the limits to analysis based on partial equilibrium, a complementary analysis based on general equilibrium is provided in section 10.3.C.

Table 45 Comparison of scenarios (one year of costs, benefits sustained over 5 years)

EU27	A.1	A.2	A.3	A.4	A.5	B.1	B2.1	B2.2	B2.3	B2.4	B2.5
	Low-qualified	Inactive	Unemployed	SME employees	Non-perm	All	All + top-up for low-qualif	All + top-up for inactive	All + top-up for unempl	All + top-up for SMEs	All + top-up for non-perm
Costs (€m)											
Total annual cost of ILA schemes (Year 1)	4 863.3	7 566.8	1 963.7	17 960.1	6 950.7	18 099.3	20 679.3	21 639.5	19 018.0	26 502.1	21 351.2
Benefits (€m)											
Pre-tax increase in enterprise revenues from higher productivity (Year 2)*	2 058.0	0.0	0.0	14 417.0	5 605.4	11 463.2	14 315.0	11 463.2	11 463.2	18 572.4	14 227.3
Pre-tax increase in income for those entering employment (Year 2)*	2 254.5	7 722.5	1 849.4	0.0	0.0	4 793.8	5 130.8	8 648.8	5 717.0	4 793.8	4 793.8
Total benefits (Yr 2)	4 312.5	7 722.5	1 849.4	14 417.0	5 605.4	16 257.0	19 445.8	20 112.0	17 180.2	23 366.2	19 021.1
Total benefits (Yr 3)	2 935.5	3 558.5	852.2	13 286.7	5 165.9	12 773.5	15 557.0	14 549.8	13 198.9	19 325.3	15 320.9
Total benefits (Yr 4)	2 818.1	3 416.2	818.1	12 755.2	4 959.3	12 262.5	14 934.7	13 967.8	12 670.9	18 552.3	14 708.0
Total benefits (Yr 5)	2 705.4	3 279.6	785.4	12 245.0	4 760.9	11 772.0	14 337.3	13 409.1	12 164.1	17 810.2	14 119.7
Total benefits (Yr 6)	2 597.2	3 148.4	754.0	11 755.2	4 570.5	11 301.1	13 763.8	12 872.8	11 677.5	17 097.8	13 554.9
Net present value of benefits											
1 year (end Year 2)	4 312.5	7 722.5	1 849.4	14 417.0	5 605.4	16 257.0	19 445.8	20 112.0	17 180.2	23 366.2	19 021.1

EU27	A.1	A.2	A.3	A.4	A.5	B.1	B2.1	B2.2	B2.3	B2.4	B2.5
	Low-qualified	Inactive	Unemployed	SME employees	Non-perm	All	All + top-up for low-qualif	All + top-up for inactive	All + top-up for unempl	All + top-up for SMEs	All + top-up for non-perm
2 years (end Year 3)	7 248.0	11 281.1	2 701.7	27 703.7	10 771.4	29 030.5	35 002.8	34 661.8	30 379.1	42 691.5	34 342.0
3 years (end Year 4)	10 066.1	14 697.3	3 519.8	40 459.0	15 730.7	41 293.0	49 937.6	48 629.6	43 050.0	61 243.8	49 050.0
4 years (end Year 5)	12 771.5	17 976.9	4 305.2	52 704.0	20 491.6	53 065.0	64 274.9	62 038.8	55 214.1	79 054.0	63 169.7
5 years (end Year 6)	15 368.7	21 125.2	5 059.2	64 459.2	25 062.1	64 366.2	78 038.7	74 911.5	66 891.6	96 151.9	76 724.6
Benefit-cost ratios											
1 year (end Year 2)	0.9	1.0	0.9	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9
2 years (end Year 3)	1.5	1.5	1.4	1.5	1.5	1.6	1.7	1.6	1.6	1.6	1.6
3 years (end Year 4)	2.1	1.9	1.8	2.3	2.3	2.3	2.4	2.2	2.3	2.3	2.3
4 years (end Year 5)	2.6	2.4	2.2	2.9	2.9	2.9	3.1	2.9	2.9	3.0	3.0
5 years (end Year 6)	3.2	2.8	2.6	3.6	3.6	3.6	3.8	3.5	3.5	3.6	3.6

** Some of the increases in revenues for enterprises would be paid to employees in higher wages and some would be paid in tax (either directly or indirectly via increased taxes on wages). Some of the pre-tax increase in income for those entering employment would accrue to public authorities through personal tax or through the removal of social security benefits. It is also assumed that unemployed people would not remain unemployed indefinitely in the absence of ILA schemes but would return to work within 18-30 months.*

The table below presents benefit-cost ratios for each Member State five years after the first year of operation (i.e. end Year 6). The table shows that after 5 years, benefit-cost ratios are positive for all policy packages in all Member States.

Both tables show that there are considerable differences in Member States. Such differences reflect differences in participation rates, different costs of training and different levels of earnings. In particular, where earnings are high relative to the cost of education and training, this tends to result in a higher benefit-cost ratio.

Table 46 Benefit-cost ratios by Member State after 5 years (end Year 6)

	A.1	A.2	A.3	A.4	A.5	B.1	B2.1	B2.2	B2.3	B2.4	B2.5
Benefit-cost ratios (end Year 6)	Low-qualified	Inactive	Unempl	SME employees	Non-permanent	All	All + top-up low-qualified	All + top-up inactive	All + top-up unempl	All + top-up SMEs	All + top-up non-permanent
EU-27	3.2	2.8	2.6	3.6	3.6	3.6	3.8	3.5	3.5	3.6	3.6
Belgium	2.6	2.3	2.0	2.9	2.8	2.8	2.9	2.7	2.8	2.9	2.8
Bulgaria	4.0	3.4	3.4	4.3	5.2	5.1	5.6	4.8	5.0	4.6	5.1
Czechia	3.5	2.8	2.8	3.7	4.1	4.2	4.8	4.1	4.2	3.9	4.2
Denmark	2.8	2.2	2.2	3.5	3.3	3.1	3.4	3.0	3.1	3.4	3.1
Germany	3.5	2.7	2.9	4.0	3.7	3.8	4.1	3.6	3.7	4.0	3.8
Estonia	3.7	3.1	2.9	4.1	4.1	4.2	4.6	4.1	4.2	4.2	4.2
Ireland	3.8	3.2	2.9	4.3	4.2	3.9	4.2	3.9	3.9	4.3	4.0
Greece	2.9	2.4	2.4	3.0	3.6	3.3	3.4	3.2	3.2	3.1	3.4
Spain	3.2	2.5	2.5	3.5	3.7	3.6	3.7	3.4	3.5	3.5	3.6
France	3.0	2.7	2.2	3.6	3.3	3.2	3.3	3.1	3.1	3.5	3.2
Croatia	2.6	2.4	2.3	2.9	3.0	3.0	3.1	2.9	3.0	3.0	3.0
Italy	2.9	2.5	2.4	3.2	3.2	3.1	3.2	3.0	3.1	3.2	3.2
Cyprus	2.6	2.3	2.1	3.1	3.1	2.8	3.0	2.8	2.8	3.1	2.9
Latvia	2.3	2.0	1.9	2.7	2.6	2.6	2.9	2.5	2.6	2.7	2.6
Lithuania	3.9	3.5	3.4	4.2	4.7	4.6	5.1	4.5	4.6	4.5	4.6

	A.1	A.2	A.3	A.4	A.5	B.1	B2.1	B2.2	B2.3	B2.4	B2.5
Benefit-cost ratios (end Year 6)	**Low-qualified**	**Inactive**	**Unempl**	**SME employees**	**Non-permanent**	**All**	**All + top-up low-qualified**	**All + top-up inactive**	**All + top-up unempl**	**All + top-up SMEs**	**All + top-up non-permanent**
Luxembourg	1.8	1.5	1.3	2.0	1.9	1.9	1.9	1.8	1.8	1.9	1.9
Hungary	2.3	2.5	2.3	3.4	2.9	2.8	3.0	2.7	2.8	3.3	2.8
Malta	2.9	2.5	2.2	3.3	3.5	3.3	3.5	3.2	3.3	3.4	3.4
Netherlands	3.7	3.1	2.6	4.6	3.6	3.7	4.0	3.7	3.7	4.2	3.8
Austria	2.5	2.1	1.9	3.0	2.5	2.5	2.7	2.5	2.5	2.9	2.5
Poland	3.4	2.9	2.9	3.7	4.3	4.1	4.6	3.9	4.1	3.9	4.2
Portugal	2.5	2.2	2.1	2.9	2.9	2.8	2.9	2.7	2.8	2.9	2.9
Romania	4.7	4.0	3.8	5.0	6.5	6.1	6.6	5.8	6.1	5.4	6.2
Slovenia	2.1	1.7	1.7	2.3	2.2	2.2	2.4	2.1	2.2	2.3	2.2
Slovakia	2.4	2.2	2.1	2.7	2.7	2.5	2.8	2.5	2.5	2.8	2.6
Finland	2.7	2.1	2.5	3.4	3.2	3.0	3.2	2.9	3.0	3.4	3.1
Sweden	1.8	1.3	1.6	2.4	2.1	2.0	2.2	1.9	2.0	2.3	2.0

10.2.5. Sensitivity analysis

The coefficients underpinning the CBA are informed by the evidence in the literature review, and should be considered as "middle ground" estimates in view of the literature. The purpose of this section is to assess the robustness of results to alternative assumptions.

Eight sensitivity analyses have been undertaken:

First, a **moderately higher deadweight loss (DWL).** The calculations of conventional measures of DWL based on Schwerdt et al. (2012) are inflated by 25% across all policy packages.

Second, a **significantly higher DWL** of 60%, drawn from Hidalgo et al. (2014) and scaled by target group and Member State as per the procedure described in section 10A.8. This can be considered as upper bound in terms of the DWL estimates found in the literature.

Third, an adjustment of **DWL taking into account dynamic effects**. Within the figures above, a conventional measure of DWL is used, which provides an indication of the number of people who would not have otherwise trained. This is taken from Schwerdt et al. (2012). As explained in chapter 8, the conventional measure ignores some dynamic effects that will affect rates of participation, most notably the likelihood that some people might train more often or for longer as a consequence of possessing a training entitlement. An adjusted measure of DWL was therefore used taking account of such effects, as derived from Messer and Wolter (2009). The application of this measures of DWL tends to result in higher participation rates.

Fourth, a **lower productivity coefficient**. A cautious approach is taken, using a productivity coefficient which is three quarters of the value of the productivity coefficient used above, i.e. 1.5% after 30 hours training (instead of 2%) and 2.475% after 50 hours training (instead of 3.3%).

Fifth, a **lower employment coefficient**. Again, a cautious approach is taken, using an employment coefficient which is three quarters of the value of the employment coefficient used above, i.e. 1.875% after 30 hours training (instead of 2.5%) and 3.13% after 50 hours training (instead of 4.175%).

Sixth, **higher training costs**. A previous study for the European Commission has established EU-level simplified cost options (SCOs) under Article 14.1 of the European Social Fund (ESF) regulation. The study estimated hourly costs of continual vocational training courses for employees per participant training hour incurred by enterprises in each Member State at 2015 values.[494] The SCO have been updated in line with 2020 values and then applied to all training to be offered under the proposed training entitlement schemes.[495] Using this method, the hourly cost of training is greater in every Member State (except Portugal), compared to the hourly cost calculating according to the method described above.

Seventh, **higher administration costs**. Across all policy packages, the administration costs are increased by 50%, i.e. from 15% to 22.5% of the cost of training entitlements in Package A and from 8% to 12% of the cost of training entitlements in Package B.

Last, an assumption of **decreasing returns to training** between 30 hours and 50 hours. The additional return between 30 hours and 50 hours is reduced by half in respect of productivity and employment. Thus, the productivity coefficient for 50 hours is 2.67% (instead of 3.3%) and the employment coefficient is 3.33 (instead of 4.175%).

NB: it should be noted that a sensitivity analysis of the wage coefficient is unnecessary as it does not affect overall benefit-cost ratios, only the distribution of productivity gains between employers (profits) and employees (wages).

The results of the sensitivity analysis are presented below. They show that:

[494] PPMI (2018), Developing 'Off-the-Shelf' Simplified Cost Options (SCOs) under Article 14.1 of the European Social Fund (ESF) regulation.

[495] The SCO figure for Romania in the report was not credible (i.e. 0.27 EUR per hour at 2015 values). Instead, the next lowest figure has been used, i.e. the value for Bulgaria (5.46 EUR at 2020 values).

- all packages feature a benefit-cost ratio above one at the latest four years after the first year of operation, even when using considerably more pessimistic assumptions concerning DWL, porductivity, employment effects, training or administrative costs;
- using the simplified cost options calculated under Article 14.1 of the ESF regulation, benefit-cost ratios are not positive until three years after the year of operation (i.e. end Year 4) or four years in the case of packages A.1, A.2, A3 and B.2.2. However, this should be considered a pessimistic scenario, since the SCOs are based on training for employees, whereas the evidence from the French CPF points to lower hourly costs for ILA-funded training;
- even using the "upper bound" measure of DWL (60%), benefit-cost ratios exceed or are equal to costs within 2 years (i.e. end Year 3) within all the packages, except A.4, A.5 and B2.5. However, all benefit-cost ratios are positive within 3 years (i.e. end Year 4);
- the inflated measure of DWL slightly reduces the benefit-cost ratios for all policy packages, however, all packages still feature a positive benefit-cost ratio two years after the year of operation (i.e. end Year 3);
- a more dynamic measure of DWL results in higher benefit-cost ratios, due to the higher participation rates;
- the benefit-cost ratios are most sensitive to any changes in the productivity coefficient (except in the packages that only serve the inactive or unemployed, i.e. A.2 and A.3, since by definition these packages do not offer benefits for those already in employment);
- the benefit-cost ratios are only slightly sensitive to the higher estimates for administration costs;
- the benefit-cost ratios are only slightly affected by assuming decreasing returns to training between 30 hours and 50 hours.

Table 47 Sensitivity analysis for benefit-cost ratios

	A.1	A.2	A.3	A.4	A.5	B.1	B2.1	B2.2	B2.3	B2.4	B2.5
Benefit-cost ratios	**Low-qualified**	**Inactive**	**Unemployed**	**SME employees**	**Non-permanent**	**All**	**All + top-up low-qualified**	**All + top-up inactive**	**All + top-up unemployed**	**All + top-up SMEs**	**All + top-up non-permanent**
Core proposalBenchmark set of parameters (above)											
1 year (end Year 2)	0.9	1.0	0.9	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9
2 years (end Year 3)	1.5	1.5	1.4	1.5	1.5	1.6	1.7	1.6	1.6	1.6	1.6
3 years (end Year 4)	2.1	1.9	1.8	2.3	2.3	2.3	2.4	2.2	2.3	2.3	2.3
4 years (end Year 5)	2.6	2.4	2.2	2.9	2.9	2.9	3.1	2.9	2.9	3.0	3.0
5 years (end Year 6)	3.2	2.8	2.6	3.6	3.6	3.6	3.8	3.5	3.5	3.6	3.6
Moderately higher deadweight loss											
1 year (end Year 2)	0.9	1.0	0.9	0.7	0.7	0.8	0.9	0.9	0.8	0.8	0.8
2 years (end Year 3)	1.4	1.4	1.3	1.4	1.4	1.5	1.6	1.5	1.5	1.5	1.5
3 years (end Year 4)	2.0	1.9	1.7	2.0	2.1	2.1	2.2	2.1	2.1	2.1	2.1
4 years (end Year 5)	2.5	2.3	2.1	2.7	2.7	2.7	2.9	2.6	2.7	2.7	2.7
5 years (end Year 6)	3.1	2.7	2.4	3.3	3.3	3.3	3.5	3.2	3.2	3.3	3.2

	A.1	A.2	A.3	A.4	A.5	B.1	B2.1	B2.2	B2.3	B2.4	B2.5
Benefit-cost ratios	**Low-qualified**	**Inactive**	**Unemployed**	**SME employees**	**Non-permanent**	**All**	**All + top-up low-qualified**	**All + top-up inactive**	**All + top-up unemployed**	**All + top-up SMEs**	**All + top-up non-permanent**
Upper bound deadweight loss (60%)											
1 year (end Year 2)	0.8	0.8	0.7	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5
2 years (end Year 3)	1.3	1.2	1.1	0.9	0.9	1.0	1.1	1.1	1.0	1.0	0.9
3 years (end Year 4)	1.8	1.6	1.4	1.3	1.4	1.4	1.5	1.5	1.4	1.4	1.3
4 years (end Year 5)	2.2	2.0	1.7	1.7	1.8	1.8	2.0	1.9	1.8	1.8	1.6
5 years (end Year 6)	2.7	2.3	2.0	2.1	2.2	2.2	2.4	2.2	2.2	2.2	2.0
Dynamic deadweight loss											
1 year (end Year 2)	0.9	1.1	1.0	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0
2 years (end Year 3)	1.5	1.5	1.4	1.7	1.7	1.7	1.8	1.7	1.7	1.7	1.8
3 years (end Year 4)	2.1	2.0	1.9	2.4	2.5	2.5	2.6	2.4	2.4	2.5	2.5
4 years (end Year 5)	2.7	2.5	2.3	3.2	3.2	3.2	3.3	3.1	3.1	3.2	3.2
5 years (end Year 6)	3.3	2.9	2.7	3.9	3.9	3.8	4.1	3.7	3.8	3.9	3.9
Lower productivity coefficient											

	A.1	A.2	A.3	A.4	A.5	B.1	B2.1	B2.2	B2.3	B2.4	B2.5
Benefit-cost ratios	**Low-qualified**	**Inactive**	**Unemployed**	**SME employees**	**Non-permanent**	**All**	**All + top-up low-qualified**	**All + top-up inactive**	**All + top-up unemployed**	**All + top-up SMEs**	**All + top-up non-permanent**
1 year (end Year 2)	0.8	1.0	0.9	0.6	0.6	0.7	0.8	0.7	0.8	0.7	0.7
2 years (end Year 3)	1.3	1.5	1.4	1.2	1.2	1.3	1.4	1.2	1.3	1.3	1.3
3 years (end Year 4)	1.8	1.9	1.8	1.7	1.7	1.8	1.9	1.7	1.8	1.8	1.8
4 years (end Year 5)	2.2	2.4	2.2	2.2	2.2	2.4	2.5	2.1	2.4	2.3	2.3
5 years (end Year 6)	2.7	2.8	2.6	2.7	2.7	2.8	3.0	2.6	2.8	2.8	2.8
Lower employment coefficient											
1 year (end Year 2)	0.8	0.8	0.7	0.8	0.8	0.8	0.9	0.8	0.8	0.8	0.8
2 years (end Year 3)	1.3	1.1	1.0	1.5	1.5	1.5	1.7	1.5	1.5	1.5	1.5
3 years (end Year 4)	1.8	1.5	1.3	2.3	2.3	2.2	2.4	2.1	2.1	2.2	2.2
4 years (end Year 5)	2.4	1.8	1.6	2.9	2.9	2.8	3.1	2.6	2.7	2.9	2.8
5 years (end Year 6)	2.8	2.1	1.9	3.6	3.6	3.4	3.8	3.2	3.3	3.5	3.4
Higher training costs											
1 year (end Year 2)	0.4	0.5	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
2 years (end Year 3)	0.7	0.7	0.6	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7

	A.1	A.2	A.3	A.4	A.5	B.1	B2.1	B2.2	B2.3	B2.4	B2.5
Benefit-cost ratios	**Low-qualified**	**Inactive**	**Unemployed**	**SME employees**	**Non-permanent**	**All**	**All + top-up low-qualified**	**All + top-up inactive**	**All + top-up unemployed**	**All + top-up SMEs**	**All + top-up non-permanent**
3 years (end Year 4)	0.9	0.9	0.8	1.0	1.0	1.0	1.1	0.9	1.0	1.0	1.0
4 years (end Year 5)	1.2	1.0	1.0	1.3	1.3	1.3	1.4	1.2	1.3	1.3	1.3
5 years (end Year 6)	1.4	1.2	1.2	1.6	1.6	1.6	1.7	1.4	1.6	1.6	1.6
Higher administration costs											
1 year (end Year 2)	0.8	1.0	0.9	0.8	0.8	0.9	0.9	0.8	0.9	0.9	0.9
2 years (end Year 3)	1.4	1.4	1.3	1.4	1.5	1.5	1.6	1.4	1.5	1.6	1.6
3 years (end Year 4)	1.9	1.8	1.7	2.1	2.1	2.2	2.3	2.0	2.2	2.2	2.2
4 years (end Year 5)	2.5	2.2	2.1	2.8	2.8	2.8	3.0	2.5	2.8	2.9	2.9
5 years (end Year 6)	3.0	2.6	2.4	3.4	3.4	3.4	3.6	3.1	3.4	3.5	3.5
Decreasing returns to training											
1 year (end Year 2)	0.7	0.8	0.8	0.6	0.7	0.9	0.9	0.9	0.9	0.8	0.8
2 years (end Year 3)	1.2	1.2	1.1	1.2	1.3	1.6	1.6	1.5	1.6	1.4	1.5
3 years (end Year 4)	1.7	1.5	1.4	1.8	1.8	2.3	2.3	2.1	2.2	2.0	2.2

	A.1	A.2	A.3	A.4	A.5	B.1	B2.1	B2.2	B2.3	B2.4	B2.5
Benefit-cost ratios	**Low-qualified**	**Inactive**	**Unemployed**	**SME employees**	**Non-permanent**	**All**	**All + top-up low-qualified**	**All + top-up inactive**	**All + top-up unemployed**	**All + top-up SMEs**	**All + top-up non-permanent**
4 years (end Year 5)	2.1	1.9	1.7	2.4	2.4	2.9	3.0	2.7	2.9	2.6	2.8
5 years (end Year 6)	2.5	2.2	2.1	2.9	2.9	3.6	3.6	3.3	3.5	3.2	3.4

10.2.6. Cost of time for training

The CBA presented above does not include the cost of time taken out of work for training purposes. Since training entitlement schemes aim to empower individuals to undertake training in their own interest and at the request of individuals, it is expected that a significant share of training funded by them will be undertaken outside of working hours, hence entailing costs that are difficult to monetize. Part of the training may however take place during working hours- either with the informal agreement of the employer (which is a way of cost sharing between employee and employer, possible e.g. in the French CPF), or because the individual makes use of rights granted formally under paid training leave schemes.

Estimated potential costs of lost working time are hence offered in the first table below. It should be noted that the cost of working time might fall on employers (should they agree to time off or be required by the rules set at Member State level) or employees (i.e. if employers decide and are able to reduce wages accordingly). Equally, Member States might choose to provide an entitlement to pay training leave (see section 12B.7 below).

Regardless of where the costs fall, the additional cost of training time (in comparison to the baseline scenario) will depend on net participation in training entitlement schemes, the number of learning hours, the level of earnings and the percentage of training undertaken in working time. The costs have thus been calculated as follows:

- Gross participation figures are drawn from the earlier analysis (section 10A) and are consistent with the figures used in the CBA above;
- Hours per person reflect the training entitlements within Packages A and B;
- Median hourly earnings are sourced from Eurostat (EU27); to be consistent with the rest of the CBA, low-qualified employees are assumed to earn 80% of the median;
- Where training takes place outside working time, it is assumed that no costs in terms of working time lost are incurred.

The table below therefore provides an estimation of costs based on 5%, 10%, 50% and 100% of training funded by individual training entitlements taking place in work time. The estimates present the net cost to society regardless of where costs fall, i.e. regardless of any decision by Member States to finance or co-finance paid training leave.

Table 48 Gross costs of training time (= cost of paid training leave)

	Target group	Gross participation of employees (m)	Median hourly earnings (€)	5% of training in working hours (€m)	10% of training in working hours (€m)	50% of training in working hours (€m)	100% of training in working hours (€m)
A.1	**Low-qualified**	3.6	10.54	96.1	192.1	960.7	1 921.4
A.2	**Inactive**	0.0	0.0	0.0	0.0	0.0	0.0
A.3	**Unemployed**	0.0	0.0	0.0	0.0	0.0	0.0
A.4	**SME employees**	24.8	13.18	816.4	1 632.7	8 163.7	16 327.4
A.5	**Non-permanent employees**	9.5	13.18	313.9	627.8	3 139.0	6 278.0
B.1	**Working age population**	32.9	13.18	649.9	1 299.8	6 498.9	12 997.7
B.2.1	**Working age + top-up for low qualified**	33.9	Low-qualified: 10.54 Others - 13.18	693.7	1 387.4	6 936.8	13 873.7
B.2.2	**Working age + top-up for inactive**	32.9	13.18	649.9	1 299.8	6 498.9	12 997.7
B.2.3	**Working age + top-up for unemployed**	32.9	13.18	649.9	1 299.8	6 498.9	12 997.7
B.2.4	**Working age + top-up for SME employees**	36.9	13.18	1 056.6	2 113.2	10 565.9	21 131.7
B.2.5	**Working age + top-up for non-permanent employees**	34.4	13.18	806.3	1 612.5	8 062.6	16 125.3

Net cost of training time/cost of PTL

In order to calculate the benefit-cost ratios of schemes that include an entitlement to PTL, it is necessary to use rates of net participation in training entitlement schemes and thus the net costs of training time. This takes account of the fact that some employers already provide training for employees and thus already incur costs in terms of working time lost. The difference between gross costs and net costs would represent a deadweight transfer from public authorities to employers, i.e. employers receive compensation for costs of training time that they would have incurred anyway (even in the absence of any entitlement to PTL).

The net costs have thus been calculated as follows:

- Net participation figures are drawn from the earlier analysis (section 10A) and are consistent with the figures used in the CBA above;
- Hours per person reflect the training entitlements within Packages A and B;
- Median hourly earnings are sourced from Eurostat (EU27); to be consistent with the rest of the CBA, low-qualified employees are assumed to earn 80% of the median;

The table therefore provides an estimation of costs based on 5%, 10%, 50% and 100% of training taking place in work time. The estimates present the net cost to society regardless of where costs fall, i.e. regardless of any decision by Member States to finance or co-finance paid training leave.

Table 49 Net costs of training time (= gross cost of PTL minus deadweight transfer to employers)

	Target group	Net participation of employees (m)	Median hourly earnings (€)	5% of training in working hours (€m)	10% of training in working hours (€m)	50% of training in working hours (€m)	100% of training in working hours (€m)
A.1	**Low-qualified**	3.1	10.54	82.0	164.1	820.4	1 640.9
A.2	**Inactive**	0.0	0.0	0.0	0.0	0.0	0.0
A.3	**Unemployed**	0.0	0.0	0.0	0.0	0.0	0.0
A.4	**SME employees**	18.2	13.18	599.7	1 199.4	5 996.8	11 993.5
A.5	**Non-permanent employees**	7.1	13.18	233.2	466.3	2 331.6	4 663.1
B.1	**Working age population**	23.9	13.18	472.0	944.1	4 720.4	9 440.9
B.2.1	**Working age + top-up for low qualified**	24.4	Low-qualified: 10.54 Others - 13.18	502.6	1 005.2	5 026.0	10 052.1
B.2.2	**Working age + top-up for inactive**	32.9	13.18	649.9	1 299.8	6 498.9	12 997.7
B.2.3	**Working age + top-up for unemployed**	32.9	13.18	649.9	1 299.8	6 498.9	12 997.7
B.2.4	**Working age + top-up for SME employees**	26.9	13.18	770.8	1 541.6	7 707.9	15 415.8
B.2.5	**Working age + top-up for non-permanent employees**	25.0	13.18	588.2	1 176.4	5 882.0	11 764.0

Benefit-cost ratios including cost of training time/cost of PTL

The table below presents an estimation of the benefit-cost ratios for training entitlement schemes including the cost of PTL. Given the impossibility in determining how much training will take place in work time, the table below provides an estimation of the benefit-cost ratios in a "highest-cost scenario", i.e. where PTL is paid for 100% of training time (i.e. all training takes place in working time). It should be noted that the same benefit-cost ratios apply both in a situation where PTL is paid and in a situation where employers incur the cost of training time (the ratios are based on benefits and costs to society without taking account of distribution effects, i.e. payment of PTL to employers to compensate them for training in working hours).

The table shows that:

- In the core proposal (see scenario analysis in section 12B.4), which takes no account of the cost of training time (whether covered by PTL or by employers), benefits exceed costs within 2 years (i.e. end Year 3) in all packages.
- where 100% of training takes place in work time, benefits exceed or are equal to costs within 2 years (i.e. end Year 3) within all the packages, except those serving only SME employees (A.4) or only non-permanent employees (A.5).
- where 100% of training takes place in work time, benefits exceed costs only after 3 years (i.e. end Year 4) within the packages targeting only SME employees (A.3) or only non-permanent employees (A.4).

Overall then, these estimates suggest that even where 100% of training takes place in working time, there is at worst only a slightly delay in the time period before benefits of schemes exceed costs (including PTL).

Table 50 Estimated benefit-cost ratios including cost of training time/cost of PTL (after accounting for deadweight transfer to employers)

	A.1	A.2	A.3	A.4	A.5	B.1	B2.1	B2.2	B2.3	B2.4	B2.5
Benefit-cost ratios	**Low-qualified**	**Inactive**	**Unemployed**	**SME employees**	**Non-permanent**	**All**	**All + top-up low-qualified**	**All + top-up inactive**	**All + top-up unemployed**	**All + top-up SMEs**	**All + top-up non-permanent**
Excluding training time											
1 year (end Year 2)	0.9	1.0	0.9	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9
2 years (end Year 3)	1.5	1.5	1.4	1.5	1.5	1.6	1.7	1.6	1.6	1.6	1.6
3 years (end Year 4)	2.1	1.9	1.8	2.3	2.3	2.3	2.4	2.2	2.3	2.3	2.3
4 years (end Year 5)	2.6	2.4	2.2	2.9	2.9	2.9	3.1	2.9	2.9	3.0	3.0
5 years (end Year 6)	3.2	2.8	2.6	3.6	3.6	3.6	3.8	3.5	3.5	3.6	3.6
Including training time (100%)											
1 year (end Year 2)	0.7	1.0	0.9	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
2 years (end Year 3)	1.1	1.5	1.4	0.9	0.9	1.1	1.1	1.0	1.1	1.0	1.0
3 years (end Year 4)	1.5	1.9	1.8	1.4	1.4	1.5	1.6	1.4	1.5	1.5	1.5
4 years (end Year 5)	2.0	2.4	2.2	1.8	1.8	1.9	2.1	1.8	1.9	1.9	1.9
5 years (end Year 6)	2.4	2.8	2.6	2.2	2.2	2.3	2.5	2.2	2.4	2.3	2.3

NB: "highest-cost scenario" assuming that PTL is paid for 100% of training hours

10.2.7. Cost of paid training leave

In order to guide decision-making, this sub-section presents illustrative estimates of the potential costs of strengthening paid training leave provisions as such, as recommended under packages A and B. The difference to the previous sub-section is that in this section, we consider potential costs of a higher paid training leave uptake among all employed adults, independently of whether they also make use of training entitlements provided under packages A or B.

Evidence from previous schemes does not provide a reliable basis on which to determine likely take-up rates. As noted, a previous report by Cedefop examined existing paid training leave schemes in the EU. Of the schemes which had wide or comprehensive coverage of the overall adult population, only three offered data on take-up rates amongst eligible groups: Belgium (2.29%), Estonia (5%), and Latvia (0.4%).[496]

For that reason, illustrative cost estimates are offered for paid training leave take-up rates of 1%, 3% and 5% amongst the full population of employed adults aged 25-64 years, whereby an annual take-up rate of 5% across EU-27 could be considered as successful "upward convergence" to the highest values currently observed among annual paid training leave schemes with broad coverage.

The cost estimates in the below Table show that at €5.9 billion, the annual costs of a 5% take-up are significantly smaller than the net benefits of all packages previously shown after 5 years (with the exception of package A.3 due to its small target group, the unemployed). This suggests that taken together, the policy measures recommended under packages A and B can contribute to sustainable public finances.

Table 51 Illustrative estimates of the cost of paid training leave

Hours per person	Number employed adults 25-64 years (m)	Hours per person	Median hourly earnings (€)	PTL cost at 1% take-up (€m)	PTL cost at 3% take-up (€m)	PTL cost at 5% take-up (€m)
50	178.7	50	13.18	1 177.3	3 532.0	5 886.6
30	178.7	30	13.18	706.4	2 119.2	3 532.0

10.3. C. ESTIMATION OF MEDIUM TO LONG TERM AND INDIRECT IMPACTS

10.3.1. Rationale and scope of the analysis

The goal of the estimates with the BeTa model (see Box 2) is to complement the analysis undertaken in the CBA (section 10.2.B) with a few insights on the longer term/general equilibrium effects of the provision of training entitlements to different target groups. This is relevant as, for instance:

- **In terms of costs**, any initiative involving public resources needs to be funded either through additional taxation/employers' levies or by steering resources away from other

public initiatives. Rational agents within an economy are likely to anticipate such effects, adjusting their behaviour e.g. in terms of expenses on goods or investments. Public investment might displace private investments not only in the domain directly addressed by the policy, but also in any other sector, if it exerts upward pressure on interest rates (e.g. due to higher public debts), or just by affecting the composition of aggregate demand and supply (e.g. due to higher labour costs/taxes or lower subsidies to other sectors). This might depress, with respect to the baseline, several macroeconomic variables including GDP. Such effects cannot be factored in by studies or models focusing only on partial equilibrium effects, that is, the short- or medium-term effects on those directly concerned by the policy. At the same time, individuals increasing their employment chances as examined in partial equilibrium studies (e.g. meta-analysis of counterfactual evaluations of training policies) might be doing so at the expense of other individuals not receiving support (displacement effect). This is clearly acknowledged in Card, Kluve and Weber (2018)[497], demonstrated in Crepon et. Al (2013)[498], Gautier et. Al (2014)[499] and broadly confirmed by the literature (see e.g. OECD 1996,[500] Calmfors and Skendinger501 and Escudero, 2015[502]). Although not strictly speaking a cost, employment growth might also be stifled in the short-term due to sluggish adjustments of labour demand to increased output. This is intuitive if one thinks that, at first, when employees become more productive a fewer number of them are needed to produce the same output. Only later the increased individual productivity will induce employers to hire more as they retain part of the increased productivity through bargaining power.

- **In terms of benefits**, there might be a range of positive effects such as increased productivity or changes in the capacity of economies to innovate leading to a ripple to additional effects such as increased employment and output (GDP), which are not limited to those directly affected by the policy but spread across countries, firms and individuals. The stress here is again on the ripple of indirect, second-order effects that over time and across economies materialise as a consequence of the change in behaviour from those targeted by the policy. The BeTa model estimates structural changes, e.g. employment created structurally in the economy due to more efficient matching between workers and jobs. Put differently, estimates of employment gains from the BeTa model are "net gains" that already take into account possible employment losses related to higher productivity/automation that may result form the policy packages. The literature suggests

[497] "We emphasize that the evaluations in our sample have many limitations. At best, these studies measure the partial equilibrium effects of ALMPs, comparing the mean outcomes in a treatment group to those of an untreated control or comparison group." Card, D., Kluve, J., Weber, A. (2018): What Works? A Meta Analysis of Recent Active Labor Market Program Evaluations. European Economic Association, p. 898.

[498] Crépon, B., Duflo, E. Gurgand, M. Rathelot, R., Zamora, P. (2013): Do Labor Market Policies have Displacement Effects? Evidence from a Clustered Randomized Experiment, The Quarterly Journal of Economics

[499] Gautier, P., Muller, P., Van der Klaauw, B., Rosholm, M. and Svarer, M. (2014): Estimating Equilibrium Effects of Job Search Assistance, Journal of Labor Economics

[500] OCED (1996): Enhancing the effectiveness of Active Labour Market Policies: Evidence from programme evaluations in OECD countries, LABOUR MARKET AND SOCIAL POLICY OCCASIONAL PAPERS No. 18

[501] Calmfors, L. and Skendinger, P. (1995): Does active labour market policy increase employment? – Theoretical considerations and some empirical evidence from Sweden, Oxford Review of Economic Policy

[502] Escudero, V. (2015): Are active labour market policies effective in activating and integrating low-skilled individuals? An international comparison, International Labour Office (ILO)

that in particular for investments in human capital, this longer-term and general equilibrium dimension of benefits is particularly significant.[503]

General equilibrium modelling therefore provides an important complementary perspective on the likely impacts of additional skills investment, not just at the time of the roll out of the initiative and with a focus on its beneficiaries, but in its longer-term implications and for the economy as a whole.

Nevertheless, some of the limitations of this exercise should be acknowledged. First, the BeTA model does not feature a disaggregation by Member State and generates estimates which should be interpreted as EU-27-level averages. In addition, the full range of differences between the policy packages are often impossible to quantify based on existing evidence[504] (and would not meaningfully be reflected in an EU-27 estimate). In addition, the full range of differences between the policy packages are often impossible to quantify based on existing evidence[505]and due to modelling constraints.[506] Hence, this exercise does not have the ambition to produce a full-fledged comparative assessment of all policy packages. Its goal, as stated above, is rather to inform on the long-term indirect effects stemming from investment in training entitlements and adjusting them based on a few key parameters (size of the target groups, deadweight loss, administrative costs) which vary across policy packages in order to complement the remainder of the analytical framework. In particular, the macroeconomic effects of all Policy Packages are examined in section 10.3.3 below. A few sensitivity checks are discussed in section 10.3.4.

Box 2 The BeTa model [507]

The BeTa model is a macroeconomic model that – in the spirit of the QUEST III-RD model and the RHOMOLO model – adopts the theoretical approach of the product variety semi-endogenous growth model of Jones (1995; 2005). It has a dynamic innovation process, described by the interaction of the choices taken in three sectors (Varga et al., 2013): the R&D sector, the household sector and the monopolistically competitive intermediate sector. Furthermore, based on the fact than in the macro model of Varga et al. (2013) a human capital (HC) sector is missing and given also the spirit and the aim of the

[503] Recent macroeconomic estimations done by the JRC on EU investments in human capital, suggest that productivity enhancing component of investment in human capital is expected to generate long-lasting positive effects in the medium to long-term, but that in the short term employment and GDP impacts are less visible. "Looking at the immediate impact of a policy can be misleading as it ignores the cumulated impact on the economy over time. [..] In our simulation exercise the reported cumulative multiplier in 2023 is around 0.6 and increases further, even though ESF investment is discontinued, and becomes larger than 1 in 2030. The main reason behind this result is that ESF is human capital oriented and as such it takes time for its effect to diffuse in the economy, a common feature of supply-side policy interventions." Stylianos Sakkas, Andrea Conte, And Simone Salotti (2018): The Impact of the European Social Fund: The Rhomolo Assessment. Territorial Development - JRC Policy Insights, p. 3. This is consistent with the literature on returns to training as presented in Chapter 6.

[504] There is, at present, no hard data or evidence on the quantitative differences between policy package A and B with respect to training participation, productivity and wages that are due to their delivery mode (i.e. the presence or absence of a personal account). This is due to the fact that the only broad scope ILA experience in the EU is currently ongoing in France and no counterfactual study could examine its effects, let alone long term effects, as yet. Therefore, the modelling strategy for the two packages is broadly similar and focuses on the macroeconomic effects of training entitlements.

[505] There is, at present, no hard data or evidence on the quantitative differences between policy package A and B with respect to training participation, productivity and wages that are due to their delivery mode (i.e. delivery through vouchers or a personal account). This is due to the fact that the only broad scope ILA experience in the EU is currently ongoing in France and no counterfactual study could examine its effects, let alone long term effects, as yet. Therefore, the modelling strategy for the two packages focuses on the macroeconomic effects of training entitlements.

[506] Macroeconomic, general equilibrium models are typically based on the representative agent modelling, that is, the assumption that all individuals within a group of actors and sectors (e.g. firms, households etc.) are identical from a behavioural perspective within an economy.

[507] The Consortium has long-standing experience with the use of macro-economic modelling, including liaising with EC officials for EU-owned models such as RHOMOLO and QUEST. In addition, the Consortium is in possession of another macro-simulation model, the BeTA model, which is the one retained for the analysis given the fact that it was impossible to involve EC officials and the team in charge of operating the RHOMOLO and QUEST models within the timeframe of this study.

present study, a fourth sector describing the HC setup was included. More in the specific for the Human Capital sector is based on Varga et al.'s endogenous growth formulation. Furthermore, the Diamond-Mortensen-Pissarides[508] search and matching labour market structure allows to account for the interaction of ex-ante investments on Human Capital and costly search in the labour market suggested by Acemoglu.[509]

The model is based on a hybrid formulation structure which consists in equations partly derived from "hard theory", partly from "soft theory".

- Hard theory: the micro foundations (i.e. formal hypotheses on preferences and technology), and inter-temporal optimization under rational expectations (i.e. model-consistent expectations/certainty equivalence) are considered to derive the behavioural equations; and
- Soft theory: general macroeconomic reasoning, supported by statistical information, is used in the specification of the mathematical representation of economic behaviour.

The **model inputs** consist of a rich and large dataset which is required by the estimation strategy. The data that will be used in the estimation stage are: GDP, consumption, investment, imports, exports, wages; the unemployment rate, the rates of change of the price deflators for consumption, import, export, nominal effective exchange rate, the domestic and the monetary policy short term interest rate, labour force, participation rates, data on R&D, and human capital.

The **model outputs** consist of the provision of different socio-economic scenarios. The focus will lie in particular on GDP and employment outcomes as a result of the provision of training entitlements.

10.3.2. The modelling strategy

Main impact channels

Based on the current specification of the policy packages (see the scenarios developed in part 10.1.A of this section) and their intervention logic, the channels below were used to simulate the macroeconomic effects of training entitlements.

With respect to the **main channels engendering positive effects on employment and GDP**, the first step is an exogenous positive shock to the number of individuals in adult learning, according to the comparative estimations of direct impacts (see section 10.1.A). This is considered a structural change, i.e. training is added on a year-by-year basis and there is no expectation that the policy will be discontinued in the long term. Such exogenous shifts in training participation will, in turn, generate:

- **a positive shock on productivity**: this affects the efficiency of the labour factor in the production technology. Due to rigidities in the labour market, employers retain part of the benefits of the increased productivity, whilst individuals partly benefit from it in the form of a wage premium and increased employment opportunities in the medium to long term. Increases in productivity are factored in as per the review of evidence described in section 10.2.B. They are assumed to be constant across educational attainment levels and type of occupation given no conclusive evidence can be drawn on heterogeneity from the literature, as described in section 4. Such increases are scaled pro-rata to match the duration/value of the training which can be purchased by the different target groups. While

[508] Pissarides, C. (2000): Equilibrium Unemployment Theory, Cambridge, MA: MIT Press.

[509] Acemoglu, D., (1996): A microfoundation for social increasing returns in human capital accumulation. The Quarterly Journal of Economics 111(3), pp. 779-804.

the BeTa model allows for accumulation of human capital over time, this accumulation is limited by skills obsolescence and depreciation of human capital (3% a year, as per the literature reviewed in section 4) and the assumption of decreasing marginal returns. Although the evidence in the literature on whether marginal returns to human capital are constant or decreasing is somewhat ambiguous (section 4), an assumption of decreasing returns is chosen to present more conservative estimates. Nevertheless, returns do no accumulate and persist linearly over time, due to skills obsolescence and depreciation of human capital (3% a year, as per the literature reviewed in section 4) and the possibility of decreasing marginal returns. Although the latter is not a fully consistent finding in the literature, this option is chosen to present more conservative estimates.

- **positive shock on job matching efficiency**: another channel leading to employment and GDP impacts is that of matching efficiency. Training and validation activities are likely to improve the signal to employers on the skills possessed by individuals and facilitate job mobility. This is confirmed in the literature[510] and accounted for in the BeTa through a semi-elasticity parameter linking the value of training investment to increases in job matching efficiency.

The direct costs of additional training entitlements are assumed to be funded through additional taxes. The specific mix of taxes used in the model aims to be neutral as it is fully a matter for the Member States to decide. To ensure neutrality, the shares of taxes by type (labour, capital and consumption) is based on the EU-27 information on taxation trends in 2019.[511]

Although the modelling strategy does not change across the different policy options, the policy packages address different target groups with different training entitlements. They are also expected to entail different operational costs (as indicated e.g. in section 10.2). This generates differences with respect to:

- The total financial resources entailed;
- The intensity of training support (value of training entitlements) that the different target groups will receive (i.e. in policy package A and B2, targeted individuals receive a 50-hour training entitlement per year instead of 30-hour one) and related differential effects on participation rates, wages, productivity and employment chances;
- The overall effects on training participation and thereby productivity, wages and employment chances.

Specific modelling assumptions

The following detailed assumptions are used in determining the exact input data for the BeTa model:

[510] See for instance Zhang, Y., Salm, M. & van Soest, A. (2021) The effect of training on workers' perceived job match quality. *Empirical Economics*. They identify a 12-25 p.p. increase (depending on the type of training, excluding post-specific training) in job changing incidence, leading to a positive increase in job matching quality for those changing jobs one year after the training episode.

The relationship between general training and job mobility is confirmed in Dekker R, De Grip A, Heijke H (2002) The effects of training and overeducation on career mobility in a segmented labour market. Int J Manpow as well as Cheng Y, Waldenberger F (2013) Does training affect individuals' turnover intention? Evidence from China. J Chin Hum Resour Manag.

Taking into account these effects in the simulation is consistent with the fact that individual training entitlements tend to favour general training for human capital accumulation as opposed to firm/job-specific training (see Annex 10 and the discussion on freedom of choice).

[511] Taxation Trends in the European Union, 2021 edition, Directorate-General for Taxation and Customs Union, European Commission, Publications Office of the European Union, Luxembourg, 2020.

- training is funded through additional public resources: private resources that are freed through deadweight loss for the public authorities, are reflected in the simulation as higher disposable income for individuals and lower costs of labour for employers;
- no substitution effects with existing public training support schemes: those participating in training would have either not participated in absence of support or done so thanks to individual, private resources;
- additional investment in upskilling activities resulting from voluntary cost-sharing is assumed away. This is in line with the assumptions used in the CBA (and based on the low figures of voluntary cost-sharing currently reported in the case of the French CPF, although the possibility of top-ups by employers exists only since recently - see section 9);
- given the model is based on the representative agent, individuals are not heterogeneous.[512] The simulation focuses on the EU-average annual value of training undertaken irrespective of any dynamics linked to individual accumulation.[513] Decreasing marginal returns over time are also assumed;[514]
- from a long-term perspective, fixed set up costs are omitted. This is justifiable because from a long-term perspective, one-off costs become negligible. Hence, the focus lies on operational yearly costs;
- the average cost of training for the EU-27 estimate is calculated based on the number of training entitlements redeemed by each target group, in each country, using as deflators for the education sector as per the cost benefit analysis.[515] It is therefore a weighted average which adjusts to the amount of entitlements used by each country and target group[516].
- input data used for this simulation is based on the middle ground scenario for the take up rate of the training entitlements and considers, as net effects on training participation, all the economically relevant additionality in training undertaken (i.e. all the training which would have not been undertaken without the training entitlements).
- wage levels are left free to fluctuate to ensure macroeconomic coherence in combination with the increases in taxes, monetary transfers (training purchased with public resources that would have been purchased through private ones) and effects on the job matching function. This is necessary as all these factors (taxes, transfers and changes to job finding

[512] This does not particularly affect the findings of the simulation as increases in productivity, i.e. the main channel through which the policy packages produce macroeconomic impacts, are assumed to be proportional across all target groups based on the literature review.

[513] From a macroeconomic perspective what matters is the average intensity of training undertaken within a certain timeframe (i.e. it is the same if one person undertakes a training of 500 EUR every year for five years or 2500 over five years).

[514] This is done to favour more conservative estimates against a background where the rich and wide-ranging literature discussing the issue of returns to scale is not fully conclusive. 9. Nevertheless, given that it is not necessarily the same pool of individuals who will undertake training every year, this might lead to underestimation of the benefits of the initiative.

[515] Such deflators are included in Sánchez-Barrioluengo, M. (2016): Expenditure on education in Purchasing Power Standards: A comparison of three alternative deflators. European Commission

[516] This can vary depending on the specification of the different policy packages.

rates) affect the value wages at equilibrium levels, hence it is impossible to fix them exogenously.[517]

Table 52 overview of the main coefficients used for the simulation

	30-hour training entitlement	50-hour training entitlement
Take up rates	18.4%	22% (13.1% for the low skilled)
Deadweight loss	*Middle ground scenario*: 22.8%, scaled down by Member State and Target group and then aggregated at the EU-27.[518] It is based on a broad definition of deadweight loss, to account for all the trainings which would have not been purchased in absence of support. *Sensitivity checks*: 0% and 60%.	
Effects on individual productivity	2%	3.34%
Effects on wages	Endogenous variable	
Effect on matching	Semi-elasticity parameter borrowed from the literature on the effect of training on job matching efficiency	
Cost of the training	EU-27 weighted average: EUR 380	EU-27 weighted average: EUR 645
Composition of taxes	Labour taxes 51.7%, consumption taxes 27.8 %, capital taxes 20.5%	
Operational Costs	They vary with the policy packages depending on the volume of vouchers redeemed as per section 10.2.B: 15% for A1, 8% for B1 and B2.1	
Accumulation and persistence of investment in human capital	Depreciation of human capital is factored in at 3%, as per the review in section 4 [519] Decreasing marginal returns to training accumulation over time are calculated based on a cube root function.	

Source: Authors' elaboration

10.3.3. Key results

The key results of the analysis carried out through the BeTa model are shown below. The focus lied on estimating the GDP and employment effects of the policy packages. The aim is thus to capture what is the likely overall macroeconomic and structural impact of providing individuals with

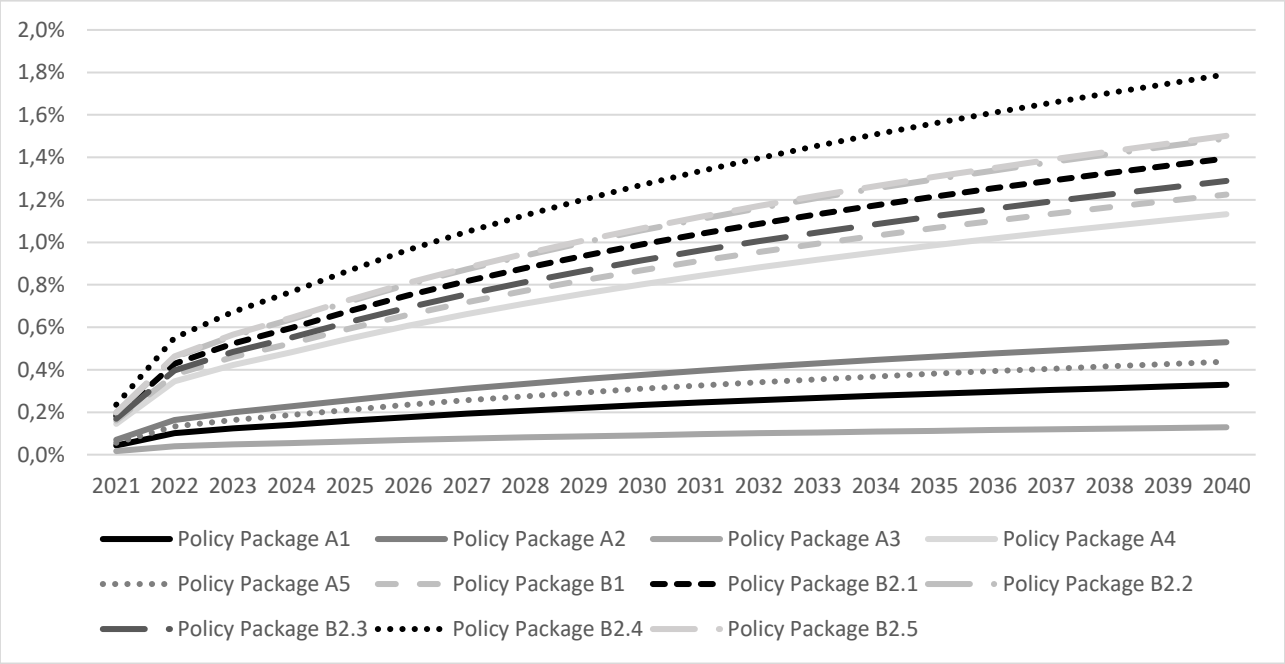
[517] It is worth recalling that estimates discussed in the literature and presented in Chapter 6 on returns to training remain partial equilibrium ones (i.e. individual level or firm level estimates, in absence of spillovers). It is therefore appropriate to take a slightly different approach to their estimation in the context of a general equilibrium simulation.

[518] The resulting deadweight loss in 2021 is 7% for A.1, 14% for B.1, and 15% for B2.1

[519] This implies that the impact of a training episode at time t on productivity at time t+n is 0.97^n of the impact of the same spell on productivity at time t

training entitlements not just as a one-off measure but over a longer time span on selected macroeconomic variables.

Figure 48 General Equilibrium GDP effects – Deviation from the baseline as a % of GDP



Source: Authors' elaboration based on the output from the BeTa model

Figure 47 above shows that a policy intervention providing individuals with training entitlements not only creates positive effects for those receiving the entitlements, but also generates structural, long lasting positive effects on the economy as a whole. This is consistent with recent macroeconomic estimates produced in the context of the evaluation of similar public investments in education and training.[520]

In particular, the largest positive effects vis-à-vis the baseline are measured on GDP, which is expected to raise considerably, e.g. by 0.09%-1.27% in 2030 (policy package A3 and B2.4, respectively) and 0.13%-1.79% in 2040 for the same policy packages, as a consequence of the cumulative productivity enhancing effects of training on the economy. Such effects are magnified by general equilibrium dynamics, as higher productivity leads to an expansion in supply which drives an increase in aggregated demand and private investments. Potential negative effects of

[520] See, for instance, the recent evaluation 2014-2018 ESF support to employment and labour mobility, social inclusion and education and training. With respect to the education and training operations (TO10) it is found that "*education and training operations are expected to add 0.16% to GDP (EUR 18 billion of euro) by 2023 compared to the baseline, and create around 170,000 additional jobs. All increases are expected to be long-term (until 2033), as GDP and employment are expected to still be higher relative to the baseline* " - SWD(2021) 10 final, Evaluation of the 2014-2018 ESF support to employment and labour mobility, social inclusion and education and training, European Commission, p. 36. It is important to stress that the average TO10 investment for the years 2014-2018 used as an input to RHOMOLO is much smaller in value than the policy packages under review here, with a ratio of approximately 1 to 10. This explains the larger absolute effects measured here. In addition, productivity shocks from training are modelled in RHOMOLO using as a proxy returns to schooling rather than returns to training. According to the literature reviewed in Annex 9 the latter typically yields higher returns. See for instance Stylianos, S. (2018) : The macroeconomic implications of the European Social Fund: An impact assessment exercise using the RHOMOLO model, JRC Working Papers on Territorial Modelling and Analysis, "*To sum up, we calculate the additional years of schooling which can be purchased with ESF expenditures per each region and skill group and we translate such skill improvement into a labour productivity shock*." Finally, agents in RHOMOLO are myopic/backword looking (adjusting their expectations based on past and current trends) whereas they are rationale – forward looking in BeTa. This affects amongst other distributional aspects (e.g. the ratio between GDP and employment outcomes, given rationale-agent firms can anticipate the positive productivity shock and therefore reduce hirings proportionally).

displacement from increases in public expenditure appear modest compared to the ripple of positive effects from increased productivity.[521] This is also explained by the fact that the increasing output generates additional revenues for public authorities, allowing the support in subsequent years to be de facto self-financed. Furthermore, these estimates are based on rapidly decreasing returns to scale and take into account the depreciation of the new skills generated by the policy support, hence should be considered conservative estimates.

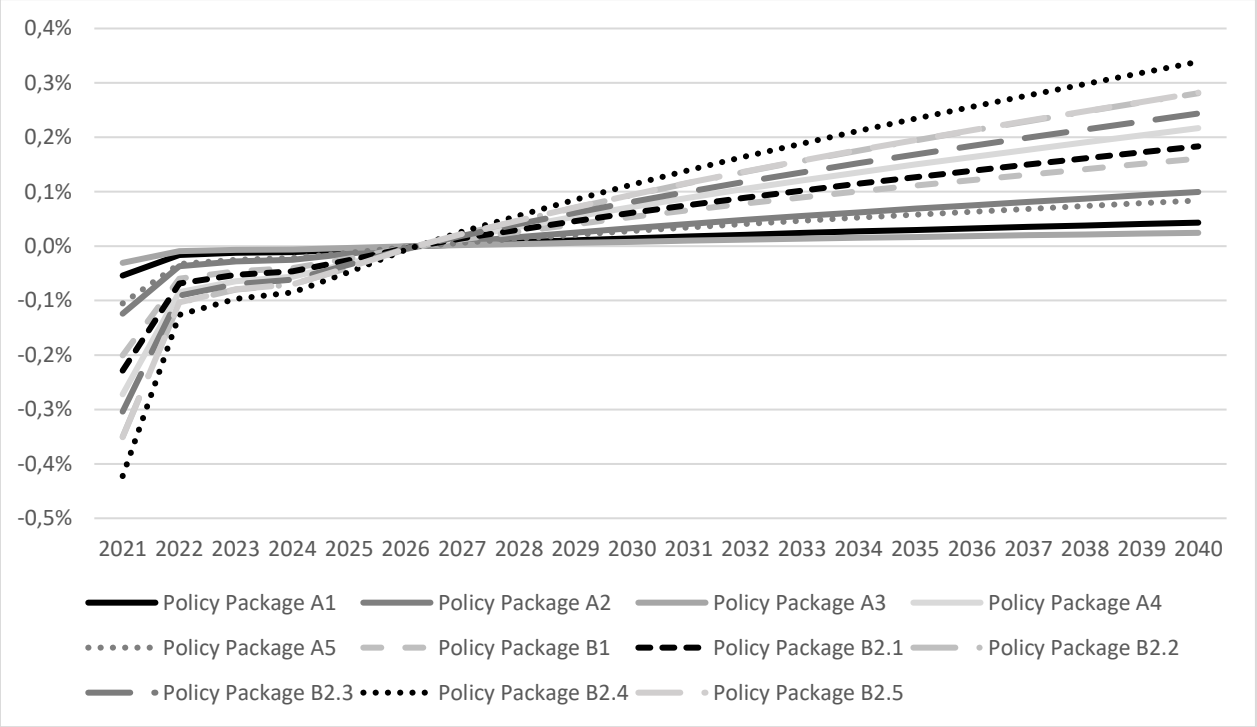
In the medium to long term and in constant prices, these increases would range from over EUR 13 billion of higher GDP every year (e.g. in 2030 for policy package A3), up to just below EUR 250 billion every year (e.g. in 2040 for policy package B2.1). These appear to be higher than the benefits calculated by the CBA in the previous section 10.2.B for the same policy packages. These findings place further emphasis on the fact that one key strength of this policy intervention is the multiplicative effect of increased productivity on growth as well as the long-term positive effects linked to the accumulation of human capital with respect to the baseline. This happens despite the depreciation of human capital and the fact that the additional skills accrued are added only partially to the effects on productivity (via decreasing marginal returns to training accumulation).

Focusing on the trend of the deviation of GDP from the baseline, all policy packages show a steadily increasing positive impact. This is explained by the cumulative effect of investment in human capital and the recursive nature of the policy packages, offering additional training opportunities to individuals every year. Increases are steeper in the short term as the economy adjusts towards new equilibrium levels where output is increased via a more productive labour force. The deviation of GDP from the baseline continues to stretch, although at a slightly slower pace, as training is continued to be offered to and taken up by individuals across the EU-27.

In terms of comparative effects between the policy packages, these tend to be proportional to the size of the intervention. The main reason for this is that the higher operational costs assumed for a targeted scheme on low qualified individuals are offset by the lower deadweight loss estimated for the same target group. In addition, the pro-rata productivity-enhancing effect tends to dominate any marginal differences in costs.

[521] This is consistent with a macroeconomic framework based on current trends in monetary policies with low interest rates.

Figure 49 General Equilibrium Employment effects – % deviation from baseline employment rates



Source: Authors' elaboration based on the output from the BeTa model

In terms of **employment effects**, as training is a measure that boosts labour supply and employers retain part of the benefits of such increased supply, a lower number of workers is necessary to produce the same output. In general, whether employment can increase structurally as a result of training tends to depend on whether scale effects are larger or smaller than substitution effects, [522] see e.g. Escudero (2015)[523] amongst others. This is apparent in the short term, and particularly in the first year, where employment levels show a negative deviation from the baseline, as rational agents in the economy (i) suffer from increases in taxes to fund the initiative and (ii) anticipate in the productivity shock putting hirings on hold.[524] In any events, the ripple of positive effects generated by increased productivity, output and increased demand boosts employment levels from the medium to long term (i.e. from 2026 onwards). In addition, training is expected to affect employment levels also through changes to job matching, as it facilitates labour

[522] Scale effects denote the expansion of production which stems from higher labour efficiency and the fact that employers are induced to expand their production, leading to additional hires. At the same time, substitution effects imply that as each individual is able to produce more, a smaller number of them is needed to produce the same output.

[523] Escudero, V. (2015): Are active labour market policies effective in activating and integrating low-skilled individuals? An international comparison, International Labour Office (ILO) "*Moreover, labour demand can be reduced if the scale effect resulting of an increase in the marginal productivity of labour (i.e. that shifts labour demand upwards because a fall of the relative unit cost of labour provides an incentive to expand output by using more efficient units of labour) is dominated by the substitution effect (i.e. arising since one unit of product can be produced by less units of labour)*".

[524] The first year reflects the sum of a few additional effects: (i) the increase in taxation needed to finance the measure (our working hypothesis is that government do not opt for additional debt – this is done to highlight the self-financing nature of investment in human capital in the long term and in times where public finances are under significant pressure. Governments however may well decide otherwise and this would reduce the negative effect on employment in the first year); (ii) the sudden increase in productivity, that is particularly strong in the first year given that in subsequent year the additional training undertaken increases the productivity only marginally (decreasing marginal returns); (iii) anticipatory effects from rational agents. It is important to notice here that in presence of non perfectly rational agents, this negative anticipatory effect on employer would be lower (generating also smaller GDP increases in the short term)

market transitions through both signalling effects (e.g. validation of skills, acquisition of certificates) and the provision of skills that are missing in the labour markets (lower skills mismatches). As explained in the working assumptions, such effects are captured in BeTa and contribute to generating structural employment effects. In particular, in the simulation above, medium to long term deviations from the baseline of employment levels **range from 0.01%-0.11% in 2030 (approx. 20 – 260 thousand new jobs in 2030, for policy packages A3 and B2.4, respectively) to over 0.03%-0.36% in 2040 (approx. 55-770 thousand more jobs in 2040, for A1 and B2.1 respectively)**. These increases might seem comparatively small against GDP increases, but are still sizable and steadily increasing over time. This finding is consistent with extant literature on the macroeconomic effects of training policies.[525]

As indicated in the methodological section above, it is important to stress that these estimates are based on a holistic consideration of all the costs and side effects (positive and negative spillovers) that are brought about by any public intervention. In addition, these positive macroeconomic performances come on top of several non-quantifiable and/or non-monetary impacts already described in the report, including increased social cohesion, civic participation, reduced crime rates etc., as per the review in section 4.

Overall, the findings from the macroeconomic simulation broadly confirm and reinforce the findings of the detailed CBA in section 10.2.B, i.e. that even from a general equilibrium, macroeconomic perspective there exists a clear economic case for substantial investment in up and reskilling. The estimates place further emphasis on the long-term, structural effects of the accumulation of human capital on GDP growth, whilst confirming comparatively small but positive and structural effects on employment rates, in line with the literature of macroeconomic employment effects of training policies.

10.3.4. Scenario analysis and sensitivity checks

Rationale and scope of the sensitivity analysis

As highlighted in the analysis above, the significant shock on productivity generated by the training entitlements drives GDP and employment increases in the medium to long run fully offsetting the cost of the investment. The estimates show positive returns for the economy in terms of both GDP and employment and such returns tend to increase over time, thanks to the accumulation of human capital and the ripple of positive effects brought about by higher productivity through the positive interaction between aggregate supply and aggregate demand.

Differences among the policy packages appear proportionally small as their efficiency is similar (losses in administrative costs in A.1 tend to be compensated by lower deadweight in presence of low qualified individuals) and the key driving factor is number of individuals that are triggered to take additional training together with the duration of such training.

To test the stability of these findings against a misspecification of the assumptions, there is an interest to apply some variation to:

- take-up rates; and

[525] See e.g. Schmid, G. O'Reilly, J. and Schömann, K. (1996): International Handbook of Labour Market Policy and Evaluation, Edward Elgar, pp. 725– 746. "*Labour-supply-oriented measures (including training, workers' subsidies, supported employment and rehabilitation and job rotation and job sharing measures), are expected to have little, if any, impact on the level of unemployment*", Calmfors L. (1994): Active Labour Market Policy and Unemployment – A Framework for the Analysis of Crucial Design Features, OECD Economic Studies, No. 22; but also the recent impact assessment on the ESF+ from the JRC as in Sakkas, S. (2018): The macroeconomic implications of the European Social Fund: An impact assessment exercise using the RHOMOLO model. JRC Working Papers on Territorial Modelling and Analysis. "*We observe that during the whole programming period the effects on employment are small but positive and increasing*", p. 9.

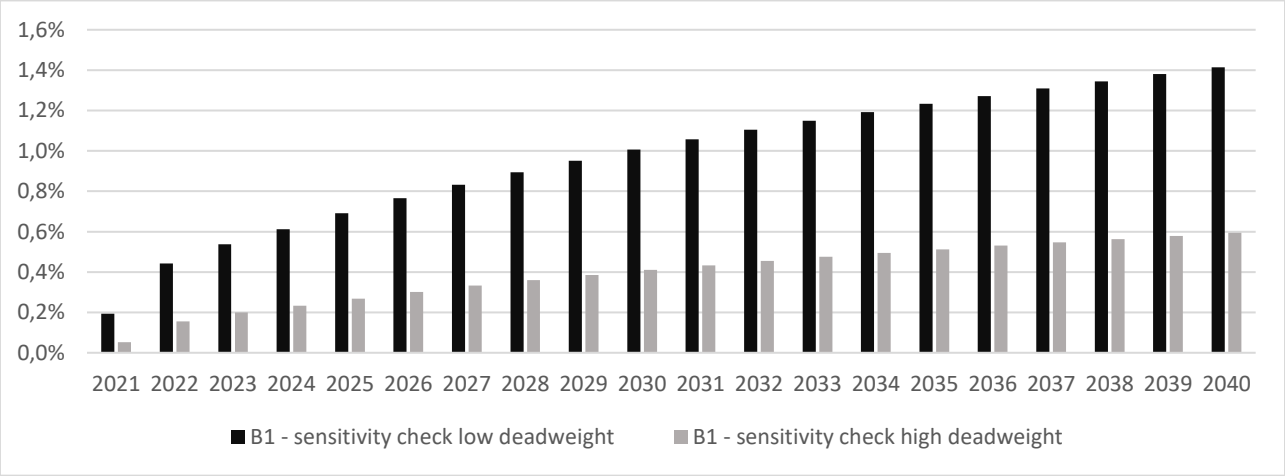
- deadweight loss.

With respect to different assumptions on take-up rates, it can be clarified from the outset that these do not strongly affect the efficiency of the policy under review, but only the volume of additional training purchased. From this perspective, the comparison between policy packages covering a small share of the population (A3) and those covering a much larger one (B2.4) already informs on the comparative effects of different take-up rates: the smaller the target group or the lower the take up, the lower the absolute gains in productivity or employment. However, there is no major deviation appearing as long as the share of administrative costs does not become disproportionately high (e.g. in presence of schemes with a few thousand individuals[526]) thanks to the substantial and cumulative gains from increased productivity.

Thus, the following paragraphs will focus on the sensitivity of the estimates to different assumptions on levels of deadweight loss. The policy package taken as a reference for such sensitivity analysis is B1, as it represents a middle ground scenario considering the size of the intervention.

Results of the sensitivity analysis

Figure 50 GDP effects of Policy Package B1 – sensitivity checks



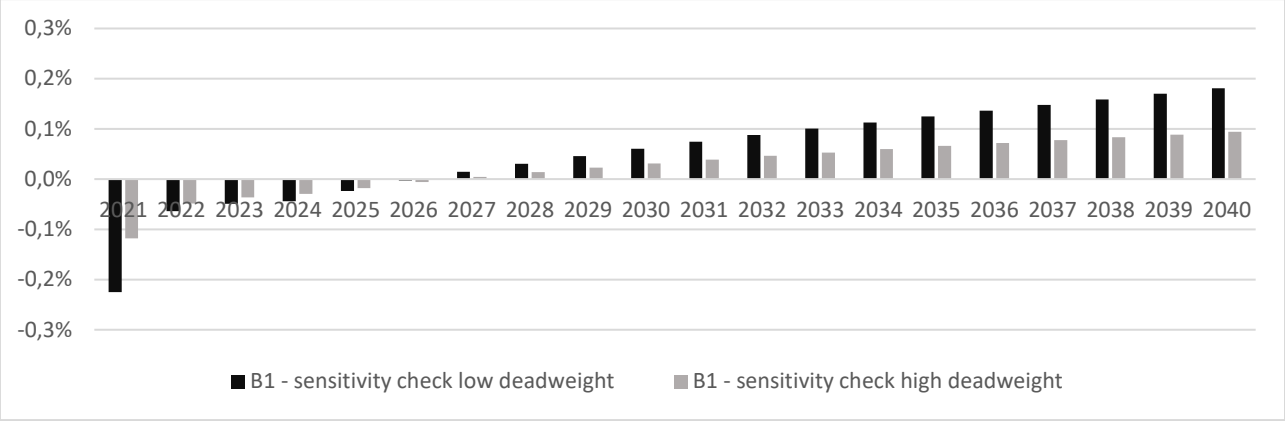
Source: authors' elaboration based on the output from the BeTa model

Figure 49 above displays the trends in GDP effects (deviation from the baseline) for the policy package B1 using two different assumptions on deadweight, respectively 0%, to account for crowding in of private resources in the case of cost-sharing from individuals, top-ups from employers and the impact of training entitlements on future training intentions, and 60%, to account for the possibility of high levels of deadweight.

The main finding of the sensitivity analysis is that impacts on GDP remain largely positive even in presence of high deadweight loss. In particular, the short and medium term the (comparatively) small direct effect on productivity due to the (comparatively) small increase in training participation is partly offset by significant transfers to employers and individuals (who are no longer paying for training they would have purchased with private resources). However, such public expenditure mostly boosts aggregate demand in the short to medium term and the long-lasting and structural effects on growth are diminished.

[526] However, such small volumes are not meaningfully discussed in macroeconomic terms.

Figure 51 Employment effects of Policy Package B1 – sensitivity checks



Source: authors' elaboration based on the output from the BeTa model

The key finding from the sensitivity analysis illustrated in Figure 50 above, is that the medium to long term employment effects of the policies remain positive even under more pessimistic assumptions on deadweight loss.

The sensitivity checks indicate that employment levels show a pattern similar to that of the main estimates, with negative effects on employment levels especially the first year in conjunction with the strongest increase in productivity, which are progressively re-absorbed in the economy as output grows and matching efficiency is positively affected by the training undertaken.

11. Monitoring indicators

Table 53 Operational objectives and monitoring indicators

Specific objectives	Operational objective	Indicators*	Source
Support Member State reforms to: 1. Close support gaps AND 2. Increase incentives and motivation to seek training	Member States have in place personal accounts with training entitlements for all working age adults. *Linked to specific objectives (SO) 1 and 2.*	a) Number of Member States with personal accounts with training entitlements for all working age adults. b) Personal accounts activated- absolute number and as share of the eligible population group, with disaggregation by Member State, employment status *(employed, unemployed and inactive)* and characteristics of the employment relationship *(permanent employee vs. other employed person and SME vs. large enterprise).*	Specific ad-hoc study[527] and Member State public authorities.
	Member States modulate the amount of training entitlements that are credited to the personal accounts according to the target group *(providing more to priority target groups).* *Linked to SO 1 and 2.*	Number of Member States that have specified priority target groups for training entitlements.	Specific ad-hoc study and Member State public authorities.

[527] Such studies can for instance draw on the independent expert network on adult learning maintained by DG EMPL since 2016.

Specific objectives	Operational objective	Indicators*	Source
	Member States have in place a public registry of recognized training, guidance and validation opportunities. *Linked to SO 2.*	a) Number of Member State with a public registry of recognized training, guidance and validation opportunities. b) Number of users of the registry as measured by the number of included training, guidance and validation events that have taken place per year.	Specific ad-hoc study and Member State public authorities.
	Member States offer career guidance services to all working age adults. *Linked to SO 2.*	a) Number of Member States with public provisions to ensure that all working age adults can access career guidance. b) Share of working age adults receiving career guidance per year.	a) Specific ad-hoc study and Member State public authorities. b) Variable "GUIDEINST" from the Adult Education Survey *("Information or advice/help on learning possibilities received from institutions/organisations in the last 12 months").* Available for 2016, 2022, and in six year intervals after 2022.
	Member States make paid training leave accessible for all employed adults. *Linked to SO 1 and 2.*	a) Share of employed adult population that is eligible to take paid training leave. b) Share of employed adult population that takes paid training leave per year.	Specific ad-hoc study and Member State public authorities.
	Member States ensure continuous improvements of the scheme. *Linked to SO 1 and 2.*	Number of Member States that have conducted an evaluation of their scheme providing individuals with training entitlements.	Specific ad-hoc study and Member State public authorities.
General objective:	**Outcome indicator:** Member States increase the share of adults who participate in learning per year.	Participation of adults aged 25-64 in formal or non-formal learning per year.	EU Labour Force Survey, data available every 2 years starting in 2022.

Specific objectives	Operational objective	Indicators*	Source
Increase overall participation of adults in training.		Total (EU and per Member State) and with disaggregation by employment status *(employed, unemployed and inactive)* and characteristics of the employment relationship *(permanent employee vs. other employed person and SME vs. large enterprise).*	For 2022, also data from the Adult Education Survey will be available, ensuring a direct comparability to the statistics on participation from the 2016 Adult Education Survey presented in this Impact Assessment.

* The above table provides a tentative list of indicators. The feasibility of collecting such indicators will be further analysed (in terms of data availability, sensitivity etc.)

12. ANNEXES

12.1. Annex I - Analytical methods

The supporting study to the impact assessment (IA) has utilised a wide variety of quantitative and qualitative methods and data sources, including extensive references to the literature and expert opinion (e.g. the mapping work of the EU Adult Learning Network, which has allowed simulations of data sets[528]). Stakeholder opinion has been captured via extensive consultations as well as the Open Public Consultation, which closed on 16th July 2021.

Overall, care has been taken to balance information from different sources, with minority opinion (both from the literature and the stakeholder consultations) also noted.

As set out in section 6, the report assesses social impacts (including participation in adult learning, wages, employment, working conditions, social dialogue, health, well-being, etc.), economic impacts (including the costs and benefits for individuals, education and training providers, employers, Member States, as well as the wider impacts on the economy in terms of GDP for instance) and the impact on fundamental rights. This integrated approach covering both the micro- and macroeconomic perspectives, requires a combination of quantitative and qualitative assessments.

In this section, we highlight in particular: 1) The quantification of impacts; 2) Qualitative approaches and 3) Data constraints.

12.1.1. Quantification of impacts

The quantitative assessment of this impact assessment consists of three parts:

- an assessment of the impact on participation rates and in turn provides the basis for the calculation of the cost-benefit analysis and macroeconomic assessments described below;
- a cost-benefit analysis of providing training entitlements of one kind or another;
- a macroeconomic assessment of the impact on output and employment resulting from conferring training entitlements on individuals

First an assessment is made **of the impact of providing training entitlements on levels of participation in training** (see section 10.1.A). The aim here is to estimate the impact of a training entitlement on participation rates bearing in mind that some people taking up the training entitlement might have trained in any case without the entitlement. In other words, as well as searching the literature to identify how training entitlements of one kind or another affect the take-up of training, consideration has also be given to deadweight so that one ends up an estimate of the additionality which might accrue from the introduction of a training entitlement such as a voucher or a personal account. The estimates of take-up and deadweight loss have been taken from various evaluations of voucher-like schemes (e.g. Schwerdt et al., 2012; Hildago, et al., 2014). The selection gives preference to a small number of experimental studies (see “constraints” below for an explanation), while placing them in the broader context of experiences from larger-scale schemes. The approach to estimating the impact on training is undertaken by identifying the size of the various populations likely to be in receipt of the training entitlement (from the EU-LFS). Their estimated take-up of the entitlement is estimated by applying the take-up and deadweight rates presented in the literature. These are then adjusted to provide an indication of likely

[528] The EU-27 was split into three groups of 9 Member States based on participation levels in adult learning, high, medium and low.

participation rates in 2030 by factoring in baseline changes in training participation rates (i.e. extrapolating trends revealed by the AES to 2030) and population change (derived from Eurostat's projections of population change to 2030); section 10.1.A provides details. Participation rates are provided for the working age population and various target groups and the detailed analysis includes high and low estimates in the form of a sensitivity analysis (see details of the sensitivity analysis in section 10.1.A).

The analysis of likely impacts on participation rates then feeds into the **cost-benefit analysis (CBA)** of the policy packages (section 10.2.B). The CBA estimates the short to medium term costs and benefits of the policy packages on individuals, employers and public authorities. Key costs are the direct costs of training entitlements, administrative costs and the costs of devoting time for training, while key benefits concern higher productivity and wages as well as higher tax revenues for public authorities and savings on social benefits resulting from positive employment impacts. Overall estimated ratios of benefits to costs are derived on the basis of the participation rate estimates from section 10.1.A, relevant estimates from the literature and Eurostat data. A limitation of these estimates is that they are of a "partial equilibrium" nature, i.e. they do not take into account some more complex impacts that are likely to affect GDP and employment levels in the longer run. The participation rates essentially establish the scale of the intervention which clearly has implications for the scale of benefits/costs. Section 10.2.B provides details.

The derivation of a cost- benefit estimate(s) leads to the wider implications for the economy. **Macroeconomic modelling**, using the BeTa model (see section 10.3.C), provides a rigorous means of capturing how increased levels of participation in training might affect output and employment. In doing so it complements the CBA model to reveal the longer term/general equilibrium effects of the provision of training entitlements to different target groups. In doing so, it is able to control for the complex economic interactions which might result from, for example, increased public investment in training and how this might affect private investment decisions. In looking at the benefits of training it is also able to capture the wider impacts and is not limited to quantifying the impact on those directly affected by the entitlements (i.e. it is able to capture various externalities). Accordingly, the BeTa model is able to rigorously estimate how increased levels of participation in training might affect output and employment by adjusting the stock of human capital available to an economy, and the impact this may have on the efficiency with which people are matched to available jobs. As a forecasting model, it is able to provide an assessment of medium to long-effects on output and employment.

12.1.2. Qualitative methods

Qualitative methods were used throughout the impact assessment to support the problem definition, the definition of policy measures as well as to assess the impacts of the policy packages, in particular the social impacts and the impacts on fundamental rights, in addition to the economic impacts, where quantitative data was limited.

In-depth systematic **literature review** was implemented in order to collect detailed and comprehensive evidence about the main problems and issues as well as the effects of different training schemes and interventions, as shown in this impact assessment supporting study.

Seven **case studies** were conducted (see section 9) with the objective of (i) gaining a better understanding of the context (socio-economic and policy framework) in which financial instruments for adult learning are being implemented in selected Member States, (ii) identifying recent and relevant policy initiatives that could inspire other Member States, (iii) and exploring the working mechanism for such policy instruments and their potential to responds specific contextual challenges and policy problems. Country experts were engaged to collect the required information and institutional stakeholders' opinion. In selecting the Member States to focus on, a set of criteria was adopted to ensure geographical representativity at the EU level and reflect other dimensions such as heterogeneity of adult learning systems, good coverage of the EU population, different

levels and trends in participation rates, different business structures, and different degree of digitalisation.

An in-depth analysis the French Compte Personnel de Formation (see section 5) was also carried out in order to provide a narrative and exemplify potential features to be promoted or avoided, information on what worked well and what worked less well and under which conditions, and lessons learned. Indeed, the development and dynamic adjustments of the French scheme in response to changing needs and political priorities represents an interesting practice for other Member States.

The outcome of the **consultations of experts and stakeholders** also contributed to the qualitative analysis of the report.

12.1.3. Constraints

It needs to be borne in mind that undertaking an assessment of the impact of an individual training entitlement faces a number of challenges which stem from the following.

Limited **quantitative data** being available on which to base quantitative estimates:

- experimental data is needed for a rigorous identification of the key parameters of interest, as observational data does not allow to observe deadweight loss (due to self-selection of motivated individuals into the scheme) and often also does not provide good evidence on take up rates (as existing schemes are often targeted at specific groups). Therefore, the quantification draws on evidence from a limited set of field experiments, in particular a voucher experiment that assigned training entitlements to a randomly subset of the entire Swiss adult population, which allows for a rigorous assessment of take-up and deadweight loss;
- estimates of deadweight loss are often not able to factor in impacts of training entitlements on the intensity of training in response to receiving training entitlements or future training intentions (i.e., individuals would have undertaken some training even in the absence of entitlements, but train longer or more frequently over a certain period thanks to entitlements), leading to an over-estimation of deadweight loss;
- there is some uncertainty in the literature as to whether returns to training are constant, increasing or decreasing (chapter 8), and this matters in particular for the estimates of long-run impacts in the BeTa model (Chapter 10);
- relatively little data is available on interactions between different policy measures, e.g. the impacts of training entitlements in the presence of strengthened guidance of paid training leave provisions and vice versa;
- limited data on costs (set up and operational) and where these data are available they tend to reveal wide variation across countries and there is always a degree of uncertainty as to whether like is being compared with like;
- some wider benefits of training, (such as the impact on job and life satisfaction, health etc.) and of some policy measures (e.g. paid training leave) are difficult to quantify, and large parts of the evidence base are of a correlational nature;

The following steps have been taken in this impact assessment to **address these constraints**:

- Deadweight loss estimates have been adjusted to ensure that deadweight estimates reflect differing levels of training participation in the Member States as explained in section 10.1.A.
- Sensitivity checks on the key parameters are conducted throughout section 10, to show the robustness of key results to alternative assumptions concerning take-up rates and deadweight loss, wage and employment impacts and administrative costs.

In the BeTa model, decreasing returns to scale have been selected as a cautious benchmark assumption for long-run impacts of higher training participation.

- Wider expected benefits of increased participation of adults in learning are not quantified but discussed qualitatively.

More **qualitative data** has been drawn upon in order to provide a more holistic analysis of the likely additionality resulting from the introduction of a training entitlement and capture some of the costs and benefits where quantitative data are limited. There are constraints from using these data too, including:

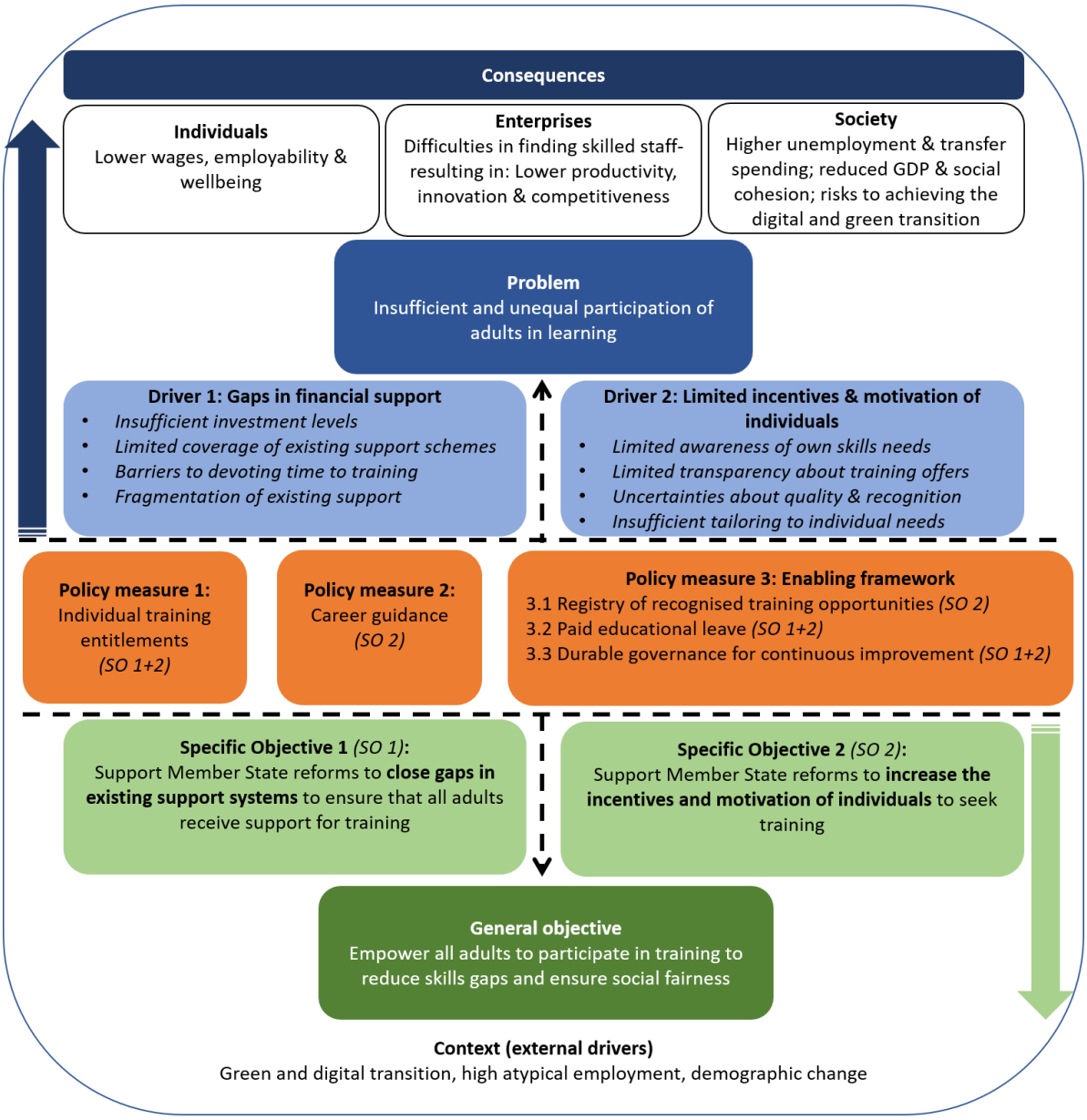
- questions about the representativeness of such data (e.g. where data or conclusions are drawn from a relatively small group of individuals or organisations);
- the comparability of data across schemes or countries given the highly specific nature of some of the more qualitative inquiries which have been drawn upon.

This impact assessment supporting study recognizes these constraints. It aims to make the most of the corpus of quantitative and qualitative information available on individual learning entitlements, including by using qualitative data where quantitative information is scarce and by making assumptions and 'best estimates' especially in modelling impacts (section 10).

12.2. Annex II – Intervention logic

Figure 5251 below provides an overview of the intervention logic underpinning the initiative, linking the policy measures introduced above to the identified problems and objectives of the initiative. Some of the policy measures address both of the problem drivers and specific objectives.

Figure 52 - Intervention logic



12.3. Annex III - Report on the Public Consultation

12.3.1. Executive summary

The European Commission is considering a proposal for a Council Recommendation on Individual Learning Accounts (ILAs) to tackle access barriers and low uptake of training. The ILA is an initiative under the 2020 European Skills Agenda and Commission Work Programme for 2021.

The public consultation was launched in April 2021 and completed in July 2021 through an online questionnaire, including open and closed questions, taking responses in the language of respondents' choice. **216 responses** and **38 unique position papers** were received and are the subject of this report.

Data collected included basic demographics of the respondent, and details of the organisation they represent, if relevant. Sections of the report follow the format of the public survey as below.

- The problem: barriers to training (costs, incentives and motivation, time for participation, employer and employee barriers).
- Objectives, added value: the objectives of ILAs; where the EU can add value (in respect of transparency, portability, funding, efficiency, registration, quality assurance, validation, career guidance, leave entitlements,).
- Options: potential approaches (including ILAs, vouchers, tax incentives, subsidies, funding, incentives for learners, delivery methods).
- Impacts: on training entitlements (for individuals, the labour market, social and environmental).

The analysis coded variables, created classifications and frequencies, and themed open responses. Minority views are reported alongside majority views.

Responses have been grouped as:

1. Citizens (78 respondents)
2. Public Authorities (26 respondents)
3. Businesses and business associations (46 respondents)
4. Trade Unions (26 respondents)
5. NGOs, academic/ research institutions and other respondents (40 respondents)

Country clusters were also used to stratify responses based on the 27 Member States grouped into countries with the highest medium and lower average levels of adult participation in learning, each with 9 countries[529].

Summary of findings: Problem analysis

The majority of respondents across all groupings (including country clusters based on respondents from the countries with high/medium and low adult learning participation) agreed[530] there are both awareness and financial barriers to accessing training, including direct and indirect costs and a lack of awareness of financial support. The direct and indirect costs of training (including loss of time taken up by training) were highlighted as barriers to accessing training by 192 (89%) and 176 (82%)[531] respondents across all groups.

Respondents agreed that fragmented/insufficiently transparent information on opportunities and uncertainty about the skills to improve employment prospects also reduce training uptake (188, 88% fully or somewhat agreed). Other barriers mentioned included poor accessibility to training opportunities in rural areas and a lack of access to IT.

The majority of respondents (189, 88%) agreed that time-related factors hinder individuals from accessing training. The inflexibility of training times and an overall lack of time because of work, family and other commitments are also seen as the main obstacles with 178 (83%) agreeing that rigid time patterns of training provision were a factor. Disaggregation by groups of respondents shows that all groups have a similar level of agreement with statements, but there was a slightly greater disagreement with time constraints being a major factor amongst businesses/business associations than other groups.

[529] From the 216 responses, 7 are excluded from the country analysis as they are from outside the EU. A further 25, from Belgium, Italy and Luxembourg, are EU level organisations and also excluded from the country analysis.

[530] For most questions respondents were given a scale choice: fully agree, somewhat agree, somewhat disagree, fully disagree, or don't know. When we refer to 'agree' we mean the aggregation of fully and somewhat agree responses.

[531] N = 216 unless otherwise stated.

There was a general agreement on the lack of capacity by small, medium and micro-enterprises to organise training for their employees, as well as agreement on a lack of support for atypical workers, although businesses/business associations were more likely to disagree with this than other groups, who often felt that provision was sufficient. 180 (83%) highlighted a lack of capacity within small, medium, and micro businesses to organise training for their employees. 179 (83%) thought that a lack of support to atypical workers was an obstacle. There was a relatively high level of disagreement that employer's fear to lose a worker once he or she has acquired better skills (51% fully or somewhat agreed, 43% fully or somewhat disagreed) and the disagreement was stronger amongst trade unions and businesses/business associations.

175 respondents (82%) fully or somewhat agreed that insufficient awareness of the benefits of training was a factor, whilst 188 (88%) mentioned uncertainty about which skills were needed to improve employment and income prospects. 192 (89% – the highest response to this question) highlighted fragmented or insufficiently transparent information on available training opportunities, with 171, 80% highlighting uncertainty of the quality of the training available. 177, 82% agreed that uncertainty about whether training outcomes will be recognised by employers was a factor and 166, 77% highlighted insufficient tailoring of training to individual needs.

Summary Findings: EU added value and policy objectives

There was a general agreement that a European initiative on ILAs could create added value for its beneficiaries. All aspects of potential implementation receive full or partial agreement that ILAs could contribute to the following:

- More efficient use of EU funds for skills development (181, 84% fully or somewhat agreed, while 10 fully disagreed)
- Validation of non-formal and informal learning outcomes 176, 81% fully or somewhat agreed, although 15 fully disagreed)
- Portability and recognition of training outcomes across Member States (163, 75% fully or somewhat agreed, while 22 fully disagreed)
- Provision of paid training leave and its take-up by individuals (167, 77% fully or somewhat agreed, while 15 fully disagreed)
- Implementation of quality assurance also for non-formal training opportunities (168, 78% fully or somewhat agreed, while 20 fully disagreed)
- Development of registries of quality-assured training opportunities at national level (168, 78% fully or somewhat agreed, although 15 fully disagreed)
- Provision of career guidance (166, 77% fully or somewhat agreed, although 12 fully disagreed)
- Increased transparency about national training markets for companies operating on the single market. Respondents agree most that there is a need for more efficient use of EU funds for skills development, and that the transparency of training markets for companies, which operate in the single market, could benefit from ILAs (154 – 71% fully or somewhat agreed).

Respondents generally fully or somewhat agree that additional policy efforts should focus on:

- short job-related training – 185, 86%
- more fundamental job-related training – 195, 91%
- basic, soft and inter-personal skills – 189, 88%
- digital skills – 200, 93%

- skills for green transitions – 198, 92%

Support was less strong for non-job-related training 158, 73% fully or somewhat agreed.

The open comments from respondents mention the ILA improving the provision of, and access to, training by overcoming barriers to a lifelong learning culture, that ILAs would facilitate sharing of good practice, and be especially beneficial for younger people. Additional open comments focus on the need for training focused on labour market needs and transitions. The need for basic, social and transversal life skills are thought be of importance, both for workers and society. The importance of portability and equal access for disadvantaged groups is noted. There was a general concern – especially from businesses/business associations - that any new interventions should avoid unnecessary bureaucracy.

Summary findings: Policy options

Support for training entitlements

There was a high level of support for ILAs as an approach to address the financial barriers to training establishment of ILAs – 182, 84% fully or somewhat agreed. There was also support for alternative measures including vouchers (177, 82% fully or somewhat agreed, tax incentives for companies (188, 87%) and additional subsidies to training and education providers – 148, 68%. The views from the position papers on the introduction of ILAs were more mixed but a general point was the need to integrate new initiatives with existing training systems and to protect existing collaborative agreements, respecting the principles of subsidiarity.

Funding of adult learning and training entitlements

A majority of the respondents (189, 88%) fully or somewhat agreed that there should be an increase in overall public funding to support training. The establishment of shared training costs between companies, public authorities and individuals is also noted as a potential solution (167, 77% fully or somewhat agreed). Some position papers, especially from trade unions and NGOs/other organisations, stressed the need to ensure ILAs or similar initiatives, if adopted, were adequately funded, avoiding piecemeal approaches.

Respondents cited both EU and Member State funds as a funding source for ILAs. 145 (68%) agreed with an employer's levy (with 31 fully disagreed) and 113, 53% agreed with individual contributions, but 84 somewhat or fully disagreed. The suggestion to increase individual contributions is the least popular among citizens. Some respondents stated that incentives should be a shared responsibility involving public funds, employers', and employees' funds.

A mix of financial tools for the administration of ILAs was mentioned in the open questions and the position papers, with a minority stating that allowances should be based on participant income, not on a standardised amount for all, although this could have high administrative costs. Comments included the importance of social partners being involved in tackling financial constraints (particularly from social partners), and that adequate childcare and paid training leave are central to successful ILA implementation.

ILAs, and accompanying measures, as a means to increase motivation to train

The extent to which ILAs or entitlements in other forms could increase motivation to participate in learning received support (178 and 177 respectively, 82% in both cases) but there was also a high level of support for additional measures including a public registry of quality assured training opportunities – 185, 86% and a one-stop shop digital platform (e.g. smartphone app) linked to a registry of training opportunities – 189, 88%. There was even greater support for in-person advice and guidance – 198, 92% fully or somewhat agreed – and for awareness raising campaigns – 190, 88% fully or somewhat agreed.

192 (89%) respondents fully or somewhat agreed that the validation of informal and non-formal learning could increase motivation. 181 (84%). mentioned increased modularisation of training offers, with certification for short courses, in respect of increasing motivation. A general view from the position papers was that for ILAs to be effective they needed to be combined with other complementary measures e.g. the provision of information on courses, paid training leave, guidance, quality of training – linked to national qualifications frameworks - and validation.

Respondents fully agreed that time constraints to participation in training could be addressed through ILAs – 135 (63%), while 24 fully disagreed or training entitlements in other forms – 137 (63%), while 22 fully disagreed.

There was general agreement (182, 85% fully or somewhat agreed), while 5 fully disagreed) that cost of living allowances would be helpful in addressing participants time constraints. At the same time, there was support for paid training leave as a means to reduce time constraints. 177, 82% fully or somewhat agreed, while 9 fully disagreed.

Universal, targeted and hybrid entitlements

166, 77% agreed in a universal approach open to all working age adults (15 fully disagreed), with 168, 78% for a universal approach combining a greater level of entitlement to those with particular training needs. 92, 43% agreed to targeted support only for those individuals with particular training needs[532], but more respondents (111, 52%) somewhat or fully disagreed.[533] Trade unions providing position papers were generally supportive of a universal approach with training (and paid training leave) as a fundamental right, enshrined in the European Pillar of Social Rights. NGOs and other organisations tended to highlight the need to target vulnerable and other priority groups.

The position papers also reflected the debate between universal and targeted entitlements, with differing views but generally in agreement that the design of the initiative should not disadvantage vulnerable groups without the resources and knowledge to access training systems, whereas others arguing that access to training was a fundamental right for the benefit of all citizens.

Rules for spending entitlements

Most respondents agreed with free selection from a registry of eligible training offers (autonomy/freedom of choice), and that for employees, training may take place during working hours with the agreement of the employer. Position papers from businesses/business associations generally emphasised a focus on labour market relevant training.

191 (88%) fully or somewhat agreed that there should be a free selection by individuals from the registry of eligible training offers and that training should be allowed to take place during working hours with the agreement of the employer. Only 83 (38%) fully or somewhat agreed that there should be a requirement for training to take place outside of working hours, and only 77 (35%) fully or somewhat agreed that individuals should have to follow compulsory guidance on the selection of training (with 118, 55%) somewhat or fully disagreeing).

Policy instruments

[532] Examples given were atypical workers, the unemployed, the low qualified and those in industries undergoing structural change.

[533] The remaining 6% answered ‘don’t know’.

84 (61%)[534] fully or somewhat agreed that the initiative should be promoted via an instrument on a voluntary basis (such as a Council Recommendation but with countries deciding what and how to implement the recommendation), while 44 (31%) somewhat or fully disagreed. 61, 44% fully or somewhat agreed that there should be no additional instrument and that the existing EU-level framework is sufficient, but slightly more respondents (63, 46%) somewhat or fully disagreed. Position papers from employer representative organisations and trade unions argued for a role in the development and governance of any new initiatives, given their experience in developing collective agreements.

The principle of subsidiarity was stressed in several position papers with all stakeholder groups but especially trade unions and NGOs - stressing the need to involve social partners and public authorities in the governance of training entitlements.

Summary findings: Impacts Respondents were in overall agreement that ILAs would improve fundamental and social rights. All fundamental and social rights listed had above 50% of respondents fully or somewhat agreeing there would be an improvement resulting from implementation. Respondents agreed that ILAs would make it easier for individuals to manage transitions in the labour market (179, 83% fully and somewhat agreed that ILAs could improve employment prospects for unemployed people). There was a slightly lower level of support for other fundamental and social rights. 161 (75%) fully or somewhat agreed that ILAs could improve health and well-being. 141, 65%) fully or somewhat agreeing in respect of ILAs promote active citizenship, 162 (75%) fully or somewhat agreed that ILAs could help to tackle discrimination in respect of access to training, employment and career progression

The majority of respondents agreed that ILAs would have a positive impact on the labour market and the economy, particularly reducing skills gaps and mismatches (172, 80% fully or somewhat agreed), closely followed by improving productivity and competitiveness of companies (167, 77% fully or somewhat agreed). Although there was a low level of disagreement overall, the highest level of disagreement was that ILAs would support geographical labour mobility, with 25% overall disagreeing.

The majority of respondents (174 (81%) fully or somewhat agreed that ILAs would support digital and green transitions by providing relevant skills) as well as improve cohesion in society (147, 68% fully or somewhat agreed), and lead to upward convergence between Member States.

These generally positive views are reflected in many of the position papers (from NGOs/other organisations, employer organisations and trade unions, the latter stressing the importance of implementing fundamental rights to training and having a strong role in the governance of ILA/training entitlements).

12.3.2. Introduction to the Public Consultation

12.3.2.1. Overview

The European Commission is considering a proposal for a Council Recommendation on Individual Learning Accounts (ILAs) - one of a number of initiatives announced in the 2020 European Skills Agenda and included in the Commission Work Programme for 2021 - to complement other actions including the Council Recommendations on vocational education and training as well as other EU instruments. The initiative is designed to tackle access barriers related to the costs of training and a lack of incentives and motivation to take up training.

[534] This set of questions were directed to organisations. N =138

12.3.2.2. The Public Consultation

There has been an extensive consultation programme on the proposed ILA initiative, ranging from a high-level conference centred on experience of operationalising training entitlements (4-5 March 2021), to a series of targeted consultations, plus a validation workshop. A 12-week public consultation was completed on 16 July 2021. **216 responses** and **38 unique position papers** were received and are the subject of this report. There was no format for position papers and most papers did not comment on all areas.

The online questionnaire included 19 open and 28 closed questions in all EU languages, taking responses in the language of respondents' choice. Data collected included basic demographics of the respondent, and details of the organisation they represent, if relevant. The survey solicited respondent views on problem, objectives, and EU value-added, options and impacts. The 12-week public consultation was launched by the European Commission on 23rd April through an online questionnaire implemented in the EU Survey tool and completed on 16 July. The questionnaire was available in electronic format only and the languages of the questionnaire are the official languages of the Union, for both questions and replies. The questionnaire included both open-ended and closed questions, and all answers are collected in a single dataset.

Various promotional activities were undertaken to encourage participation in the survey. These included a variety of prompts from the Commission.

In order to ensure that the consultation reached the highest number of EU respondents from different target groups and countries the European Commission has used different information channels aimed both at the general public as well as to stakeholders (websites and social media, communication at events as well as to information multipliers such as EU-level organisations and social partners).

Respondents were allowed to participate in the language of their choice. Both closed and open questions were asked in five sections.

About you – details of the respondent including: language, contributor background (citizen or organisation), employee size and scope (where relevant), age group, their role in training (if any).

Problem analysis – views on aspects of the barriers to participation in adult learning including: costs, incentives and motivation, time available for participation in training, and other employer and employee based barriers including loose links to employers amongst atypical workers.

Objectives and EU added value – questions on what the objectives of a scheme involving training entitlements should be and the extent to which the EU could add value including: transparency, portability, funding efficiency, registries of training opportunities, quality assurance, validation, link to career guidance, paid training leave entitlements, and through policy actions in specific skill areas including general transversal basic or soft skills, skills for digital and green transition.

The options – questions on ILAs, vouchers, tax incentives for individuals and or companies, subsidies to providers, innovative funding mechanisms; questions on incentives and motivations for individual learners and ways to address specific barriers such as time constraints for individual learners, and questions on the targeting of incentives and training to groups with greater or lesser current participation rates in training, and needs for upskilling; questions on delivery methods of training, and the suitability of arrangements for entitlements for individual delivery and uptake mechanisms.

Impacts – questions on the potential impacts of a scheme involving training entitlements on individuals and on the labour market, as well as wider social and environmental impacts.

12.3.2.3. Methodological Issues

The public consultation is a voluntary online survey. It is not a representative statistical survey, but a gathering of opinions, and might not be in a position to reach all target groups to the fullest extent. This can lead to opinion biases. Furthermore, the number of responses does not always allow for a meaningful disaggregation of results (by country grouping or by respondent's profile). We therefore, provide the number of actual responses as well as percentages.

Respondents had the opportunity to tick 'don't know' as a valid response. This is different from questions left unanswered in which case the number of responses (and analysis against that total) was reduced.

12.3.2.4. Analysing the responses

CLOSED QUESTIONS

All survey questions included in the public consultation have been analysed in the text by the differences between sub-groups of the disaggregation by Member States including the use of country groupings based on levels of adult learning participation (see below) and groups of respondents (which were regrouped into five categories for analytical purposes).

OPEN QUESTIONS

Open-ended questions were translated and screened through a qualitative analysis. Subsequently, inductive coding was used to derive themes from the answers to the respective questions. Clusters of the most recurrent type of answers served as starting point for the analysis.

Additionally, particular answers, even if not recurrent, were included if considered particularly original and relevant by the experts working on the qualitative analysis. The responses per theme were distilled to arrive at the essential messages, which offer valuable insights from each set of responses and were integrated in the report.

12.3.2.5. Interpretation of results

The questionnaire is structured so that all the respondents have to fill in the descriptive section covering basic information related to themselves, while the questions in the main section differ according to the macro group of the respondents.

The closed questions have been analysed as follows:

Overall frequency – how were the questions answered by all respondents

Respondent type – five groups of respondents were selected for analysis

The survey has been analysed using these clusters of responses, namely:

- **Respondent Group 1** – Citizens (78 respondents)
- **Respondent Group 2** – Public Authorities (26 respondents)
- **Respondent Group 3** – Business Associations and Enterprises (46 respondents)
- **Respondent Group 4** – Trade Unions (26 respondents)
- **Respondent Group 5** – Non-governmental bodies (NGOs), academic and research institutions and other respondents (not specified) (40 respondents)

Country clusters – three country clusters were identified based on dividing the 27 Member States into three groups of 9, the group with the highest levels of adult participation in learning, the next 9 with a medium level of participation, and final group with the lowest levels of participation in adult learning. 209 of the 216 responses came from the EU and were included in this level of analysis.

66 came from the 9 Member States with the highest average level of participation in adult learning, 62 from the next group of 9, and 56 from the 9 states with the lowest levels of participation. The remaining 25 responses were received from EU level organisations but were not considered in the country clusters. In addition, 38 unique written responses were received. This provided another layer of analysis, namely:

Countries with a high level of adult learning participation – EU Member States in the top group for average levels of participation in adult learning (9 of 27 EU Member States). 66 responses received from (AT, DE, DK, FI, FR, HU, IE, NL, SE).

Countries with a medium level of adult learning participation - EU Member States in the middle group for average levels of participation in adult learning (9 of 27 EU Member States). 87 responses (62 when EU organisations are excluded) received from (BE, CY, EE, IT, LU, LV, PT, SI, SK)

Countries with a low level of adult learning participation - EU Member States in the low group for average levels of participation in adult learning (9 of 27 EU Member States). 56 responses received from (BG, CZ, EL, ES, HR, LT, MT, PL, RO)

12.3.2.6. Response to the Public Consultation

216 respondents replied to the public consultation comprising **78 citizens, 26 public authorities**, **46 businesses/business associations** and enterprises, **26 trade unions** and **40 NGOs**/other organisations.

Summary of respondents:

Most citizens, at 45 out of 78, were aged 35-54, a further 17 aged 55-64.

13 participants were aged under 35 and 3 were 65+.

66 of the 135 organisations had up to 49 and 9 employees respectively. 40 were large organisations (more than 250 employees), while 29 medium size with 50-249 employees.

Belgium had the most respondents (35) but of those 23 were Brussels based EU organisations.

Table 54 - I am giving my contribution as:

I am giving my contribution as[535]	Number of answers (a.v)	Percentage of answer (%)
EU citizen	77	35.7%
Business association	28	13.0%
Trade union	26	12%
Public authority	26	12%
Non-governmental organisation (NGO)	23	10.6%
Company/business organisation	18	8.3%
Other	9	4.2%
Academic/research institution	8	3.7%
Non-EU citizen	1	0.5%
Total	**216**	**100%**

[535] These were later re-grouped for analytical purposes. See Figure 53

The table below details respondents by their self- classification of their status as citizen or by employer. The largest group of respondents is EU citizens at 77 (36%), followed by 28 (13%) businesses and business associations, with a similar number for trade unions at 26 (12%). Public authorities and NGOs had similar numbers of response at 26 (12%) and 23 (11%) respectively. There were also 18 (8%) responses from businesses or business associations and 8 (4%) from academic/research institutions. Figure 53 shows the same information but grouped into five respondent groups, as previously described.

Figure 53 I am giving my contribution as

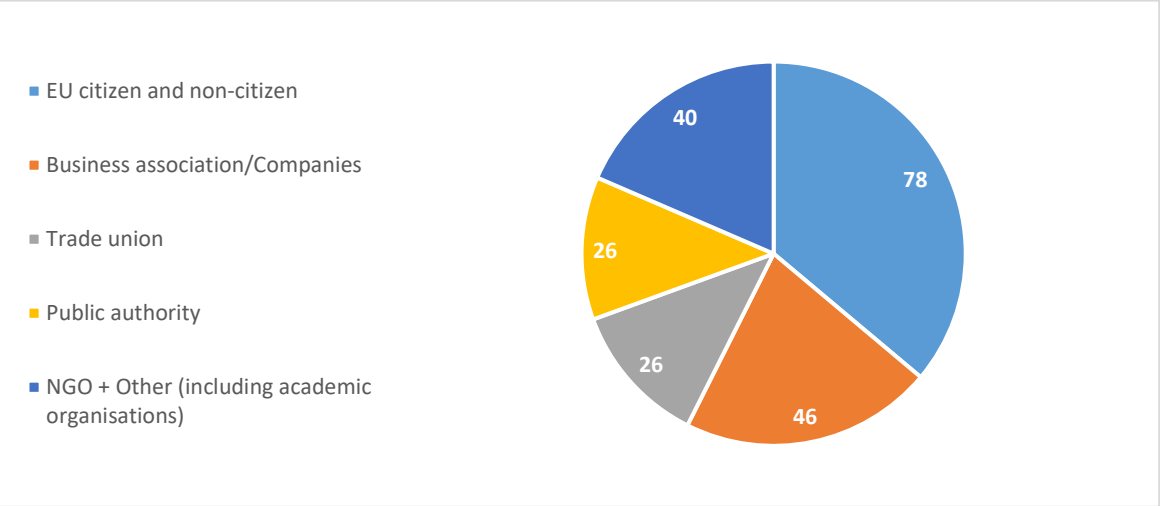
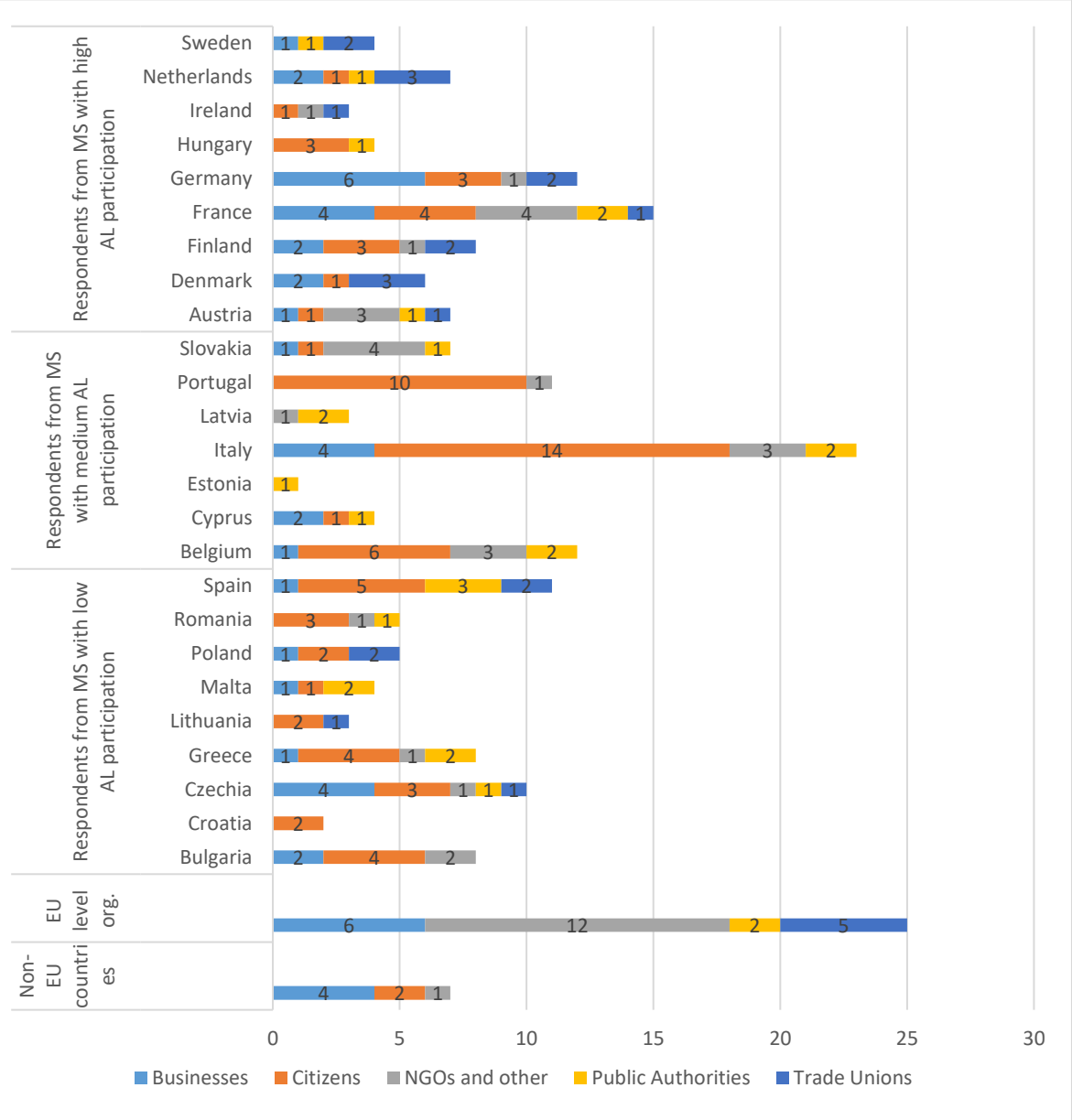


Figure 54 Structure of respondents by country[536]



As can be seen in Figure 54, **Belgium** had the highest number of respondents of any Member State at 35 (but 23 were EU level organisations). This was followed by **Italy** with 24 (including 1 EU level organisation) respondents and France with 15.

12.3.2.7. Respondents by age and scope

Of the 78 citizens responding, the majority were in the age bracket 35-54 year olds. The second most common age bracket to respond were 55-64 year olds. The age bracket comprising of the smallest group of respondents was 20-24 year olds with just 2 respondents.

[536] EU-27 countries were grouped equally into relatively high, medium and low participation levels in adult learning, based on the 2016 Adult Learning Survey.

Table 55 In which age group do you fall (citizens only) (78 respondents)

Age Group	*Number of answers*
20-24	2
25-34	11
35-54	45
55-64	17
65+	3
Total	**78**

The scope of public authorities engaged in responding to the questionnaire were broken down to international, local, national and regional levels. Of the 24 such authorities, 12 had national scope, 8 regional, 3 local, and 1 international.

Table 56 - Scope of public authorities (26 respondents)

Scope	Number of answers
International	1
Local	3
National	14
Regional	8
Total	**26**

12.3.2.8. Scope and size of the organisations

The organisational size of participating organisations was broken down into four groups: Large (250 or more employees), Medium (50-249), Small (10-49) and Micro (1-9). Of the 135 organisations that responded, large organisations provided the most responses with 40, followed by small organisations (36), micro (30) and medium (29).

Table 57 Organisation size (excluding citizens)

Organisation size	Number of answers
Large (250 or more)	42
Medium (50 to 249 employees)	29
Micro (1 to 9 employees)	31
Small (10 to 49 employees)	36
Total	**138**

A total of 127 organisations responded to the question of their role in training. The most common response to this question was 'Other' role in training. The second most common response was 'national or regional organisation with responsibilities for adult learning and training' (26 responses). This was closely followed by education and training provider (25 responses). The answer with the fewest responses was 'company providing training' for its employees (5 responses).

Table 58 What is your organisation's primary role in training? (127 respondents)

What is your organisation's primary role in training?	Number of answers
Other role in training	53
National or regional organisation with responsibilities for adult learning and training (including the funding of training)	26
Education and training provider	25

What is your organisation's primary role in training?	Number of answers
Public or private employment services providing information, advice, guidance or training	12
Accreditation or certification body/ provider of quality assurance	6
Company providing training for its employees	5
Total	**127**

12.3.3. Problem Analysis

The section reports the responses to questions about the barriers to adult training and the incentives and motivation that might encourage higher levels of participation. Finance, time and family commitments, languages are highlighted as well as the practice and policies of employers.

Problem analysis - Summary

- The majority of respondents overall fully or somewhat agree that there are awareness and financial barriers to individuals accessing training, and that these include the direct costs, indirect costs and a lack of awareness of the availability of financial support.
- Respondents generally agree that factors related to incentives and motivation can prevent individuals from accessing training especially fragmented/insufficiently transparent information on available training opportunities and uncertainty about which skills are needed to improve employment and income prospects.
- The majority of respondents agree in saying that time-related factors hinder individuals from accessing training. Both the inflexibility of training times when training can be undertaken and a lack of time including work, family and other commitments are seen as the main obstacles, though there is higher agreement with this from trade unions and public authorities.
- There is a majority agreement on the lack of capacity by small, medium and micro-enterprises to organise training for their employees although businesses/business associations were less likely to agree with this than trade unions, public authorities or citizens. There was also overall agreement on there being a lack of training support for workers with no links, or close links, to an employer (i.e. atypical workers).
- Respondents referred to difficulties for certain groups in accessing training including persons with disabilities, migrants and others with language barriers and older people especially related to IT barriers. There is also reference to the difficulty to access training in rural areas and/or for people without access to internet.
- Personal motivation, especially the fear of the training not being recognised or linked with a long-term benefit.

12.3.3.1. Cost as a barrier

Respondents from all groups were asked to express their opinion on the costs that prevent individuals from accessing training. Figure 55 (direct costs) and Figure 56 (indirect costs) below shows the overall results with broadly similar results although citizens highlight direct over indirect costs in respect of barriers to training (67% against 44% in full agreement).

Figure 55 - Q 4.1 To what extent do you agree or disagree that following factors related to costs prevent individuals from accessing training? (216 respondents)

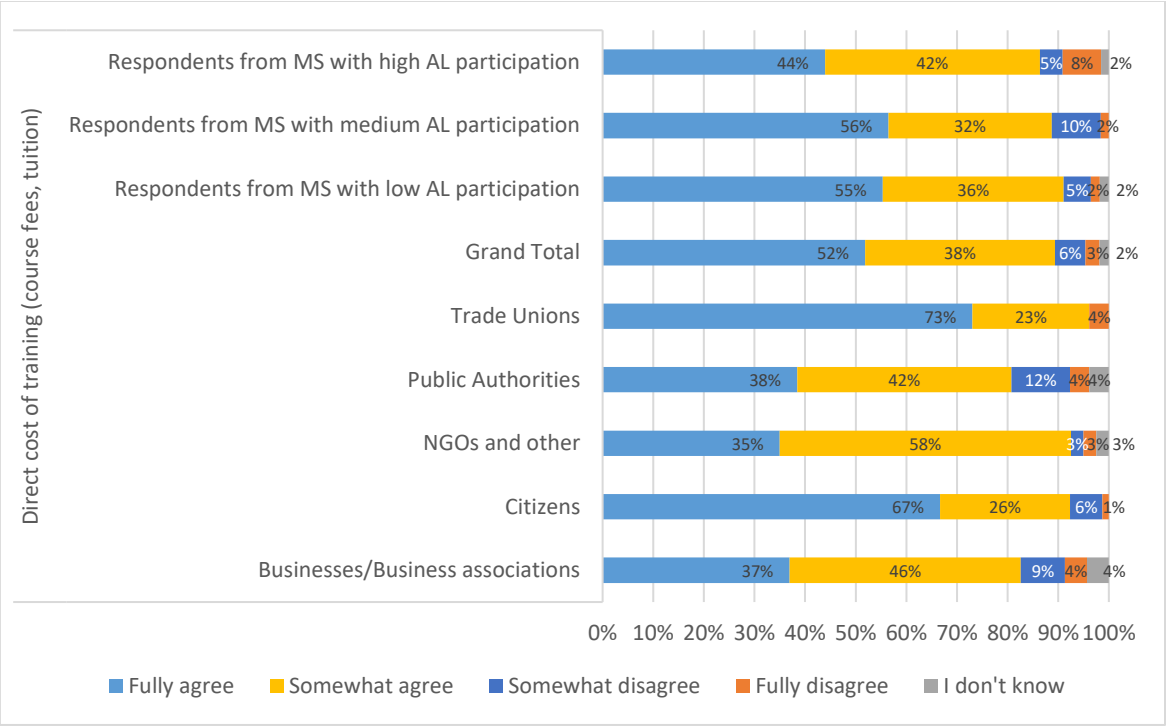
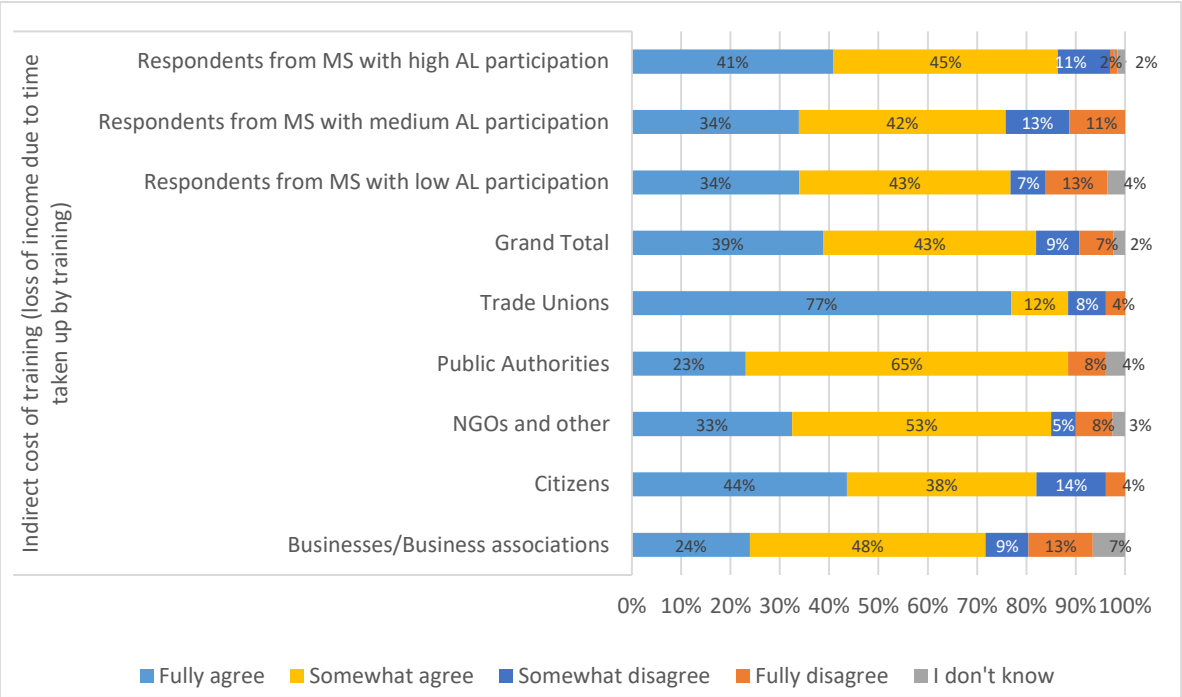


Figure 56 To what extent do you agree or disagree that following factors related to costs prevent individuals from accessing training? (216 respondents)



The highest levels of positive responses (fully agree plus somewhat agree) are: the 'insufficient awareness of available financial support for training'; and the 'direct costs of training'. Respectively 184 and 189 respondents agree with that, for an overall 87% and 89% of positive responses. The highest share of agreement comes from trade unions. 96% of respondents from this group agree that direct cost of trainings prevent individuals from accessing them. The other factor related to costs, the 'indirect costs of training', still has a high percentage of positive responses (fully agree plus somewhat agree), but slightly lower than the average of the other two (173 respondent agree with that, 82%). However, this

factor also has the highest percentage of answers that disagree with it (34 or 16% of partial or full disagreement). In the other two cases the levels of disagreement are lower both in percentage and absolute terms: 20 and 19 disagree in each case, or around 9% for both.

The disaggregation by groups of respondents shows that all groups follow a similar pattern in terms of agreement levels: 96% of answers from trade unions agree that the direct costs of trainings may reduce uptakes, followed by citizens (92%), and NGOs/other organisations (93%); businesses/business associations (83%) and public authorities (81%). Likewise, the overwhelming majority of respondents fully or somewhat agree that indirect costs of training may reduce uptakes as well. However, we need to note that a relatively high number of citizens (18% out of 78) and businesses/business associations (22% out of 46) do not agree (fully or in part) with the role of indirect costs as a barrier.

Looking at respondents, according to the level of participations in adult learning in their countries, the indirect costs are the factors that are considered to be least influential on training decisions. 12% of respondents from countries with the highest level of adult learning, 24% of the middle grouping, and 20% of the lowest group countries do not agree (fully or in part) that direct costs are a major obstacle. In addition, 14% of the respondents from countries with the lowest levels of participation in adult learning disagree that there is 'insufficient awareness of available financial support for training'.

12.3.3.2. Incentives and motivation

Respondents generally agreed that factors related to incentives and motivation can prevent individuals from accessing training. There are two factors that have received a particularly high consensus: 'Fragmented/insufficiently transparent information on available training opportunities', which has registered 192 consents (89%) and 'Uncertainty about which skills are needed to improve employment and income prospects', for which 88% of people agree (188 respondents). Higher levels of disagreement with this causal factor appear in countries with medium and higher levels of participation in training, where 10% and 17% disagreed respectively overall that this is a factor.

In general, the disagreement rate is very heterogeneous: ranging from options that exceeds 15% of people who do not agree, to 'other' which is under 10%. The 'Insufficient tailoring of available training to individual needs' has the maximum amount of dissent (42 people disagree, or 19%) while 'Fragmented/insufficiently transparent information on available training opportunities' has the minimum amount (20 respondents, 9%). Fuller details can be seen in Table 59 below.

Table 59 To what extent do you agree or disagree that following factors related to incentives and motivation prevent individuals from accessing training? (216 respondents)

Option	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
Fragmented/insufficiently transparent information on available training opportunities	97	95	15	5	4	216	89%	9%
Uncertainty about whether training outcomes will be recognised by employers	96	81	28	5	6	216	82%	15%
Uncertainty about which skills are needed to improve employment and income prospects	95	93	18	4	6	216	88%	10%
Insufficient tailoring of available training to individual needs	85	81	32	10	8	216	77%	19%
Uncertainty about the quality of training opportunities	75	96	33	6	6	216	80%	18%

Option	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
Insufficient awareness of the benefits of training	63	112	30	7	4	216	82%	17%

NB: For presentational purposes decimal points are excluded. This leads to some occasional and minor variations due to rounding when comparing the fully and somewhat agreed/disagreed in combinations with the percentages for each. This applies to subsequent tables and graphs.

Figure 57 To what extent do you agree or disagree that following factors related to incentives and motivation prevent individuals from accessing training? (216 respondents)

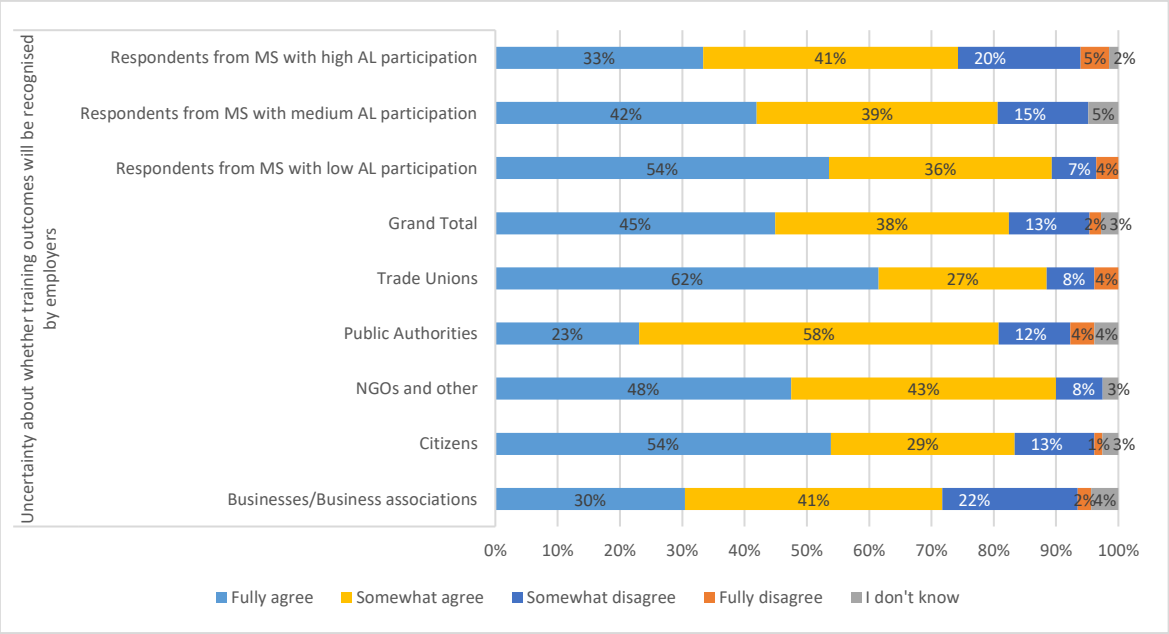


Figure 58 To what extent do you agree or disagree that following factors related to incentives and motivation prevent individuals from accessing training? (216 respondents)

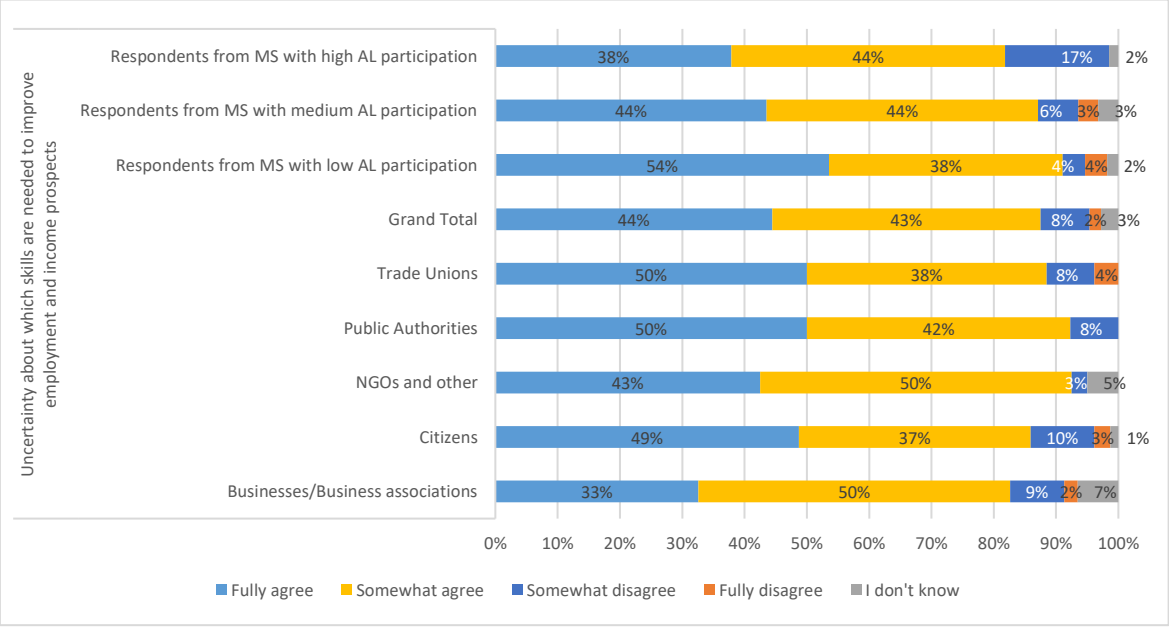
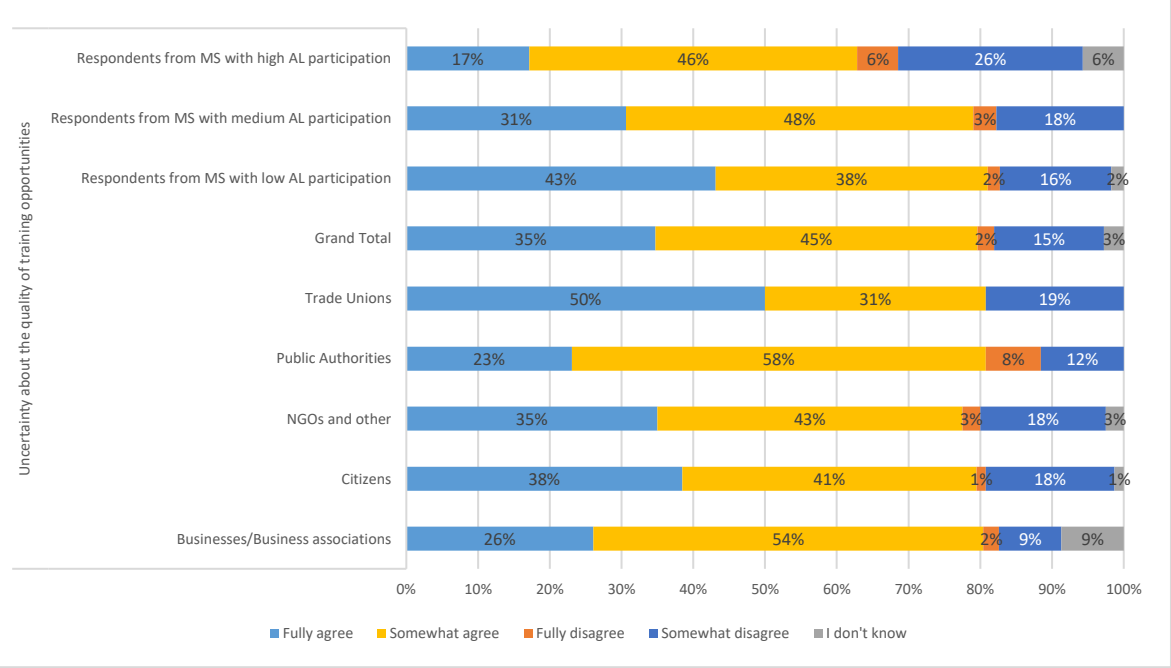


Figure 59 To what extent do you agree or disagree that following factors related to incentives and motivation prevent individuals from accessing training? (216 respondents)



Figures 57-59 show the responses in respect of key factors that could impact on incentives and motivation to train (uncertainty about training outcomes, uncertainty about skills needed to improve income and employment prospects, and uncertainty about the quality of training opportunities). Citizens and trade unions agree more than businesses/business associations that uncertainty over the skills needed is a significant barrier, whilst trade unions and respondents from countries with the lowest levels of participation in adult learning agree that training quality is a potential barrier more than other groups.

12.3.3.3. Time constraints

The overwhelming majority of respondents agreed in saying that time-related factors hinder individuals from accessing training. Both response options proposed by the Commission received broad support, evidenced by the fact that both exceed 80% agreement (fully and somewhat). The 'inflexibility of training time' (when training can be undertaken) had 178 people who fully or somewhat agree, while the 'lack of time' (including work, family and other commitments) is the main obstacle, where 189 respondents agree fully or somewhat (88% of the sample - trade unions and public authorities have the highest levels of agreement). 15% and 11% fully or somewhat disagree respectively and is higher for businesses/business associations. Levels of agreement and disagreement with the potential time constraint issues follow a pattern of higher agreement in country clusters with lower levels of participation, through to somewhat lower levels of agreement in countries with higher levels of participation, albeit within the overall high levels of agreement across the board. Full details can be seen in Table 60 below.

Table 60 To what extent do you agree or disagree that following factors related to time prevent individuals from accessing training? (216 respondents)

Option	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
Inflexibility of training time (when training can be undertaken)	91	87	26	7	5	216	83%	15%

Option	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
Lack of time (including work, family and other commitments)	120	69	22	2	3	216	88%	11%

Figure 60 To what extent do you agree or disagree that following factors related to time prevent individuals from accessing training (216 respondents)?

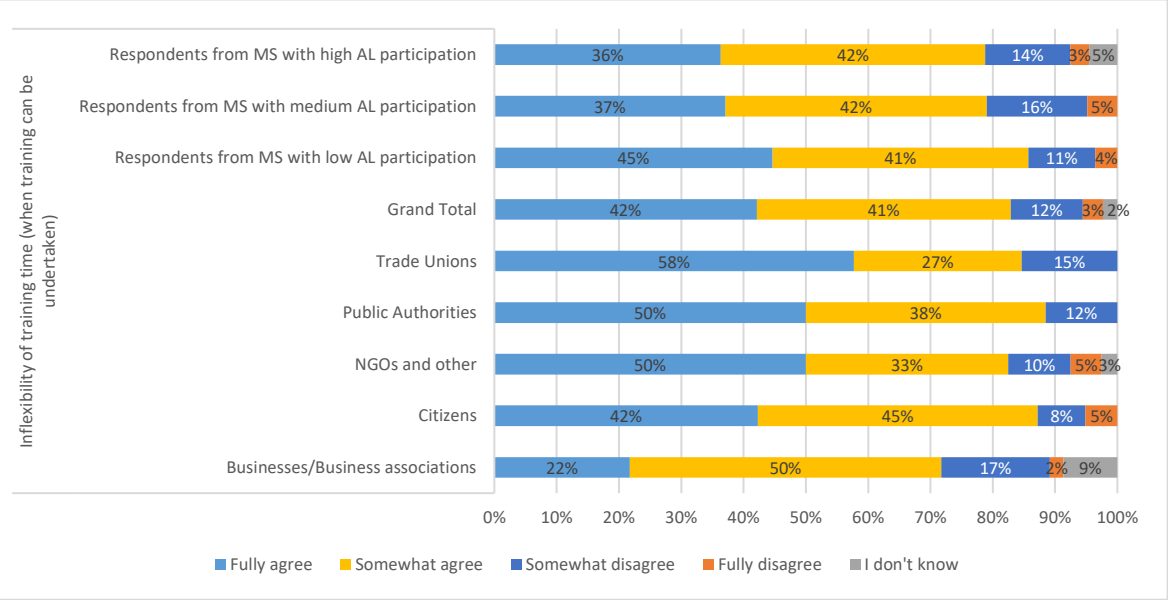
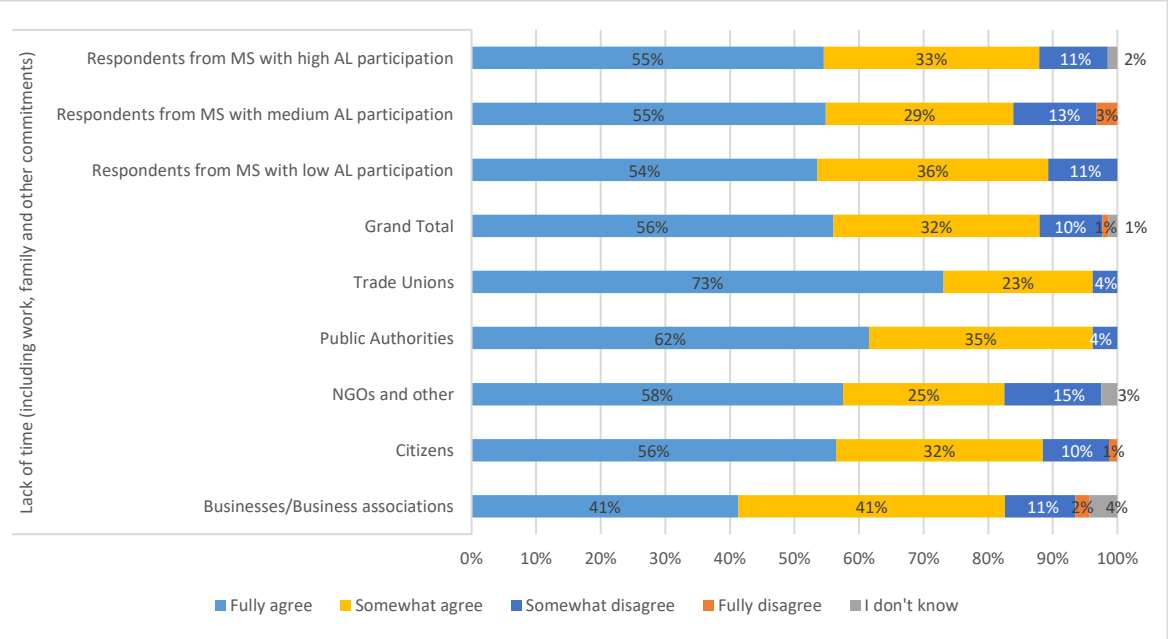


Figure 61 To what extent do you agree or disagree that following factors related to time prevent individuals from accessing training (216 respondents)?



Figures 60-61 show the breakdown of responses to time factors by group. Perhaps, unsurprisingly businesses/business associations see inflexibility of training time as less of a constraint than other groups whilst trade unions highlight both inflexibility of training time and lack of time more than other respondent groups.

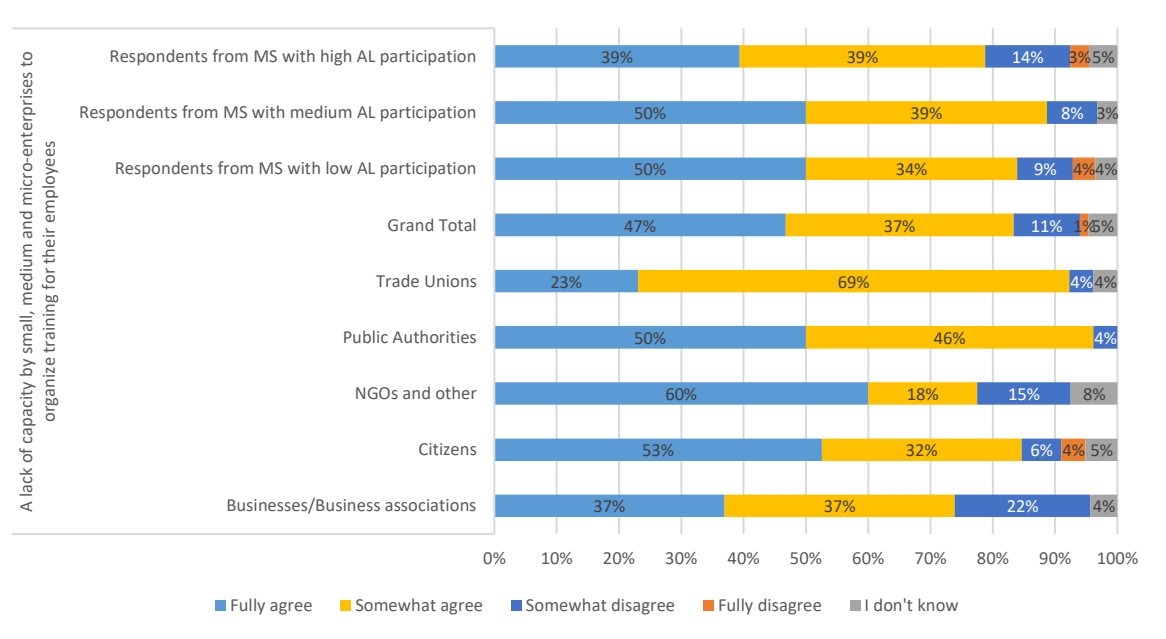
12.3.3.4. Other obstacles to training

When asked to what extent certain factors are obstacles to a higher training provision on the labour market, there is a high level of agreement on the 'lack of capacity by small, medium, and micro-enterprises to organise training for their employees'. 180 (83%) agreed this to be an obstacle. However, businesses/business associations were somewhat less likely to agree with this than trade unions, public authorities or citizens. This is closely followed by 'lack of support for workers with no links, or close links, to an employer' (i.e. atypical workers), that received 179 responses in agreement (83%). Businesses/business associations are the group least likely to agree with this as an explanation of barriers, but overall still have a higher level of agreement than disagreement with the statement. It is also worth reviewing the disagreement rate, which shows 43% (92 respondents) disagree that 'employer's fear to lose a worker once he or she has acquired better skills' and 25% (55 participants) for 'A lack of instruments for an effective sharing of training costs (between companies, individuals, public authorities). Businesses/business associations and trade unions both generally disagree overall with this statement. Full details can be seen in Table 61 and Figure 62 below.

Table 61 To what extent do you agree or disagree that the following factors are obstacles to a higher training provision on the labour market? (216 responses)

Option	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
A lack of capacity by small, medium and micro-enterprises to organize training for their employees	101	79	22	4	10	216	83%	12%
A lack of instruments for an effective sharing of training costs (between companies, individuals, public authorities)	72	78	46	9	11	216	69%	25%
Employer's fear to lose a worker once he or she has acquired better skills	38	72	70	22	14	216	51%	43%
A lack of support for workers with no links, or close links, to an employer (i.e. atypical workers such as platform workers)	108	71	13	3	21	216	83%	7%

Figure 62 To what extent do you agree or disagree that the following factors are obstacles to a higher training provision on the labour market? (216 responses)



Box 3 In your opinion, are there other important barriers to training participation or provision not previously mentioned? (open question, 128 responses)

Respondents referred to difficulties for certain groups in accessing training. The respondent felt courses should be better tailored to the needs of all individuals including:

- **Persons with disabilities**
- **Language (especially for migrants)**
- **IT barrier for elderly people**

There was also reference to the difficulty to access training in rural areas and/or for people without access to internet.

Personal motivation is also mentioned, especially the fear of the training not being recognised or linked with any pay rise or longer-term benefit. Respondents underline how training offered should be labour market relevant and linked with the real needs of the changing environment (digital transition is mentioned foremost).

More or better career guidance is mentioned as potentially helping individuals understand the importance of training.

A lack of commitment from the employers is referred to as being a barrier to training participation by some. Time and the possibility of undertaking training during working hours is seen as something that may help overcome barriers.

On the other hand, businesses underline how, especially for small-micro enterprises, funding training can be expensive.

Finally, there is reference to the need to develop a more culture orientated approach to training.

12.3.4. EU action and policy objectives

This section covers the questions where respondents were asked about policy objectives, following the problem analysis, and the added value of a European initiative on ILAs. It concludes with an analysis of the policy responses for different types of training (e.g. job-related/non-job-related, short term/long term etc.).

EU added value and policy objectives - Summary

- There is general agreement overall that a European initiative on ILAs could create added value for its beneficiaries. All aspects of potential implementation receive full or partial agreement (e.g. incuding the validation of non-formal and informal learning outcomes, the provision of paid training leave, and a more efficient use of EU funds for skills development among adults).
- Respondents mention the ILA could improve the provision and access to training by overcoming barriers to a lifelong-learning culture and that ILAs would facilitate the sharing of good practice, as well as being especially beneficial for younger people.
- Respondents generally stressed the need for training that can be used for current or future jobs including discussion of the need for training supporting the labour market transitions, including green and digital transitions.
- The need for basic skills including social skills, and skills that are transversal, both for workers and for the wider society was also mentioned . The importance of portability and equal access for disadvantaged groups is also noted as important. There is a note that bureaucracy should be minimised.

12.3.4.1. Potential for a European Initiative on ILAs

In general, typically around 80% of the respondents to the questionnaire tend to agree fully or partially that a possible European initiative on ILAs could create added value for the beneficiaries. Respondents consider it important to deliver 'more efficient management of European Funds for skills development' (181 agreement, or 84%). Disagreements are low in the face of this result, but it is worth pointing out that there is less agreement that 'transparency of national training markets for companies operating on the single market' can benefit from a project on ILAs (24% disagreement) with trade unions disagreeing overall most strongly. Around 50% of businesses/business associations agree on the need for a registry whilst the group that agrees most strongly with this is citizens at 91%. Quality assurance measures follow the same pattern with citizens strongly agreeing (with an 91% frequency) this is needed but businesses/business associations agreeing less, though a majority of businesses/business associations do agree overall with a quality assurance mechanism being needed. Indeed, businesses/business associations overall support for all measures is lower than for all other groups, and hovers just above 50%. Fuller details can be seen in Table 62 and Figures 63-65 below. NGOs and other organisations stand out in their relatively high level of support for ILAs in respect of added value for the validation of non-formal and informal learning, and the recognition of training outcomes across Member States, as well as the provision of paid training leave. There is also more support from respondents from those countries in the middle and lower groups in respect of participation in adult learning (than for those from countries with high levels of participation in adult learning).

Table 62 To what extent do you agree or disagree that a European initiative on individual learning accounts could add value on the following topics? (216 respondents)

Topic	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
Increased transparency about national training markets for companies operating on the single market	92	62	40	11	11	216	71%	24%
More efficient use of EU funds for skills development	126	55	10	10	15	216	84%	9%
Validation of non-formal and informal learning outcomes	118	58	16	15	9	216	81%	14%
Portability and recognition of training outcomes across Member States	105	58	19	22	12	216	75%	19%

Topic	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
Provision of educational leave and its take-up by individuals	110	57	16	15	18	216	77%	14%
Implementation of quality assurance also for non-formal training opportunities	104	64	20	20	8	216	78%	19%
Development of registries of quality-assured training opportunities at national level	104	64	23	15	10	216	78%	18%
Provision of career guidance	105	61	27	12	11	216	77%	18%
Other topic	54	7	8	3	144	216	28%	5%

Figure 63 To what extent do you agree or disagree that a European initiative on individual learning accounts could add value on the following topics? (216 respondents)

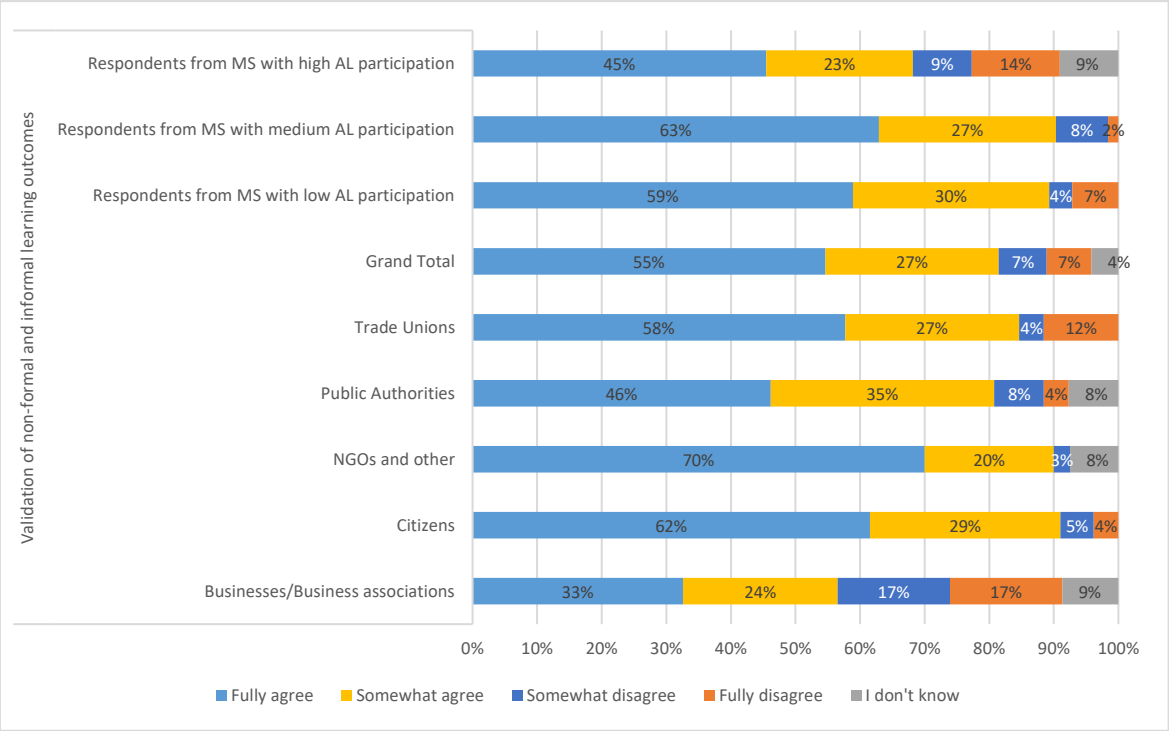


Figure 64 To what extent do you agree or disagree that a European initiative on individual learning accounts could add value on the following topics? (216 respondents)

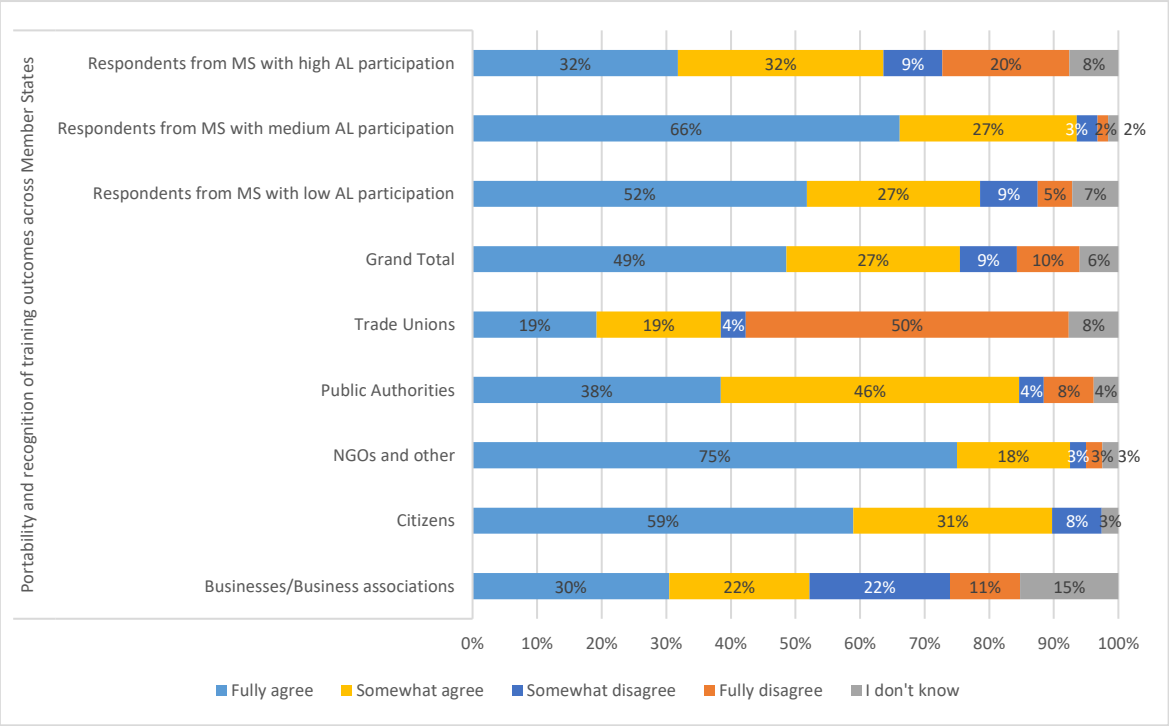
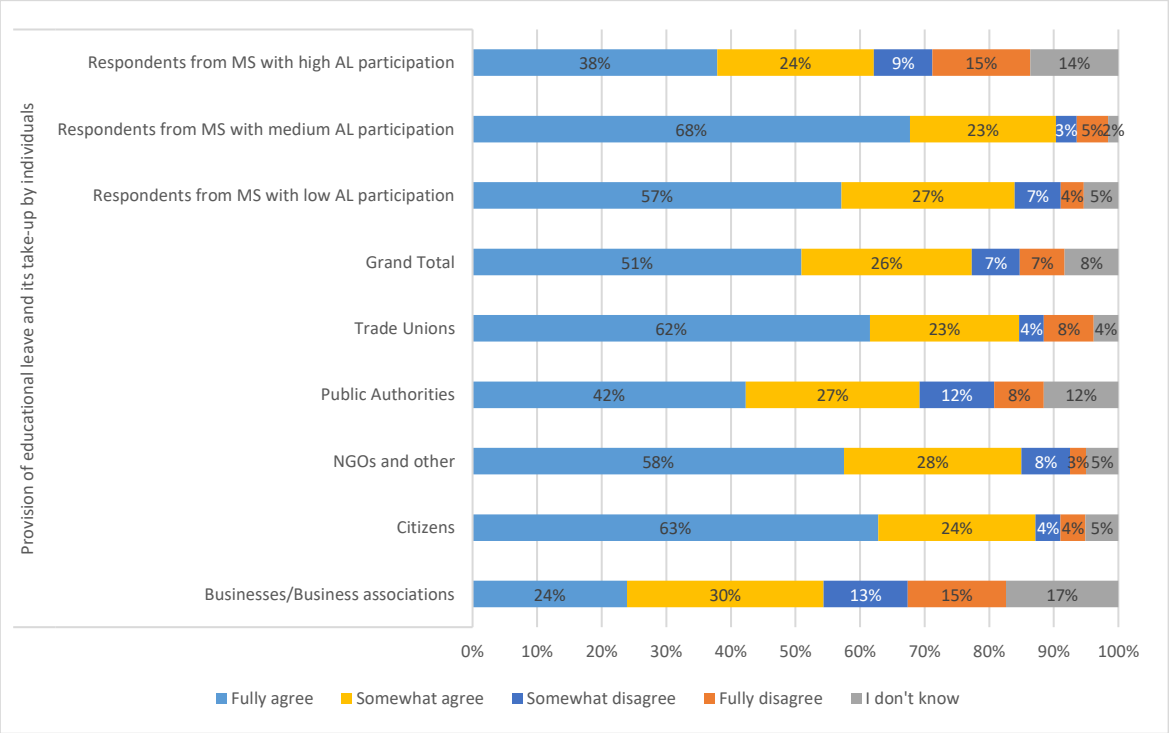


Figure 65 Q 5.1 To what extent do you agree or disagree that a European initiative on individual learning accounts could add value on the following topics? (216 respondents)



Box 4. Q 5.2 Open responses to Q 5.1 (75 responses)

Several respondents mention that the ILA could improve the provision and access to training by overcoming barriers to a lifelong learning culture. In addition, according to one

NGO, ILAs would facilitate the sharing of good practice, while one citizen noted that ILAs could be especially beneficial for younger people.

In relation of the benefit proposed by the Commission, one respondent underlined that micro-credentials are better suited to increase portability and recognition.

Among the benefits the ILA could bring, market regulation was mentioned by one respondent, referencing France as having increased competition leading to lower training prices. The same respondent notes the importance of market monitoring, to avoid abuses and fraud. The same recommendation was given by one business organisation.

One respondent stated that the benefits of an ILA would strongly depend on how it is implemented. Others agree, and these recommendations were given:

- Simplification of the framework of the training provision
- Tailoring the training offer to individual needs
- Constant monitoring
- Increase the importance of recognition of informal and non-formal learning

Concerns about the need for flexibility of any ILA instrument introduced was also expressed by one business organisation.

12.3.4.2. Additional Policy efforts

Table 63 shows that respondents generally agreed that additional policy efforts are needed to properly support different types of learning among adults. This is demonstrated by the low disagreement rate recorded for practically all the options examined. Only two areas show a degree of disagreement (somewhat and partially) of more than 10%: non-job-related learning (43 respondents disagree, 20%) most strongly disagreed with by businesses/business associations at 41%; and short, job-related training (e.g. for training within the current job) (28 disagree, 13%) with NGOs/other and businesses/business associations most likely to disagree. Training in digital and green skills register high levels of agreement from all groups (93 and 92% respectively).

Table 63 Q 5.3 To what extent do you agree or disagree that additional policy efforts are needed to support the following types of learning among adults? (216 respondents)

Type of learning	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
Non job-related learning	95	63	25	18	15	216	73%	20%
Training in digital skills	153	47	10	2	4	216	93%	6%
Training in skills relevant for the green transition (i.e. skills required in sectors that are growing as economies become more environmentally sustainable)	145	53	12	2	4	216	92%	6%
More fundamental job-related training (e.g. for a professional transition)	136	59	13	2	6	216	91%	7%
Short job-related training (e.g. for training within the current job)	124	61	19	9	3	216	86%	13%
Training in general transversal skills (basic skills, soft and inter-personal skills etc.	135	54	17	5	5	216	88%	10%
Other types	54	19	4	3	135	215*	34%	3%

**one respondent did not reply to the question*

Box 5. Q 5.4 Open responses to Q 5.3 (20 responses)

The majority of respondents open responses focus on the need for training that can be used for current or future jobs including discussion of the need for:

- Several supporting training for labour market transition particularly digital and overall updating of the skills of current workers
- Soft skills useful for accessing the labour market and training for the care sector
- Social skills and basic skills like maths and languages were highlighted by some

Some respondents focus on training in general, not necessarily related to the LM (9) including the need for:

- Transversal skills
- Training for life sustainability
- Training for citizens in general

Respondents suggested that policy should focus on increasing the offer of online education, increase accessibility for people with disabilities, portability and recognition between Member States, and stated the importance of the exchange good practice.

Other recommendations include:

- Keep bureaucracy as simple as possible, and increase the transparency of systems
- Data protection requirements being met
- Increased communication/visibility of ILAs at national level
- Harmonisation of the tax system to avoid fighting for training providers across borders (leading to low price and quality)

12.3.5. Policy Options

This section covers the potential policies that will increase levels of adult participation in training, addressing the barriers that were subject to earlier questions. The questions explored issues of funding of policies as well as the detailed composition of effective policy solutions (e.g. packaging of policies to include registries of approved training offers and adult guidance offers).

Policy options – Summary

- More than 80% of respondents (including majorities of respondents from all stakeholder groups) agreed that the establishment of individual learning accounts is effective both for tackling the financial constraints influencing training participation and for increasing the incentive and motivation to take up training.
- A majority of the respondents fully or somewhat agree with increasing overall public funding available to support training as a well as tax incentives for companies. The establishment of shared training costs between companies, public authorities and individuals is also considered to be a potential solution to the problems identified.
- Respondents cited public funds (Member State and EU funds) as the source that should be used to increase available funding for training with strong levels of agreement across all respondent groups. An employers' levy was also a popular

response for respondents. The suggestion to increase individual contributions is the least popular source of funding for training, especially amongst trade unions.

- It was suggested that to ensure sufficient access to and uptake of training opportunities across the Union, the EU should provide methodological and financial assistance to Member States. There was also support for cross-border recognition of training entitlements
- Increasing incentives and motivation influencing participation in training has a high level of agreement across all groups. Increased modularisation of the training offer and in-person advice and guidance on training opportunities also have particularly high levels of support.
- There was general agreement that an allowance to cover the costs of living during training would be helpful in addressing participants time constraints (highest support from citizens and public authorities, and countries with lower participation rates in adult learning). Childcare support was also mentioned.
- Increasing the modularisation of the training has high overall agreement especially from public authorities, less so from trade unions.

Most respondents, and especially citizens and trade unions, agreed with free selection from the registry of eligible training offers, and that for employees, training may take place during working hours with the agreement of the employer. Most disagreement from respondents was around the suggestion that there is restricted freedom in selection of training on the basis of compulsory prior guidance.

Table 64 Q 6.1 To what extent do you agree or disagree that the following approaches are effective for tackling the financial constraints influencing participation in training? (216 respondents)

Approaches	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
Tax incentives for individuals	100	65	37	8	6	216	76%	21%
Establish individual training entitlements in other forms (training vouchers, individual budgets etc.)	98	79	22	10	7	216	82%	15%
Subsidies to education and training providers	76	72	48	13	7	216	68%	28%
Increase overall public funding available to support training (i.e., sum of funding provided to individuals, companies and education & training providers)	119	70	15	5	7	216	88%	9%
Establish individual learning accounts	112	70	11	14	9	216	84%	12%
Facilitate the sharing of training costs between companies, public authorities and individuals	108	59	28	11	10	216	77%	18%
Tax incentives for companies	101	87	16	6	6	216	87%	10%
Other approach	49	8	3	1	154	215*	27%	2%

**one respondent did not reply to the question*

Figure 66 Q 6.1 To what extent do you agree or disagree that the following approaches are effective for tackling the financial constraints influencing participation in training? (216 respondents)

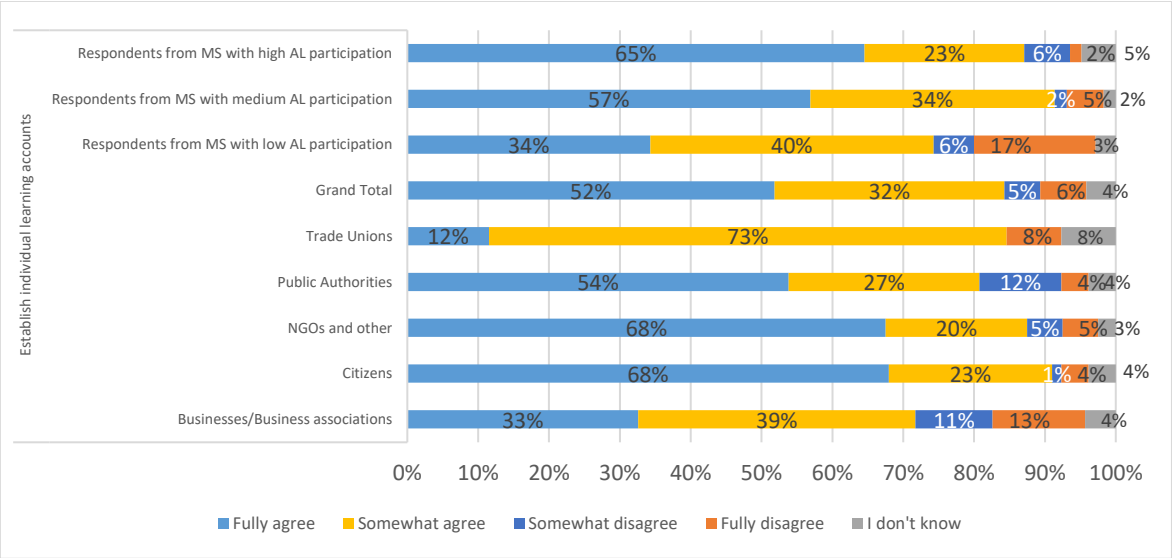


Figure 67 Q 6.1 To what extent do you agree or disagree that the following approaches are effective for tackling the financial constraints influencing participation in training? (216 respondents)

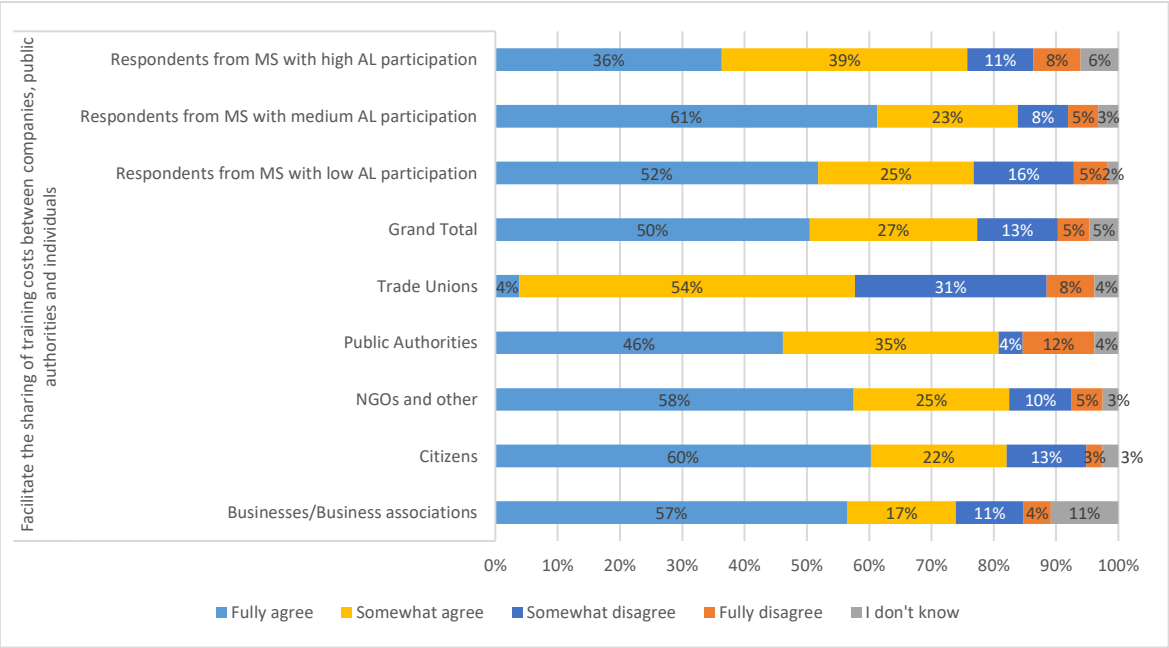
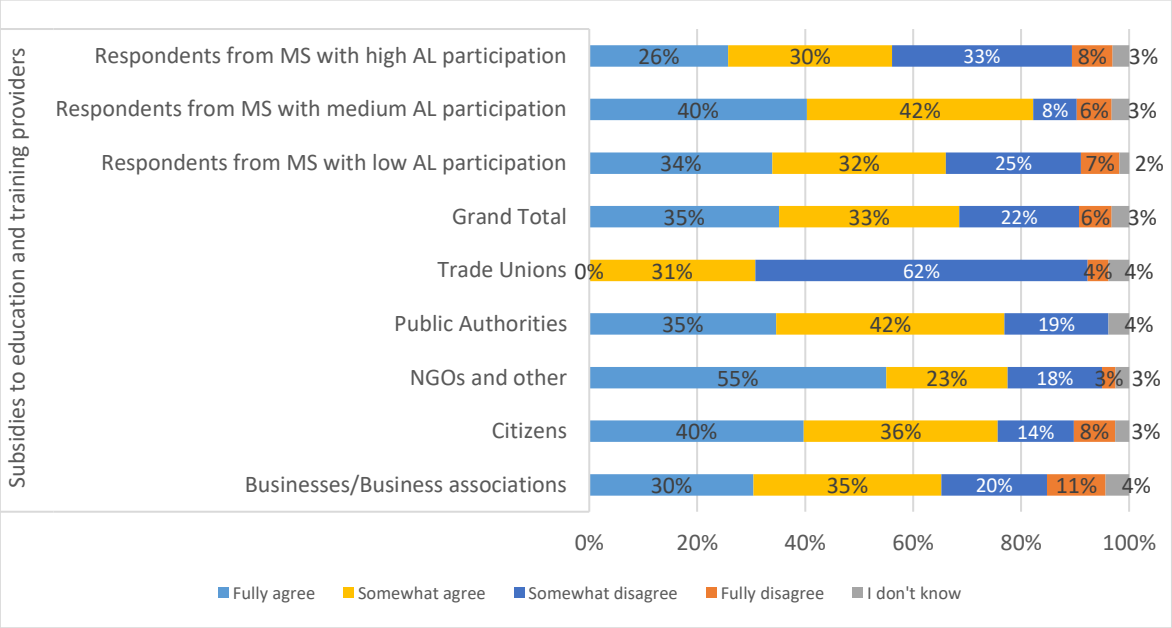


Table 64 and Figure 66-67 provide respondent breakdowns for approaches to tackle financial constraints. Generally, the majority of the respondents agree with approaches proposed to overcome the financial constraints to accessing training. The options with the highest levels of agreement are: 'Increase overall public funding available to support training' (i.e., sum of funding provided to individuals, companies and education & training providers) (189 agree or 88%) which receives strong agreement across the board, with only slightly lower levels of support coming from businesses/business associations. 'Tax incentives for companies' (188 agreement, 87%). 'Establishment of sharing of training costs between companies, public authorities and individuals' is considered to be a potential solution, with overall 77% of respondents agreeing with this measure, but with only just over 50% of trade unions agreeing this is a good option. 'Establishing individual training entitlements in other forms (training vouchers, individual budgets etc.)' is supported by all respondent groups and respondents from different country cluster according to adult learning participation, with slightly lower levels of support from businesses/business associations. 'Establishing ILAs' is positively seen by respondents who agree with this

measure including businesses/business associations where there are also the highest levels of disagreement.

The highest levels of disagreement are with 'Subsidies to education and training providers' (61 disagree, 28%) and 'Tax incentives for individuals' (45 respondents disagree, 21%). The 'don't know' rate is low between 3% and 4% (see Figure 68).

Figure 68 Q 6.1 To what extent do you agree or disagree that subsidies to education and training are effective for tackling the financial constraints influencing participation in training? (216 respondents)



Box 6. Q 6.2 - Open responses to Q 6.1 (87 responses)

Respondents to this question mentioned in a few case some issues in relation to the financial constraints on people taking up training, including:

- The need for increased public funding overall
- Because employers have primary responsibility for training there is a need for companies to invest more
- The need for tax incentives for companies
- The need for cost sharing between stakeholders
- The need for attention to all related costs, not only the one strictly associated with the training course
- The importance of a mix of financial tools for ILAs to be administered with flexibility
- Allowances to be based on the income of the training participant
- There was also reiteration that social partners should be involved at governance level to support tackling the financial restraints on training.

Table 65 Q 6.3 To what extent do you agree or disagree that the following approaches are effective for increasing incentives and motivation influencing participation in training? (216 responses)

Approaches	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
Tax incentives for companies	99	89	14	8	6	216	87%	10%

Approaches	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
Tax incentives for individuals	97	75	24	13	7	216	80%	17%
Establish individual training entitlements in other forms (training vouchers, individual budgets etc.)	92	85	24	7	8	216	82%	14%
Publication of training course evaluations of past participants in the registry of quality-assured training opportunities	77	94	28	8	9	216	79%	17%
Subsidies to education and training providers	70	88	36	15	7	216	73%	24%
Public registry of quality-assured training opportunities	109	76	18	6	7	216	86%	11%
Opportunities for the validation of informal and non-formal learning outcomes	140	52	11	5	8	216	89%	7%
In-person advice and guidance on training opportunities	140	58	9	4	5	216	92%	6%
Increase modularisation of the training offer (opportunities to acquire a certification on completion of short courses)	123	58	26	4	5	216	84%	14%
Awareness raising campaigns	130	60	15	4	7	216	88%	9%
Establish individual learning accounts	115	63	19	12	7	216	82%	14%
“One stop shop” digital platform and smartphone app that link a registry of quality training opportunities to financial support	113	76	13	6	8	216	88%	9%
Other approach	46	13	5	1	151	216	27%	3%

Figure 69 Q 6.3 To what extent do you agree or disagree that the following approaches are effective for increasing incentives and motivation influencing participation in training? (216 responses)

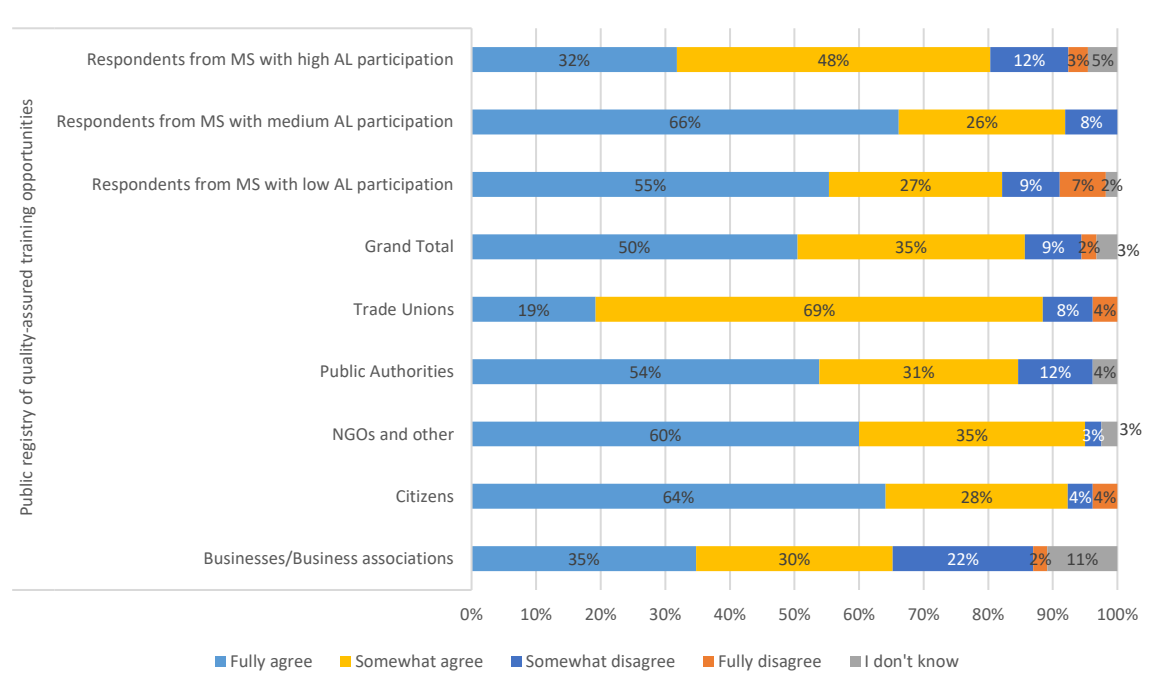
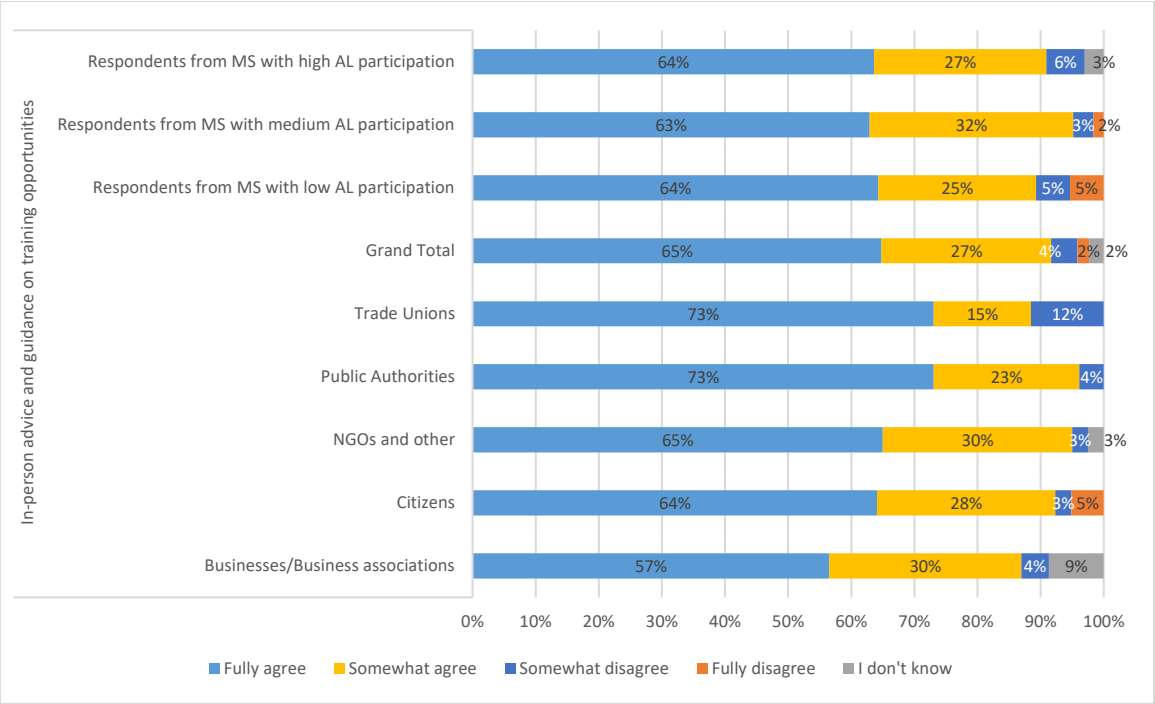


Table 65 shows some possible tools aimed at increasing incentives and motivation influencing participation in training. The level of agreement with potential methods to do this are high on average (around 82%), even if some proposals are supported more clearly than others. This is the case with 'Increase modularisation of the training offer' (opportunities to acquire a certification on completion of short courses), with 181 respondents who agree with that partially or fully (84%). 'In-person advice and guidance on training opportunities' has 198 individuals who agree fully or partially (92%). Figures 69-70 show that citizens and respondents from countries from the middle and the lowest grouping (for participation in adult learning) are most supportive of registries of approved training, whilst all groups are strongly supportive in respect of in-person advice and guidance.

Figure 70 To what extent do you agree or disagree that the following approaches are effective for increasing incentives and motivation influencing participation in training? (216 responses)



'Subsidies to education and training providers' has the lowest amount of agreement (across all respondent sub groups) as a mechanism for delivery (158 respondents or 73%). This is followed by 'Publication of training course evaluations of past participants in the registry of quality-assured training opportunities' where slightly less people agree partially or fully at 171 respondents (79%). However, overall levels of agreement with these two options remain high particularly amongst citizens and the lower adult learning participation rate country cluster.

Box 7. Q 6.4 Open responses – Respondents were asked about the factors that could increase motivation to train (59 responses)

To increase motivation respondents mentioned the following in open answers:

- The need to promote training in various languages
- That ILAs should be tailored to different needs rather than a single model of delivery
- One respondent reiterated that they would like the individual to be free to choose the training themselves, and that training should be practical training rather than theoretical
- Modular training was reiterated as a flexible option for delivery
- Mechanisms being in place for validation was considered central to successful implementation by a number of respondents.
- Tax incentives for individuals were reiterated as a good mechanism for delivery by one respondent.

One NGO supported the idea that the introduction of training entitlement in combination with paid training leave might increase trainee motivation. The same respondent suggests promoting an inclusive approach through awareness-raising campaigns

Several respondents do not agree that ILA would increase employees' motivation to participate in training activities and state that the correlation between training schemes and increased motivation cannot be demonstrated.

Trade unions reiterated that any instrument needs to be agreed with social partners.

Table 66 Q 6.5 To what extent do you agree or disagree that the following approaches are effective for helping to address time constraints to participation in training? (216 responses)

Approaches	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
Establish individual learning accounts	83	52	37	24	20	216	63%	28%
Establish individual training entitlements in other forms (training vouchers, individual budgets etc.)	67	69	44	22	14	216	63%	31%
Paid educational leave (granted by employer for employees)	128	49	23	9	7	216	82%	15%
Increase modularisation of the training offer (opportunities to acquire a certification on completion of short courses)	123	58	26	4	5	216	84%	14%
Allowance to cover the costs of living during training (open also to non-employees)	122	60	20	5	9	216	85%	12%
Other approach*	37	14	5	1	158	215	24%	3%

** one respondent did not reply to the question*

Table 66 presents the extent to which respondents agree or disagree with different approaches to addressing time constraints to participation in training. The most agreed upon measure is 'An allowance to cover the costs of living during training', with 85% overall agreement on the measure, with the highest levels of support coming from citizens and NGOs/other, and countries in the lower participation rate cluster. A much lower level of support for this measure comes from trade unions although remains over 50% overall agreement. 'Increasing the modularisation of the training offer' has 84% total agreement with total agreement from public authorities, but very low support from trade unions at 35% overall agreement. The 'establishment of individual learning accounts' had a majority in agreement on the effectiveness of the measure for addressing time constraints (at 63%) but is less popular as an option amongst trade unions and businesses/business associations both receiving less than 50% overall agreement, but higher support from citizens.

Box 8. Q 6.6 Open responses to Q 6.5 (153 responses)

Respondents listed several responses to this question, 287 summarised below:

Employers determining employee training needs was considered important to carve out the necessary time for employee training during working hours.

Adequate support in terms of childcare and the possibility of training during working hours was strongly supported as was paid training leave.

Views were expressed that entitlement should be given to individual, as opposed to employers or any other group.

Trade unions tended to reiterate that suggested methods will ensure a correct work-life balance.

Concerns were expressed by some organisations that accounts do not in themselves provide an automatic solution to any time-related problems that people face. It was noted that perceived time constraints are more likely to be linked to a perceived limited personal value of education.

Table 67 To what extent do you agree or disagree with the following options for targeting individual training entitlements? (216 respondents)

Option	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
Universal support: Give training entitlements to all working-age individuals, no matter their current position on the labour market	106	60	25	15	10	216	77%	19%
Universal, but differentiated support: Give training entitlements to all working-age individuals, and a higher amount to individuals with particular training needs	108	60	27	12	9	216	78%	18%
Targeted support: Give training entitlements only to individuals with particular training needs (such as those in industries undergoing significant structural change, the unemployed, atypical workers or the low-qualified)	49	43	68	43	13	216	43%	52%
Other approach*	40	8	4	5	158	215	22%	4%

** one respondent did not reply to the question*

Table 67 and Figures 71-72 show the extent to which respondents agree or disagree with different approaches concerning measures for targeting individual training entitlements. The most agreed upon measure is 'Universal but differentiated support', that is, to 'Give training entitlements to all working-age individuals, and a higher amount to individuals with particular training needs', with 78% overall agreement including total support from trade unions. Likewise, full or partial agreement with 'Universal support (give training entitlements to all working-age individuals, no matter their current position on the labour market)' totalled 77% of respondents agreed. Support for this measure is highest amongst trade unions and citizens and amongst respondents of the countries with medium participation rate for adult learning. On the contrary, the least agreed upon measure is 'Targeted support, or giving training entitlements only to individuals with training needs (such as those in industries undergoing significant structural change, the unemployed, atypical workers or the low-qualified)'. This measure totalled 52% disagreement, especially from trade unions and from respondents from higher level adult learning participation rate countries.

Figure 71 Q 6.7 To what extent do you agree or disagree with the following options for targeting individual training entitlements? (216 respondents)

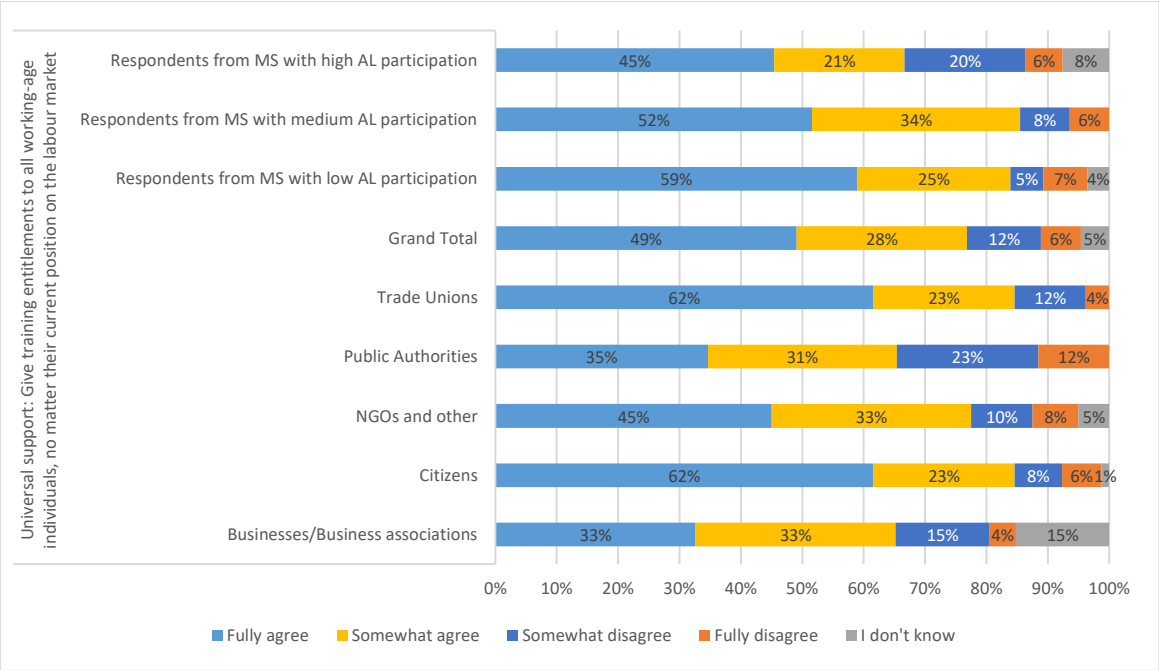


Figure 72 Q 6.7 To what extent do you agree or disagree with the following options for targeting individual training entitlements? (216 respondents)

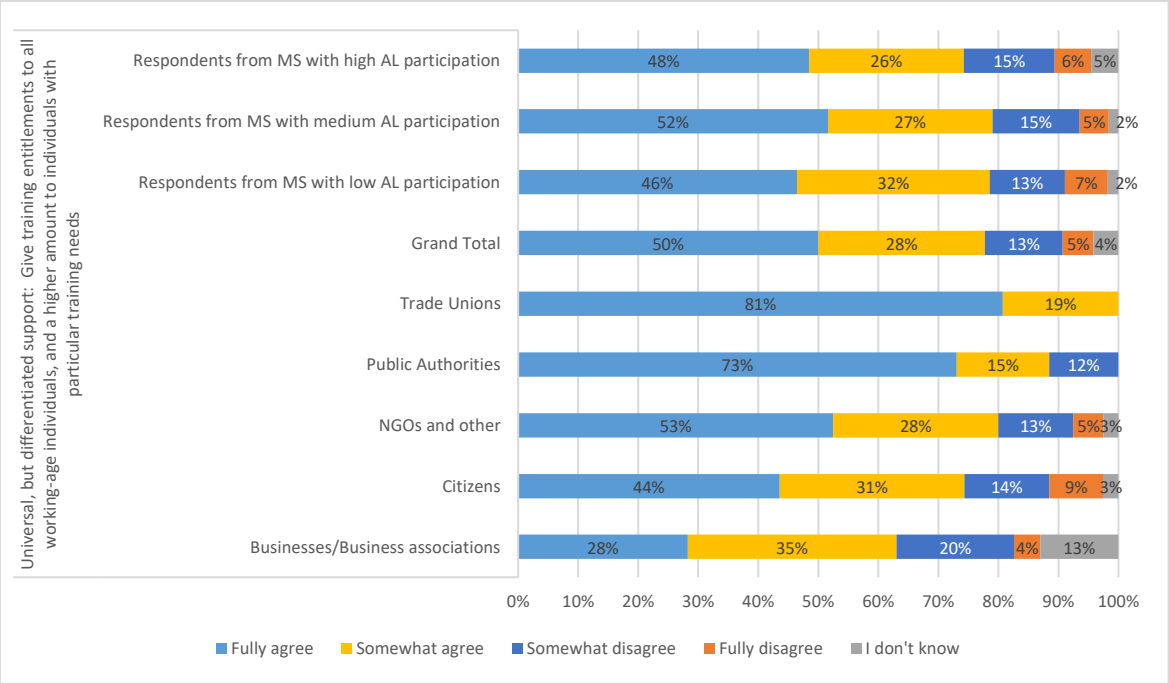


Table 68 shows a strong level of agreement that skills intelligence/research (information on skills in shortage on the labour market) is needed (85% agree). 96% support for this comes from public authorities. This is followed by 'A strong role of public authorities' (56% fully agree) with very high rates of agreement from trade unions, public authorities and countries with low participation rates. A majority also agreed that both employer associations and trade unions should have a strong role in governance of the registry, rating over 70% overall agreement, including from trade unions and lower level participation rates countries and only slightly lower levels of support from NGOs and public authorities.

Table 68 Q 6.9 Giving individuals training entitlements/ to spend on training goes hand-in-hand with the establishment of a registry of training opportunities that are eligible for funding from these training entitlements. To what extent do you agree or disagree

Statements	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
Strong role of employer organisations	70	36	12	7	12	137	77%	14%
Strong role of trade unions	60	40	13	12	12	137	73%	18%
Strong role of public authorities	77	31	12	5	12	137	79%	12%
Strong role of skills intelligence/ research (information on skills in shortage on the labour market)	85	32	3	5	12	137	85%	6%
Other*	39	4	3	1	89	136	32%	3%

**one respondent did not reply to the question*

Box 9. Q6.10 – Open responses to Q6.9 (50 responses)

Respondents to this question agreed with the registry with the following qualifications in a small number of cases:

- A European and national list of trusted and quality assured training providers would support the access of teachers to further training under an EU initiative.
- The initiative should take into account that a registry is not the only option and that Member States may have different mechanisms to define what training possibilities are eligible for funding e.g. legislative tools.

Table 69 6.11 To what extent do you agree or disagree with the following possible rules on how individuals can spend their individual training entitlements? (216 respondents)

Rules	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
Free selection from the registry of eligible training offers. For employees, training is required to take place outside of working hours	31	52	80	38	15	216	38%	55%
Restricted freedom in selection of training on the basis of compulsory prior guidance (e.g. by Public Employment Services)	27	50	57	61	21	216	35%	55%
Free selection from the registry of eligible training offers. For employees, training may take place during working hours with the agreement of the employer	145	46	6	6	13	216	88%	6%
Other*	42	8	6	2	157	215	23%	4%

**one respondent did not reply to the question*

Table 69 shows the extent to which respondents agree or disagree with suggestions on how individuals can spend their individual training entitlements. Most respondents agreed with the proposal for 'free selection from the registry of eligible training offers, and that for employees, training may take place *during working hours with the agreement of the employer'* at 88% agreement. Most disagreement from respondents was registered for the suggestion that there is 'Restricted freedom in selection of training on the basis of compulsory prior guidance' (e.g. by Public Employment Services) with more than half of respondents (55%) in disagreement. Finally, more respondents overall disagreed 55% than agreed with the 'free selection from the registry of eligible training offers *where it is outside of working hours*' with very low levels of agreement from trade unions but also from

businesses/business associations and the higher and medium level participation country clusters.

Figures 73-75 provide a further level of analysis, but support is greatest across all groups (less so for businesses/business associations) for a free selection of training from the registry to be undertaken during working hours on the proviso that is agreed with employers.

Figure 73 Q 6.11 To what extent do you agree or disagree with the following possible rules on how individuals can spend their individual training entitlements? (216 respondents)

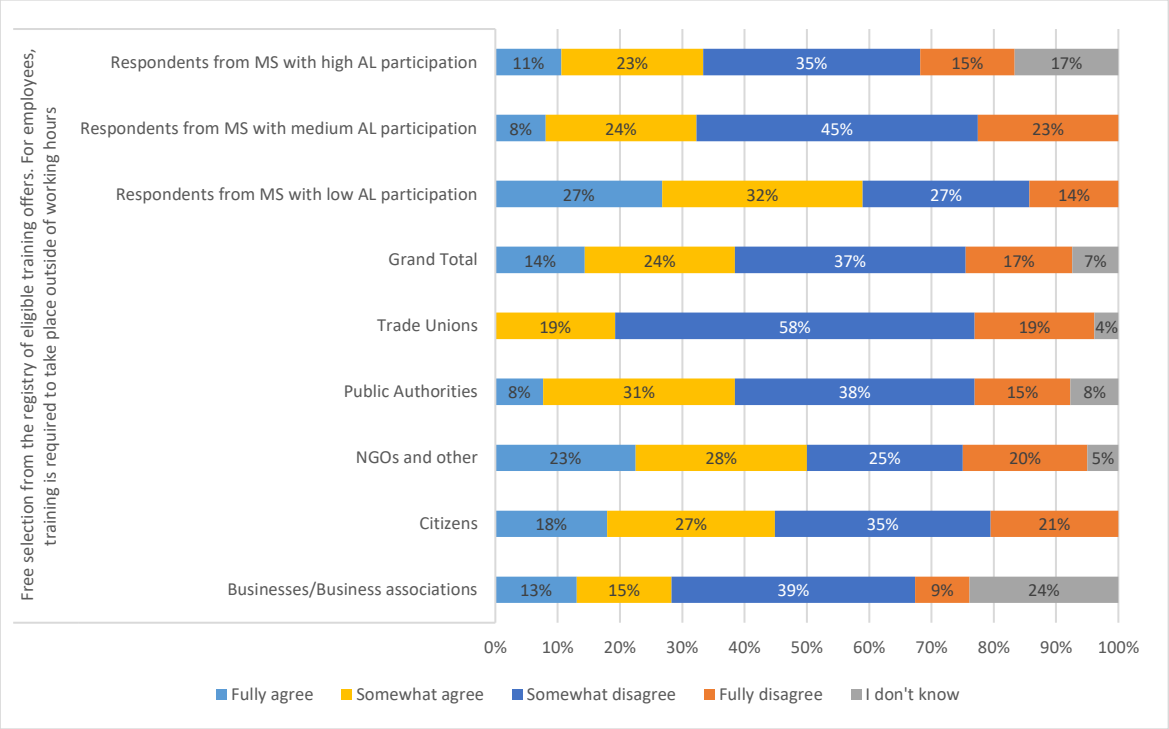


Figure 74 Q6.11 To what extent do you agree or disagree with the following possible rules on how individuals can spend their individual training entitlements? (216 respondents)

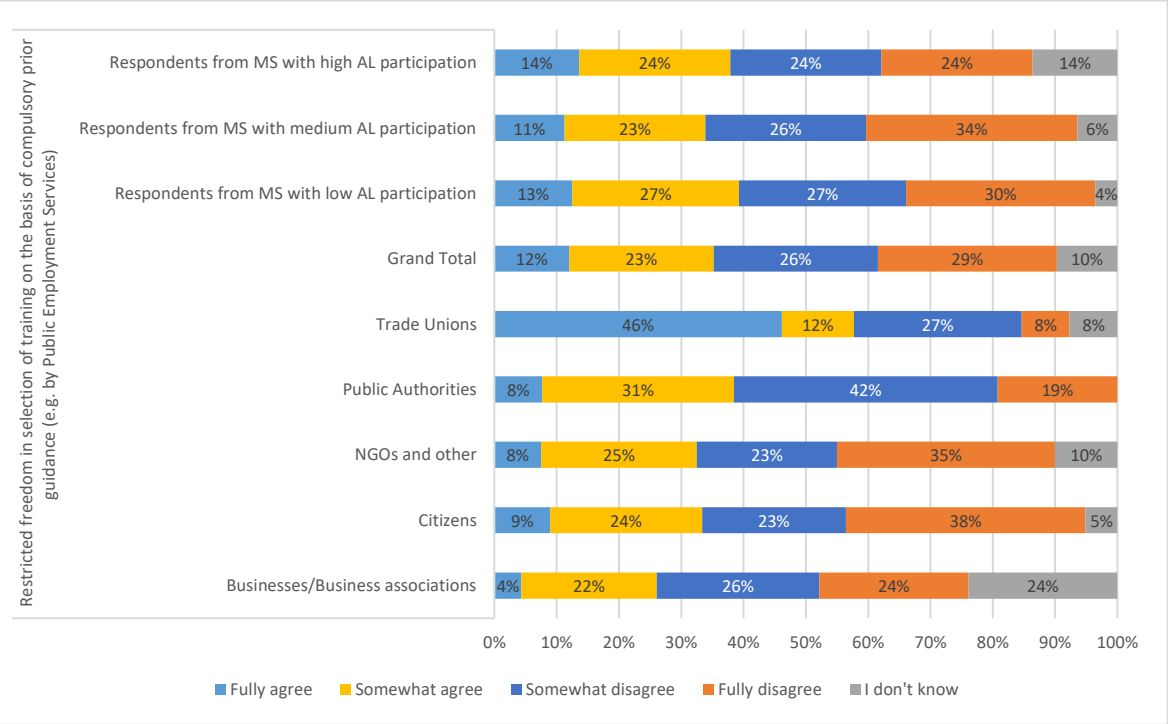
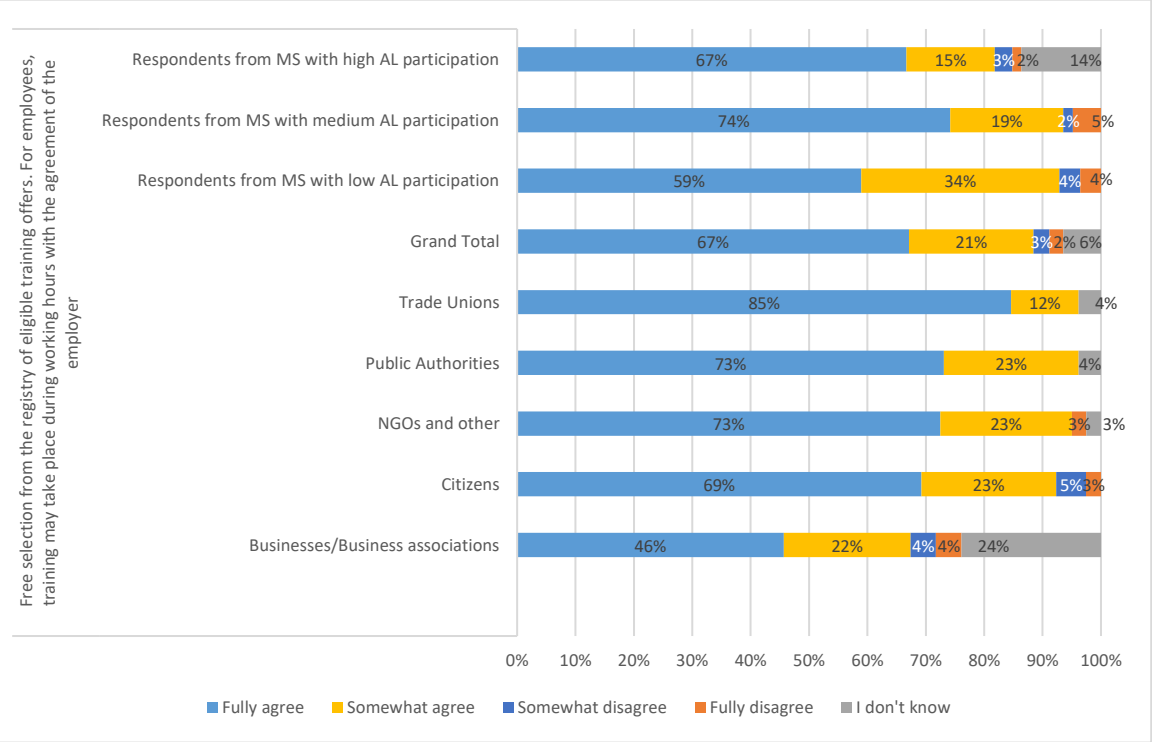


Figure 75 Q 6.11 To what extent do you agree or disagree with the following possible rules on how individuals can spend their individual training entitlements? (216 respondents)



Box 10. Q 6.12 Open responses on the rules on how individuals can spend their individual training entitlements (64 responses)

The majority of respondents agree with training during working hours for better work-life balance. Where there was agreement that training could happen outside of working hours the respondents suggested that this should always be through paid training leave.

Some respondents suggest the worker must be free to choose their training options, which is always restricted by a register. Some suggested that training must have an objective and be organised according to an agreed training format.

Some respondents commented that registries and their governance are national concerns and cannot be addressed at EU level.

Table 70 Q 6.13 To what extent do you agree or disagree that the following sources should be used to increase available funding for training? (216 respondents)

Source	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
Employer's levy (e.g. on payroll)	64	83	27	31	11	216	68%	27%
Individual contribution	37	78	43	42	16	216	53%	39%
Member States public funding	149	48	5	4	10	216	91%	4%
EU funds (including the European Social Fund, Recovery Funds etc.)	149	55	1	3	8	216	94%	2%
Other*	34	12	5	3	161	215	21%	4%

**one respondent did not reply to the question*

Respondents cited EU funds as the source that should be used 'To increase available funding for training' with a total of 94% overall agreement towards this measure, with high levels of agreement across all groups (see Table 70). A broadly similar percentage (91%) was recorded for Member State public funding. 68% agreed with the option of an employers' levy (see also Figure 77) but the least popular was individual contributions at only just over half agreeing (53%), and just under 40% disagreeing with this measure, although citizens were more supportive than other groups (62% fully or strongly agreeing – see Figure 76). The suggestion to increase individual contributions is the least popular source of funding for training and was particularly unpopular with trade unions.

Figure 76 Q 6.13 To what extent do you agree or disagree that the following sources should be used to increase available funding for training? (216 respondents)

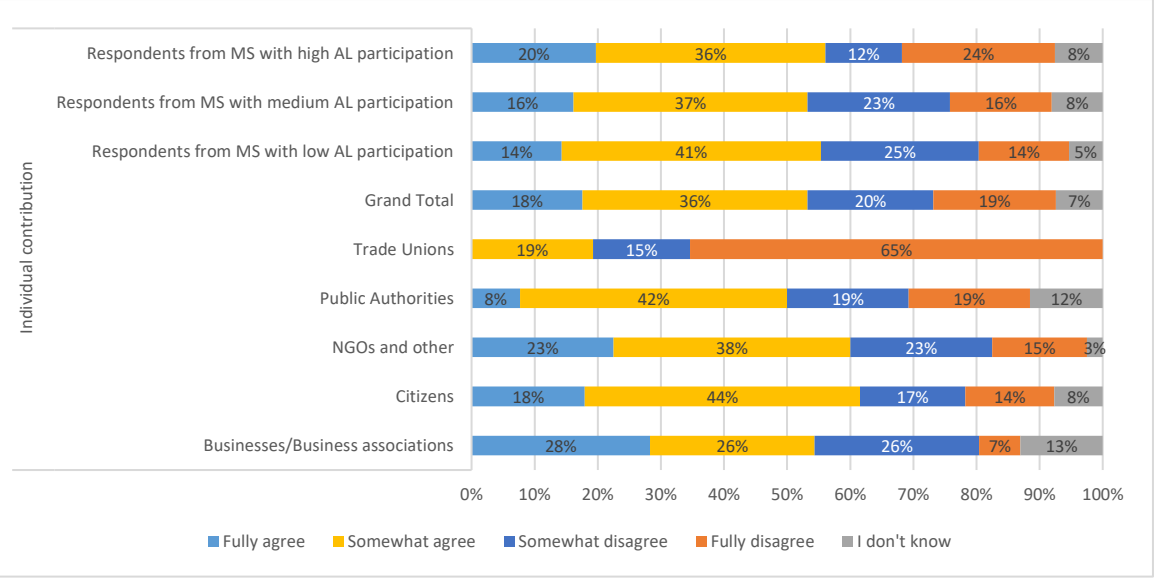
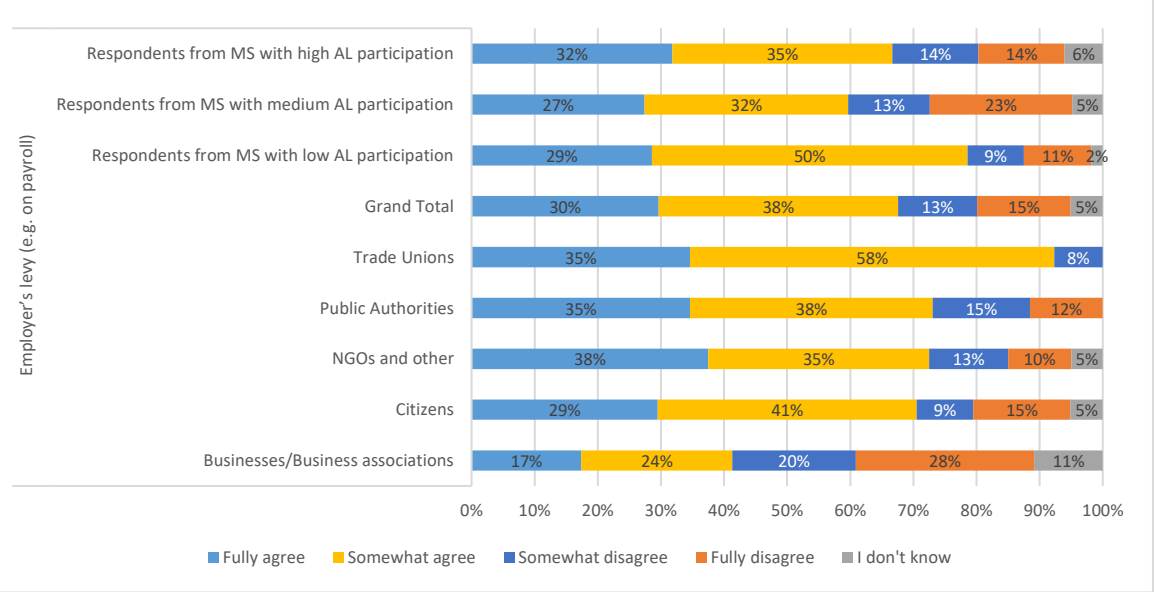


Figure 77 Q 6.13 To what extent do you agree or disagree that an employer's levy should be used to increase available funding for training? (216 respondents)



Box 11. Q 6.14 - Open responses to who should fund increased training (68 responses)

Trade unions recommend costs for training should not fall on teachers and that there should be associated support for teachers' skills and competence development.

A number of respondents stated that incentives should be a shared responsibility of involving public funds, employers', and employees' funds. Additional levies for employers would not be fair without compensations from public funds according to some respondents.

One citizen stated that funding should not increase and that improving guidance to those seeking life-long training opportunities as well as mapping this market segment would do the job of helping to improve the lives and employment of many citizens.

Table 71 Q 6.15 To what extent do you agree or disagree that the following policy instruments would be suitable/effective to ensure a sufficient access to and uptake of training opportunities across the EU? (excluding citizens and one public authority) (137 resp

Policy instrument	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
Strengthen EU level monitoring and exchange of best practices (e.g. European Semester, Open Method of Coordination)	51	60	9	4	13	137	80%	9%
Introduce EU legislation to be adhered by Member States on a voluntary basis (e.g. Council Recommendation)	46	38	27	16	10	137	61%	31%
No additional instrument, the existing EU-level framework is sufficient	24	37	42	22	12	137	44%	46%
Other instrument*	28	5	92	5	6	136	24%	71%

**one respondent did not reply to the question*

Table 71 shows to what extent respondents agree or disagree regarding policy instruments that would be suitable/effective to ensure a sufficient access to and uptake of training opportunities across the EU. The majority of respondents (80%) fully or somewhat agree that 'Strengthening EU monitoring and exchange of best practices (e.g. European Semester, Open Method of Coordination)' would be the most suitable instruments. 61% of respondents agreed that the initiative for an ILA should adhered to by Member States on a voluntary basis such as a Council Recommendation.

Box 12 Q 6.16 Open question on the effectiveness of policy instruments (37 responses)

One organisation suggested that the existing EU legal framework is sufficient but that the EU should play a key role in encouraging the exchange of good practices and mutual learning.

Awareness-raising campaigns and multi-stakeholder initiatives were considered important at European level, for example, in the context of the European Semester.

Monitoring full compliance with the UN Convention on the Rights of People with Disabilities was mentioned by one respondent as being important in respect of accessibility of training (adopting the EU horizontal anti-discrimination directive implementing the principle of equal treatment outside the labour market was referred to).

It was noted that to ensure sufficient access to and uptake of training opportunities across the union, the EU could provide methodological and financial assistance to the Member States.

One comment suggested that legislation should be binding to allow for cross-border recognition of learning outcomes and entitlements (for example in case of international mobility).

Peer learning activities among different Member States were encouraged through a twofold approach:

1) reducing the burden for all groups of learners (people with no higher education, the elderly etc.) by increasing the counselling and options to seek advice for the non-privileged learners.

2) increasing the input provided from regional and national stakeholders, and civil society in order to adjust and improve the policy instruments in place.

It was noted by some that recommendation to Member States must be based on national and, in many cases, sectoral conditions and cannot be regulated at EU level.

12.3.6. Expected impacts

Those responding to the survey were asked about the potential economic and social impacts of an ILA (e.g. impacts on skills, cohesion of society, health and wellbeing and competitiveness).

Impact – Summary

- The majority of respondents registered fully or somewhat agreement that ILAs would improve fundamental and social rights. The highest proportion of respondents agree that ILAs would make it easier for individuals to manage transitions in the labour and also improve employment prospects for unemployed people through tailor made assistance.
- The majority of respondents agreed that ILAs would have a positive impact on the labour market and the economy, particularly reducing skills gaps and mismatches,

closely followed by improving productivity and competitiveness of companies. Although only a low level of disagreement overall was registered by respondents, where there was disagreement it concerned the extent to which was that ILAs could support geographical labour mobility (25% disagreeing that ILAs would increase mobility.

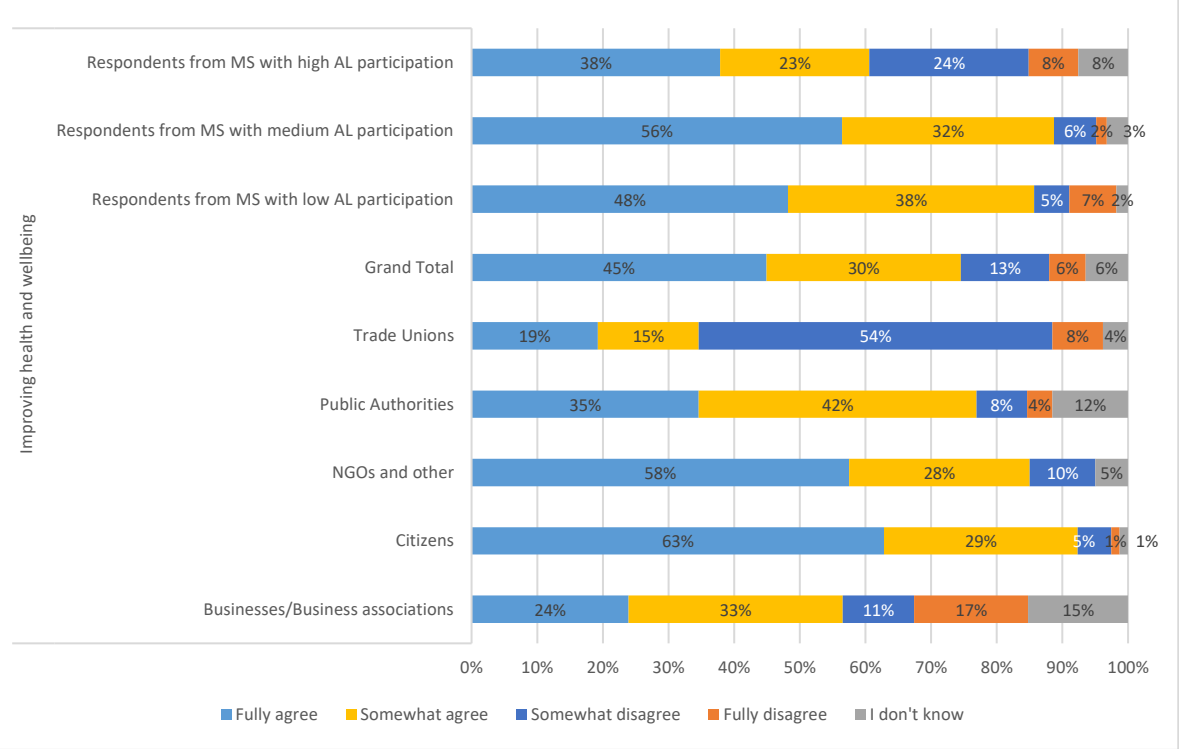
- The majority of respondents registered overall agreement that ILAs would support digital and green transitions by providing relevant skills as well as improve cohesion in society as well as lead to upward convergence between Member States.

The wider impact from individual learning accounts is analysed in the responses to the questions in this section.

Table 72 Q 7.1 To what extent do you agree or disagree that the following impacts related to fundamental and social rights could result from an EU initiative on individual learning accounts? (216 respondents)

Impact	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
Improving access to secure and adaptable employment regardless of the type and duration of the employment relationship	99	63	28	9	17	216	75%	17%
Improving health and wellbeing	97	64	30	11	14	216	75%	19%
Promoting active citizenship and political participation	86	55	35	15	25	216	65%	23%
Making it easier for individuals to manage transitions in the labour market (between different jobs or sectors, or from unemployment to employment)	125	54	18	9	10	216	83%	13%
Improving employment prospects for unemployed by tailor made assistance	119	55	23	8	11	216	81%	14%
Tackling discriminations on all grounds regarding access to training, employment prospects and career progression	107	55	31	11	12	216	75%	19%

Figure 78 Q 7.1 To what extent do you agree or disagree that the following impacts related to fundamental and social rights could result from an EU initiative on individual learning accounts? (216 respondents)



In relation to the possible impact of an ILA on fundamental and social rights, respondents registered overall agreement that ILAs would improve these rights (see Table 72). The highest proportion of respondents agree that ILAs would 'Make it easier for individuals to manage transitions in the labour market' at 83% overall agreement, with NGOs and other organisations, and citizens agreeing most frequently. This is closely followed by 'Improving employment prospects for unemployed by tailor made assistance' at 81% overall agreement.

All of the fundamental and social rights listed had above 50% of respondents fully or somewhat agreeing there would be an improvement in that particular area, although businesses/business associations tended to agree with less frequency with a number of the measures including 'Health and Wellbeing', 'Promoting Active Citizenship' and 'Tackling Discrimination'. Figure 78 shows that citizens and respondents from the middle group of countries in respect of adult learning participation were most positive in terms of health and wellbeing impacts.

Table 73 Q 7.2 To what extent do you agree or disagree that the following impacts related to the labour market and the economy could result from an EU initiative on individual learning accounts? (216 respondents)

Impact	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
Supporting geographical labour mobility	76	67	43	11	19	216	66%	25%
Reducing skills gaps and mismatches	127	45	21	11	12	216	80%	15%
Improving productivity and competitiveness of companies	106	61	26	7	16	216	77%	15%
Supporting an efficient reallocation of labour in light of structural changes or economic downturns	101	63	27	10	15	216	76%	17%

Table 73 shows that the majority of respondents agreed that ILAs would have a positive impact on the labour market and the economy, particularly 'Reducing skills gaps and mismatches' with 80% either somewhat or fully agreeing that ILAs would have this effect. Trade unions and businesses/business associations (see Figure 79) agreed less frequently with this, but citizens agreed overall most frequently at more than 90% agreement rate. This was closely followed by 'Improving productivity and competitiveness of companies' with 77% of respondents either somewhat or fully agreeing they would have this effect, although trade unions and Businesses agreed less frequently with this. Although only a low level of disagreement overall was registered by respondents, the highest level of disagreement was 'Supporting geographical labour mobility', with 25% overall disagreeing that ILAs would increase mobility.

Figure 79 Q 7.2 To what extent do you agree or disagree that the following impacts related to the labour market and the economy could result from an EU initiative on individual learning accounts? (216 respondents)

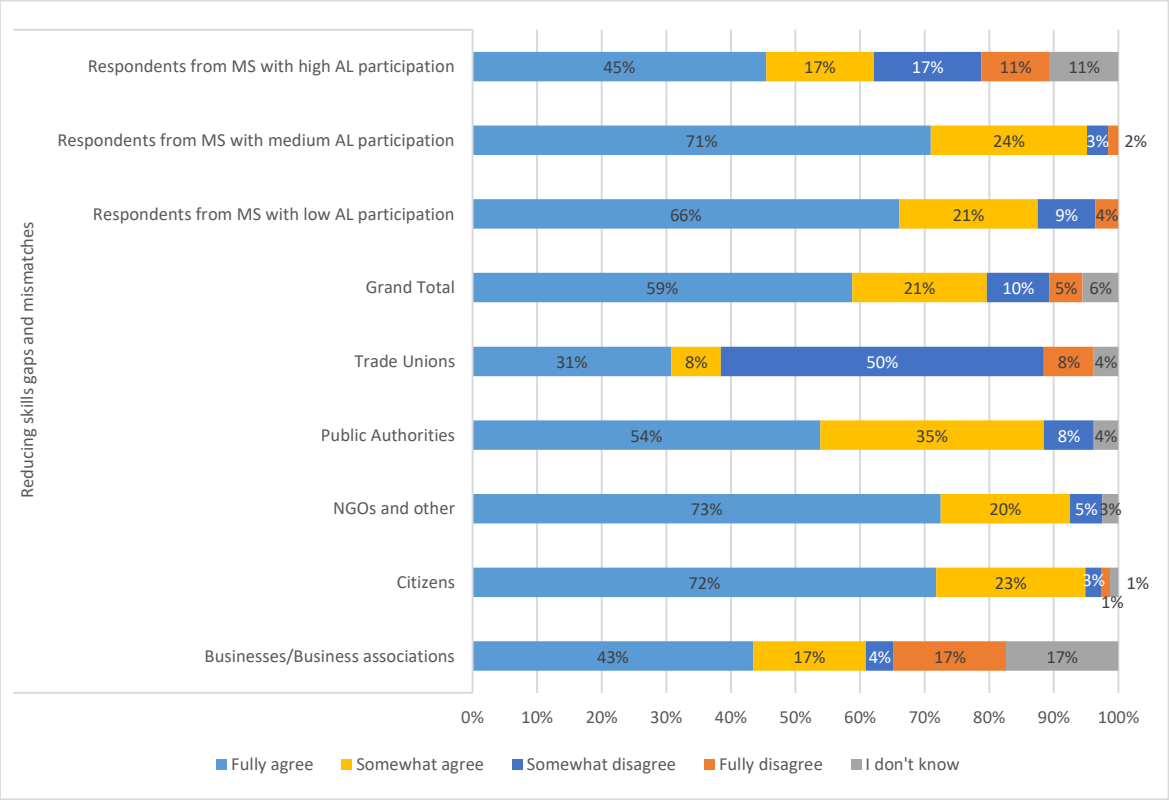
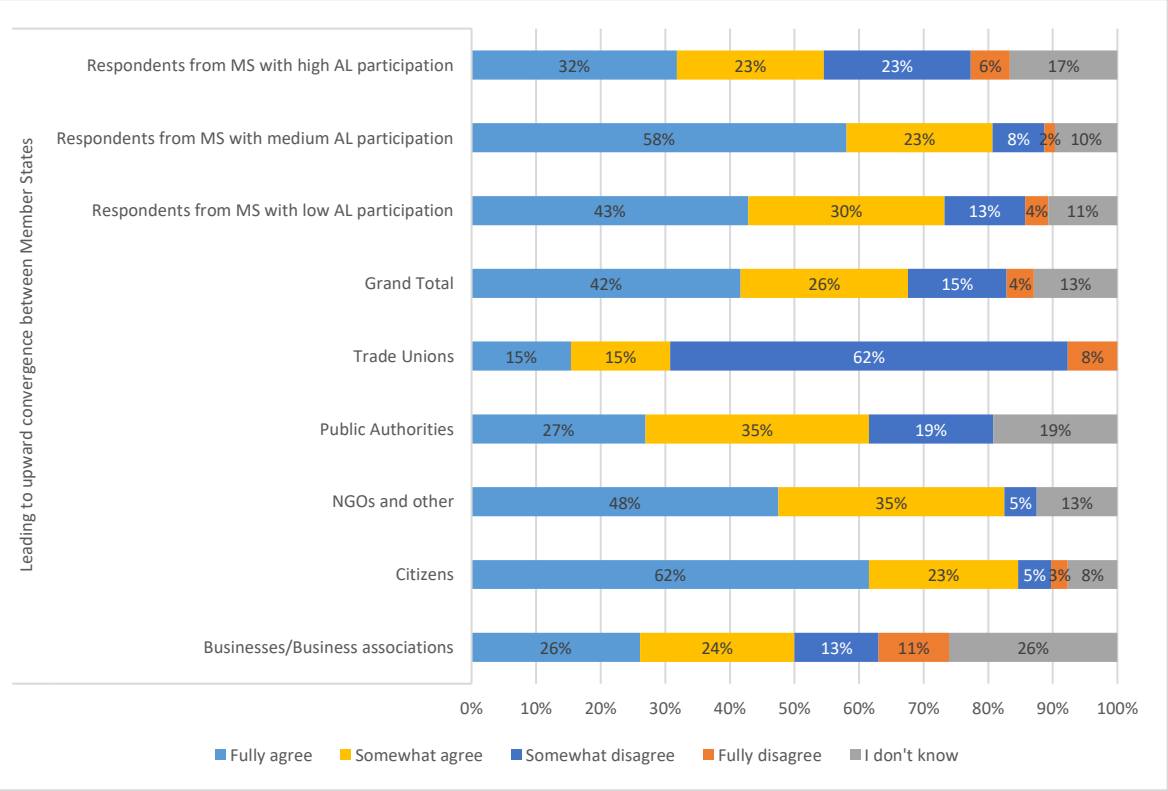


Table 74 Q7.3 To what extent do you agree or disagree that the following impacts related to the society and the environment could result from an EU initiative on individual learning accounts? (216 respondents)

Impact	Fully agree	Somewhat agree	Somewhat disagree	Fully disagree	I don't know	Grand Total	Fully + somewhat agree	Fully + somewhat disagree
Leading to upward convergence between Member States	90	56	33	8	29	216	68%	19%
Supporting digital and green transitions by providing relevant skills	109	65	19	9	14	216	81%	13%
Improving cohesion in society	104	43	33	7	29	216	68%	19%

Table 74 shows that the majority of respondents registered overall agreement that ILAs would have an impact on the areas considered (society and environment). Respondents overwhelmingly agreed that ILAs would 'Support digital and green transitions by providing relevant skills' with 81% of respondents fully or somewhat agreeing, with more than 90% of citizens agreeing. Under 50% of trade unions agreed with this overall, however. 'Improving cohesion in society' registered the second highest level of agreement by respondents with 68% either somewhat or fully agreeing ILAs would contribute to this goal, although more than 50% of trade unions and business/business associations disagreed with this, plus there was a high incidence of 'Don't know' amongst businesses/business associations on this at 28%. Finally, 68% of respondents either fully or somewhat agreed that ILAs would 'Lead to upward convergence between Member States'. Citizens, NGOs and other organisations together with respondents from countries with medium levels of participation in adult learning were most positive in this respect (see Figure 80).

Figure 80 Q7.3 To what extent do you agree or disagree that the following impacts related to the society and the environment could result from an EU initiative on individual learning accounts? (216 respondents)



Box 13 Q7.4 Open question on the wider potential impacts of ILAs (58 responses)

Open responses ranged between reiterations of points made within the earlier sections, and some wider philosophical questions, as well as issues related to the potential social impacts of ILAs and methods for implementation.

Points made included:

Clarity of objectives – either simplifying the application of training entitlements or the broader social benefits to creating a culture of lifelong learning, and a better trained, upskilled group of labour market participants. Some commented that the potential social impacts were over stated, and that many other factors would impinge on social and civic participation. They further commented that there could be outcomes both positive and negative, not one or the other.

In discussing the potential impacts of an individual learning accounts initiative, it is useful to differentiate between "delineated objectives", which ILAs can address (for example, making individual training entitlements more simple or accessible) and broader ambitions for the labour market and society, to which ILAs can contribute (for example, contributing to a culture of lifelong learning).

The benefits of ILAs in developing wider and more equitable access to training were noted by respondents to this question. The individual learner feeling and being more in control of their learning and upskilling was an associated theme. It was felt that positive benefits that could accrue including changes at an individual level, enabling people to feel more in control of their learning, alongside wider cultural change in attitudes to learning, and an overall improvement in the quality of training on offer.

Some points made included ILAs being something of an experiment in social change making it hard to predict the outcome in advance. Inequalities of position and starting point impacting upon the outcomes of ILAs was also made.

One respondent felt that individual learning accounts could have the same impact as the Erasmus scheme has had on education and training.

One minority view was that individuals may be more involved in training choices if they have an account to which they also made a financial contribution.

The position of the respondent in social hierarchies was also likely to impact on their views according to one answer.

Responses suggested the need for a pilot phase to test and learn from ILA introduction. In the same vein it was suggested that lessons needed to be learned during implementation. Assessment of the added value and experimentation of a ILA approach is necessary before we can guess about the impacts for the labour market, economy and society.

Box 14 Q 8.1 If you have any additional comments and/or suggestions, feel free to use the open answer box below

Suggestions:

Any developments should not increase the costs to business

Important to look at the needs of persons with disabilities

Keep administrative burden to minimum to ensure that barriers to training are actually removed and funds are spent on actual training

Must include a strong role of the social partners (repeated several times)

Paritarian funds play a crucial role in the establishment of a registry. Such funds should be supported in the Member States to maintain/establish them. Lifelong learning should be accessed by everyone was stated some participants Doubts and concerns: The approach of focusing on one single instrument is too narrow. Lifelong learning should be funded through a mix of instruments. The EU initiative should take a broader standpoint and focus on ensuring the right to access training for education sector employees. No one-size-fits all Limited scope of the EU as adult learning relies on national efforts and strong role of social partners.

12.3.7. Position Papers

Introduction

Position papers were an additional mechanism for stakeholders to submit views on ILAs. These could be submitted at the end of the survey or through other mechanisms including e-mail submissions. 38 unique position papers were received (there were also cases where the same paper was submitted by more than one organisation, or from within the same organisations). The papers came from trade unions (5), public authorities (9), employers' organisations (including chambers of commerce) (15), and NGOs (including other 'non-specified' respondents) (9).

There was no format for position papers and most papers did not comment on all areas. The papers were analysed using thematic group of papers received to understand patterns in key questions arising from the potential for introduction of ILAs within the EU Member States.

Training entitlements

Papers from NGOs and trade unions generally stated that entitlements should primarily relate to financial resources giving individuals the possibility to access training, but accompanied by measures to ensure quality of training and guidance. One paper from a trade union noted a potential confusion arising from the term 'access to rights/entitlements' between an ILA and ensuring individual's rights to training and suggests a differentiation between the right and access to adult learning; the right and access to employee training; and the right and access to different types of paid training leave. The paper also states that the right to training 'should not be an obligation for the workers'. There was some support for cross-border arrangements that allowed entitlements to be used in different Member States. Businesses/business associations showed some support for policies that would facilitate labour migration from third countries together with a review of regulated professions to facilitate cross-border movements in order to address skills gaps.

The papers contrasted most on their perspective of ILAs, some (especially NGOs and public authorities) welcoming ILA as a tool to help close labour market gaps, others (especially business associations and trade unions) concerned at the steps that would be required to integrate ILA with existing training systems and protect existing agreements involving social partners and public authorities. Some NGOs also believed that ILAs could reinforce and exacerbate structural inefficiencies in the labour market and that limited investments will yield limited returns. An NGO contributor noted points from ILO and UNESCO research that most existing entitlement systems are partial and that more developed approaches require:

- appropriate legislation to be in place;
- a dedicated entity to manage the entitlement system

- sufficient and sustainable financing from public and private contributions
- adequate training infrastructure backed by quality assurance mechanisms
- wide reaching and effective advocacy and social marketing.

The need for further investment to improve the effectiveness of training entitlements was emphasised by some business associations on the need for public funds to lever additional private funds. NGOs also commented that there is a need for financial investment to support this level of initiative as well as a need for measures to guard against fraud.

ILAs as a means to address financial barriers to training

There were generally positive perspectives across all groups, welcoming the initiative and the opportunity to close financial gaps that act as barriers to training, as a building block for lifelong learning focused on upskilling and reskilling of adults. ILAs could be one tool and should be an opportunity to foster continuous learning and lever in additional funding. It was stated that ILAs (emphasised by some public authorities) could help to increase participation in adult learning but that outreach work and additional resources would be required to support those in most need of training, and/or at most threat from automation and technological transitions.

There was support for the European Commission in continuing to encourage and facilitate exchanges of knowledge, experience and lessons learned between Member States. The added value could be the role the EU can play in raising awareness of green and digital transition in the business community. The papers from all groups suggested that ILA success was highly dependent on design, should only be used where they add value and do not conflict with existing systems or create additional bureaucracy. Lack of time and funding are barriers that need to be resolved. There was a welcome for the continuation of the measures that monitor and forecast the skills needed on tomorrow's labour market for specific occupations, sectors and regions, while using new digital technology and big data.

Defined target groups and universal rights

The targeting of ILAs as opposed to a universal training entitlement available to all, was an area where there were a variety of positions expressed. Papers from NGOs and public authorities prioritised vulnerable groups, especially women, older people and persons with disabilities, and some highlighted the potential benefit of ILAs to younger people moving into the labour market. There was an emphasis on reaching those through outreach with low motivation to take up training associated with this view. These answers tended to come from NGO networks but also from other respondents.

There was support, especially from NGOs, for more targeted outreach work with marginalised groups and individuals, to raise awareness of the potential opportunities of ILAs. These views are echoed throughout all sections of the position papers, including the need for targeted guidance to more marginalised groups, but especially for older people and women.

Papers from all groups argued for a universal approach (trade unions and NGOs stressing the need to implement the fundamental right of citizens to training), where all adults should benefit, and to be consistent with the principle of training available to everyone, but with safeguards to ensure that such an approach did not overly favour the higher skilled and those most able to articulate their training needs and to secure the training of their choice, at the expense of the priority group, supporting the universal but differentiated approach.

Some felt ILAs should focus on upskilling and reskilling, especially for the future – mainly trade unions and business associations. Trade unions generally emphasised the rights of individuals to determine their training needs, and the importance of a universal entitlement, (although others also echoed this sentiment too).

With respect to the choice of training most (especially business associations) supported training with labour market relevance there was also specific mentions of green and digital transitions (e.g. one paper underlined the importance of education and skills to deliver

successful green and digital transitions). Some NGOs emphasised the need for training to also focus on basic skills, to develop higher levels of community engagement, civic and political participation. Removing language barriers in the delivery of ILAs (and as a training opportunity to be funded through training entitlements) was seen as a key tool in reducing barriers, and especially for migrants and minority populations, which can be quite sizeable.

Individual Training entitlements and freedom of choice

Another area where there were a variety of views expressed was the extent to which there should be free choice of training. Trade unions and NGOs generally favoured a free choice of training. In contrast business associations tended towards a view that training is the responsibility of employers, and that issues such as eligibility for ILAs, training choices and labour market policy are the domain of Member States and indeed Trade Associations. SME representatives went one step further stating that the training offers need to be designed around the real needs of companies, especially those of SMEs, including informal and on-the-job training.

Role of Career Guidance

Career guidance was thought to be of importance by the majority who addressed this issue (including public authorities). Trade unions were concerned that education and training professionals should be given enough support in this role as provider of guidance on choice of ILA.

Public authorities pointed to the need to target information and guidance towards those with least access and there was support from NGOs for more information and guidance for unemployed, vulnerable groups and those with low basic skills. The digitalisation of information and guidance was thought to be an option to increase access for a wider group, although a more personal approach was noted as helpful by employers, such as coaching. One response stated that ILAs should be aligned with the updated EU Action Plan on Digital Education.

The need for economic relevance of choices given during information and guidance support was thought to be of importance by some. The need for a registry from which ILA choices were made was emphasised by employers (more detail on registries given below).

There was a call from NGOs for a ‘one stop shop’ for information and guidance for individuals to learn about their rights. The proper funding of information and guidance was emphasised by public bodies, referring to the French model of *Bilan de Competence*. There was support for additional resources for information and guidance systems and further training of advisers.

Role of Registries and quality assurance

Quality assurance of training was an area where there was a general consensus across all groups on its importance, as well as much emphasis being placed on registries to ensure the quality of training provided through ILAs. There is recognition that much current training is not quality assured and there are many unregistered or validated providers of training. There are views expressed by contributors, across all groups, that anything being delivered under an ILA must have certification for a guarantee of quality. One NGO states that they have had in place a comprehensive public registry of global quality award accreditations since 2005 which they believe demonstrates the importance of quality assurance, awards systems and standards of certification of courses.

Quality assurance is strongly associated by respondents with validation and the recognition of qualifications within Member States, and across the EU (the role of National Qualifications Frameworks was stressed), to increase quality, transparency and recognition of education and training entitlements, which in turn increases the potential for labour market mobility. This was noted as the key mechanism to help individuals secure new employment pathways and/or develop their careers. Most contributions echoed these sentiments where they expressed a view.

'Micro-credentials' are referred to as a tool for both lifelong learning and mobility by an employer representative, with calls for increased modularisation of learning achievement records, should be included to improve access to qualifications, especially for those with low levels of educational attainment. The validation of prior learning is referred to by an NGO as a requirement to ensure flexibility in access and certification.

Paid Training Leave

Specific points were made on the right to paid training leave by trade unions and NGOs, alongside advocacy of an entitlement to a living wage for all adults. Trade unions made strong arguments in favour of paid leave, and argued that paid leave needs to be guaranteed in every EU country in accordance with ILO convention 140[537] on paid training leave. They suggest this should apply equally to atypical workers. There was a proposal from one trade union for company/sectoral level paid learning or training leave, defined and implemented through collective agreements. The paper highlighted that women in particular, and especially for those with caring responsibilities, are felt to be excluded by the lack of paid leave for training.

One trade union notes a financial gap – 'only seven Member States have national budgets for the validation of skills and competences of workers'. There is reference by some trade unions to the need for transferability of the right to paid training leave and financial resources for training among EU countries, through bilateral agreements.

Governance arrangements

The governance of ILAs at an international and national or regional level was an area where there was consensus from business associations and trade unions (and some public authorities), especially in countries with strong bilateral and collective labour and training agreement systems and pacts, and especially in Northern Europe. Some business associations felt that there are already strong systems in place but the lack of robust training frameworks in some countries is an ongoing issue. They believe that Member States must increase investments to match EU actions on skills.

An employer representative noted the need for a guaranteed role for social partners and well as chambers of commerce and trade organisations in governance structures. Other employer representatives emphasise the role of social partners in skills development. The lack of transparency on the provision of training, the lack of visibility on the benefits of training on career paths, the lack of information on the rights and practical arrangements for access was also mentioned as a failing of some current governance arrangements.

Various trade union representative notes that subsidiarity needs to be respected and that EU Member States should define the financial mechanisms and tools for ILAs with the involvement of social partners. They further note that social dialogue with trade unions should be enshrined as part of any EU initiative on ILAs. The involvement of social partners is mentioned not just by trade unions but also employers and NGOS. "Collective agreements are the result of lengthy discussions and need to be protected" is another comment from a business association. Some contributions from public authorities suggest a key role for local and regional authorities in shaping new initiatives, especially linking into their work on green transitions (mention of regional territorial strategies and green deal pacts). There is a suggestion by a public authority that the European Commission could use local and regional authorities to develop pilot projects, test how ILAs might work, and the need for regional variations in approach, not a 'one size fits all' governance structure.

Fears of greater bureaucracy are echoed throughout the contributions – for example, this point is made by an employer representative: "Greater centralisation, regulation and standardisation of training through individual learning accounts would act as a barrier. A public authority similarly comments that, "If the individual learning account has a role to

[537] http://ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312285

play, it should be developed in a sufficiently simple manner and accompanied by sufficient accompanying measures".

To strengthen governance arrangements there were calls for monitoring and review arrangements and pilot projects to test new initiatives before large scale roll-out.

Responding to Covid-19

There was a general welcome for the EU's attention to adult learning in the aftermath of the Covid-19 pandemic and the recovery process ahead. Trade unions saw the opportunity for fair social and employment policies and there was support for the implementation of the first principle of the European Pillar of Social Rights 'ensuring that everyone has an entitlement to access quality and inclusive training and lifelong learning'[538].

Coordination with higher education policies

An NGO commented on the updated European Skills Agenda and the European Education Area[539], to achieve a strong link between education, skills policies and the labour market. It was suggested that this could be achieved by coordination between Higher Education institutions which contribute significantly to skills development and lifelong learning.

12.3.8. Conclusion

The main conclusions from the public consultation are summarised below:

There is overall support from all groups for the EU initiative for individual learning accounts. It was generally thought across all groups that ILAs can make positive contributions to increase motivation for learning and reduce financial and time barriers to training and that ILAs can make a positive impact on fundamental and social rights, as well as social and environmental impacts. The following four success factors emerged from the public consultation:

- ILAs, or alternative mechanisms to deliver training entitlements, are adequately financed (funding sources which gained most support within the PC were EU and Member State funding and employer levies). There is a general view, and also from the position papers, that additional resources are required to boost adult learning overall.
- Accompanying measures need to be fully integrated into the delivery of ILAs and alternative mechanisms and include personal guidance to help individuals with career and training choices, outreach for those groups not engaged with training systems, quality assured training offers, ease of access to information on training offers (with support for the idea of a registry or one-stop shop) and training that has certifications that are recognised by employers and fully transferable (i.e. not restricted to one employer, or even one country). This includes the validation of informal and non-formal learning. There is also support for paid training leave, especially from trade unions and NGOs.
- ILAs, or alternative mechanisms, are part of the 'armoury' of tools and not a sole or 'one size fits all' solution. Where there was disagreement with the ILA initiative, articulated in some of the position papers, the central point concerned the integration of ILAs into existing training systems, avoiding unneccessary bureaucracy and also conflict with existing collective agreements (a view especially expressed by representatives from Nordic countries). The principle of subsidiarity was mentioned

538 The European Pillar of Social Rights in 20 principles | European Commission (europa.eu)

539 The European Education Area, the Next Generation EU, the EU's **COVID-19 recovery plan** to lead the Union out of the crisis and towards a modern and more sustainable Europe fit to face the digital and green transitions.

in a few papers implicitly or explicity (and especially by some trade unions and NGOs).

- A European Council recommendation to Member States was the preferred option for the introduction of ILAs (France – with the CPF - excepted), with the proviso that Member States would be able to make choices as to how an ILA could be implemented and funded in their countries.

There were two areas where the views of stakeholders on the delivery of ILAs diverged in the position papers (and targeted consultations summarized in Annex IV), while a clearer picture emerged in the public consultation:

- **Universal, targeted or hybrid approaches:** Views were varied between a universal entitlement (available to all adults) or a targeted approach with resources focused on priority groups, to be determined by Member States. There was **most support for a universal approach with differentiation to provide additional support to vulnerable groups** such as the low qualified, unemployed and those who are economically inactive (78% support with majorities among all stakeholder groups, see Table 67 and following). The case was also made for workers in SMEs and atypical workers (not in permanent employment). The arguments in favour of universal rights tended to focus on fundamental rights to train (to be available for all adults, and a small number of position papers also argued for extending rights beyond 64 years of age (beyond working age), given the changing demographics of European labour markets), whilst the arguments for targeting centred on efficient use of resources and greater effectiveness at reaching those individuals in most need of training, especially those whose jobs were at risk of automation or who needed training for digital and green transitions.

- **Freedom of choice or compulsory guidance:** There was broad consensus on the need to assure labour market relevance of training. Discussions focused on how that might be defined and regulated (one from an NGO highlighted concerns as to how a registry would work in practice[540] and balance the needs of quality assurance against the exclusion of some training offers, especially informal and non-formal learning). Business associations in particular, argued for training that was labour market relevant and associated with the skills directly required by businesses, including those required by digital and green transitions. That was seen as too narrow by some respondents (especially NGOs) in open questions and position papers. Language and driving skills were highlighted by a few papers as important skills to help individuals access employment, whilst not strictly vocational or labour market focused. Some NGOs favoured a broader approach still, allowing a freedom of choice that encouraged lifelong learning in the widest sense (e.g. learning in respect of civic responsibilities). Overall, there was the **highest support for a free selection from the registry of eligible training offers**, whereby training may take place during working hours with the agreement of the employer (88% support with majorities among all stakeholder groups, see Table 69 and following).

[540] Very few papers made explicit reference to a registry

12.4. Annex IV – Targeted consultations

12.4.1. High-level conference on individual learning accounts

This two-day online High-level forum of 4-5 March 2021 aimed at debating the concept of individual learning accounts (ILA) as part of a solution to the EU objective of increasing adult participation in up- and reskilling, through learning from existing practices and discussing the challenges and factors for success. The conference is part of a broader stakeholder consultation process to investigate whether individual learning accounts can be useful tool to support the upskilling and reskilling. This especially given the many skills challenges Europe is facing, related to the Covid-19 pandemic and the digital and green transformations.

The High-level forum brought together nearly 800 participants from 48 countries. The audience consisted of stakeholders including social partners, industry and business, NGOs, education and training providers, national public authorities, international organisations and EU agencies, researchers and many more.

The speakers included European Commissioner for Jobs and Social Rights, the French Minister of Labour, Employment and Economic Inclusion and the Director General for Employment, Social Affairs and Inclusion. The floor was given also to speakers from international organisations, social partners, business, Cedefop, as well as experts on diverse national approaches.

Four key points emerged from the high-level conference:

The time is right for individual entitlements to learning and ILAs: ILAs can play an important role in providing an additional impetus to re -and upskilling, reaching out to disadvantaged adults, and through this contribute to the fair, just, and innovative recovery of Europe. The Recovery and Resilience Facility can have an important role in financing skills development and supporting the green and digital transitions, for instance through ILAs.

ILAs should be based on universality, support inclusiveness, and different learning types: While there are different possible options, generally, the high-level conference supported the idea that ILAs should be open to everyone (as an individual entitlement), to be used for formal and non-formal learning, also responding to the need for adults to enrol in more concise learning pathways leading to partial qualifications and/or micro-credentials. While participants generally agreed on the universality of ILAs, some of them highlighted the need to include provisions targeting individuals who need it the most. One risk with ILA mentioned during the event by a research institute was a risk of deteriorating quality with increased demand and supply of training offers. Some participants (employers' organisation) warned about the limited effects ILAs can have on increasing participation to training for those groups with generally low motivation.

ILAs can only function in well-governed and designed systems: ILAs should be seen as an additional instrument to support individuals in engaging in learning that can complement existing instruments and arrangements for re- and upskilling. ILAs should therefore, be designed together with social partners. Furthermore, as ILAs support developing training markets in the countries, a careful consideration needs to be given on how public and private training providers operate within these markets.

Effective ILAs need to be embedded in well-functioning adult learning systems: ILAs, individual entitlements and in general demand-side funding can only be effective when it is embedded in effective adult learning systems. They need to have in place mechanisms concerning guidance, validation, outreach to disadvantaged groups, quality assurance of the training provided and solid IT systems to support the take up of ILAs. At the same time, ILAs can foster the development of such systems, by strengthening transparency and

quality assurance for non-formal learning offers, and by making guidance and validation offers eligible for ILA funding.

12.4.2. Validation Workshop

The validation workshop was hosted by Fondazione Brodolini (FGB) on 9th June 2021 and was based on a briefing paper prepared by the consultants and based on the key findings of the draft final report in support of the Impact Assessment. The purpose was to test the interim findings and early findings on impacts.

The European Commission (DG EMPL) were in attendance but as observers. Overall 25 stakeholders representing ministries, universities and national adult learning institutions of 16 Member States participated in the validation seminar and the debate that followed two presentations.

- The problem definition and problem drivers, the case for EU intervention, the objectives for intervention and the option packages designed to address the problems and problem drivers.
- The impacts of the option packages.

Question and answer sessions followed each presentation.

Problem analysis

The was a general endorsement of the problem analysis. Nordic Network of Adult Learning felt that it was important to consider the root causes of low participation and not just the shorter-term symptoms, and posed the question as to whether the focus on quantity (levels of participation) should be replaced by a focus the quality of training and its contribution to lifelong learning and the experience of learners (recognising both are important). This view was echoed by Hellenic Open University that felt that the focus on labour market relevant training underplayed the wider values of lifelong learning (especially skills relating to civic responsibilities and learning for the enjoyment of learning and gathering knowledge).

The need for intervention

One stakeholder expressed a view, echoed by others, that any intervention concerning training entitlements, was helpful in principle, if it added to the training offer and raised the profile (and value) of training. However, respondents also stressed that it was important that interventions such as vouchers or an ILA, had a clear place in their national training systems and were integrated as part of a package of support. One representative from Italy talked about a combination of instruments with an ILA as one tool.

Options

Some of the delegates could point to experience from their own country contexts. One of them recalled the consideration of an ILA in Finland where research was undertaken in support of an ILA, but which proved inconclusive, partly because the added value of an ILA could not be assessed given already high levels of training participation in Finland.

There was general agreement from delegates on the design of vouchers/ILA:

- The importance of guidance, especially for the low-skilled and those who need the most support to navigate training systems. A representative ftom the national coordinator for adult learning, Denmark; Ministry of Children and Education,

stressed the importance of proactive support and information to increase the motivation of prospective trainees, as a pre-requisite to entering a training offer;

- In addition to guidance there also needs to be outreach to attract – and retain - those from inactive, unemployed and other vulnerable groups (retaining trainees and avoiding high drop-out rates was seen as a key challenge). This point was stressed by the Human Resource Development Authority from Cyprus Greece suggested there were good practice lessons from the experiences of working with NEETs that could be transferred across to the implementation of training entitlements. Need to think about use of social media and other approaches to increase interest levels and participation in adult learning;
- Trainees need to have guarantees of quality – an approved list, registry or similar could provide this but not if too restrictive (by subject or provider). One respresentative expressed the view that languages could be a useful gateway to professional transitions as well as a motivation to get people into adult learning. Having a relatively broad set of training offers was also stressed by one delegated from Firenze University (Italy) with the added comment that younger people in particular were accessing non-traditional forms of training;
- In a related point the quality of trainers was raised as general concern by some delegates, with the suggestion that a new intervention could also include a training package to raise standards amongst trainers (as part of a quality assurance framework);
- The importance of targeting was mentioned by a number of delegates who expressed the opinion that the voucher schemes in Greece would have been more effective with better targeting of vulnerable groups;
- One delegated from Firenze University asked if there an option to combine an ILA and a voucher (which could be used for more targeted approaches);
- A representative from the Ministry of Education, Science and Sport (Slovenia) stressed the importance of good governance with the full involvement of stakeholders at all levels and sectors, to help raise the profile of adult learning and to determine priorities and responsibilities (who also gave the example of the Skills Strategy project in Slovenia, undertaken in conjunction with the OECD (see www.oecd.org/slovenia/skills-strategy-implementation-guidance-for-slovenia) – how best to raise the profile of AL, how to involve social partners, how to link support such as guidance, how to plan an ILA or similar message where stakeholders have a clear direction and responsibilities.

Impact

There was general support for targeting policies in order to increase effectiveness and overall impact. There were different views on the focus of targeting policies, although unemployed, low skilled and other vulnerable groups. It depends on objectives, one respondent outlined a voucher scheme in Italy that targeted the higher skilled groups and was relatively cost effectiveness with greater economic impacts than alternative targeting approaches. It was a valid strategy but didn't address that EU objective of closing gaps.

Another participant stressed the importance of including soft outcomes (including progression towards the labour market) in any assessments of impact.

Closing summary

FGB provided a summary of the discussion and the main 'takeaways'.

- ILAs in particular needed public investment and a ‘good scale’. An ILA should not be ‘half-hearted’.
- The overall impact of an ILA could be measured in the behavioural change (for the training participants), resulting from the ability to accumulate training credits. ‘Accumulation may encourage more long term thinking’.
- Need to ensure there is added value and not displacement of existing services.
- Parallel investment in ‘quality guidance’ that needs to be informative and inspiring (motivational)
- Quality of training (and trainers) is vital to ensure effectiveness.
- Must respect national systems. Not a ‘one size fits’ all model. Will be adapted at Member State level, but there are general lessons of good practice that can be useful.
- Focus on participation is not the only story – it is also about providing high quality lifelong learning with longer term benefits.
- Even in universal schemes there should be targeting of groups who are harder to reach in terms of adult learning.

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