STUDY

requested by the CONT committee

European Parliament

# Ensuring high-quality job creation from EU funding programmes:

## How can the best practice of Horizon 2020 be better integrated into other programmes (ESF, Youth Guarantee, Globalisation Fund)?

Budgetary Affairs


Policy Department for Budgetary Affairs
Directorate General for Internal Policies of the Union
PE 603.832 - April 2018

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DIRECTORATE GENERAL FOR INTERNAL POLICIES

POLICY DEPARTMENT D: BUDGETARY AFFAIRS

# Ensuring high-quality job creation from EU funding programmes: How can the best practice of Horizon 2020 be better integrated into other programmes (ESF, Youth Guarantee, Globalisation Fund)?

STUDY


**Abstract**

This study examines four EU funds and programmes in how they support job creation and quality employment. It also assesses the methodologies and indicators used to measure job quality and it identifies lessons and recommendations to improve current practices.



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This document was requested by the European Parliament's Committee on Budgetary Control. It designated Ms Inés AYALA SENDER (MEP) to follow the study.

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# LIST OF ABBREVIATIONS

| | |
|---|---|
| **AIR** | Annual Implementation Report |
| **CF** | Cohesion Fund |
| **CIE** | Counterfactual impact evaluation |
| **DG EMPL** | Directorate-General for Employment, Social Affairs and Inclusion |
| **EAFRD** | European Agricultural Fund for Rural Development |
| **EC** | European Commission |
| **ECA** | European Court of Auditors |
| **ECS** | European Company Survey |
| **EESC** | European Economic and Social Committee |
| **EGF** | European Globalisation Adjustment Fund |
| **EID** | European Industrial Doctorates |
| **EMCO** | Employment Committee |
| **EMFF** | European Maritime and Fisheries Fund |
| **EP** | European Parliament |
| **ERA** | European Research Area |
| **ERDF** | European Regional Development Fund |
| **ESF** | European Social Fund |
| **ESIF** | European Structural and Investment Funds |
| **ESRS** | Early-stage researchers |
| **EU** | European Union |
| **EWCS** | European Working Conditions Survey |
| **FP** | Framework Programme |

| | |
|---|---|
| **FP7** | Seventh Framework Programme for Research and Technological Development |
| **FTE** | Full-time equivalent |
| **H2020** | Horizon 2020 |
| **IA** | Impact assessment |
| **IAPP** | Industry-Academia Partnerships and Pathways |
| **IF** | Individual Fellowship |
| **IRSES** | International Research Staff Exchange Scheme |
| **ISCED** | International Standard Classification of Education |
| **ITN** | Innovative Training Networks |
| **MA** | Managing Authority |
| **MFF** | Multiannual Financial Framework |
| **MS** | Member States |
| **MSCA** | Marie Skłodowska-Curie actions |
| **NEET** | Not in employment, education or training |
| **OP** | Operational Programme |
| **REA** | Rapid Evidence Assessment |
| **RTD** | Research and Innovation |
| **TO** | Thematic objectives |
| **YEI** | Youth Employment Initiative |
| **YG** | Youth Guarantee |

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# EXECUTIVE SUMMARY

## Context for the study

Job creation and quality jobs are integral to the European Union's Europe 2020 strategy for smart, sustainable and inclusive growth. Several EU funds and programmes support the implementation of the strategy and aim to contribute to its objectives. Job creation is clear and measurable in principle but the issue of underutilisation of labour in the EU calls for a closer examination of job quality. This, however, is a multifaceted concept. There are many frameworks that aim to capture it but no common definition or index has been agreed at the European level. Yet, job quality indicators can help in policymaking by pointing to areas of concern or worrying trends over time.

The EU funds examined in this study are Horizon 2020 (H2020), the European Social Fund (ESF), the Youth Employment Initiative (YEI) and the European Globalisation Adjustment Fund (EGF). These funds vary considerably in terms of their objectives, beneficiaries and participants, type of eligible actions, the way they are managed and implemented, and how much resources they offer.

The objectives of this study were to: 1) analyse the selected funds in relation to their potential to create high-quality jobs; 2) assess how job creation and job quality can be measured in the framework of EU funding; and 3) identify key characteristics that can facilitate quality employment and job creation.

## Methodology

The methodological approach for the study included a review of documentation on the EU funds, coupled with a rapid assessment of evidence from existing literature on job quality, interviews with key stakeholders at European and national levels and subject experts, and a review of illustrative examples of high-quality job creation practices in the EU funds.

## Findings

The EU funds can support job creation and job quality in diverse ways: H2020 seems to place more emphasis on growth (and thus on job creation), while the abilities of the ESF, YEI and EGF to create jobs are close to none. The ESF promotes sustainable and quality employment and the YEI aims to provide a good-quality offer of employment, apprenticeship, further education or training to young people, while the EGF seems to prioritise re-employment over job quality.

Given these differences, the evidence on job creation varies among the EU funds: only H2020 could demonstrate strong evidence for job creation that reflects the different character and purpose of the funds in question. The main limitation of the ESF, YEI and EGF so far has not been the fact they do not create jobs (simply because they are not designed to and cannot do it), but because any claims about their effectiveness in bringing people (back) to employment are hampered by the lack of robust evidence from counterfactual impact evaluations (CIEs) as such evaluations are still hard to come by.

There is some evidence on job quality across all the funds but the picture across the EU funds is patchy: with a few exceptions, there is almost no evidence on job quality at the EU level, but often very rich data can be found at national and regional levels. This data, however, cannot be easily

synthesised across the EU: the data focuses on various (and different) aspects of job quality and draws on different definitions and methodologies. Yet it seems that, most commonly, the evidence addresses issues of job prospects and earnings.

The methodologies used for the estimates of job creation and job quality in the EU funds are not dissimilar from each other, and include econometric modelling, survey methods and counterfactual analysis. However, measurements after the implementation has started or was completed were much more common across the EU funds, while ex-ante estimates on job creation have been identified for H2020 only.

Indicators used to measure and estimate job creation include absolute numbers (e.g. the number of people who received a job offer or found a job). Job quality indicators used in the EU funds focused on the dimensions that are easier to capture and directly measurable (e.g. type of contract, earnings). However, given the diversity of frameworks, indicators and indices available more widely, existing attempts to capture job quality in the EU funds can be considered as modest at best.

Data availability and quality limit possibilities to assess the efficiency of the EU funds in relation to employment results and quality employment in particular. While some assessments have been provided for most of the EU funds, it is not possible, nor would it be useful, to compare such different instruments.

## Lessons learned

The involvement of private companies (especially SMEs) was a key success factor in job creation in H2020. To further improve job creation and make these effects more equally distributed across the EU, future research and innovation programmes should aim to strengthen the participation of EU-13 beneficiaries where the growth and employment benefits have been more limited so far.

The ability of the ESF to intervene from early childhood education until retirement is a unique and key characteristic of the fund in helping people find and keep their jobs. Yet target setting in relation to employment effectiveness (and quality jobs) of ESF programmes should be considered with care as this bears the risks of cherry-picking individuals with higher chances of success and leaving those who most need the support without it.

Indicators broken down by gender and corresponding reporting requirements of the ESF form a good practice that can and should be applied across all European funds and programmes. Similarly, efforts to conduct (more) CIEs should be commended to other funds.

A key success feature of the EGF (and to some extent the YEI) in terms of employment outcomes is its flexibility with regard to its intervention as well as with regard to the measures provided to beneficiaries.

## Conclusions and recommendations

The EU funds can support job creation and job quality in diverse ways. We recommend that the concept of job quality could be better embedded in the founding regulations of the EU funds. Different options depend on the level of ambition and include:

- Low: Acknowledge the importance of employment/job quality in the founding regulations and encourage examining these aspects against the evaluation criteria, such as relevance, effectiveness, efficiency, etc.
- Moderate: Emphasise the importance of employment/job quality in the founding regulations and provide non-binding but detailed guidelines and recommendations for funds / programme managers on how to assess employment/job quality and what dimensions to focus when doing so.
- High: Introduce provisions similar to those on the quality of job offer in the YEI that require periodic assessments and reporting in relation to employment/job quality.

The evidence on job creation varies between the EU funds with the strongest data provided by H2020. We question whether all EU funds should directly aim at job creation, but we conclude that a high-level intervention logic model where the contribution of different (types of) funds to EU overall objectives would be helpful. We further recommend that the feasibility of EU-level counterfactual impact evaluations or meta-reviews of CIE studies carried out at national and regional levels could be further explored and exploited to provide more robust evidence on employment effects of the EU funds.

Measuring job creation and job quality still comes with conceptual, methodological and practical challenges. This leads to issues with completeness and comparability of data. This is particularly problematic for the evidence on job quality across the EU funds as they have limited mechanisms in place to capture high-quality job creation. We recommend more consistency in terms of dimensions of job quality explored across the EU funds and encourage further efforts to address current data limitations.

# 1. INTRODUCTION TO THE CURRENT REPORT

In this chapter, we present the purpose of the study and the research questions (1.1), the methodology used (1.2) and limitations identified in the study (1.3). The chapter concludes with an outline of the remainder of the report (1.4).

## 1.1. PURPOSE OF THIS STUDY AND RESEARCH QUESTIONS

The objectives of this study are manifold. First, we analysed the EU funding programmes (namely Horizon 2020 (H2020), the European Social Fund (ESF), the Youth Employment Initiative (YEI) and the European Globalisation Adjustment Fund (EGF), hereafter referred to as the EU funds) in relation to their potential to create high-quality jobs. Second, the study assessed how job creation and job quality can be measured in the framework of EU funding. Lastly, it identified key characteristics that can help facilitate success with view to quality and number of jobs created by EU funding. By pursuing these objectives, the study aims to provide the Committee on Budgetary Control of the European Parliament with additional evidence around the sound management of EU finances, as well as the efficiency of the EU expenditure.

The Committee on Budgetary Control pointed to H2020 as the best performing instrument in terms of creating long-lasting high-level jobs.[1] This may be partly due to the fact that the EU funds have very different purposes and serve various target audiences: a programme that supports research and development and a fund that helps most vulnerable people find a path to their first job are not necessarily on a level playing field. To acknowledge that, we proposed to examine all the EU funds for the evidence on job creation and job quality (or quality employment) and if any lessons could be identified (regardless of which EU funds offers these), we aimed to capture them to facilitate learning and sharing of promising practices among the EU funds.

The study's objectives are expressed by the following research questions:

1) What is the evidence for high-quality job creation of the following EU instruments: H2020, ESF, YEI and EGF?
2) What indicators are best suited for assessing the efficiency of EU instruments aiming to create high-quality jobs?
3) Can expected quality and number of jobs created be measured or estimated ex-ante and if so, by what methods?
4) What characteristics can be considered key to success in terms of quality and number of jobs created?
5) What recommendations could be made for the improvement of these instruments in terms of high-quality job creation?

The section below outlines the methodology adopted, while Annex A contains the conceptual framework for this study that links the research questions with data sources and methods used.

## 1.2. METHODOLOGY

To respond to the research questions, we have designed a methodological approach building on a thorough investigation of EU documentation and available evaluations, coupled with a rapid review of evidence from existing literature on job quality, interviews with key stakeholders at

[1] Specifications, p.1

European and national levels, and illustrative examples of high-quality job creation practices in the EU funds. Annex A captures the full details of the conceptual approach to the study.

#### 1.2.1. Review of documentation relating to the EU funds

We developed detailed guidelines (see Annex B) to collect and review the documentation relating to the selected EU funds and to understand (1) how they can support high-quality job creation and (2) what evidence or estimates exist on their planned and actual impact on job creation more broadly and the creation of high-quality jobs in particular. We then developed a data extraction template to capture the relevant information and evidence.

The documentation reviewed is related to the selected EU funds (H2020, ESF, YEI and EGF) and is categorised as followed: (1) the founding regulations; (2) EU level evaluations, impact assessments (IAs) and studies; (3) evaluations and studies at the national or regional level, academic publications and other grey literature; and (4) Internet sites dedicated to the assessment of the EU funds or specific projects supporting high-quality job creation through the EU funds.

The review includes regulations for the 2014–2020 period only. Where it was necessary, accompanying legislation and other documentation were reviewed. As part of documentation review, the experts collected and reviewed four types of EU-level documentation related to the EU funds: (1) all EU-level ex-post evaluations of the EU funds for the 2007–2013 period; (2) all available interim evaluations of the EU funds for the 2014–2020 period; (3) all IAs of the EU funds for the 2014–2020 period; and (4) selected (other EU-level) reports (e.g. by the European Parliament (EP), European Court of Auditors (ECA), European Economic and Social Committee (EESC), etc.) that included an assessment of the EU funds for the 2014–2020 period. We have also included selected evaluations and studies at national or regional levels, academic publications or grey literature that discuss the effectiveness of the EU funds in terms of job creation and job/employment quality . Lastly, we reviewed selected Internet sites dedicated to the assessment of the EU funds or specific projects supporting high-quality job creation through the EU funds.

#### 1.2.2. Rapid Evidence Assessment

In line with the proposed conceptual framework, the objective of the Rapid Evidence Assessment (REA) was to collect available evidence in two distinct, yet related, areas:

1) Indicators used to assess job quality in the EU
2) Measures and estimations of job quality present in the current literature.

We developed a series of search terms and inclusion/exclusion criteria (see Annex C) to identify a comprehensive yet manageable number of relevant hits. Additional sources were identified through targeted searches and through consultation with some of the interviewees. Data from reviewed studies was captured in a data extraction template (see Annex C), structured around the research questions pertinent for the REA.

#### 1.2.3. Interviews

We conducted 21 interviews with a twofold purpose. Firstly, interviews assisted us to complement our understanding of the evidence obtained through document review. Secondly, the interviews gave us additional insights on the characteristics of the EU funds which contributed to high-quality job creation. We covered the following three groups of stakeholders: (1) representatives of the EU institutions in charge of the EU funds, including the management and evaluation of the funds; (2) representatives from selected Member States (MS) in charge of the EU-funded

programmes; and (3) subject experts and thought leaders on the EU funds and job creation. Semi-structured interviews were carried out following a standardised template developed by the research team (see Annex D), which was further tailored according to the role and expertise of each interviewee. This provided a flexible approach that allowed respondents to offer their own perspective and raise issues most salient to them, at the same time as providing a way of gathering more structured responses to allow comparative analysis of cases.

#### 1.2.4. Illustrative examples

Based on the documentation review, as well as interviews, we collated information of any examples of promising practices in high-quality job creation through the EU funds. All the examples are reported in the annexes specific to each EU fund; information is presented in a standardised format, presenting briefly available information on the context, objectives, critical factors/key characteristics and results of these initiatives. Shortened versions of the most relevant examples are also presented in the main report. The illustrative examples supported the overall synthesis and analysis of the information and offer insights into promising practices and learning within and between the EU funds.

#### 1.2.5. Synthesis and reporting

At the completion of the work packages above, all data has been brought together in a systematic fashion for subsequent analysis. The data collected from all research strands has been synthesised by the research team through one internal workshop taking a framework-based synthesis approach, whereby we map evidence against a pre-defined framework building on the key research questions. On the basis of discussions at the workshop, the research team formulated a set of conclusions and policy implications building on the evidence collected throughout the study.

### 1.3. LIMITATIONS

The study's data collection and analysis are subject to a series of limitations. We restricted the scope of the documentation review by targeting EU-level documentation and the review of national/regional level studies to a few MS. We used money allocations as a key criterion to select national documents to review. For each fund we carefully chose up to five countries that received the highest allocations from these funds and looked for relevant evaluations at the national levels.

The temporal scope also proved to be a challenge for the collection of evidence. The study focused on the 2014–2020 programming period for which results are only starting to emerge, monitoring is in progress, and evaluations are limited at this stage. To address this specific limitation, we also looked at the most relevant evidence and results that emerged from the 2007–2013 programming period.

Methodological limitations also concern the REA. A comprehensive review of job quality indicators has been prepared for the EP in 2009. We therefore aimed to update this review and collect the most recent discussions of the concept in the literature published after 2009. The REA we conducted, while robust and methodologically rigorous, is nevertheless conducted in a targeted manner, which leaves open the possibility that relevant sources may not have been included.

Finally, we only conducted a limited number of interviews (20) and these were spread across the four EU funds and stakeholders from the European and national levels. We aimed to ensure the sample was well-balanced and varied, in that it included a wide range of thought leaders,

policymakers and practitioners. However, perspectives and insights provided and presented here are unlikely to be representative of all the issues at stake and of all groups of stakeholders.

### 1.4. STRUCTURE OF THIS REPORT

The remainder of this report is structured as follows:

- Chapter 2 introduces the concepts of job creation and job quality in the EU and briefly presents the EU funds examined in this report.
- Chapter 3 outlines the main findings on how the EU funds can support job creation and job quality, if and how they have created new jobs (or supported employment more broadly) and the evidence behind the quality of these jobs.
- Chapter 4 provides an overview of the findings related to measuring and estimating job creation and job quality and describes strengths and limitations of various approaches.
- Chapter 5 presents our findings and links these with a set of conclusions and policy recommendations on how the EU funds can better support high-quality job creation in the EU in future.

The annexes to this report contain a detailed analysis of the EU funds and provide a comprehensive overview of the methodology and tools used in this study:

- Annex A: Conceptual framework
- Annex B: Documentation review
- Annex C: Rapid Evidence Assessment
- Annex D: Interview guide
- Annex E: Template for the EU funds reports
- Annex F: Horizon 2020 report
- Annex G: The European Social Fund report
- Annex H: The Youth Employment Initiative report
- Annex I: The European Globalisation Adjustment Fund report

# 2. JOB CREATION AND JOB QUALITY IN THE EU

**KEY MESSAGES**

- Job creation and quality jobs are integral to the European Union's Europe 2020 strategy for smart, sustainable and inclusive growth.
- Job creation is clear and measurable in principle but underutilisation of labour in the EU calls for a closer examination of job quality.
- Job quality is a multifaceted concept – there are many frameworks that capture job quality but no common definition or index is agreed at the European level. Yet, job quality indicators can help in policymaking by pointing to areas concern or worrying trends over time.
- The EU funds examined in this study (H2020, ESF, YEI and EGF) vary considerably in terms of their objectives, beneficiaries and participants, type of eligible actions, the way they are managed and implemented and how much resources they offer.
- Other EU instruments could offer (more) suitable comparators to H2020 because of the type of interventions they support or expected results they aim to achieve.

In this chapter we outline the policy context of this study: the importance of job creation and quality jobs (2.1); the concept of job quality (2.2); and the role of EU funds in supporting the EU's agenda for jobs; and growth (2.3).

## 2.1. JOB CREATION AND QUALITY JOBS ARE IMPORTANT FOR THE EU

The Europe 2020 strategy is the EU's agenda for growth and jobs for the decade 2010–2020. It focuses on smart, sustainable and inclusive growth and it is used as a reference framework for activities and funding at EU and at national and regional levels. There are a multitude of EU funding programmes that aim to contribute to the Europe 2020 strategy and its objectives. These funds cover a wide range of topics, from employment and social rights, research and innovation, through to business, health, culture, education, youth, agriculture, justice, migration, citizens' rights and many others.[2] The European Commission (EC) is responsible for ensuring that EU funds are spent in the best possible way. Most of the funding is managed in partnership with national and regional authorities but some programmes are managed directly by the EU. The European Parliament Budgetary Control Committee monitors the value for money of EU funding in the implementation of the EU's policies and it seeks to improve the performance of the EU funds in creating more and better quality jobs to respond to the still pressing challenges on the labour market.

'Job creation' is clear and measurable in principle. Ten years after the beginning of the crisis, the EU seems to be on an upward trend of recovery. During the last four years, economic growth has been moderate but steady, and all EU MS' economies are set to grow in 2017 and 2018. The recovery in employment and the decline in unemployment have been strong relative to the pace of GDP growth, especially over the last two years. In 2016, labour market participation in the EU continued to increase in line with the observed longer-term trend. The employment rate in the EU

[2] European Commission (2017a)

had surpassed its pre-crisis high and had reached 71.1% in the EU-28.[3] Unemployment also continued to fall in 2016 and 2017, but remained above pre-crisis levels. A further expansion of employment is expected over the next two years in all MS.[4] Further employment growth will also help to lower unemployment: in the EU as a whole, unemployment is expected to fall from 8.5% in 2016 to 8.1% in 2017 and to 7.8% in 2018.

Despite these positive developments and an 'employment-rich' recovery, recent research[5] demonstrated that the assessment of labour market performance based on aggregate employment and unemployment is no longer adequate and may be misleading. In particular, the unemployment rate is based on a rather narrow definition of labour underutilisation, since it does not account for: (1) people seeking work but not immediately available; (2) people available but not seeking to work; and (3) underemployed workers who would like to work longer hours but there is insufficient demand for labour. When such measures are included, evidence shows that this underutilisation of labour or 'labour market slack' accounts for double the unemployment rate.[6]

The assessment of labour market performance based solely on aggregate employment and unemployment does not provide information on key characteristics of the jobs such as level of earnings, typology of contract, labour market security and risk of unemployment, and quality of the working environment. Eurofound reports that structural inequalities and differences in job quality in European workplaces still exist and several issues are posing a threat to job quality.[7] The self-employed and workers on temporary contracts report not only less favourable working conditions and job quality, but also lower incidence of good health. Workers in less-skilled occupations report significant differences in motivation, wellbeing, engagement and satisfaction with their working conditions. On the other hand, evidence shows that even higher education staff report worse well-being than those in other types of employment and that job stress and poor workplace well-being contribute to reduced productivity for researchers.[8] Labour market performance should therefore be assessed in terms of the increase in both the number of jobs created and jobs quality. However, 'job quality' faces conceptual difficulties and problems of assessment.

### 2.2. JOB QUALITY IS A MULTIFACETED CONCEPT

Job quality is complex to define and measure.[9] Broadly speaking, job quality reflects a combination of aspects relating to earnings, employment security and other aspects that affect the quality of life at work and beyond.

[3] In 2016, the EU-28 employment rate for people aged 20 to 64, as measured by the EU labour force survey (EU LFS), stood at 71.1%, the highest annual average ever recorded for the EU.
[4] European Commission (2017f)
[5] See: Eurostat (2017); European Central Bank (2017); OECD (2017); Eurofound (2017)
[6] Eurostat (2017) reports that over 20.5 million people had some resemblance to being unemployed, which is almost the same number of people officially recorded as unemployed (20.9 million). Similarly, the European Central Bank (2017) suggests that labour market underutilisation is almost double the level captured by the unemployment rate. According to Eurofound (2017) around 50 million people are in a broader category of labour slack, encompassing inactive people wishing to work and underemployed, involuntary part-timers, as well as the unemployed.
[7] Eurofound (2016)
[8] Guthrie et al (2017)
[9] de Bustillo et al (2009)

Job quality does not only affect individual well-being and that of the households in which they live, but also labour force participation, productivity and aggregate economic performance. The work environment can cause or exacerbate health problems.[10] Indeed, there is evidence that jobs with poor psychosocial quality can erode mental health compared to unemployment.[11] A recent study examined the relationship between changes in individuals' overall psychosocial job quality and variation in sickness absence and indicated that respondents reported a greater number of days of sickness absence in response to worsening psychosocial job quality.[12] These results suggest that workplace interventions aiming to improve the quality of work could help improve employees' health while at the same time reduce sickness absence. As the EU moves out of recession, renewed focus on quality of work issues may help improve policy and actions in this area. This includes the EU funds supporting job creation and job quality.

### 2.2.1. Many frameworks exist to capture job quality

Job quality has attracted a wide interest and various frameworks have been developed over the last decade (e.g. ILO Decent Work Indicators,[13] UNECE Framework for Measuring Quality of Employment,[14] OECD job quality framework[15]). The first EU framework to systematically measure job quality was developed in 2001 (the Laeken indicators).[16] Eurofound has addressed the quality of work in its research[17] and it has been monitoring changes in working conditions through its European Working Conditions Survey (EWCS) since 1990. The Employment Committee (EMCO) report on the quality of work further examined and promoted the quality of work during the economic crisis.[18] Some work has been done on quality in the context of youth work which recommended that 'in 2016–2018, the cooperation framework for youth […] should help [young people] find quality jobs and participate in social life'.[19] The most recent survey (sixth EWCS) studied seven job quality indices and developed five distinct profiles of job quality: high flying, smooth running, active manual, under pressure and poor quality.[20]

The study on indicators of job quality in the EU provides an overview of existing indicators on quality of work, including the Laeken indicators of job quality,[21] European Job Quality Index, EWCS, ILO Decent Work Indices, Good Jobs Index, Quality of Employment Indicators and many others. After thoroughly reviewing 18 existing job quality indicators, the report concludes that despite a wide variety of existing measures, none of them fulfilled all the desirable characteristics of such an index, especially if this index was to be used for EU employment policymaking. The main problem was the lack of consensus on what job quality is and a consistent data source at EU level.[22]

[10] Waddell & Burton (2006*)*
[11] Butterworth et al. (2013)
[12] Milneret al. (2015)
[13] International Labour Office (2013)
[14] UNECE (2015)
[15] Cazes et al (2015)
[16] European Commission (2001)
[17] Eurofound (2002)
[18] Employment Committee (EMCO) (2010)
[19] European Commission (2015b)
[20] Eurofound (2016)
[21] European Commission (2001)
[22] de Bustillo et al (2009)

For the purpose of this study, we use the Eurofound 2016 definition (Table 1), as it emphasises earnings, prospects (including job security), intrinsic quality of work and working-time quality,[23] which are particularly important to the EP. However, we note that jobs tend to perform differently on the dimensions listed above pointing to some trade-offs (e.g. some may score high on earnings, prospects and skills but low on work intensity and working-time quality).

**Table 1: Dimensions of job quality**

| Core elements | Features | Indicators |
|---|---|---|
|  **Earnings** | Earnings | · Net monthly earnings |
|  **Prospects** | Employment status | · Kind of employment contract |
| | Career prospects | · Good prospects for career advancement |
| | Job security | · Possibility to lose the job in the next six months |
| | Downsizing | · Change in the number of employees at the workplace |
|  **Intrinsic job quality** | Physical environment | · Posture-related (ergonomic) risks<br>· Ambient (vibration, noise, temperature) risks<br>· Biological and chemical risks |
| | Work intensity | · Quantitative demands<br>· Pace determinants and interdependency<br>· Emotional demands |
| | Social environment | · Exposure to adverse social behaviour<br>· Social support from colleagues and manager<br>· Management quality from immediate boss |
| | Skill use and discretion | · Cognitive dimension<br>· Decision latitude (ability to choose)<br>· Organisational participation<br>· Provision of training |
|  **Working time quality** | Duration | · Length working hours/working days<br>· Recovery period |
| | Atypical working time | · Night and weekend work<br>· Shift work (various shifts) |
| | Working time arrangements | · Control over working time arrangements<br>· Change in working time arrangements |
| | Flexibility | · Easiness to arrange an hour off for personal matters<br>· Work in free time to meet work demands (several times a month) |

[23] Eurofound (2016)

**Source:** Eurofound (2016)

### 2.2.2. Job quality indicators can help in policymaking

Previous research investigated how the different dimensions of job quality can be access by policy intervention and policy instruments. The comprehensive framework proposed by Bothfeld and Leschke[24] shows that not all the dimensions are equally accessible to the same actors' interventions or policy instruments. To affect intrinsic job characteristics such as work intensity, autonomy and representation, policymakers may intervene at firm level, engaging with social partners, and via legislation, for example with the regulation of working time or health and safety regulation. The skills dimension can also be tackled at firm level and by legislation with education and training policies. On the other hand, extrinsic job characteristics, such as job status, wages and income, are rather subject to direct regulation by social and labour law; policymakers can intervene with direct and indirect regulation. Lastly, policymakers can intervene on job quality aspects related to labour market integration, i.e. job security, via regulation of employment contracts and social dialogue. In this framework job, quality sub-indicators can help policymakers to tailor their interventions.

A common feature of the reviewed literature[25] is that it makes use of the indicators to measure changes over time, and to look at the evolution of job quality across the different dimensions and components. Such measuring provides a way to monitor and benchmark EU countries' overall job quality performances and evaluate how specific aspects of work improved or deteriorated. While measuring ex-post how job quality varied in time and across countries appears to be a standard and consolidated practice, none of the studies and reports reviewed provided neither ex-ante estimates of possible policy intervention nor discussed its feasibility.

Another exercise common to many of the studies reviewed, and in line with the Eurofound approach to measure job quality, is the use of job quality dimensions to group workers into different profiles, each consisting of a set of job characteristics. Cluster analyses allow the creation of a typology of jobs. For example, Holman[26] developed a taxonomy of six job types: active jobs, saturated jobs, team-based jobs, passive independent jobs, insecure jobs and high-strain jobs. Van Haerden[27] condensed multiple factors characterising the employment situation into five job types: standard employment relationship-like, instrumental, precarious unsustainable, precarious intensive and portfolio jobs.

Using job types has useful implication for policymaking.[28] Firstly, using job types enables to evaluate the quality of these jobs and to investigate the outcomes for the worker. Secondly, it does not only enable policymakers to see how job quality varies over time, and across and within countries, but it also allows them to track changes in the groups of workers. Thirdly, job types can be a method to estimate the overall or total quality of a job to see if there is a variety of types of high-quality jobs and low-quality jobs, following from different job quality indicators. Overall, job types can help policymakers to target their policies more accurately taking into account the multidimensionality of job quality and the interactions between job characteristics.

[24] Bothfeld et al. (2012)
[25] See among others: Leschke et al. (2012); Fernández-Macías et al. (2014); Piasna et al. (2018)
[26] Holman (2013)
[27] Van Aerden (2016)
[28] See: Greenan et al. (2017)

## 2.3. THE EU FUNDS SUPPORTING JOB CREATION AND QUALITY EMPLOYMENT

As mentioned earlier (Section 2.1), the EU has various instruments, programmes and funds at its disposal to facilitate job creation and improve the quality of employment. In this chapter, we aim to provide a brief overview of the EU funds examined in this study and explain the challenges in comparing them against the job creation and job quality criteria.

### 2.3.1. Instruments in the scope of this study

As requested and agreed with the EP, the study focuses on the four EU funds: H2020, the ESF, the YEI and the EGF.

**H2020** is the EU's programme for research and innovation with a budget of around EUR 77 billion, the largest budget ever for an EU research and innovation programme. It plays a role to drive economic growth and create jobs through investments in research and development. Its funding is organised through multiannual work programmes and funds are allocated via call for proposals. The programme is directly managed by the EC.

The **ESF** is Europe's main instrument for supporting jobs, helping people get better jobs and ensuring fairer job opportunities for all EU citizens. The ESF aims to 'benefit people, including disadvantaged people such as the long-term unemployed, people with disabilities, migrants, ethnic minorities, marginalised communities and people of all ages facing poverty and social exclusion'.[29] Therefore, the ESF primarily aims to address labour supply by investing in human capital. The ESF is organised, managed and funded on the basis of seven-year programmes agreed in partnership between MS and the EC, and implemented at the national and regional levels. In the 2014–2020 funding cycle more than EUR 83 billion has been dedicated to the ESF.

From the onset of the recession, the EU made the need to improve the labour market prospects of young people one of its key priorities. It reacted with a number of initiatives (e.g. Youth on the Move Flagship Initiative, Youth Opportunities Initiative, the Youth Employment Package) crowned with the YEI in 2013 and the EC recommendation on establishing a Youth Guarantee (YG)[30] in 2013. The **YEI** is – next to the ESF – the main EU financial resource to support the implementation of the YG. The objectives of YEI interventions relate to support young people who are not in education, employment or training (NEET) in regions where youth unemployment was higher than 25% in 2012 and the total budget amounts to EUR 8.8 billion for the period 2014–2020 (including EUR 4.4 billion from ESF national allocations). The YEI specific allocation is additional to investments under the ESF.

The **EGF** is designed to offset the impact of changing trade patterns (such as offshoring decisions or changes in import levels) on labour demand and mobility by offering financial support to workers who face redundancies as a consequence. MS can apply for funding of up to 60% of the total cost of a package of active re-employment policies for up to 24 months. The EGF's annual

[29] European Parliament & Council of the European Union (2013a)

[30] The YG is a commitment by all MS to ensure that all young people under the age of 25 years receive a good quality offer (of employment, continued education, apprenticeship or traineeship) within a period of four months of becoming unemployed or leaving formal education.

budget is currently EUR 150 million for the period 2014–2020, although the unpredictable demand for funding means actual distributed funding varies by year.

As indicated above and as we will document in the remainder of this report, these funds vary considerably in terms of their objectives, intended beneficiaries, type of actions eligible for support, the way they are managed and implemented and how much resources they offer. Table 2 provides a simplified illustration of the EU funds that are viewed alongside, nuanced and detailed in the following chapters and annexes of the report. One particular aspect deserves more attention. The four EU funds differ in how they affect the key labour market factors: supply of and demand for labour. As we will explain, H2020 aims to increase the demand for researchers as well as to raise the level of excellence in Europe's science base and ensure a steady stream of world-class research (supply). On the other hand, the remaining funds (the ESF, the YEI and the EGF) focus much more on the supply side of the labour market helping people gain and maintain jobs (rather than support businesses in creating jobs).

**Table 2: Key characteristics of the instruments in the scope of this study**

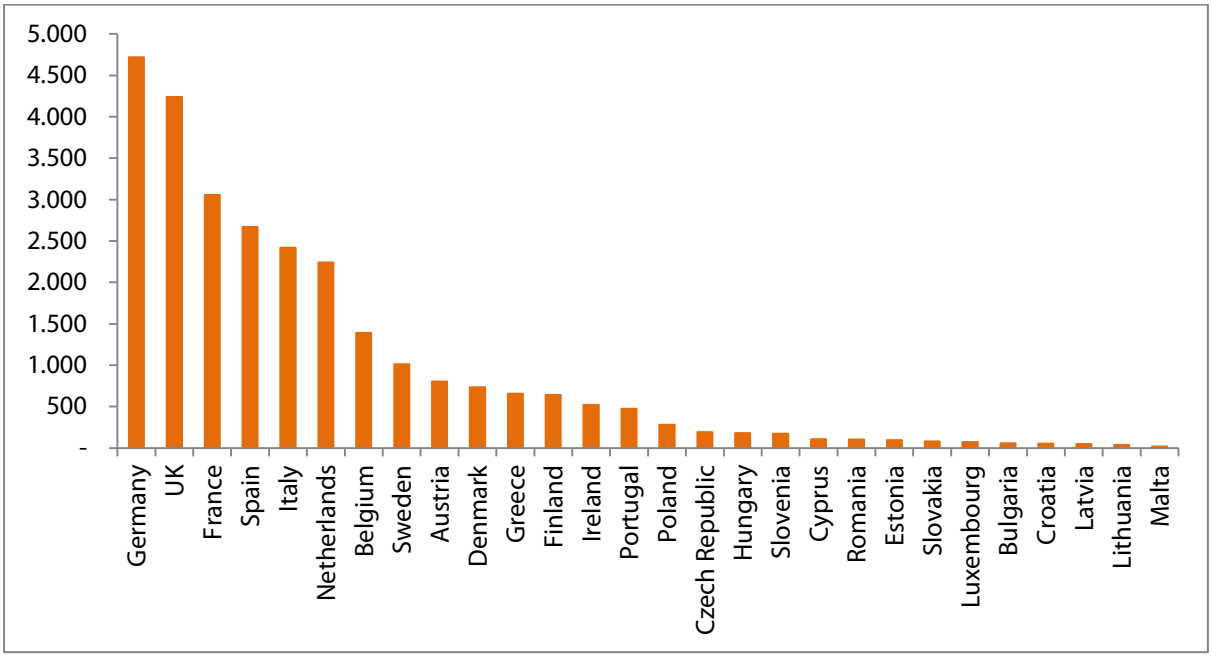
| Instrument | H2020 | ESF | YEI | EGF |
|---|---|---|---|---|
| **Labour market factor** | Demand for researchers<br>Supply of researchers | Supply of labour | Supply of labour | Supply of labour |
| **Intended beneficiaries** | Researchers<br>Research / higher education institutions<br>Enterprises | Unemployed<br>Inactive<br>Employees<br>Enterprises<br>Administration | NEET | Persons made redundant |
| **Type of actions** | R&D | Training+ | Training+ | Training+ |
| **Management** | Direct (EC) | Shared (EC+MS) | Shared (EC+MS) | Shared (EC+MS) |
| **Budget (2014–2020)** | EUR 77 billion | EUR 83 billion | EUR 8.8 billion | EUR 1.05 billion |

**Source:** RAND Europe

As the four EU funds vary considerably in terms of their objectives, intended beneficiaries, type of actions eligible for support, and how much resources they offer, the allocation and budget by country also vary considerably. With regards to H2020 (see Figure 1), Germany and the UK are the countries to receive the largest contributions, followed by France, Spain and Italy. For the ESF

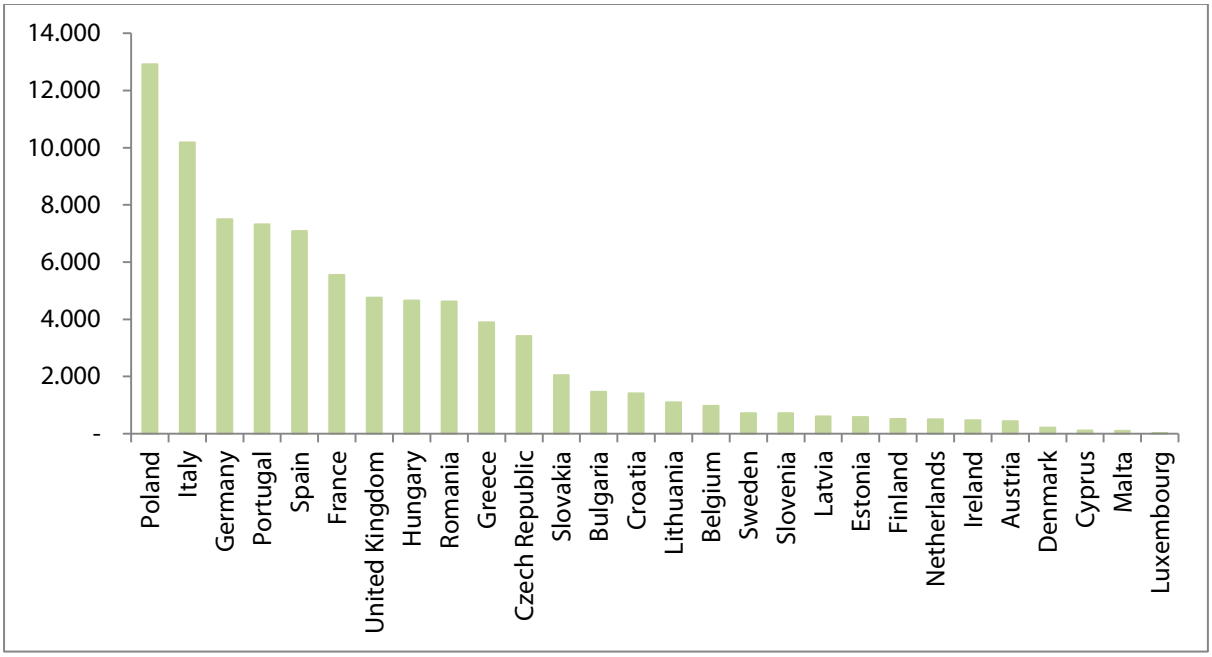
(Figure 2), Poland and Italy are by large the two countries to receive the largest EU contributions, followed by Germany, Portugal and Spain.

**Figure 1: H2020 projects – EU Contribution by Country, EUR million**




**Note:** Data for the MS only reflects the situation as of 20 March 2018
**Source:** European Commission (2018a)

**Figure 2: ESF – EU Contribution by Country, EUR million**

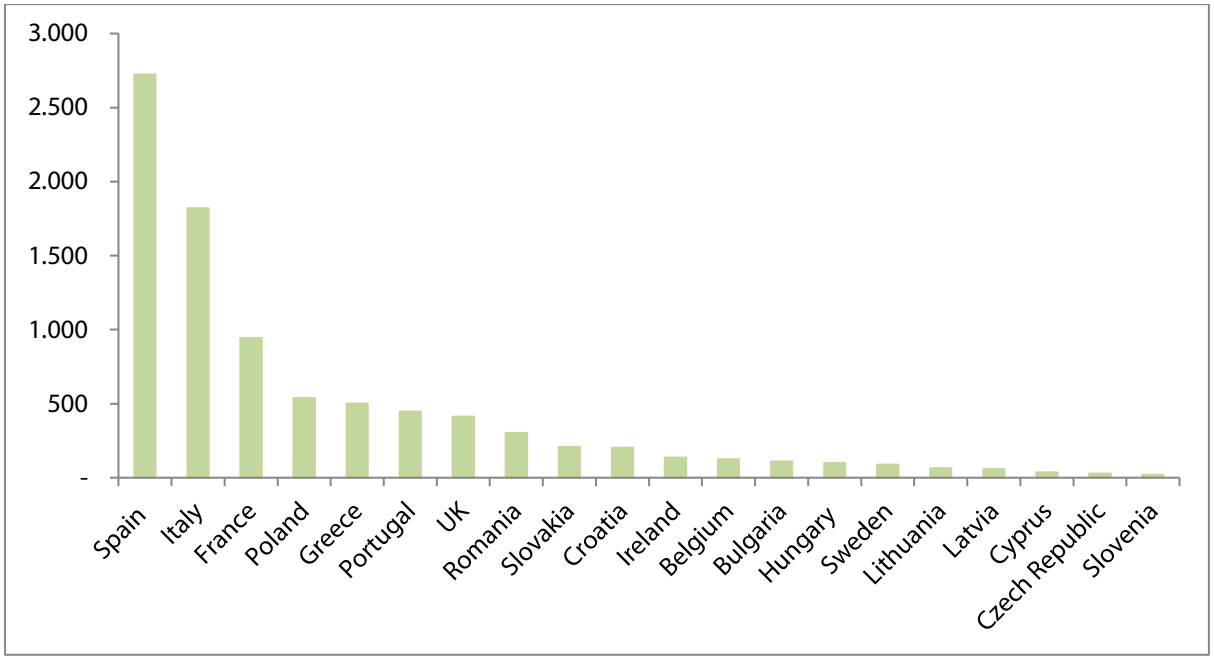



**Source:** European Commission (2018b)

Since YEI funding is contingent to youth unemployment was higher than 25%, not all the EU MS are receiving these funds; in terms of size of the EU budget contributions, Spain, Italy, France, Poland and Greece are the countries with the largest budget allocations (Figure 3). Lastly, with

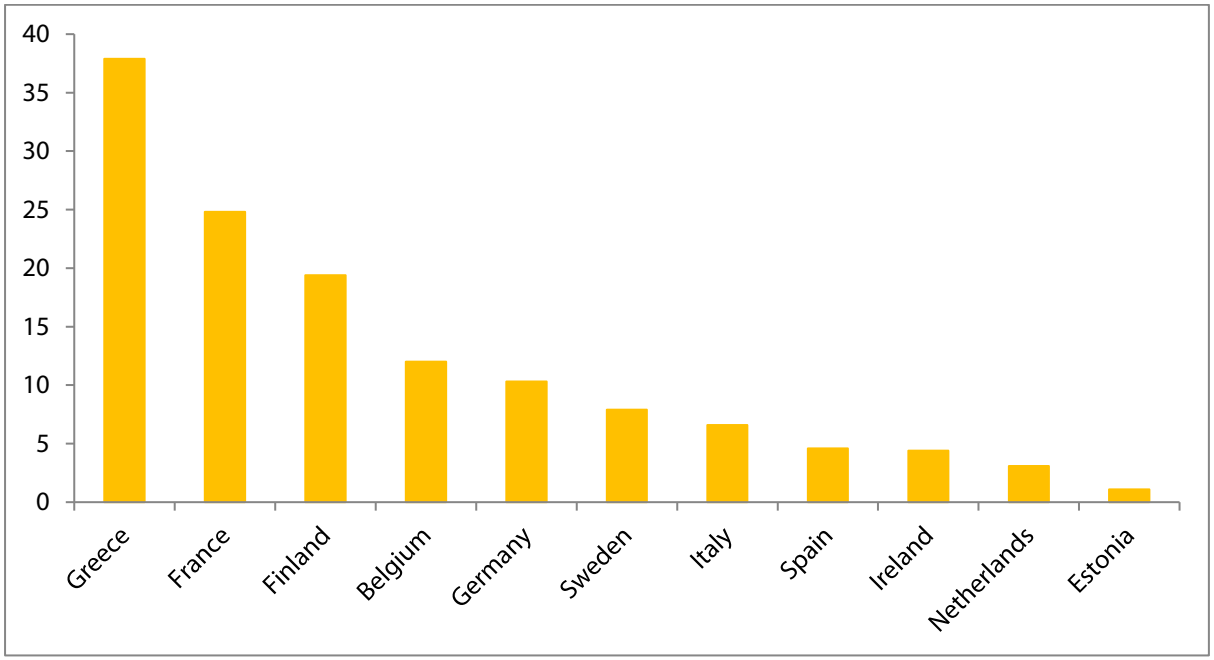
regards to the EGF, only eleven EU MS applied for funds from 2014, with Greece being the largest beneficiary, followed by France, Finland, Belgium and Germany (Figure 4).

**Figure 3: YEI – EU Contribution by Country, EUR million**




**Source**: European Commission (2018b)

**Figure 4: EGF – Amount Requested by Country, EUR million**




**Source:** European Commission (2018c)

### 2.3.2. Other EU instruments

It is also important to note that the EU funds selected for this study and their efforts in supporting the Europe 2020 strategy are complemented by a wide set of other EU instruments. Some of those focus precisely on stimulating demand for labour and creating more jobs.

Over half of the overall EU funding (EUR 351.8 billion) is channelled through the five European Structural and Investment Funds to boost jobs, growth and investment across Europe. These include: the ESF (described above), European Regional Development Fund (ERDF), Cohesion Fund (CF), European Agricultural Fund for Rural Development (EAFRD) and European Maritime and Fisheries Fund (EMFF).

Although not included in the scope of the study, the ERDF could be a (more) suitable comparator to the H2020 because of the type of interventions it supports and expected results it aims to achieve. The aim of the ERDF is to reinforce economic and social cohesion within the EU by redressing the main regional imbalances through financial support for the creation of infrastructure and productive job-creating investments, mainly for businesses. One of the priority areas it supports includes innovation and research with over EUR 61 billion funding available and plans to create 45,040 jobs, including 29,372 jobs for new researchers in supported entities.[31]

[31] European Commission (2017b)

# 3. EVIDENCE FOR JOB CREATION AND JOB QUALITY

**RESEARCH QUESTIONS ADDRESSED IN THIS CHAPTER**

- **RQ1**: What is the evidence for high-quality job creation of the following EU instruments: H2020, ESF, YEI and EGF?

**KEY FINDINGS**

- The EU funds can support job creation and job quality in diverse ways: H2020 places more emphasis on growth (and thus on job creation), while the abilities of the ESF, YEI and EGF to create jobs are close to none.
- The ESF promotes sustainable and quality employment and the YEI aims to provide a good-quality offer of employment, apprenticeship, further education or training to young people, while the EGF seems to prioritise re-employment over job quality.
- Given these differences, the evidence on job creation varies between the EU funds: only H2020 could demonstrate strong evidence for job creation that reflects the different character and purpose of the funds in question.
- The main limitation of the ESF, YEI and EGF so far has not been the fact they do not create jobs (simply because they are not designed to and cannot do it), but because any claims about their effectiveness in bringing people (back) to employment are hampered by the lack of robust evidence from counterfactual impact evaluations (CIEs) as such evaluations are still scarce.
- There is some evidence on job quality across all the funds but the picture across the EU funds is patchy; with a few exceptions, there is almost no evidence on job quality at the EU level but often very rich data can be found at national and regional levels.
- This data, however, cannot be easily synthesised across the EU; the data focuses on various (and different) aspects of job quality and draws on different definitions and methodologies. Yet, it seems that most commonly, the evidence addresses issues of job prospects and earnings.

This chapter comprises three main sections: first, we review the founding regulation and other relevant documentation of each fund to establish if and how it can support job creation and job quality (3.1). Second, we examine various evaluations and studies for any evidence for **job creation** behind each fund (3.2). Third, we present additional evidence found in these studies that shed more light on the **quality of the jobs** created or employment generated by each fund (3.3). These main findings are further supported by evidence from the interviews and clearly referenced.

## 3.1. THE EU FUNDS CAN SUPPORT JOB CREATION AND JOB QUALITY IN DIVERSE WAYS

We start by examining how the EU funds can support job creation and job quality.

### 3.1.1. H2020 is expected to help maintain and create jobs in business and academia

Already the predecessor of H2020, the Seventh Framework Programme for Research and Technological Development (FP7), recognised its indirect contribution to job creation. Mobilising and strengthening the necessary research and innovation capacities in Europe was seen as a

principal tool to develop competitive and dynamic knowledge-based economy, capable of sustainable economic growth with more and better jobs and greater social cohesion.[32]

**Box 1: FP7 envisaged actions directly aiming at job creation (in research)**

FP7 envisaged a number of specific actions, some of which were relevant for job creation. For example:

- Strengthening the human potential in research and technology in Europe, both quantitatively and qualitatively through: better education and research training, easier access to research opportunities as well as the recognition of the profession of researcher, not least through a significant increase in the presence of women in research, encouraging researchers' mobility and career development.
- Facilitating the scientific career of researchers in the most productive period of life.[33]

As such, some of the specific objectives and actions for their implementation under FP7 were more relevant for job creation (and career development) than others. In this context, the most important specific programme under FP7 was the People Programme or Marie Skłodowska-Curie actions (MSCA). The overarching strategic aim of the FP7 People Programme was to make Europe more attractive for researchers and to increase the human R&D potential in Europe in terms of both quality and quantity.

With the shifting of focus towards a market-driven approach where commercialisation of research and knowledge transfer are crucial, **H2020 even more explicitly recognises its importance in developing knowledge-based economy and growth and (indirect) creation of jobs in Europe**. The EC acknowledged that research and innovation help deliver jobs[34] and the regulation reiterates that:

> Horizon 2020 shall play a central role in the delivery of the Europe 2020 strategy for smart, sustainable and inclusive growth (…) acting as a vehicle for leveraging private and public investment, **creating new job opportunities** and ensuring Europe's long-term sustainability, growth, economic development, social inclusion and industrial competitiveness, as well as addressing societal challenges across the Union.[35]

The changing focus of the programme and its growing relevance for economic development was reflected in the specific objective and priorities of H2020:

- Excellent Science (ES) refers to raising the level of excellence in Europe's science base and ensuring a steady stream of world-class research to secure Europe's long-term competitiveness (actions include supporting the best ideas, developing talent within Europe, access to research infrastructure and making Europe an attractive location for the world's top researchers).
- Industrial Leadership (IL) aims at making Europe a more attractive location to invest in research and innovation by promoting activities where businesses set the agenda. (Actions

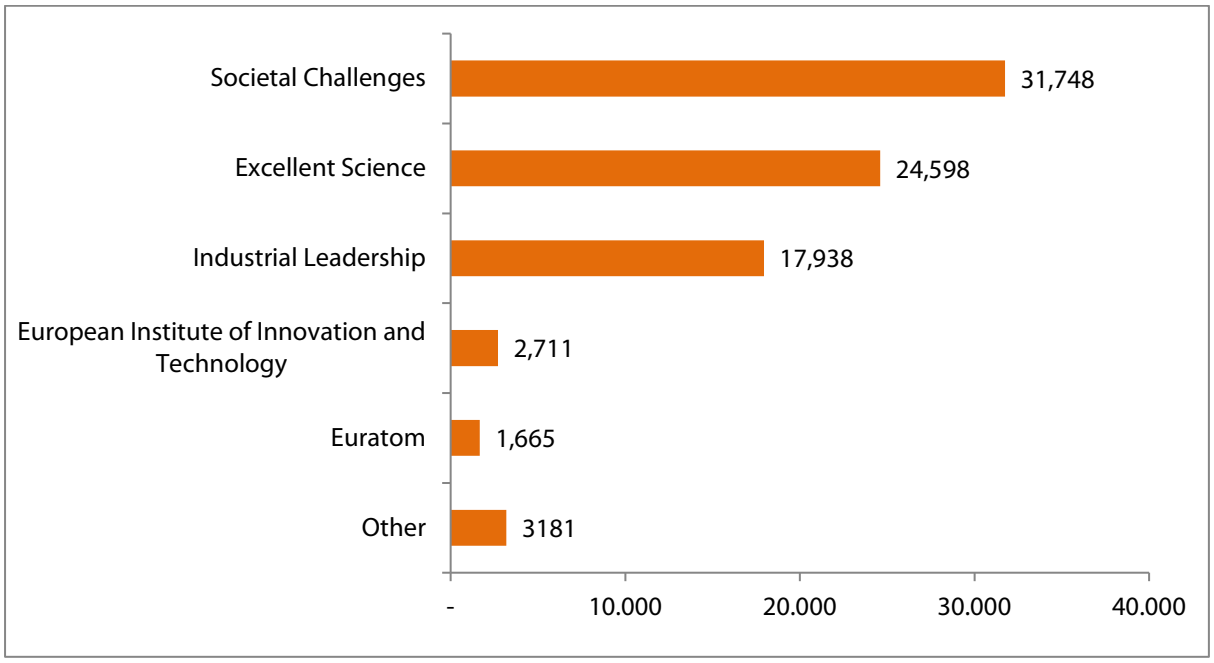
[32] European Parliament & Council of the European Union (2006)
[33] European Parliament & Council of the European Union (2006)
[34] European Commission (2011a)
[35] European Parliament & Council of the European Union (2013b)

include investing in key industrial technologies, providing European companies with finance and helping innovative SMEs grow.)

- Societal Challenges (SC) reflects the policy priorities of the Europe 2020 strategy and addresses major concerns shared by citizens in Europe and elsewhere by bringing together resources and knowledge across different fields, technologies and disciplines. This includes activities from research to market with a new focus on innovation-related activities, such as piloting, demonstration, test-beds, and support for public procurement and market uptake.[36]

The changing focus of H2020 discussed above is also reflected in the breakdown of the budget between Horizon 2020 priorities. As can be seen in Figure 5, the majority of resources are allocated to the three pillars of the programme – ES (which includes the European Research Council and MSCA), IL and SC.

**Figure 5: Breakdown of the H2020 budget, EUR million**




**Source:** European Commission (2013b)

The stronger focus on innovation and market-oriented skills of researchers are all very important aspects of job creation and business expansion in Europe. This is well reflected by **the intervention logic of H2020 pointing to jobs in business and academia as expected results** and leading to wider anticipated impacts, such as the diffusion of innovation in the economy generating (further) jobs, growth and investments.[37]

In relation to the job quality, the regulation points to 'the need for many more high-quality research jobs' as one of the main challenges facing European research, innovation and education systems in the years ahead that H2020 aims to address. As in the case of the FP7, some of the specific actions under H2020 are more relevant for job creation and career development (especially among researchers) than others. In particular, the successor of FP7 People Programme,

[36] European Commission (2011a)
[37] European Commission (2017d)

H2020 MSCA aims at 'ensuring the optimum development and dynamic use of Europe's intellectual capital in order to generate new skills and innovation.'[38] More broadly, the regulation points to high quality and reliable employment and working conditions as necessary elements of a knowledge-based and sustainable economy.[39]

The evidence from the documentation review was complemented by observations and opinions expressed by a limited number of interviewees who were versed in H2020. A representative of the EU institutions highlighted that as part of the H2020 funding scheme, grants and, in particular, the MSCA, were the programmes where one would expect a direct job creation effect, since researchers can be recruited. A subject expert on H2020 explained that job creation and job quality may depend largely on the type of research institutions that receive funding rather than the programmes themselves. In their view, research institutions with more staff and that were more familiar with EU funding mechanisms may be less likely to hire workers; on the other hand, research institutions with fewer funds may need to hire workers but also may offer less favourable employment conditions.

### 3.1.2. The ESF is expected to bring people to education or employment and help them gain qualifications and skills needed in the labour market

The ESF aims to help people have a better start in life through education, finding a job or getting a better job (either newly created or offered due to replacement demand). Its activities fall under the following objectives:

- Promoting sustainable and quality employment and supporting labour mobility (access to employment for jobseekers and inactive people, integration into the labour market, self-employment, entrepreneurship and business creation, equality between men and women, adaptation of workers, enterprises and entrepreneurs to change, active and healthy ageing, modernisation of labour market institutions and improving the matching of labour market needs).
- Promoting social inclusion, combating poverty and any discrimination (active inclusion and improving employability, integrating marginalised communities, combating all forms of discrimination and promoting equal opportunities, enhancing access to services and promoting social entrepreneurship).
- Investing in education, training and lifelong learning (reducing and preventing early school-leaving, promoting early childhood, primary and secondary education, improving tertiary and equivalent education, enhancing access to lifelong learning, upgrading the knowledge, skills and competences of the workforce, facilitating the transition from education to work, and strengthening vocational education and training systems).
- Improving the efficiency of public administration (investment in institutional capacity and in the efficiency of public administrations and public services, capacity building for all stakeholders delivering education, lifelong learning, training and employment, and social policies).[40]

Promoting sustainable and quality employment is the objective with the largest budget allocation (Figure 6), followed by education and vocational training, and promoting social inclusion. A smaller part of the ESF budget is allocated to improving the efficiency of public administration and technical assistance to support the administration of the fund.

[38] European Council (2013a)
[39] European Parliament & Council of the European Union (2013b)
[40] European Parliament & Council of the European Union (2013b)

**Figure 6: Breakdown of the ESF budget by theme, EUR million**


**Source:** European Commission (2018b)

As such, the ESF does not aim to create jobs. Given the extremely broad scope of the fund, this is difficult to evaluate it. Likely, there are many ways that it may create jobs, but typically indirectly. The only exception is when it supports self-employment, (social) entrepreneurship and business start-ups. The ESF Regulation stipulates that:

> The Member States and the regions should be encouraged to leverage the ESF through financial instruments in order to support, for example, students, job creation, the mobility of workers, social inclusion and social entrepreneurship.[41]

In terms of job quality, the ESF should support 'promoting sustainable and quality employment'.[42] However, while the regulation puts an emphasis on access to, integration and re-integration with the labour market, no further details are offered in terms of the quality of (future) employment. This is different compared to the YEI regulated by the same legislation, as described below.

The interviews conducted allowed us to collect additional evidence with regards to some key aspects of the ESF scope to support job creation and job quality. Two interviewees from the EU institutions stressed that job placement was a more suitable definition than job creation for many of the actions financed by the ESF. With regards to job quality, the same interviewees noted that since the social focus of the fund was to help unemployed disadvantaged people, job quality was taken into account only partially; in other words, the kind of job and its characteristics played only a minor role compared to the possibility of getting a job. With regards to the monitoring of job quality, one interviewee from the EU institutions noted that quality elements appeared but mainly indirectly and this was really not a focus of the current monitoring system.

[41] European Parliament & Council of the European Union (2013b)
[42] European Parliament & Council of the European Union (2013b)

One interviewee from the EU institutions also explained that the attention paid to job quality was very likely to vary across the EU. According to the interviewee, MS with higher unemployment rates were unlikely to put job quality on the top of their ESF agenda but they would focus their efforts on increasing employment and employability; on the other hand, MS with higher employment rates may give more attention to job quality elements when programming ESF interventions.

#### 3.1.3. The YEI puts the quality of an employment offer at the heart of the intervention

The YEI focuses on reducing youth unemployment by integrating young people into a job market. The regulation does not specify which activities are eligible under the YEI, but interventions may include the provision of traineeships, apprenticeships or first job experiences, reduction of non-wage labour costs, wage and recruitment subsidies, job and training mobility measures, start-up support, vocational education and training courses, programmes for early school leavers.[43]

Similarly to the ESF, the YEI is limited in its ability to generate jobs beyond those created through self-employment and business start-ups. However, the regulation steps up the requirements regarding the job quality for the YEI compared to the ESF and it requires that:

> The [annual implementation] reports shall also **set out and assess the quality of employment offers received by YEI participants**, including disadvantaged persons, those from marginalised communities and those leaving education without qualifications. The reports shall also set out and assess their progress in continuing education, finding **sustainable and decent jobs**, or moving into apprenticeships or quality traineeships.[44]

This requirement follows the Council recommendation establishing the YG with 'the objective that within a few months of leaving school, young people receive a good quality offer of employment, continued education, apprenticeship or a traineeship'.[45]

The evidence from the documentation review was complemented by some observations expressed in a number of interviewees. Three interviewees from the EU institutions highlighted that – similarly to the case of the ESF – within the limited scope of the YEI, self-employment remained the main action that could lead to job creation; as a consequence, self-employment – they said – was also a feasible and direct indicator to account for the creation of new jobs. With regards to job quality, one interviewee from the EU institutions signalled that both the involvement of the EP in the YEI negotiations and the political focus on young people, were key elements that led to the inclusion of the notion of sustainable and decent jobs. A subject expert stressed that the YEI had the potential to address many, if not all, dimensions of job quality. Another interviewee from the EU institutions added that since 'increased employability' was a key element of the YEI, this could be viewed as one indicators of job quality.

[43] European Commission (2014).
[44] European Parliament & Council of the European Union (2013b)
[45] European Council (2013b)

### 3.1.4. The EGF remains oriented towards reintegration into sustainable employment

The EGF aims to support workers and self-employed persons that have been made redundant as a result of major structural changes in world trade patterns due to globalisation where these redundancies have a significant adverse impact on the regional or local economy. The eligible actions under the fund include active labour market measures designed to re-integrate redundant workers and self-employed persons into the labour market.[46] These measures include: training and retraining, including information and communication technology skills and certification of acquired experience; job-search assistance; occupational guidance; advisory services; mentoring; outplacement assistance; entrepreneurship promotion; aid for self-employment; business start-ups and employee take-overs; and co-operation activities, as well as time-limited allowances and incentives.[47]

The EGF Regulation clearly focuses on the objective of supporting workers and self-employed persons in their reintegration into the labour market. Whether the job they find is pre-existing or newly created is not specified in the regulation. As such, the EGF does not intend to support job creation other than self-employment, business start-ups and employee take-overs that have some potential of creating or at least saving existing jobs. Aspects of the quality of such future employment are not explicitly considered in the regulation.

The interviews conducted confirmed our understanding that job creation is not a direct objective of the EGF, but its objective is to get people back into employment. One representative from the EU institutions stressed that based on the current legislation, EGF can support retraining, rescaling and whatever was needed in a particular niche of the market that would require labour force, but it really did not aim at job creation. Nevertheless, it also emerged from the interviews[48] that there were few EGF specific characteristics that would, at least in theory, make it effective and successful in job placement. First, the EGF was a very flexible instrument. Second, it allowed for a large degree of personalisation in its offer, providing target tailored assistance to the beneficiaries. Lastly, it addressed a very homogenous population, since the participants were all in the same situation of having suddenly become unemployed. On the other hand, the interviewees also highlighted that such specific characteristics limited the room for comparing the EGF with other programmes.

### 3.1.5. Summary

The review of the founding regulations related to the examined funds showed that the EU funds can support job creation and job quality in different and mainly indirect ways. The objectives of H2020 seem to place more emphasis on growth (and thus on job creation), while the abilities of the ESF, the YEI and the EGF to create jobs are limited to self-employment and business start-ups. The ESF supports promoting sustainable and quality employment. The YEI aims to provide a good-quality offer of employment, apprenticeship, further education or training to young persons within four months of becoming unemployed or of leaving formal education. While the EGF seems to prioritise re-employment (including self-employment) of workers made redundant over considerations on the quality of the new employment.

[46] European Union (2013)
[47] European Union (2013)
[48] Two interviewees from the EU institutions and three interviewees from the MS had very similar observations.

The sustainability of employment features consistently the ESF, YEI and EGF provisions. However, it is meant in the context of integration into the labour market, rather than a particular job. As such, the founding regulations do not specify whether the employment should be continuous (with the same employer) or with different ones. From the labour market perspective this is of secondary importance, but when considering this against the job quality, we would be looking at the job prospects (job security, career progression and contract quality).

## 3.2. GIVEN THESE DIFFERENCES, THE EVIDENCE ON JOB CREATION VARIES ACROSS THE EU FUNDS

### 3.2.1. H2020 (and FP7) have created many jobs in Europe, especially in research

Although H2020 has no direct objective of job creation in Europe, a number of studies, evaluations and IAs we reviewed confirm that this programme (and its predecessors) has already contributed to the creation of jobs, especially in research. Moreover, future estimates based on extrapolations and economic modelling show that in the long-term perspective the impact of both FP7 and H2020 on job creation in Europe will grow over time.

Overall, studies distinguish two ways in which FP7 and H2020 contribute to job creation:

- **Direct job creation**, which refers to the creation of research jobs in the beneficiary organisations when researchers hired during the project retains their positions after the project ends.
- **Indirect job creation**, which refers to the creation of jobs in the industries affected by Research and Innovation (RTD) activities funded by FP7/H2020 (emergence of new technologies).

There is substantial empirical evidence that the financial support and the research activities triggered in FP7/H2020 beneficiary organisations contribute to the growth of these organisations and creation of research jobs within them. In Table 3 and the text below, we present selected studies and briefly discuss their key findings. However, in interpreting findings not based on counterfactual methodologies, one need to be cautious not to assume that success can be directly attributed to FP7/H2020.

**Table 3: Summary of findings on overall FP7/H2020 job creation effects**

| Source | Findings/estimates on job creation | Method | Programme covered |
|---|---|---|---|
| PPMI (2017)[49] | Approximately 53,000 additional research jobs created in FP7 alone during 2007–2015 | Survey-based counterfactual analysis | FP7 |
| | Estimated:<br>• Total 2,091,000 jobs created by FP7 between 2007 and 2023<br>• Total 2,329,000 jobs created by H2020 between 2014 and 2030 | NEMESIS economic modelling | FP7 and H2020 |
| High Level Expert Group (2015)[50] | FP7 directly created 130,000 jobs in RTD over a period of ten years (2007–2017) and approximately 160,000 additional jobs are indirectly caused by FP7 over a period of 25 years | Economic modelling | FP7 |
| Idea Consult, IFQ and PPMI (2014)[51] | About 142,000 researchers were hired on FP7 projects between 2007 and 2014, 43% of these researchers (approximately 61,000) remained employed in the research team after the end of the project | Survey of beneficiary research teams | FP7 |

**Source:** RAND Europe based on PPMI (2017), High Level Expert Group (2015) and Idea Consult, IFQ and PPMI (2014)

A recent evaluation of the FP7/H2020 Union Added Value reported that some 53,000 additional research jobs have been created in FP7 alone.[52] The same study also estimated the long-term job creation effects of FP7/H2020 showing that on average, FP7 is forecasted to contribute to the creation of 123,000 jobs/year, and H2020 of 137,000 jobs/year. The vignette below presents an example of how FP7 financed research in the high-tech sector resulted in the direct creation of jobs (see Annex F for more details).

[49] PPMI (2017)
[50] High Level Expert Group (2015)
[51] Idea Consult, IFQ & PPMI (2014)
[52] PPMI (2017)

**EXAMPLE**

HYPER INTERACTION VIABILITY EXPERIMENTS (HIVE) ***FP7; EUR 3 million; 2008-2012***

HIVE followed the long-term vision of technologies enabling computer-mediated brain-to-brain interaction. HIVE aimed at moving away from the widely used two channel transcranial Direct Current stimulation (tDCS) devices, by developing a new prototype of multichannel tDCS device.

**HIVE produced a prototype that allows brain data collection and stimulation**

The main output of the project was the prototype of the Starstim system - a lightweight, wireless multichannel transcranial current stimulator, which allows both brain data collection through electroencephalogram (EEG) and stimulation with multichannel tDCS. Although the project only produced a prototype, Starstim quickly became a commercial product, which became marketed by Neuroelectrics, a spin-off created by the project coordinator (Starlab) as a certified medical device.

**HIVE resulted in the direct creation of jobs in research and high-tech sectors**

In terms of employment effects, HIVE also resulted in the direct creation of jobs in research and the high-tech sector. At the beginning of the HIVE project, Starlab had around 15 workers. In 2015, the project coordinator (Starlab) and its spin-off Neuroelectrics already had around 45 employees distributed across three offices in Barcelona, Oxford and Boston.

*Source: PPMI (2017)*

An ex-post evaluation examined **direct and indirect employment effects** of FP7 and estimated that it directly created 130,000 jobs in RTD and indirectly[53] – approximately 160,000 additional jobs.[54] According to another study, about 54% of the FP7 beneficiary organisations hired new staff for their project activities resulting in more than 142,000 researchers employed.[55] However, only about 43% of these researchers (approximately 61,000) remained employed in the research team after the end of the project.[56]

Other studies assessed the employment effect of various actions under FP7/H2020 and on different types of beneficiaries (e.g. with and without business involvement) – see Box 2 and Annex F for more details. Finally, some studies noted that the effectiveness of FP7/H2020 in job creation varies across MS – see Box 3.

[53] This means jobs created in the industries affected by RTD activities funded by FP7 through the emergence of new technologies.
[54] High Level Expert Group (2015)
[55] Idea Consult, IFQ & PPMI (2014)
[56] Idea Consult, IFQ & PPMI (2014)

**Box 2: Job creation by specific actions under FP7/H2020 and type of beneficiaries**

FP7/H2020 People Programme or the MSCA have specifically focused on training and career development of researchers in Europe. The evaluation of MSCA[57] found that the programme contributed to the growth of the beneficiary organisations by creating new research positions in addition to staff directly funded by the project. According to the survey results, 23% of organisations had created (or will create) one additional full-time equivalent (FTE) job while 12% of organisations had created two or more FTE posts as a result of participation in MSCA, which translates to around 973 FTEs.

The study on business participation in MSCA[58] found that project with business organisations involvement had on the average higher job creation effect, which was mainly achieved by retaining researchers hired for (or seconded to) the MSCA project in the company. The study found that the MSCA projects with business involvement had a considerable job creation effect on beneficiary research fellows, mainly among early-stage researchers and experienced researchers hosted in industry under the Innovative Training Networks (ITN) and Industry-Academia Partnerships and Pathways (IAPP) actions. According to the survey results, around 47% of the responding business beneficiaries declared that at least one job (FTE) was/will be created in their organisation as a result of the project (around 14% of respondents reported that more than one job was/will be created). Overall, this survey showed that 218.5 jobs (FTE) were/will be created in beneficiary business organisations (most of which were SMEs) as a consequence of their participation in the programme.

**Box 3: FP7/H2020 job creation by country**

According to the evaluation of the Union Added Value of FP7/H2020, the relative job-creation performance follows the share of the EU funding secured by the different countries. Countries that secure very low amounts, such as Poland, encounter positive but limited impacts on GDP and employment. The evaluation estimated that due to the labour productivity gains provoked by the innovations, significant impact of the EU funding for research on national employment are only possible when the GDP gains reach an important level. As a consequence, in the EU-13 countries (such as the Czech Republic, Hungary, Malta, Poland or Slovakia) employment creations are very limited, or even slightly negative like in the Czech Republic (when the level of GDP growth does not outweigh the labour productivity gains/job losses provoked by the innovations). More than 70% of jobs at EU level in 2030 are concentrated in the larger EU-15 countries (France, Germany, Italy, Spain and the UK) that secure the greatest part (64% in all) of EC contribution for research.[59]

#### 3.2.2. There is limited evidence of the ESF creating new jobs, but its jobless participants tend to find work

As explained above, the ESF does not aim to create jobs. Therefore, presenting evidence on its effectiveness in job creation is somewhat difficult. For this reason, we will first look at what data on direct job creation are available (self-employment). We will then review ESF achievements – starting with the evidence available at the EU-level and then providing some snapshots on data from selected MS. The main studies and their key findings are summarised in Table 4.

[57] ICF (2017)
[58] PPMI group and partners (2017)
[59] PPMI (2017)

**Table 4: Summary of findings on the overall ESF job creation/employment effects**

| Source | Findings/estimates on job creation/employment effect | Method | Period covered |
|---|---|---|---|
| European Commission (2017c)[60] | Participants:<br>• In employment, including self-employment*: 803,776<br>• In employment, including self-employment, six months after leaving: 232,881<br>• with an improved labour market situation six months after leaving: 19,570 | MS reporting | 2014–2020 (2016 values only) |
| Panteia (2016)[61] | Over 300,000 individuals were supported by the ESF in starting their own business (direct job creation)<br>More broadly:<br>• 9.42 million people gained employment | Meta-analysis of secondary data | 2007–2013 |
| European Commission (2016b)[62] | 2.4 million participants in ESF actions supporting access to employment found a job within six months (2007–2011) | MS reporting | 2007–2013 |

**Note:** * Participants upon leaving
**Source:** RAND Europe based on European Commission (2017c; 2016b), Panteia (2016)

### Direct job-creation: Self-employment

Even though some jobs may be created through entrepreneurship supported by the ESF, the number of people who received ESF support and are self-employed upon leaving is not reported separately but aggregated with the number of participants in employment upon leaving.

However, the 2007–2013 ex-post ESF evaluation reported that 'over 300,000 individuals were supported by the ESF in starting their own business, particularly in France, Germany, Spain and Finland. Given its explicit contribution to job creation, these have been included in the aggregated total of employment'.[63] Some partial results focused on enterprises created to support vulnerable populations in their integration with the labour market are presented in Box 4.

Two things are worth noting here. Firstly, the ESF support for self-employment forms a fraction of the possible range of measures this fund can support. Secondly, that even this limited potential needs to be considered in the context of the survival rate of new businesses more broadly. According to Eurostat's business statistics, the five-year survival rate of enterprises (created in 2010) was on average about 50% and that only in some countries (Ireland, Finland, Malta, Norway, the Netherlands, Estonia, Luxembourg, Belgium, Latvia and Romania) employment in those enterprises that passed the five years mark increased.[64] We provide an example of the evaluation of this form of support at a national level in Box 4.

[60] European Commission (2017c)
[61] Panteia (2016)
[62] European Commission (2016b)
[63] Panteia (2016)
[64] Eurostat (2018)

**Box 4: ESF job creation in the social economy (2007–2013)**

The ex-post evaluation on supporting the integration of disadvantaged groups into the labour market and society provides numbers for various enterprise-creation indicators. In total, it reported that 20,367 jobs were created:

- Poland: Number of jobs created in the social economy sector due to ESF support (1,600)
- Romania: Number of jobs created by entities in the field of social economy (6,046)
- Slovenia: Number of gross jobs created (vulnerable groups) cumulative (3,807)
- Slovakia: Number of jobs created (6,219)
- The Czech Republic: Number of newly created jobs for the disadvantaged groups (2,695).[65]

**ESF achievements: Observed changes**

The EC presents data on ESF achievements in the 2014–2020 period based on relevant common (result) indicators required by the ESF regulation.[66] Values from fully implemented projects in 2016 showed that there were 803,776 participants in employment (including self-employment) upon leaving, **232,881 participants in employment (including self-employment) six months after leaving**, and **19,570 participants with an improved labour market situation six months after leaving**.[67] In interpreting these indicators, one needs to be cautious not to assume that success can be directly attributed to the ESF – there might have been other factors at play that have contributed to the participants' employment. Improved socio-economic conditions offer one (of many) plausible explanations for the observed changes in the labour market status of ESF participants. However, this data does point to the possible role of the ESF in bringing people closer to employment.

Given that the 2014–2020 data only refer to 2016, we looked for a more complete picture of ESF results in the previous programming period (2007–2013). The mentioned ex-post evaluation found that **over 9.42 million people were reported to be in employment** immediately or sometime after completing ESF support.[68] The EC reported that **2.4 million participants found a job within six months of receiving the support** (between 2007 and 2011).[69]

A wide range of other results have been described by different EU-level studies and evaluations (Box 5).

[65] ICF (2016a)
[66] To ensure monitoring progress in the implementation of ESF funded programmes across the EU, a common set of output and result indicators was established in the ESF Regulation. See Annex I and II of Regulation (EU) No 1304/2013 of 17 December 2013 on the European Social Fund and repealing Council Regulation (EC) No 1081/2006 for a complete list of indicators.
[67] European Commission (2017c)
[68] Panteia (2016)
[69] European Commission (2013a)

**Box 5: Employment-related results of ESF interventions (2007–2013)**

The ex-post evaluation reported that around 8.70 million ESF participants received a qualification or certificate and approximately 13.67 million reported another positive result ('other than employment or qualification, such as improving skills and competences, or successfully completing the ESF supported intervention').[70]

The ex-post evaluation of ESF investment into human capital[71] found that at least 21 million results have been recorded and that the aggregated results ratio was 46.3% (calculated as 21,004,272 aggregated results divided by 45,384,631 participations), including:

- 25% other positive result rate
- 13% qualification result rate
- 8% employment result rate.

The study further reported that the result rate (results / participations) was highest in the Regional Competitiveness OPs (54%), followed by Convergence OPs (39%) and the Multi-objective OPs (37%). The study noted however that linking results and participations was problematic 'due to the data quality issues as participations include sometimes indirect participants for whom no results could be expected, but also one participation can be associated with [multiple] results'.[72] The study concluded that the ESF human capital annual activities reached a significant share of the targeted population: 4% of people aged 15–24 in the EU, 1% of people in employment and 3% of the unemployed people, 2% of long-term unemployed, 3% of the disabled people, 1% of the migrant population and 6% of low-skilled students (at levels 1 and 2 of the International Standard Classification of Education (ISCED)).[73]

**ESF results: Snapshots at the national level**

The responsibility for the evaluation of the ESF is shared between the EC and MS. There is abundance of ESF evaluations carried out at the national and regional level. We will now look at the evidence from selected countries on the (expected and achieved) results of the ESF implementation, especially where the effects can be attributed to the ESF only. While the insights we provide in this report are far from comprehensive, they allow to understand what data and the level of detail might be available at the national and regional levels. Please refer to Section 1.5 and Annex B for the detailed explanation of the selection and scope of our review.

**In Poland**, a comprehensive study on the effectiveness of the ESF in 2007–2013[74] was carried out using a combination of ESF cohort and panel study and computer-assisted phone interviews with a sample of ESF participants.[75] Overall, the study noted that in subsequent years of the implementation the effectiveness of the programme increased and that the ESF support took time to bear fruit. Among the responding participants who completed support in 2012–2013, about

[70] Panteia (2016)
[71] ICF (2015a)
[72] ICF (2015a)
[73] ICF (2015a)
[74] PAG Uniconsult (2015)
[75] There were four cohorts (waves) with between 2,000 and 4,900 participants six months upon leaving in each of the cohort and two follow-ups (18 months and 29 months upon leaving). The main limitation of the study is that it did not involve the control or comparison groups and as such the results reported cannot be entirely attributed to the ESF support – more information about the methodology of this study can be found in Annex G.

44% were employed six months upon leaving – this increased to 52% in employment 18 months upon leaving. However, among a later cohort (participants who completed support in mid-2013) the percentages were 70% and 75% respectively.[76] The study showed that young people (below 24 years old), those with higher education, as well as the long-term unemployed were overrepresented. On the other hand, people over 50 years old and individuals with lower levels of completed education were underrepresented when compared to the population of the unemployed. The study concluded that the creaming effect[77] occurred following the introduction of targets for the employment effectiveness.[78] The assessment of the business start-up support is presented in Box 6.

The study further reported that almost all responding participants (93–96%) had been satisfied with the ESF support. If after six months from completing the support respondents were employed, they often used the competencies gained through the project. Around a half of those who took part in an occupational training or a traineeship/internship and worked after six months had a job consistent with their vocation.

**Box 6: Effectiveness of ESF support for business start-ups in Poland (2007–2013)**

The study on the effectiveness of the ESF in Poland examined measures helping people set up their own businesses. It reported that the support in the form of grants for business start-ups allowed for the establishment of 187,000 businesses (direct job creation). The survival rate 18 months after the registration was 68% and it declined to 56% three years after the registration. The study concluded that these rates were aligned with the survival indicators of newly established companies in Poland and as such it was a good result given that a considerable proportion of those supported came from vulnerable groups.

On the other hand, the study revealed that even without financial support from the ESF about 35% of the businesses would have been established indicating a considerable deadweight of this form of support.

Among examples of evaluations from other countries, we have reviewed the ex-ante evaluation of two national programmes **in Italy**. The evaluation highlighted the learning from previous studies. Firstly, the measures promoting self-employment were considered instrumental for fostering the emergence of new businesses and for allowing those without work to set up their own firms. Secondly, the combination of loans, training and coaching activities was considered key to success. According to the report, training on various aspects of business development improved the entrepreneurial and managerial skills of the participants and reduced the risk of failure and continuous assistance (from a business plan to becoming fully operational during the first year) ensured efficient use of ESF resources.[79]

**In Spain**, an ex-post evaluation of the effectiveness of the ESF in 2007–2013 was undertaken. The EUR 11,202 million budget over the period was attributed in large part to measures relating to Access to Employment (69.5%) and Human Capital (19.5% of total ESF budget). Of the 13.8 million

[76] PAG Uniconsult (2015)
[77] 'Creaming' occurs when groups with higher chances of success are selected for the intervention over those who require more intensive efforts to place in employment.
[78] PAG Uniconsult (2015)
[79] PWC per il Ministero del Lavoro e delle Politiche Sociali (2015)

participants who registered for at least one ESF activity, 32% were aged below 25, 63% were unemployed, 46% had low educational attainment, and 21% were of a disadvantaged background. The study recorded 3,160,266 as having entered into employment, 97,587 gaining a qualification, and 112,888 businesses created.

Additional evidence comes from observations and opinions expressed in interviews with actors working with the ESF at the EU and national level. One interviewee from the EU institutions, as well as two interviewees from the MS, confirmed that in the scope of the ESF, self-employment measures were the most likely to directly affect job creation. Therefore, according to these interviewees, the main evidence for the ESF supporting job creation should be assessed in relation to self-employment measures and indicators. One interviewee from the MS provided some anecdotal evidence for self-employment projects financed by the ESF to be successful in more than one case.

### 3.2.3. The evidence on the YEI only starts to emerge showing a mixed picture and few jobs created

Compared to the ESF, there is much less evidence of the effectiveness of the YEI due to the (relative) novelty of the fund (established in 2013). The main studies and their key findings are summarised in Table 5.

**Table 5: Summary of findings on the overall YEI job creation/employment effects**

| Source | Findings/estimates on job creation/employment effect | Method | Period covered |
|---|---|---|---|
| European Commission (2017c)[80] | Participants:<br>• completed YEI: 712,233<br>• receive offer after YEI: 94,011<br>• in employment, including self-employment*: 97,781<br>• in employment, six months after leaving: 139,431<br>• self-employed, six months after leaving: 2,278<br>• with an improved labour market situation six months after leaving: 19,570 | MS reporting | 2014–2020 (2016 values only) |
| European Court of Auditors (2017)[81] | 29% of the participants received employment offer[82] | MS reporting | 2014–2020 (2015) |
| Ecorys & PPMI (2016)[83] | 320,000 young people participated in the YEI | A mixed-method approach | 2014–2020 (2015 values only) |

**Note:** * Participants upon leaving
**Source:** RAND Europe based on European Commission (2017c), European Court of Auditors (2017), Ecorys & PPMI (2016)

[80] European Commission (2017c)
[81] European Court of Auditors (2017)
[82] The ECA report examined the situation of only a limited number of YEI participants. The sample included 175 participants. For more information see Annex H.
[83] Ecorys & PPMI (2016)

As shown by the first comprehensive assessment of the YEI, by the end of 2015, 18 countries have launched actions under the YEI and almost 320,000 young people already participated in YG actions supported by the YEI.[84] The most common measure used in the MS to engage young people in 2015 was to provide them with the first job experience or offer traineeships/apprenticeships. Only 53% of the MS included start-ups support and entrepreneurship in their Operational Programmes (OPs).[85]

Yet, the recent ECA report concluded that initial results were falling short of expectations and after three years of the YEI implementation:

> None of the Member States could ensure that all NEETs had the opportunity to take up an offer within four months, helping them to integrate into the labour market in a sustainable way.[86]

This may suggest that the programmes have not been performing as well as they could or that the goals set by the YG were overly ambitious. Results achieved by the end of 2015 vary in different MS; we provide selected examples below.

**France** reported[87] that 31% of responding participants who completed an exit questionnaire[88] obtained a temporary contract of more than six months or a permanent contract; further 7% were in other forms of employment (temporary, short-term contracts of less than six months, subsidised contracts or self-employed) and 14% were in training or studying. In total, 52% positive outputs were reported. By the end of 2015, already 234,000 of participants completed YEI actions, 104,500 received an offer of an employment, continued education, apprenticeship or traineeship, and 30,000 of them were still in employment ix months upon leaving.[89]

In **Spain** in 2014, 168,000 young people registered for the YG scheme. 6,379 completed YEI actions and 1,940 of them received an offer of employment, continued education, apprenticeship or traineeship afterwards. Until the end of 2015, 11,367 have received a professional advice. 5,278 have finished training and 1,657 were participating in training. 57 participants received an internship offer and seven were reintegrated in the job market[90]. The EC evaluation mentioned that activities such as start-up support to young entrepreneurs was included in the OP in Spain; however, no data is available on the measure.[91] Employment subsidies have also been used in Spain to encourage the hiring of young people (see the vignette below and Annex H for more details).

[84] Ecorys & PPMI (2016)
[85] Ecorys & PPMI (2016)
[86] European Court of Auditors (2017)
[87] Capgémini and Asdo (2016)
[88] Sample size unknown, please refer to Annex G
[89] Ecorys & PPMI (2016)
[90] Ministerio de Empleo y Seguridad Social (2016)
[91] Ecorys & PPMI (2016)

**EXAMPLE**

TARIFA JOVEN

***YEI / ESF; EUR 1.3 million; 2014–2016; Spain***

The programme aimed to encourage the hiring of young people through employment subsidies by affording employers a six-month reduction of EUR 300 per month (on a pro-rata contract basis) from social security contributions for each young person they hired who was registered with the Youth Guarantee services.

In order to avoid a replacement effect, the employer was required to maintain or increase overall organisational employment levels (both permanent contracts and total employment levels). If they failed to meet this criterion, the incentive had to be returned. The project ran from 2015 to 2016 and is reported to have supported an estimated 4,500 young people during this time.

**To avoid replacement effects, employers had to maintain or increase overall organisation employment levels**

*Source: European Commission (2017l)*

The **Italian** YEI entails several measures: orientation sessions; training, apprenticeships and internships; civil service; support for self-entrepreneurship; professional mobility within the national territory or in EU countries; employment bonus for companies; and distant learning.[92] An early study showed that 165,061 young people had engaged in the measure in 2015 and 31.9% of those received apprenticeship contracts, 35% fixed-term employment contracts and 26.4% were offered a permanent job contract.[93] According to the recent national report, as of June 2017 1.381 million people were registered, 376,178 completed one of the measures, 172,094 were employed.[94] Among many measures financed by the Italian YEI, one specific intervention offering zero-interest loans combined with training support shows results in terms of job creation (see the vignette below and Annex H for more details).

[92] ANPAL (2017)
[93] Ecorys & PPMI (2016)
[94] ANPAL (2017)

**EXAMPLE**

SELFIEMPLOYMENT

***YEI; EUR 103 million; 2016–present; Italy***

**Successful loan applicants receive a training plan with counselling support during the entire period of the funding**

The SELFIEmployment project has started to support the implementation of YG in the context of high youth unemployment in Italy. The aim of the project is to increase the number of self-employed young people (mostly young NEETs) who are able to establish their own enterprises or become entrepreneurs while providing them with microcredit or loans and support. Successful loan applicants receive a training plan with counselling support during the entire period of the funding.

The target group is young people aged 18 to 29 who are NEETs and are enrolled in the YG programme. It is the first national policy in Italy that promotes self-employment. According to the data as of 1 February 2018, 624 start-ups had been funded and 1,154 new jobs were created in enterprises supported by these loans.

**624 start-ups were funded;**

**1,154 jobs**

**were created in enterprises supported by the loans**

*Sources: Invitalia (2018)*

A national evaluation **in Poland** examined the effectiveness of the YEI support.[95] According to the study, on average, 62% YEI participants reported receiving an offer of an apprenticeship (42%), vocational education (23%), job (22%) or training (12%) following their participation in the project.[96] Those who had not received any offer reported gaining a job (34%), apprenticeship (24%) or vocational education (13%) through their own efforts. Taking these into account, only 15% of project participants had not had any offer (received or found by themselves).

[95] The evaluation was based on: (1) analysis of secondary data about 21,204 support recipients; (2) 1,150 telephone interviews with project participants: (3) 422 web interviews with project coordinators; and (4) 10 in-depth interviews with support coordinators at the local and central level. However, the study did not employ control or comparison groups and was based on self-assessment. See Section 3.2 for details on methodology.

[96] IBS (2015)

### 3.2.4. EGF's re-employment show promise but not many new jobs

A number of largely EU-level studies examined the role and results of the EGF. The main evaluations and assessments are summarised in Table 6.

**Table 6: Summary of findings on the overall EGF job creation/employment effects**

| Source | Findings/estimates on job creation/employment effect | Method | Programme covered |
|---|---|---|---|
| ICF (2015b)[97] | • EGF beneficiaries in this period: 55,302<br>• Average re-employment rate: 49%<br>• Re-employment rate varied between 4% and 86% for the different cases analysed<br>• Average self-employment rate: 5% | MS reporting, beneficiary survey | 2007–2013 |
| European Commission (2015c)[98] | • EGF beneficiaries in this period: 18,848<br>• Average re-employment rate: 44.9% | MS reporting | 2013–2014 |
| European Commission (2017e)[99] | • EGF beneficiaries in this period: 19,434<br>• Average re-employment rate: 47%<br>• Average self-employment rate: 7.6% | MS reporting | 2015–2016 |
| ICF (2016b)[100] | • Average re-employment rate: 56%<br>• Re-employment rate varied between 23% and 88% for the different cases analysed | MS reporting, beneficiary survey | 2014–2015 |

**Source:** RAND Europe based on European Commission (2017e; 2015d); ICF (2016b, 2015b)

Measures aiming at 'direct job creation' have not been directly provided to dismissed workers in the context of EGF interventions in the 2007–2013 period, so no evidence on this can be found in the ex-post evaluations. However, data on re-employment rates have been provided, although similar to other studies in interpreting these data one need to be cautious not to assume that success can be directly attributed to the EGF. While the average re-employment rate was 49% (of 55,302 beneficiaries) at the end of the EGF support, these rates varied considerably between 4% and 86% for single cases.[101] The self-employment rate varied between 44% and 0 per cent, amounting to an average share of 5%.[102] A survey undertaken for the evaluation showed that the time in which beneficiaries found a job varied, with people finding jobs during the measures (13%), people finding new jobs between one and three months after the intervention (18%), three to six months after the measure (14%) and longer than six months after the EGF measures (47%). With regard to the long-term effect of the measures, comparing the re-employment rate at EGF completion with the re-employment rate 12 months after the completion, in the majority of cases analysed (33 out of 51), an increase in the re-employment rate took place. In 7 cases out of 51, the

[97] ICF (2015b)
[98] European Commission (2015c)
[99] European Commission (2017e)
[100] (ICF 2016b)
[101] ICF (2015b)
[102] ICF (2015b)

re-employment rate was stable and in 11 cases, a decline in the re-employment rate after 12 months could be observed. The survey also showed that of 66% of those beneficiaries who found new jobs, 52% were still in employment at the time the survey was conducted.[103]

For the 2013–2014 period, the ex-post evaluation reported that at the end of EGF cases, 44.9% (7,656) of the beneficiaries (18,848) had found new employment or were self-employed. The share of beneficiaries unemployed or inactive for personal reasons was 39.1%, while 6% were in education or training. It is further noted that based on MS information, the reintegration rates tend to improve a few months after the final reports on the EGF assistance had been submitted and that a further increase in re-employment rates can be observed in the medium term.[104] The self-employment rate varied between 44% and 0%, amounting to an average share of 5%.[105]

For the period 2015–2016, the EC reported that upon the completion of EGF cases, 47% (9,072) of the beneficiaries (19,434) had found new jobs (including 1,471 or 7.6% as self-employed). The share of people that were assisted by EGF measures and were unemployed or inactive for various reasons at the end of the implementation period was 48%, while approximately 3% were in education or training, and for 2% the employment status was not known. As stated above, improvements in reintegration rates could be expected over time.[106]

The mid-term evaluation is based on 29 cases for which a funding request was made in 2014 and 2015.[107] In this time, and based on the 13 cases in which EGF implementation has been completed, the re-employment rate varied between 23% and 88%, with the average re-employment rate at 56%. This is higher than the average re-employment rate of 49% over the 2007–2013 period. The mid-term evaluation also contains a survey among beneficiaries. This survey shows that 49% of the beneficiaries have found employment since their redundancy. This number is lower, than the 56% rate, as it has been calculated based on the cases for which data was available and as the survey included beneficiaries for whose cases no employment outcome was reported.[108] In the EGF cases covered by the evaluation, data on the long-term effect on re-employment was unavailable. Therefore, the report considers the contract type of new jobs as an alternative indicator to measure sustainability and concludes, given that 74% of beneficiaries that responded to the survey indicated having found a permanent job, that there are 'strong indications of significant positive sustainable outcomes for EGF beneficiaries'.[109]

We have not identified many national-level studies or evaluations examining the effectiveness of the EGF in different countries, hence the scarcity of evidence in this respect. Please see Annex I for selected country-level assessments.

The interviews conducted did not provide additional evidence on job creation stemming from EGF interventions. Nevertheless, one interviewee from the MS said that they had one specific measure

[103] ICF (2015b)
[104] European Commission (2015c)
[105] ICF (2015b)
[106] European Commission (2017e)
[107] The Commission's mid-term evaluation covers 29 cases in Greece, Belgium, France, Finland, Ireland, Germany, Spain, Italy, the Netherlands and Sweden. The cases were based both on the globalisation and the crisis criterion and were spread over 21 sectors, such as the automotive sector, retail trade, road transport, aircraft maintenance and machinery and equipment manufacturing (those sectors had two or more cases).
[108] ICF (2016b)
[109] ICF (2016b)

in place to foster job creation: self-employment workshops. However, the interviewee also reported that this was not a very popular measure among the applicants as EGF participants had very often worked in their jobs for many consecutive years and they were not looking for a drastic change in their careers. The interviewee also explained that it was difficult to keep track of the success of this measure, since self-employment and starting a new business may take long time to materialise. Lastly, all the interviewees[110] also thought that capturing evidence about the employment effects was extremely difficult (see discussion in 4.1).

### 3.2.5. Summary

Of the four analysed instruments, only H2020 can demonstrate substantial job creation effects and strong evidence behind these. This – as explained earlier – reflects the different character and purpose of the funds in question. As such, EU cohesion policy and the ERDF and CF may form better comparators for H2020 (see Box 7 and Section 2.3.2).

However, the main limitation of the ESF, YEI and EGF so far has not been the fact they do not create jobs (simply because they are not designed to and cannot do it), but because any claims about their effectiveness in bringing people (back) to employment are hampered by the lack of robust CIEs that can eliminate other factors possibly explaining the changes observed among programme participants. The evidence presented above does not clarify whether employment effects are due to the participation to a specific programme. Ideally, one would need comparator data to assess the effect of a programme on the employment situation of the participants. This is not to say that such evaluations do not exist but as we have shown they are not in abundance either. We will come back to this point in the remaining sections of the report.

**Box 7: Achievements of the EU cohesion policy (2007–2013 and 2014–2020)**

The ex-post evaluation of the ERDF and CF programmes (2007–2013) showed that they were responsible for directly creating over 940,000 jobs (including some 41,600 jobs in research) by the end of 2014. This number was expected to go up as it left some OPs out and reflected the point in time when only 77% of funding had been spent.[111] The evaluation also pointed out that a substantial number of jobs were also created indirectly as a consequence of the investment. For instance, it estimated that in Spain (one of the case studies) the number of such indirect jobs could be as much as four to five times the number of jobs directly created.

The EU portal with cohesion policy data indicates progress in achieving results in the 2014–2020 period:

- FIRMS: New direct jobs (direct employment increase in supported enterprises)
  - Planned: 419,592 FTEs
  - Decided: 155,512 FTEs
  - Implemented: 10,329 FTEs
- RTDI: New researchers (research and innovation: number of new researchers in supported entities)
  - Planned: 29,603 FTEs
  - Decided: 7,885 FTEs
  - Implemented: 636 FTEs.[112]

[110] Two interviewees from the EU institutions and three interviewees from EU MS.
[111] Applica and Ismeri Europe (2016)
[112] European Commission (2017c)

## 3.3. THERE IS SOME EVIDENCE ON JOB QUALITY ACROSS ALL THE FUNDS

### 3.3.1. H2020 (and FP7) helps improve career prospects of researchers

A number of studies provide evidence that FP7/H2020 made an important contribution to some dimensions of job quality among the beneficiaries, particularly among the researchers. More specifically, FP7 and H2020 **helped improve the career prospects – long-term job security, career progression, remuneration and, to a somewhat lesser extent and contract quality – of beneficiary researchers**. We summarise the supporting evidence below.

The study on FPs' contribution to human research capacities assumed that the ratio between fixed-term and open-ended contracts is a relevant proxy indicator of the job security and longer career perspectives of a researcher.[113] According to the study findings, FP funding has contributed to a small overall change in the ratio of permanent (+20%) and fixed-term (+27%) contracts and a slight adverse shift to the more widespread use of fixed-term contracts in the participating research teams. The use of fixed-term vs permanent contracts varied depending on the type of employing organisation and career stage/age of researcher. Full-time permanent contracts to researchers who stayed in the teams after the end of the projects were more commonly offered by SMEs, whereas the use of fixed-term contracts was more prevalent in universities and HEIs. Similarly, the study found that first-stage and recognised researchers were generally offered fixed-term contracts after the end of the project, whereas established/leading researchers with more experience usually received permanent contract offers with higher financial remuneration.[114]

Although more widespread use of fixed-term contracts may actually denote lower job security (which is a key concern for researchers and their well-being), aside from this, there is evidence that in the long-term FP participation translates into formal advancement and better working conditions for the researchers that have been involved in FP activities. More specifically, the results of the individual-level survey showed that beneficiaries of FP6 and FP7 had the highest share of researchers employed under permanent contracts: 77% of the participants of both FP6 and FP7 were employed under permanent contracts, while the overall average of permanently employed researchers was 55%. Thus, although in the short-term participation in FP had mixed results in terms of contract quality and job security, in the long term, FP funding brought about better working conditions to the majority of the participating researchers due to the skills and level of autonomy obtained in FP-funded projects.[115]

For instance, more than 30% of beneficiary research teams indicated that participation in FP6/FP7 projects made salaries in their organisation more financially attractive.[116] Similarly, according to the survey results in the Assessment of the Union Added Value and the Economic Impact of the EU Framework Programmes, without H2020 support, revenue would have decreased for 58% of survey respondents, and particularly in Societal Challenge (SC) 5 (65%), SC4 (69%), Nanotechnologies, Advanced Materials, Advanced Manufacturing and Processing, and Biotechnology Public Private Partnerships (NMPB PPPs) (71%), and SC5 (65%). Overall, the beneficiaries of these programmes and projects funded under the instrument appear to be experiencing relatively large impacts on their commercial position (i.e. not only in terms of

[113] Idea Consult, IFQ & PPMI (2014)
[114] Idea Consult, IFQ & PPMI (2014)
[115] Idea Consult, IFQ & PPMI (2014)
[116] Idea Consult, IFQ & PPMI (2014)

revenue but also their competitive position nationally/internationally and market share) relative to what would have been available nationally.[117]

The study on assessing the contribution of the framework programmes[118] also used self-reporting to capture the perceptions of the researchers on their career paths. Since this method might involve confirmation bias – in that researchers report more positive benefits whether they decide to move or stay where they are – the findings on the impact of decisions on careers should be interpreted with caution. Nevertheless, the study reported that almost half of the researchers perceived their FP participation as having positive effects on their research career. Around one quarter of respondents expected that FP participation would contribute to acquiring a new position in academia, and 17% into another sector.[119] The FP7 ex-post and H2020 interim evaluation of MSCA[120] also found evidence that the MSCA programme was effective in boosting the career of researchers; around 60% of past MSCA fellows believed that it would have taken them more time to attain their subsequent career stage without the MSCA fellowship, and 12% believed they would not have attained the subsequent career stage at all. Only 16% of fellows believed that they would have attained the subsequent career stage in a similar timeframe and only 2% of respondents believed they would have attained a subsequent career stage faster. Of the 21% of MSCA fellows who moved to a permanent position after their MSCA fellowship, more than half (56%) reported that this was to a (very) large extent the result of MSCA support. In addition, 38% of respondents moved to a more senior position after their MSCA fellowship. Two thirds of these fellows attributed this career progression to a (very) great extent to participation in MSCA. [121]

The available evidence also indicates that the FP7/H2020 support significantly contributed to **on-the-job training and learning, acquisition of new skills and competences**, as well as personal development of beneficiary researchers. The study on FP contribution to human research capacities[122] revealed that the acquisition of important skills for further career development (e.g. networking, leadership and negotiation skills) and increased autonomy in terms of carrying out tasks are effects of FP participation that result in positive outcomes on researchers' careers in the longer run.

Similarly, according to the study on business participation in FP7/H2020 MSCA findings,[123] being exposed to the industry environment through MSCA projects made the beneficiary fellows a highly attractive choice for private companies and increased their opportunities of employment in the business. Almost all of the interviewed beneficiary researchers confirmed that being hosted in business significantly increased their opportunity to get a job either in that same or in another company after the project completion. The main reason was that the MSCA projects with business involvement turned out to be a favourable framework to train researchers with industry-relevant skills and competences. A number of beneficiary fellows also indicated that these projects significantly extended their professional network and helped to develop the ties with potential employers in the business sector.

[117] PPMI (2017)
[118] Idea Consult, IFQ & PPMI (2014)
[119] Idea Consult, IFQ & PPMI (2014)
[120] ICF (2017)
[121] ICF (2017)
[122] Idea Consult, IFQ & PPMI (2014)
[123] PPMI group & partners (2017)

Apart from the documentation review, we also gained some insights on job quality in the context of H2020 from a number of interviews with actors from the EU institutions and subject experts. An interviewee from the EU institutions suggested that mobility was an element that should be kept in high consideration when discussing job quality of the researchers. As a matter of fact, they were of the view that while mobility of researchers was a key driver of excellence in research, researchers still faced many difficulties when moving across the EU. In this direction, the interviewee recalled that, for example, the MSCA included some measure to facilitate international mobility of young researchers. Moreover, to preserve their supplementary pension benefits when moving between countries, the interviewee highlighted that the EC was supporting a consortium of employers, through H2020, in creating a single European pension arrangement (RESAVER) that will offer a defined contribution plan, tailor-made for research organisations and their employees.

A subject expert on H2020 was of the opinion that job creation that stems from fostering technological change and innovation entailed the creation of jobs with different and new characteristics and working arrangements. They felt that such jobs were better quality than the previous ones for some of the job quality dimensions, for example wages and compensation, but could be detrimental for other dimensions such as work intensity.

FP7 and H2020 have also financed research projects exploring the issue of job quality. For instance, QuInnE[124] is an interdisciplinary project investigating how job quality and innovation mutually impact each other, and the effects this has on job creation and the quality of these jobs. The WALQING project has investigated the links between new and expanding jobs, the conditions of work and employment in these jobs, and the outcomes for employees' quality of work and life (see the vignette below and Annex F for more details).

[124] See: http://quinne.eu/

**EXAMPLE**

## WORK AND LIFE QUALITY IN NEW AND GROWING JOBS (WALQING)

*H2020; EUR 3.3 million; 2009–2012*

*Countries involved: Bulgaria, Denmark, Germany, Hungary, Italy, Lithuania, Norway, Spain, UK*

The main objective of WALQING project was to increase the knowledge of the quality of work and life in new and growing jobs among researchers, stakeholders, managers and policymakers. More specific project objectives included the aim to: (1) identify expanding economic activities in Europe with problematic configurations in terms of low wages, precarious employment and lack of social integration; (2) assess relations between different contractual arrangements, working hours, etc., and the impact on the quality of work and life; (3) transfer examples of good practice beyond their national context and to explore the limitations of such transfers; (4) identify gaps in stakeholder, national and European policy that may contribute to locking organisations and individuals in patterns of low wage and poor job quality; and (5) investigate the possibilities to transfer examples of organisational strategies that support higher-quality paths.

**WALQING aimed to increase knowledge of the quality of work and life in new and growing jobs**

The project's main activities were research-related – in-depth analysis of the European Labour Force Survey, European Working Conditions Survey, Quality of Life Survey and EU statistics on income and living conditions. In addition, each of the selected sectors was investigated in four or five countries that represent different employment regimes. In each country, project partners assessed industrial relations in two sectors, conducted two or three company case studies in each of their sectors and investigated the work situations, careers and perspectives of individuals and vulnerable groups. In addition, WALQING conducted five small-scale action research interventions to further dialogues and sector- or company-level initiatives to improve the quality of work in construction, cleaning and waste disposal.

**New methods were developed for tackling low-quality job-related issues**

The project results include new methods developed and knowledge generated in the field of tackling low-quality job-related issues, including: (1) developing a balanced absolute and relative trend (BART) index; (2) identification of growing sectors and functions (between the years 2000 and 2007) in Europe with problematic and precarious working conditions and low quality of work and life; and (3) analysis of the characteristics of low-quality jobs in emerging markets.

Among the institutional conditions that can improve job conditions in the above sectors the study identified inclusive employment regimes, welfare state provisions, inclusive and collaborative working cultures and corporate social responsibility, a functioning social partnership and worker voice. In addition, it was also found that smart organisational solutions and management strategies can render workflows more continuous, employment more secure and contribute to service innovations, whereas new technology can lessen health and safety hazards.

*Source: CORDIS (2018)*

### 3.3.2. There is lack of evidence on job quality in the ESF available at the EU level

The EU-level studies and evaluations have not provided much insight on job quality (or quality employment) supported by the ESF other than information on the status of the participants six months after completing project activities. While this information provides some indication on the sustainability of the support, it is not helpful as a proxy indicator for job prospects.

This does not mean that the concept of job quality is not considered. There are many studies that aim to shed more light on what happened to the ESF participants after the support ceased and how they are doing. This evidence is available at the national and regional level, but it is much more difficult to compare due to different methodologies used – we come back to this in Chapter 4.

Below, we provide a sample of findings from a few MS.

**In Poland,** the study of the 2007–2013 period found that the quality of employment of people who found a job was varied but often low (the aspects examined included: forms of employment, salary level, working conditions and satisfaction). Depending on the cohort, between 17% and 25% of participants (or between 25% and 58% of those employed) had low-quality jobs. According to the study, those with higher chances of finding a job more generally (such as men or people with higher education) tended to secure jobs of higher quality.[125]

The study found that some participants moved between employment and unemployment (having a job (usually of poor quality) and losing it) but the relative size of this group of participants was uncertain. Flows to (and from) jobs of higher quality were rare – these jobs usually offered more stability and were difficult to access for those long-term unemployed or 'stuck' in jobs of poor quality. Sustainable integration with the labour market was most frequently achieved by people who had high-quality jobs.[126]

Some specific findings of this study include:

- **Prospects:** Only 9% of those who found jobs had permanent employment contracts, 41% had fixed-time employment contracts and 16% worked in other forms of employment than the employment contract (contract of mandate, task-specific contract, managerial contract, mixed form, other civil law agreement). The flows to more secure and stable contracts were limited.
- **Earnings:** Salaries of some participants were measured between the 6- and 18-month follow-ups. An average salary of a person who had a job at the 6-month follow-up was 1,475 PLN and 1,779 PLN at the 18-month follow-up. This was reported to be just above the minimum wage (1,178 PLN and 1,237 PLN respectively).
- **Working conditions:** About 32% of those who found a job and remained employed at the 18-month follow-up worked shifts, and 11% worked at night. Still, 89% were satisfied with the working conditions.

Finally, the study examined the quality of jobs created by the ESF through business start-ups (Box 8).

[125] PAG Uniconsult (2015)
[126] PAG Uniconsult (2015)

**Box 8: Job quality in the ESF supported business start-ups in Poland (2007–2013)**

The study on the effectiveness of the ESF in Poland[127] examined the jobs created through business start-ups and concluded that they were of a rather low quality. Employees who have found a job in companies formed from the ESF grants, were characterised by the following features:

- Having an employment contract – 26% of employees (however, if the company employed only one employee, 64% of them had a contract of employment).
- Having a permanent contract (but work based on a contract of any type) – 31% of employees (regardless of the size of the company).
- Having a full-time job – 52% of employees (71% if the company employed only one employee).
- Providing training opportunities – 37% of companies employing staff.
- Average remuneration – 1,700 PLN (if disclosed).

In **Spain**, a survey of immigrants who had participated in ESF programmes included some questions with respect to aspects of job quality.[128] The survey found that of those who reported finding a job as a result of the ESF programme, 98% stated that their working conditions had improved compared with previous employment. This was reported by 99% of those between 25 and 45 years of age and 94% of those over the age of 45. It was also consistent across education level, with 93% of people with primary education, 99% of people with secondary level education and 97% of people with tertiary-level education reporting that their working conditions had improved. No difference was recorded between genders. However, in the same survey, 61% of respondents reported that they did not consider their income sufficient to 'live with dignity'.[129]

In addition to the documentation review, some observations on job quality were captured through the interviews. According to a number of interviewees[130] it was impossible to measure the sustainability of the ESF. Two national-level interviewees as well as one interviewee from the EU institutions were of the opinion that it was not always possible to track beneficiaries and participants over time and to find out about their employment situations six or 12 months after the intervention. As consequence, job quality was difficult to measure.

With regards to specific ESF measures supporting job quality, one interviewee from MS explained that skills match with job requirements was the job quality dimension which they kept into higher consideration in the ESF case. Specifically, they explained that the centres for employment conducted extensive profiling activities to guarantee, as much as possible, that ESF participants were offered opportunities in line with their education, skills and career perspectives.

[127] PAG Uniconsult (2015)
[128] Ministerio de Trabajo e Inmigración de España (2011)
[129] Ministerio de Trabajo e Inmigración de España (2011)
[130] This was highlighted not only by two interviewees working with the ESF in the MS, but also by interviewees working with the YEI and EGF.

### 3.3.3. The YEI may provide an unprecedented breadth and depth of evidence on the job quality, just not yet

Given the early stages of the YEI implementation and, subsequently, the scarcity of evaluations on this initiative as yet, it is not surprising that little evidence was found on the job quality at the EU level. However, this will hopefully and most likely change in the future given the requirement for the MS to assess and report on the quality of employment offers received by YEI participants (see Section 2.1.3). Already, some early insights are offered at the national level. What emerges in the first place is that there are different interpretations of what the 'quality offer' means (Table 7).

**Table 7: Examples of interpretations of the 'quality offer' against dimensions of job quality**

| Country | Earnings | Prospects | Intrinsic job quality | Working time quality | Other |
|---|---|---|---|---|---|
| **Bulgaria** | Salary | Contract quality | Skills use and education | | Personal satisfaction |
| **Greece** | Salary | Job security | Skills use and experience | | |
| **Lithuania** | | | Skills use, experience and education | Work–life balance | Health |
| **Slovakia** | | Job security | Skills use, experience and education | Duration | Health |
| **Croatia** | | | | | Immediate offer[131] |
| **Ireland** | | Job security | | | |
| **Poland** | | | Skill use and discretion (on the job training and learning) | | |

**Source:** RAND Europe based on Ecorys & PPMI (2016)

**In Poland**, the recent evaluation examined the quality of apprenticeships and training offered and the quality of job offers made to the YEI participants.[132] The study defined six dimensions (or criteria) of a high-quality job offer defining it as one that is: (1) relevant to education and qualifications obtained in the past; (2) ensures stability of employment and job protection (offers an employment contract); (3) offers a decent salary;[133] (4) offers a salary perceived as 'fair' by respondents; (5) good working conditions (satisfaction from the working time); and (6) is satisfactory to the applicant who received it. Overall, the quality of a job offer was highly rated by 67% of the respondents. Of the job

[131] Any job placement received in four months after completing education, training or becoming unemployed.
[132] IBS (2015)
[133] This amounts to at least two thirds of an average salary in a given profession and is controlled for changes in the labour market.

offers examined, 64% scored positively on the first criterion (relevance), 60% on stability, 54% on decent salary, 67% on 'fair' salary, 86% on working conditions and 67% on satisfaction. In summary, 45% of job offers met five or all areas identified in the definition of a high-quality job offer. Another 21% met four dimensions and only 5.5% of offers met at most one dimension.[134]

The study also showed that 84% participants who accepted the offer had been in the same job when the study was conducted.[135]

Some more evidence emerges from other countries as well. For example, data from **Italy** provide some information on the proportion of permanent contracts which are associated with job prospects (one of the dimensions of job quality). According to the recent Italian report, 172,094 YEI participants were employed.[136] Out of those employed, 53,000 had a permanent contract, 44,000 had a temporary contract, 63,000 received an apprenticeship contract and the other 6,000 had other temporary contracts.

### 3.3.4. The EGF evaluations examined job prospects and beneficiaries' perceptions on the new employment

Overall, the evidence suggests that beneficiaries who found jobs tended to work full-time and on permanent contracts. However, their perceptions of some other dimensions of job quality seemed to be a little more negative for the new job when compared with the old.

In the context of the Commission's ex-post evaluation of the EGF in 2007–2013, a beneficiary survey has been conducted that provides evidence on some dimensions of the quality of the jobs beneficiaries found after the intervention of the fund. In terms of **job prospects**, the survey showed that roughly 89% of those who found a job work full-time, while the rest (11%) work part-time. Of the people who found a job, 81% work under permanent and 19% under temporary contracts.

The survey also captured perceptions of beneficiaries on their new employment compared to their former jobs. However, such assessments need to be considered and interpreted with caution; beneficiaries are likely to be tainted with disappointments of losing a job in the first place, and they do not have the same terms to comparison in terms of the previous job. Comparing the overall **quality of the new job** with their former employment, 24% declared the quality of the jobs was the same, 41% respondents felt it was worse of far worse, while 35% considered it better or far better. With regard to **salaries**, while 50% indicate that it was the same, 36% saw it as worse or far worse and only 14% said it was better or far better. Looking at the **match between skills and the role**, 35% of the respondents said it was the same, 41% that it was worse or far worse, and 23% better or far better. Comparing the **provision of training and support**, 35% of the respondents indicated it was the same, 41% said it was worse or far worse and 21% felt it was better or far better. Finally, with regard to their **work–life balance**, 28% reported it was the same, 39% worse or far worse and 33% better or far better.[137]

More recently, the mid-term evaluation of the 2014–2020 period showed that 63% of the beneficiaries who found a job worked under a permanent contract, 36% under a temporary contract,

[134] IBS (2015)
[135] IBS (2015)
[136] ANPAL (2017)
[137] ICF (2015b)

and that 88% worked full-time and 11% part-time.[138] For nine cases out of 29, statistical evidence on the new employment status was available, showing an average of permanent jobs of 52% across the cases where data was available. In 19 cases, evidence on sectoral employment was available. In eight cases, evidence shows a significant shift towards other sectors than those of the previous employment.[139] The mid-term evaluation also provides information on the quality of the new jobs compared to old jobs. However, this data is only presented at the case level and, unlike in the ex-post evaluation of the EGF in 2007–2013, not provided at a general level. Out of the seven cases for which an approximate evaluation is given, in three cases, the new positions of beneficiaries were at least equal ('in most cases' or 'in many cases'). In two cases, the new jobs were found to be similar ('in many cases' or 'in general'). In one case, the conditions were unlikely to be similar and, in another case, the new positions were on average worse.[140]

The vignette below shows an example of an EGF intervention **in Belgium** where a combination of active employment measures led to one of the highest re-employment rates recorded by the EGF interventions (see Annex I for more details).

[138] Cernat & Mustilli (2017)
[139] ICF (2016b)
[140] ICF (2016b)

**EXAMPLE**

## EGF/2015/007 BE/HAINAUT-NAMUR GLASS

***EGF; EUR 1.8 million; 2015–2017; Belgium***

Between 2000 and 2010, the employment in the glass sector in Europe decreased by 32%, with the loss of jobs in the glass sector in Hainaut and Namur being considerably more significant than in Wallonia or Belgium as a whole. This project provided support in light of the redundancies of 412 workers due to the closure of two production sites in the Belgian regions Hainaut and Namur: AGC Europe SA and Saint-Gobain Glass Benelux.

**There were funding requests for redeployment, facilitation job search, training, transfer of experience and promotion of entrepreneurship**

This project aimed at the re-employment of 412 workers and eventually targeted 512 workers, including NEETS, this initiative being made eligible by the Youth Employment Initiative. The average amount per worker amounted to EUR 1,638. The measures that funding has been requested for included redeployment, facilitating job search, training, transfer of experience and promotion of entrepreneurship. Planned expenditures for individual case management amounted to 77% of expenditures, training and retraining to 9%, promotion of entrepreneurship to 9%, job search allowances to 4% and training allowances to 1%.

In the Commission's mid-term evaluation of the EGF in 2014–2020, this project is shown to have a very high re-employment rate of 77%. In terms of the quality of the contract of the new employment found by beneficiaries, 69% of those that found a job worked under a permanent contract, 26% under a fixed-term or temporary contract and 5% were self-employed. The majority of beneficiaries that found work did so outside of the glass production sector. The evaluation found that in many cases, the quality of work was similar to the quality of beneficiaries' previous jobs.

**The project had a re-employment rate of**

**77%**

**– of these, 69% worked under a permanent contract**

*Sources: ICF (2016b).*

Similarly to job creation, two interviewees from the MS working with the EGF, signalled that the nature of the EGF as a flexible fund, which on a case-by-case basis offered personalised services, may have given it a comparative advantage in promoting quality employment. Nevertheless, the interviewees also reported that since this was not the focus of the EGF, the performance in terms of job quality was not systematically estimated or assessed at a national level.

### 3.3.5. Summary

The picture of the job quality across the EU funds is patchy. Firstly, the information is unevenly available between the EU-level studies and national evaluations. To some extent this can be explained by the way the funds are managed and evaluated. Where the EC remains in charge for the

management, as well as monitoring and evaluation, the evidence is more readily available at the EU level. When these responsibilities are shared between the EC and MS, there might be plenty of data at the national level, but it is not easily synthesised across the EU. The ESF and YEI are cases in point.

Secondly, the available data focus on various (and different) aspects of job quality and draws on different definitions and methodologies, so comparing the evidence across the funds is impractical. Most commonly, the evidence addresses issues of job prospects, such as job security, career progression or contract quality, and earnings. Often, the measures rely on self-assessments and perceptions of programme participants.

Thirdly, some funds have a potential to provide much more insights into job quality than others (notably the YEI). However, this is yet to be proved the case.

# 4. MEASURING AND ESTIMATING JOB CREATION AND JOB QUALITY

**RESEARCH QUESTIONS ADDRESSED IN THIS CHAPTER**

- **RQ2:** What indicators are best suited for assessing the efficiency of EU instruments aiming to create high quality jobs?
- **RQ3:** Can expected quality and number of jobs created be measured or estimated ex-ante and if so, by what methods?

**KEY FINDINGS**

- The methodologies used for the estimates of job creation and job quality are not dissimilar from each other and include econometric modelling, survey methods and counterfactual analysis. Measurements after the implementation has started or was completed were more common across the EU funds, while ex-ante estimates on job creation were provided only for H2020.
- Economic modelling offers a possible method of estimating the overall impact of a programme on employment. However, the experiences of the NEMESIS and the RHOMOLO models demonstrate that estimating the number of jobs created ex-ante is extremely difficult and reliability may be affected by underlying assumptions and data availability.
- Indicators used to measure and estimate job creation tend to focus on absolute numbers (e.g. the number of people who received a job offer or found a job, FTE). Job quality indicators used to measure the impact of the EU funds focused on the dimensions that are easier to capture and directly measurable (e.g. type of contract and earnings).
- Almost all recent frameworks look at job quality as a multidimensional concept. Yet, there is a great variation in the number of dimensions within different indexes. Given the diversity of indicators and indices available more widely, existing attempts to capture job quality in the EU funds can be considered as modest at best.
- Data availability and quality limit possibilities to assess the efficiency of the EU funds in relation to employment results and quality employment in particular. While some assessments have been provided for most of the EU funds, it is not possible, nor would it be practical, to compare such different instruments.

## 4.1. MEASURING AND ESTIMATING JOB CREATION AND JOB QUALITY COME WITH CHALLENGES

Over the recent years, the EU has launched a range of policy initiatives addressing job creation and job quality, such as the European Employment Strategy,[141] the Lisbon Strategy[142] and more recently the European 2020 inclusive growth strategy[143] and the Commission's Agenda for new skills and jobs.[144] These initiatives, together with the multitude of EU funding programmes, rely heavily on measurable objectives and targets set both at EU and national level. Reliable estimates and measure of job creation and job quality are therefore a key element for the successful design, monitoring, and evaluation of the EU employment policies.

[141] For an overview of the European Employment Strategy see: http://ec.europa.eu/social/main.jsp?catId=101&langId=en
[142] Presidency Conclusions of the European Councils. Lisbon European Council 23 and 24 March 2000
[143] European Commission (2010)
[144] European Commission (2016a)

Job creation is tangible and measurable in principle. Nevertheless, as mentioned in Chapter 1, the assessment of labour market performance based on aggregate employment and unemployment is no longer adequate and may be misleading. First, recent research[145] demonstrated that the unemployment rate is based on a rather narrow definition of labour underutilisation. Second, the assessment of labour market performance based solely on aggregate employment and unemployment does not provide information on key characteristics of the jobs such as level of earnings, typology of contract, labour market security and risk of unemployment, and quality of the working environment.

Labour market performance should therefore be assessed in terms of the increase in both the number of jobs created and jobs quality. However, it is a complex task to define and measure job quality. There is neither agreed definition on what is a good (or high-quality) job nor clear guidelines in modelling job quality. The design of job quality indicators to a great extent is determined on an arbitrary consideration of what is important for job quality. The challenges evolve around: (1) conceptualisation; (2) measurement; and (3) perspective issues.

Conceptually, it is not easy to determine what the key dimensions of job quality are, to what extent a dimension is important or to what degree one dimension is interconnected to another. Even though there are some non-standard alternatives where job satisfaction is used as an inclusive indicator to job quality,[146] it is broadly accepted that it's best to look at job quality as a multidimensional concept. Often, once measured each dimension is standardised, then the 'designer' assigns (un)/equal weight to each dimension and combines them in one composite index that has an objective to measure overall job quality. Opting for a single index has drawbacks. Important trends within dimensions cannot be well captured. Likewise selecting the key quality dimensions, quantifying them can include objective and subjective assessments. Lastly, there are perspective challenges in measuring job quality. Some indicators are developed at an individual, while others are measured at an aggregate level.

We complemented the evidence collected through the documentation review and the REA with a number of interviews that provided further observations and some opinions on measuring job creation and job quality. In particular, several interviewees[147] signalled specific challenges in measuring job creation and job quality for the EU funds. Firstly, they thought it was extremely difficult to separate the effect of the fund from other effects; for instance, two interviewees from the EU institutions said that without a control group it was not possible to assert if a person got a job because of the participation to a programme or thanks to other external factors, and, as consequence, it was not possible to draw conclusions on the effectiveness of the different programmes. Secondly, availability of data at regional and national level and comparability at EU level was considered by the interviewees as still limited. Although some interviewees from MS reported having specific administrative structures and database in place to track beneficiaries, they said the use of such data

[145] See: Eurostat (2017); ECB (2017); OECD (2017); Eurofound (2017). Eurostat (2017) reports that over 20.5 million people had some resemblance to being unemployed, which is almost the same number of people officially recorded as unemployed (20.9 million). Similarly, the ECB (2017) suggests that labour market underutilisation is almost double the level captured by the unemployment rate. According to Eurofound (2017) around 50 million people are in a broader category of labour slack, encompassing inactive people wishing to work and underemployed, involuntary part-timers, as well as the unemployed.
[146] Sousa-Poza & Sousa-Poza (2000)
[147] Four interviewees from the EU institutions, five interviewees from the MS and two subject experts had very similar overlapping observations.

was limited by concerns on data protection and data privacy; moreover, comparisons at EU level would remain challenging.

Thirdly, some interviewees thought that the current indicators used by many of the funds provided only a partial picture of the participants' situation upon leaving; for instance, interviewees from the EU institutions and from the MS working with the EGF stated that the pure reintegration rates did not provide information on the context, external factors and workers' satisfaction. Fourthly, many interviewees recognised that the indicators and measures currently in use reflected the working situation of the participants at a specific point in time; the data systems in use did not always enable follow-up with the participants six or 12 months after completion of the intervention.

Finally, three interviewees from the MS signalled that the existing indicators were already burdensome to report and some of the information requested for monitoring purposes – e.g. the situation of beneficiaries one year after an intervention – was very difficult to collect. Overall, the interviews conducted clearly showed the need to strike a balance between the amount of data that would be necessary for monitoring and evaluation activities, and the workload that more extensive data collection would entail.

The remainder of this chapter looks at how the EU funds have dealt with estimating and measuring job creation and job quality, and how wider literature faced the issue of measuring job quality.

## 4.2. METHODOLOGIES AND MODELS USED IN THE CONTEXT OF EU FUNDING INSTRUMENTS

### 4.2.1. Ex-ante estimates of job creation feature H2020 studies; surveys are more common after implementation has started

A first possible distinction is between methodologies used ex-ante and ex-post to estimate and assess job creation and job quality. Ex-ante estimates can be produced via quantitative techniques. In particular, economic modelling can support the assessment of the impact on employment and income levels as those impacts are quantitative in nature (e.g. the number of jobs can be counted, and wages labour costs and disposable income are expressed in monetary units). In other areas, such as working conditions, impacts are qualitative by nature and converting them into quantitative units will require the use of an indicator that acts as a proxy.[148]

In general, quantitative techniques have the following advantages: they permit generalisations; other researchers can independently replicate and verify the results; they can enable analysis of causality through the measurement of a counterfactual; and the results are generally seen as objective and impartial.[149] At the same time, quantitative techniques have also some important drawbacks: they struggle and often fail to capture context-specific issues; they depend heavily on assumptions regarding the inputs and parameters to be used and the hypothesised relationship between variables; and they may need a large amount of data.[150] Such drawbacks are even more pronounced when quantitative techniques and economic modelling are used for ex-ante estimates.

[148] European Commission (2017g)
[149] Ecorys & IDEA Consult (2009)
[150] Ecorys & IDEA Consults (2009) and de Vet et al. (2010)

In the first place, in the context of the EU funds, one would expect to find ex-ante estimates[151] on job creation – and eventually job quality – in the IAs documents accompanying the decision to establish a new funding instrument at the EU level or in a decision to continue an existing funding programme. This is the case of the H2020 IA,[152] which made use of three econometric models (NEMESIS, an OECD model and Quest III) to assess the macroeconomic impacts of EU research and innovation programmes on economic variables, including the impact on employment. A comparison of ex-ante estimates with updated estimates from the interim evaluation in the case of H2020 (see Box 9) shows the difficulty of assessing the impact on employment and how initial assumptions can affect the results of the model.

**Box 9: Comparison of the H2020 interim evaluation with the H2020 IA**

The NEMESIS model was used again in the interim evaluation to assess the impact of the H2020 and FP7 budget on the EU economy and employment at macro and sectoral levels. The impacts on employment captured by the interim evaluation of H2020 were compared to those estimated in the IA carried out in 2012.

The comparison showed important differences, with most of them coming from the difference in the assumptions used for the crowding-in effect, and from the size of the total H2020 budget that was inputted in NEMESIS. In particular, the average annual employment gains were estimated at about 494,000 in the IA, against only 278,000 in the interim evaluation. This -44% difference was due to: -16% to the difference in the size of the budget, -34% to the difference of the crowding-in effect[153] and +7% to the other factors. Focusing on the comparison of the results for the year 2030, the difference reduces from -44% previously to -35%. On these -35%, -13% come from the difference of budget, -28% from the difference of crowding-in effect and +7% from the other factors that play again positively in the comparison.

A representative of the EU institutions interviewed for this study noted that the assessing the impact of H2020 on growth and jobs through indicators at project and programme level, including in terms of its efficiency and quality, was a challenge. As a consequence, even if H2020 aimed to create growth and jobs, job creation was not included among the H2020 indicators, confirming once again that job creation was still challenging to measure.

With regards to the other EU funds, in terms of ex-ante assessments, the IA accompanying the proposal for the ESF Regulation[154] and the ex-ante evaluation of the EGF 2014–2020[155] do not contain

[151] By ex-ante estimates or assessments, we mean those studies that are carried out prior to the implementation of a given instrument, fund or programme. Most commonly, these include impact assessments (IAs) and ex-ante evaluations. IA is a specific type of study carried out to determine if there is a need for EU action in a given area and what the possible impacts of available options are. As such, IAs inform and support the decision-making process before the EC finalises a proposal for a new law. See: European Commission (2017i). *Ex-ante evaluation* is required in the context of the European Structural and Investment Funds (including the ESF) to improve the quality of the design of each operational programme. See Article 55 of Regulation (EU) No 1303/2013

[152] European Commission (2011b)

[153] Public subsidies for R&D can produce crowding effects, that is through a strong leverage effect on private investments can have a positive net effect on the total availability of R&D funding. In the IA, the crowding-in effect was assumed to be equal on average to EUR 0.86 (each EUR of Commission contribution leading to an additional R&D expenditure of EUR 0.86 from other public and private actors), while in the interim evaluation this was estimated on conservative figures and it was set at EUR 0.24.

[154] European Commission (2011c)

[155] European Commission (2011d)

any estimates or quantified projections on the employment effects.[156] Three interviewees from the MS noted that while it was true that the nature of the EGF limited the possibility to produce ex-ante assessments, some estimates were still provided when MS were submitting an EGF application. Such applications looked at different socio-economic characteristics of the participants, at the local labour market situation, and assessed how the EGF measures would address the situation. No IA was conducted in preparation of the YEI.

A subject expert interviewed for this study reported that IA and ex-ante estimates were time- and resource-consuming because they required large amount of quantitative and qualitative data and information. Therefore, while undoubtedly useful, they were not always accurate. Two representatives from the MS echoed such observations and mentioned explicitly that resource and time constraints affected the quality of ex-ante evaluations and limited the provision of reliable estimates for job creation.

Although the ESF IA did not include estimates or quantified projections on the employment effects, for regional policy IAs and simulations the European Commission makes use of economic modelling. In particular, the RHOMOLO model has been used to analyse European regional policies since 2010. A recent review of the RHOMOLO model[157] highlighted that while the core of the RHOMOLO was well-founded in economic theory, there were assumptions and technical issues which needed to be revised: specifically, the assumptions relating to wage curve elasticity, the composition of the labour stock, the elasticity of labour productivity with respect to additional years of training, and the treatment of labour in the R&D sector. The review also reported some concerns with regard to the expected time path of the economic consequences of regional policy interventions, and concerns on how data collection and data estimations are done. Taking everything into account, the review recommended developing a strategy for further work on RHOMOLO.[158]

Overall, economic modelling offers some mechanisms for estimating the overall impact of a programme on employment (for example, estimating the overall number of jobs created). However, the experiences of the NEMESIS and the RHOMOLO models demonstrate that estimating the number of jobs created ex-ante is extremely difficult and reliability can be constrained by the underlying assumptions and data availability. As a consequence, policymakers should interpret and use measures and estimates derived from economic modelling initiatives with caution, bearing in mind their limitations.

Measurements ex-post (or after the implementation has started) are more common across the EU funds. Through the documentation review, we identified different methodologies and models used to estimate and assess job creation or (re-)employment effects. The first method encountered is the reporting the number of jobs created (H2020) or people placed in employment (ESF, YEI, EGF). For example, in case of the EGF, overall figures are mostly provided based on numbers of reintegrated beneficiaries reported by the MS.[159] Similarly, in the case of the YEI, national reports presented data on the number of youths who found a job after taking part to an initiative financed by the YEI. Some

[156] However, the ESF IA provides a qualitative assessment of the various options against a number of criteria (including Contribution to Employment)
[157]European Commission (2017h)
[158] European Commission (2017h)
[159] ICF (2016b), European Commission (2017e, 2015c)

of this data comes from the monitoring systems and capture the self-reported situation of beneficiaries following the completion of project activities.

A second common methodology employed is to commission studies which involve data collection via techniques such as surveys and interviews. These techniques can contribute to an assessment of impacts on employment in cases where quantitative estimates are not available or heavily caveated, for example by data availability. While random probability surveys[160] can provide robust evidence, they also face specific challenges (high costs, declining response rates, bias in survey findings). Qualitative methods, such as interviews or surveys, can generate rich and helpful insights but these approaches are also subject to certain limitations: they may also involve high costs and intensive preparation; they may not enable conclusions to be drawn about the wider population; and the analysis and interpretation of qualitative data often involves significant judgment on the part of the researcher.[161]

With regards to H2020, to assess the job-creation effect, several studies[162] used surveys to estimate the absolute number and share of researchers who were hired during FP7/H2020 project and retained their positions in the beneficiary organisations after the project end. In the case of the EGF, the ex-post evaluation 2007–2013 contains findings from a beneficiaries' survey that provided further details on the employment effect of the interventions.[163] The analysis of the first results of the YEI, included a survey of 22 managing authorities (MAs) and qualitative interviews in ten MS.[164] Similarly, survey methods were used in the MS to collect evidence on the effects of YEI from participants and beneficiaries; for example, the Polish national evaluation carried out telephone surveys with participants.

A specific type of such empirical studies is counterfactual analysis and in particular CIE.[165] The strength of counterfactual analysis is that the observed differences (over time and across individuals) between the treated group and the control group with regard to the outcomes of interest can with confidence be attributed to the intervention. However, counterfactual analysis has also some limitations: CIEs are technically challenging[166] and require extensive data on the status of participants, ideally collected both before and after the intervention.[167]

As mentioned earlier, these types of studies are not widespread at the EU level, yet we found some examples. In the case of FP7/H2020, a survey and a counterfactual analysis were used to measure the job creation effect of the EU Framework Programmes; the relative growth of the FP7/H2020 beneficiary research teams was compared to the growth of a control group (those who did not

[160] In a random probability survey a sample is selected in a process that gives all the individuals in the population equal chances of being selected.
[161] Ecorys & IDEA Consults (2009) and de Vet et al. (2010)
[162] See for example: Study of business participation and entrepreneurship in Marie Skłodowska-Curie actions (FP7 and H2020), Study on assessing the contribution of the framework programmes to the development of human research capacity, FP7 ex post and H2020 interim evaluation of Marie Skłodowska-Curie actions (MSCA)
[163] ICF (2015b)
[164] Ecorys & PPMI (2016)
[165] In contrast to other types of evaluations, CIE informs about the causal effect of a policy on its recipients. The distinctive feature of CIE is thus that it measures the impact of a given policy intervention by comparing the actual situation to the one that would have happened in the absence of the intervention. As such, CIE compares e.g. labour market outcomes of those who benefited from a policy (treated group) with outcomes of a so-called 'control group' of individuals, who are similar in all characteristics to the policy beneficiaries but their recipient status.
[166] European Commission (2012)
[167] European Commission (2017g)

receive FP7/H2020 support) research teams during the same period of time.[168] In the ex-post EGF Evaluation 2007–2013, in order to find more evidence on the employment effect of EGF cases compared to other cases, a CIE is also used.[169] With regards to the ESF, pilot projects were implemented in some countries (Spain, Italy, Estonia, Portugal, Lithuania and Slovakia) to measure the causal effect of ESF policies.[170] Where available, we presented the main findings of these studies in Chapter 3 and Annexes F–I.

For H2020 (and previously for FP7), while usually survey-based methodologies are used to assess the direct job creation effects (i.e. the numbers of staff hired during the project and/or retained after the project end), macro-econometric modelling is used to assess both direct and indirect[171] job creation**.** The assessment of the Union Added Value, for instance, used two European macro sectoral econometric models to estimate job-creation effect of FP7/H2020.[172] In the ex-post evaluation of the EFG, a statistical regression analysis is used to analyse the impact of EGF measures as well as of other supply and demand side factors on the re-employment rate.[173]

Table 8 below summarises the main methodologies and models that have been used to estimate and assess job creation and employment effects in the context of the EU funds.

**Table 8: Methodologies and models used to estimate/assess job creation**

| | H2020 | ESF | YEI | EGF |
|---|---|---|---|---|
| **Ex-ante estimates (before implementation)** | Economic modelling (e.g. NEMESIS) | Economic modelling (e.g. RHOMOLO) | - | - |
| **Assessments after implementation started / was completed** | Economic modelling<br>Survey methods<br>Counterfactual analysis | Survey methods<br>Counterfactual analysis | Survey methods | Survey methods<br>Counterfactual analysis |

**Source:** RAND Europe

### 4.2.2. Survey-based methodologies provide insights on job quality

The methodologies used for the assessments and estimate of job quality do not differ extensively from the ones used for job creation. To assess aspects related to job quality (such as effects on career progression, remunerations, contract quality, training, development of competences and skills) the FP7/H2020 studies and evaluations usually rely on surveys of beneficiary/control group researchers and organisations, as well as interviews, literature review and case studies. This is very similar to studies and evaluations of the ESF, YEI and EGF.

As illustrated in Chapter 3, information on certain aspects of job quality came entirely from ESF evaluations carried out at the national (or regional) levels. These studies involved qualitative and

[168] PPMI (2017)
[169] ICF (2015b)
[170] JRC (2016) Synthesis report on the 'Pilot projects to carry out ESF related counterfactual impact evaluations'
[171] Indirect job creation captures the number of jobs resulting from spill-over of innovations/products/new technologies developed as a consequence of FP7/H2020 projects.
[172] PPMI (2017)
[173] ICF (2015b)

quantitative methods, including surveys and interviews with project beneficiaries and other stakeholders. For example, an evaluation in Poland used a telephone survey with four cohorts of ESF beneficiaries (between 2,000 and 4,900 participants in each cohort) and up to two follow-ups with each cohort (18 months and 29 months upon completing project activities).[174] The study developed a synthetic employment quality index that took into account three dimensions: stability of employment, professional position and income. Using the index, four categories of jobs have been distinguished: (1) high-quality jobs, i.e. those with high salaries (over 50% of the average salary in the industry sector) and high or medium professional position; (2) jobs with an adequate salary, i.e. those with high salaries and stable employment but low professional position or with an unstable form of employment; (3) low-salary jobs, i.e. those with low salaries but where employment is stable or where it is unstable but compensated with high professional position; and (4) jobs without prospects, i.e. low paid, unstable and with medium or low professional position. The study found that if the participants found a job, they usually occupied jobs without prospects (between 25% and 17% of participants). However, participants from later cohorts tended to find high-quality jobs more often (12% to 17%) than those from earlier cohorts (3% to 5%).[175]

With regards to the YEI, there is a quality element in the job placement offered as describe in the recommendation. However, as revealed by the EC evaluation, MS have not agreed on a common definition of a high-quality offer. As consequence, there is also no common practice on how to measure job quality. Nevertheless, actual data on the type of offer received, as well as participants' surveys, have been used as methods to measure some aspects of job (offer) quality. For instance, the Greek national evaluation conducted a survey where YEI participants were asked their opinion about the quality of the offer.

Information on the quality of the jobs that beneficiaries have found after the EGF intervention, has been collected via a beneficiaries' survey, where beneficiaries were asked about their employment status, contract type (full-time/part-time/permanent/temporary) as well as on their impression of the new job in terms of total pay of the new job, the match between skills and role, training and support provided, work-life balance and overall satisfaction.[176] Beneficiaries could indicate for these categories whether they felt that their new job was far better, better, the same, worse or far worse. For the Commission's mid-term evaluation, another survey has been conducted that provided information on the contract types of the beneficiaries.[177]

Overall, while these survey-based methodologies provide some insights with regard to job quality, there are also some methodological caveats worth mentioning. In many of these surveys, job quality is entirely based on an employee's subjective assessment of the quality of a job. This kind of subjective approach has been queried for several reasons.[178] It ignores the fact that employees have objectively different working conditions which shape the experience of work over and above any personal preferences. Similarly, employees' experiences of work are varied and wide-ranging and cannot necessarily be reduced to preference fulfilment.

[174] PAG Uniconsult (2015)
[175] PAG Uniconsult (2015)
[176] ICF (2015b)
[177] Cernat et al. (2017)
[178] Holman and McClelland (2011)

The use of job satisfaction as a proxy for job quality has proven unsatisfactory, especially in an international context,[179] as there are many variables (such as relative thinking, individual differences and different contexts) which can affect the level of job satisfaction. In the same way, well-being measures do not necessarily correspond to satisfaction of needs, so they are not acceptable as proxies for the quality of jobs.[180] For such reasons, surveys relying exclusively on job satisfaction measures do not provide a comprehensive picture of job quality.

The influence of individual perspectives and expectations appears to be particularly relevant in the case of the EU funds. In this regard, one interviewee from the MS emphasised that it was important to combine subjective and objective measures of job quality. They explained that since beneficiaries of the ESF often came from vulnerable groups, they could score poorly on many dimensions of job quality (e.g. remuneration, work intensity, etc.) and yet showed high levels of job satisfaction. A subject expert also flagged that applying traditional job quality frameworks to self-employed workers was challenging, as their preferences on many of the job quality dimensions (e.g. working hours) differed from those of the employed.

#### 4.2.3. Summary

Measuring job creation and job quality comes with a number of challenges. In particular, the traditional assessment of labour market performance based solely on aggregate employment and unemployment does not provide sufficient information on fundamental characteristics of jobs quality. In this section, we looked at how the EU funds have dealt with estimating and measuring job creation and job quality.

Overall, the methodologies used for the estimates of job creation do not differ extensively from the ones used for job quality. A wide range of methods was used to assess the job creation effect of H2020, and employment effects of the ESF, YEI and EGF including econometric modelling, survey methods and counterfactual analysis. Measurements after the implementation has started or was completed are common to the four EU funds, while ex-ante estimates on job creation were provided only for H2020. Moreover, the H2020 interim evaluation presented a comparison of results with ex-ante estimates from the H2020 IA; although the comparison showed important differences, most of these are due to a change in the budget assumptions.

### 4.3. INDICATORS AND MEASURES USED

#### 4.3.1. Result indicators are used to capture job creation

The previous section showed that both quantitative and qualitative methods are in use to estimate and assess job creation. The documentation review has also identified specific indicators and measures that are used in practice. Absolute numbers are the primary indicators used in most cases. For example, to assess the job-creation effect of FP7/H2020, evaluations reported the absolute number and share of researchers who were hired during FP7/H2020 project and retained their positions in the beneficiary organisations after the project end. Result indicators are used to capture the employment effect of the ESF and YEI interventions, such as a number of unemployed (long-term unemployed or inactive) participants who received an offer of employment, or are in employment, including self-employment, upon leaving. Longer-term result indicators that measure ESF and YEI employment effect include participants in employment (including in self-employment) six months

[179] Muñoz de Bustillo et al. (2009)
[180] Arranz et al (2017)

after leaving the intervention. For the EGF, the employment effect is covered by the re-employment rate, which takes into account the number of workers assisted that have found an employment at the end of EGF measures and for whom the employment status was known. Data also differentiates between those who are employed or self-employed, and provides information on the re-employment rate 12 months after the intervention.

As described above, macro-econometric modelling-based indicators can be used to assess both direct and indirect job creation. The assessment of the Union Added Value, for instance, used two econometric modelling based indicators to estimate job-creation effect of FP7/H2020: (1) average employment gain triggered by FP between 2014 and 2030 (average annual change of total employment compared to its level in the reference scenario), with the distinction between high-skilled jobs and the remaining jobs; and (2) average annual employment gain in research (average annual change of total employment in research compared to its level in the reference scenario), with the distinction between the researcher jobs and other research-related jobs (e.g. technicians).

### 4.3.2. Indicators provide only limited observations on dimensions of job quality

The review of documentation presented in Chapter 3 showed that the EU funds support job quality in different and mainly indirect ways. As consequence, the number of indicators and measures dealing with job quality aspect is rather limited.

In relation to H2020, it is worth noting that the direct job creation triggered by FP7/H2020 usually involved job creation among researchers and other research jobs (e.g. technicians), which can be considered as high-skilled jobs.[181] While high-skilled jobs clearly do not correspond to high-quality jobs, there is evidence[182] that the jobs traditionally recognised to be of high quality and score highly in the indicators of skills. On the other hand, there is also evidence that researchers and higher education staff report worse well-being than those in other types of employment and find their jobs stressful, with PhD students facing similar challenges, and job security was a key issue, particularly for early-career researchers often employed on successive short-term contracts.[183]

The beneficiary survey undertaken for the purpose of the ex-post evaluation of the EGF contains measurements of the quality of the jobs beneficiaries found after the EGF support.[184] Indicators used were the type of the contract in terms of full-time/part-time and temporary/permanent contracts. Further indicators were the total pay of the new job, the match between skills and role, training and support provided, work–life balance and overall satisfaction. Beneficiaries could indicate for these categories whether they felt that their new job was far better, better, the same, worse or far worse.[185]

With regards to the YEI, based on Article 19(4) of the Regulation, the annual implementation and progress reports have to assess the quality of job offers received by YEI participants, including specific target groups reached – yet similar provisions are missing for the ESF.[186] The guidance on evaluation

[181] Low skilled jobs correspond to ISCED levels 0–4 (i.e. all non-tertiary education according to ISCED 1997 levels of education); high-skilled jobs correspond to ISCED level 5–6 (i.e. tertiary education according to ISCED 1997 levels of education).
[182] Eurofound (2016)
[183] Guthrie et al. (2017)
[184] ICF (2015b)
[185] ICF (2015b)
[186] European Parliament & Council of the European Union (2013b)

of the YEI[187] takes into account various criteria to describe a 'quality' offer. Most importantly, an evaluation must take into account 'characteristics of the employment offer, the relevance to the participant needs and the labour market outcomes produced by the offer after a certain period of time'. Given that the regional/national context should be considered, it is suggested to agree on the final concept of a quality offer at the national level. As consequence, MS focused and measured different aspects of the quality offer to unemployed young people. While most MS looked at the job prospects (mainly job security) and intrinsic job quality (mainly skills use, experience and education), fewer MS measured earnings and working time quality (see Annex G for detailed information).

Table 9 below summarises the indicators and measures used by H2020, the ESF, YEI and EGF, against the job quality dimensions used by Eurofound. In particular, it shows which dimensions of the Eurofound definition of job quality have been addressed by the four EU funds included in this analysis. Some of the dimensions may be easier to quantify and measure (as in the case of the type of contract and the salary); on the other hand, intrinsic work quality (such as aspects of social and physical working environment) may be more challenging to measure. In line with the design and the scope of the EU funds, the skills dimension appears to be the one of the main focus.

**Table 9: Job quality indicators in the EU funding programmes**

| Eurofound job quality dimensions | | H2020 | ESF | YEI | EGF |
|---|---|---|---|---|---|
|  | **Earnings** | | Earnings | Salary | Pay |
|  | **Prospects** | | Type of contract | Job security | Contract |
|  | **Intrinsic job quality** | Skills | Skills use | Skills use | Skills and training |
|  | **Working time quality** | | Working conditions Shift work | | Work–life balance |

**Source**: RAND Europe

The indicators used in the context of the EU funds and the insights on some dimensions of job quality they provide should be viewed alongside wider attempts to capture aspects of a job associated with or affecting well-being. We present these in the section below.

### 4.3.3. A wide range of approaches have been proposed to measure job quality

The challenges in measuring job quality have led to the development of different proposals for indicators and systems of indicators. These proposals came from a wide range of actors, from international organisations such as the ILO and the OECD, to trade unions and academics. The different proposals also vary widely in terms of scope, dimensions considered in the analysis, variables used to measure such dimensions, as well as how these measures can be used. Table 10 below summarises the reviewed approaches to the measurement of job quality.

[187] European Commission (2015a)

**Table 10: Review of job quality indicators**

| Indicator | Earnings | Prospects | Intrinsic job quality | Working time quality | Other | Databases | Source / Author |
|---|---|---|---|---|---|---|---|
| Laeken indicators of job quality | | · Flexibility and security<br>· Career development | · Intrinsic job quality<br>· Health & safety<br>· Lifelong learning<br>· Social dialogue | · Work organisation and work–life balance | · Gender equality<br>· Inclusion and access to labour market<br>· Non-discrimination<br>· Overall economic performance | ECHP, ELFS, SILC | European Commission (2001; 2008) |
| Good and Bad Jobs Index | · Labour income | · Opportunities of advancement | · Opportunities of improving skills | · Autonomy at work | · Social benefits<br>· Interest of the job | ILO survey | Ritter et al. (2002) |
| Quality of Employment Indicators | | · Career and employment security | · Skills development<br>· Health and well-being | · Reconciliation<br>· Satisfaction with working conditions | | EWCS | Brisbois (2003) |
| Decent Work Indicators | · Adequate Earnings | · Employment opportunities<br>· Stability and security of work | · Social dialogue and workplace relations<br>· Safe work | · Balancing work and family life<br>· Decent hours | · Unacceptable work<br>· Productive work<br>· Fair treatment in employment<br>· Social protection<br>· Socio-economic context | ILO databases | Various ILO Authors (2003-2013) |
| Good Jobs Index | · Salary | · Employment<br>· Social security | | | · Equal opportunities<br>· Labour rights | ILO databases | Avirgan et al. (2005) |
| Austrian Work Climate Index | | | | · Job satisfaction and conditions | · Society<br>· Company expectations | IFES omnibus survey | Preinfalk et al. (2006) |
| Indicators of | · Wage and | · Job security | · Health and safety | · Work–life balance | · Access to labour | Spanish | Caprile et al. |

| Indicator | Earnings | Prospects | Intrinsic job quality | Working time quality | Other | Databases | Source / Author |
|---|---|---|---|---|---|---|---|
| Quality of the Labour Market | income | | | | · Labour segmentation<br>· Work satisfaction<br>· Social protection | national statistics | (2006) Toharia et al. (2008) |
| Tangian's proposal | | · Career prospects/training | · Physical work environment<br>· Health<br>· Collectivity<br>· Social environment | · Work-life balance<br>· Stress-inducing factors<br>· Time factors<br>· Independence | | EWCS | Tangian (2007, 2009) |
| The European Job Quality Index by ETUI | · Wages | · Non-standard forms of employment<br>· Job security | · Access to training and career<br>· Development | · Working time and work–life balance<br>· Working conditions | · Collective interest representation | ELFS, EWCS, SILC, AMECO, ICTWSS | Leschke et al. (2008 and SS) & Piasna (2018) |
| Subjective Quality of Working Life Index | · Remuneration | · Security | · Relationships | · Time<br>· Conditions | · Social realisation | Ad hoc survey | Vinopal (2009) |
| DGB Good Work Index | · Income | · Job security | · Resources | · Workload and stress | | Ad hoc survey | Mußmann (2009) |
| Quality of Work in Flanders | | · Physical working conditions<br>· Social support | · Skills<br>· Learning opportunities<br>· Well-being | · Autonomy<br>· Work–life balance<br>· Workload | · Emotional load<br>· Stress | Ad hoc survey | Flanders Social and Economic Council (2009) |
| EMCO's job quality measure | · Adequate earnings | · Job and career security<br>· Employability | · Skills<br>· Development<br>· Health and safety at | · Work–life balance<br>· Work intensity<br>· Autonomy | · Collective interest representation<br>· Gender balance | EU statistics | EMCO (2010) |

| Indicator | Earnings | Prospects | Intrinsic job quality | Working time quality | Other | Databases | Source / Author |
|---|---|---|---|---|---|---|---|
| | | | work | | | | |
| UNECE | · Income | · Employment security and social protection<br>· Safety | · Skills development and training<br>· Workplace conditions and motivation | · Working hours<br>· Balancing work and non-work life | · Monetary benefits<br>· Ethics | | UNECE (2010) |
| Indicator of job quality in the EU | · Salary and payments | · Employment quality (contract and development) | · Intrinsic job quality (skills and autonomy)<br>· Health and safety | · Working time and work–life balance | | EWCS | Muñoz de Bustillo et al. (2009 and SS) |
| Weighted Job Quality Measure | · Wages and payment system | · Security and flexibility | · Skills and development | · Work organisation | · Collective representation and voice | EWCS | Holman and McClelland (2011); Holman et al. (2013–2015) |
| Measures of job quality | | | · Skills | · Autonomy | · Work effort | EWCS | Oinas et al. (2012) |
| Job quality indices | · Earnings | · Prospects | · Skills use and discretion<br>· Physical environment<br>· Social environment | · Work intensity<br>· Working time quality | | EWCS | Green et al. (2012) |
| Quality of work indicator | | · Employment conditions<br>· Social relations | | · Working conditions | · Job content | EWCS | Vandenbrande et al. (2013) |
| Summary indicator of job | | | · Complexity of tasks<br>· Assistance from | · Intensity of work<br>· Job autonomy | | EWCS | Cottini et al. (2013) |

| Indicator | Earnings | Prospects | Intrinsic job quality | Working time quality | Other | Databases | Source / Author |
|---|---|---|---|---|---|---|---|
| quality | | | colleagues<br>· Physical hazards | · Shift work and working hours | | | |
| Quality of work and employment | | · Socio-economic security | · Training and learning<br>· Health and safety | · Working time<br>· Work organisation | · Rights and fairness | EWCS | Peña-Casas et al. (2013) |
| Job quality | · Pay | · Promotion prospects<br>· Job security | · Learning<br>· Health<br>· Interpersonal relations | · Work–life balance<br>· Autonomy<br>· Work conditions<br>· Intensity of work | · Intrinsic rewards | EWCS | Simões et al. (2015) |
| Employment quality concept | · Material rewards | · Employment stability<br>· Employability opportunities | · Trainings<br>· Interpersonal power relations | · Working time arrangements | · Workers' rights and social protection<br>· Collective organisation | EWCS | Van Aerden et al. (2015) |
| OECD's Job Quality Framework | · Earnings quality | · Labour market security | · Quality of working environment | | · | OECD Job Quality database | Cazes et al (2015) |
| Composite indicator of job quality | · Wage | · Stability<br>· Career opportunities | · Skill match<br>· Responsibility | · Work–life balance | · Teamwork | Ad hoc survey | Boccuzzo et al. (2017) |
| Job quality indicators | · Salary | · Contracts<br>· Career opportunities | · Social relations | · Work (task autonomy and complexity) | · | EWCS | Greenan et al. (2017) |
| Employment Quality index | | | · Working conditions<br>· Skills and training | · Work–life balance | · | LFS | Arranz et al. (2017) |

**Source:** RAND Europe

There exists a big variation in the number of dimensions within an index. Some of the more recent proposed indices are composite measures of three to four dimensions or more than eight dimensions and use many variables within each dimension. For instance, an index can be based on three dimensions: economic, professional and the work–life balance,[188] or a composite measure of eight dimensions measured by using 38 variables of work and employment-related factors.[189] According to a study by Holman and McClelland[190] some of the existing indices include dimensions that are not properties of the job but rather properties of the organisation (e.g. gender balance), the labour market (e.g. the level of social protection or unemployment rate), or elements of the job at the individual level (e.g. physical or psychological well-being).

Furthermore, it is not well established which dimensions of job quality are more important than others. Traditionally, the labour focus was on the wage aspects of job quality. The newly developed indices put less emphasis on the salary or choose to leave it out entirely.[191] Non-wage features that are emphasised as important are employment stability,[192] the possibility to develop and use skills at work,[193] to what extent the job promotes valued outcomes for the employee[194] and the type of a contract[195]. Some studies choose to look at each sub-index separately or specify more than one index for assessing job quality. For example, Green and co-authors[196] look at an earnings index, a working time quality index, a prospects index and an intrinsic job quality index.

The diversity of indicators or indices does not end with the selection of dimensions to be examined. The question is also about how they can be quantified. Quantifying key quality dimensions can include objective and subjective assessments; while some authors derived weights from subjective judgements, others used criterion-based approach.[197] Again, different approaches have been used. Many indicators are based on survey or interview data, such as the EWCS and European Company Survey (ECS) that uses self-reported and subjective measures of quality from the personal perspective of the worker.[198] The EWCS is considered to be the most complete source of information on job quality[199] and as a matter of fact it appears to be the main source for constructing indicators of job quality in the EU. Jones[200] discusses the limitations of the overuse of subjective measures and, according to the study, it is important to use objective assessment in particular when measuring key dimension in the index. For example, if according to the objective measures the paid salary is lower than the minimum living wage or the health and safety measures are not in place then that job will be of low quality regardless of the subjective perception. To a great extent, the measuring challenges are linked to data availability. The specification of the index is very often tailored to the available data. For example, Arranz and co-authors[201] when using objective measures omit intrinsic quality of work and health and safety as dimensions due to lack of such data in the Labour Force Survey. Muñoz-de-

[188] Boccuzzo & Maron (2017)
[189]Holman (2013)
[190] Holman & McClelland (2011)
[191] Fernández-Macías et al. (2014)
[192] Van Aerden et al. (2015)
[193] Oinas et al. (2012)
[194] Holman & McClelland (2011)
[195] Arranz (2017)
[196] Green & Mostafa (2012a)
[197] Holman & McClelland (2011)
[198] Green & Mostafa (2012b); Cottini & Lucifora (2013); Leschke et al. (2012); Van Aerden et al. (2016)
[199] Simões et al. (2015)
[200] Jones et al. (2017)
[201] Arranz et al. (2017)

Bustillo,[202] for instance, tailors the specification of their four-dimensional index to the information available in the ECS.

Lastly, there are perspective challenges in measuring job quality. Some indicators are developed at the level of an individual, while others are measured at an aggregate level. For example, the Laeken indicators are constructed at a country level, while the EWCS at the individual level.[203] However, the indicator can capture heterogeneous trends for specific groups or industries only if measured at individual level and then aggregated to the sub-industry or industry level. From a policy point of view, it is often necessary to look not only at averages, but at the distributional quality of jobs. In light of exploring the extent to which certain workers', jobs' or firms' characteristics determine job quality, it is important to have individual level data. Also, it is important to be aware of changes in the labour market as in the composition of the workforce and jobs when looking at job quality indicators over time. The evolution of job quality is linked to the composition of the workforce and jobs.[204] As explained in Chapter 2, for the purpose of this study, we use the Eurofound 2016 definition, which includes seven job quality indices: physical environment, work intensity, working time quality, social environment, skills and discretion, prospects, and earnings. Earnings, prospects, skills and discretion, working time quality, and work intensity are covered are somehow covered by almost all the indicators reviewed in a wider literature. Physical environment and social environment seem to be covered less extensively.

#### 4.3.4. Summary

We identified some specific indicators and measures that are used in practice to measure and estimate job creation and job quality, both in the context of the EU funds and in academic literature more broadly.

For job creation, absolute numbers are the most common indicators, measuring for example the number of people who received a job offer or found a job (the ESF, YEI, EGF). For H2020 also some macro-econometric modelling-based indicators were proposed.

Job quality indicators used in the EU funds studies and evaluations focused on the dimensions that are easier to capture and directly measurable. These include job prospects (such as job security, i.e. the type of contract) and earnings (the salary). They most often relied on self-reported and subjective assessments of beneficiaries of the support, be it from H2020, the ESF, YEI or EGF.

Some methodological aspects are common to almost all recent frameworks to capture job quality, in primis to look at job quality as a multidimensional concept. On the other hand, there is a great variation in the number of dimensions within different indexes. The main source for the calculation of job quality indicators at the EU level is the EWCS. Given the diversity of indicators and indices available more widely, existing attempts to capture job quality in the EU funds can be considered as modest at best.

[202] Muñoz de Bustillo et al. (2017)
[203] Muñoz de Bustillo et al. (2011)
[204] Arranz et al. (2017)

## 4.4. THE EFFICIENCY OF THE EU INSTRUMENTS IN HIGH-QUALITY JOB CREATION IS YET TO BE FULLY ASSESSED

This last section deals with the question of assessing the efficiency of the EU funds. In a nutshell, efficiency considers the relationship between the resources used by an intervention and the changes generated by the intervention. A complete assessment of efficiency in all its aspects, such as cost-effectiveness or cost-benefit analysis, is out of the scope of this study. Our focus is instead on reviewing which methodologies and indicators have been used for assessing the efficiency of the EU funds, and which are their main challenges in relation to the efficiency in job creation.

When assessing employment effects, efficiency deals with 'the relationship between financial inputs and employment outputs, i.e. cost per job and value for money'.[205] Assessing the efficiency means therefore assessing the extent to which the employment outcomes were achieved at a reasonable cost given the level of the financial resources made available by the funds:

> an evaluation is needed of whether the same financial inputs could have had led to even greater employment effects or, conversely, whether the same effects could have been achieved with reduced financial inputs (value-for-money).[206]

The starting point is to calculate the cost per job and to then to compare the results with internal benchmarks (e.g. other priorities) or external benchmarks (e.g. similar programmes). However, any benchmarks for the cost per job should be treated with caution, as no two interventions or the circumstances in which they take place are exactly the same.

The challenges described for measuring and estimating job creation and job quality, reflects directly on the possibility to measure the efficiency of the EU funding programmes in employment effects. In particular, the difficulties in aggregating and comparing national data originating from different and often incomparable data sources hamper any comprehensive and reliable assessment of the efficiency at EU level. Moreover, since projects and programmes are very specific to the labour market context, there is limited availability of cases suited for comparison that could shed some light on the efficiency.

A representative from the EU institutions warned against the risks of measuring efficiency and presenting comparison between projects, programmes or beneficiaries. There is the risk of providing a perverse incentive to the beneficiaries of the funds that would opt for the initiatives that guarantee the best level of efficiency, particularly cost-efficiency. For instance, in the case of the ESF beneficiary, organisations may focus their interventions on participants 'close to the labour market', which is less costly and provides better results than addressing disadvantaged people 'far from the labour market'.

Chapter 2 and 3 showed that the EU funds have limited scope to address job creation directly and that any claims about their effectiveness in bringing people to employment are hampered by the lack of data and the lack of robust CIEs. As consequence, the assessment of efficiency has mainly focused on assessing the efficiency of programme management and implementation processes. Nevertheless, some relevant information can be found for H2020, the ESF and EGF.

[205] European Commission (2007b)
[206] European Commission (2007b)

With regards to H2020, the estimated job creation was reported to represent a good overall value for money, as the EU FPs contributed to about 15% of the total increase in research jobs in Europe during 2007–2015 with about 10% of the total research funding in the EU.[207] Based on macro-economic projections, H2020 is expected to be as cost-effective as FP7 and comparable to the cost-effectiveness of public spending in research.[208] However, currently the administrative system of H2020 does not collect any robust data, which would allow regular tracking of job creation effects of the programme and consequently to assess more specifically efficiency in job creation.

For the ESF, efficiency of interventions can be assessed by: (1) comparing the cost per participation; (2) comparing the cost per type of result achieved; or (3) comparing the cost of different types of interventions across ESF priorities. According to the ex-post evaluation, the average cost per participation for all interventions across the EU-28 was EUR 897.[209] The study showed that interventions in the field of human capital were less expensive (EUR 681 per participation) compared to those targeting more vulnerable groups (access to employment interventions cost on average EUR 1,113 per participation and social inclusion actions EUR 1,763 per participation). Costs per result ranged between EUR 401 (quality of school education), EUR 3,548 (employed) and EUR 8,340 (upskilling of adults) pointing to a link between the average costs of results achieved and the intensity of the support received.[210]

For the EGF, the EC's ex-post evaluation[211] indicators used for the evaluation of efficiency are the total cost per assisted worker, total cost per re-employed worker, and the comparisons of the costs of EGF cases with similar programmes and/or active labour market policy measures. The cost per re-employment represents a very useful measure of how efficient the fund is in providing assistance that eventually leads to beneficiaries finding a new job. The 2007-2013 ex-post evaluation finds no clear trend in the relation between the level of expenditure and the re-employment rates. Furthermore, the evaluation does not find a clear trend between the level of expenditure for a specific measure and the re-employment rate, and no correlation could be detected between re-employment rates and financial resources allocated to cases.[212] The evaluation concludes that other factors, such as education and skill profiles of beneficiaries, economic performance of the affected region, and responsiveness of measures with needs of beneficiaries have a greater impact on re-employment rates.[213] Overall, it is methodologically difficult to single out the intervention of the EGF as a factor in the re-employment of beneficiaries, as other factors, such as the labour market situation, the level of skills of assisted beneficiaries and other support affect the outcome in practice.

Overall, because of the underlying differences between the EU funds, comparing relative efficiency (regardless of the indicators used) does not seem suitable. However, the cost per job can be used to assess cost-efficiency and value for money within each of the EU funds. For such assessments robust evidence on the effects of the interventions is critical. However, as shown in previous sections, the availability of such evidence is still problematic.

[207] PPMI (2017)
[208] European Commission (2017d)
[209] Panteia (2016)
[210] Panteia (2016)
[211] ICF (2015b)
[212] ICF (2015b)
[213] ICF (2016b)

A last general point related to efficiency is worth noting. Although the EU funds may be proved to be efficient, it is also crucial that they provide EU added value. EU financing should not replace national expenditure. For the YEI, studies signalled that various MS used the YEI funding to finance already existing measures to combat youth unemployment that were already showing positive results.[214] It also resulted in less innovative approaches that struggled to reach the targeted groups and identify the NEETs. According to the ECA, it was difficult to evaluate 'the added value of the YEI funds in providing assistance to the NEETs when the OPs only partly substantiate the allocation of the funds available'.[215] It was also difficult to measure how the YEI funding contributed to the reduction of youth unemployment in Europe since 2013, given that it was not possible to distinguish the effect of the YEI from economic and structural changes as labour market reforms. In the case of the EGF, a 2013 report from the ECA showed that:

> The EGF delivered EU added value when used to co-finance services for redundant workers or allowances not ordinarily existing under Member States' unemployment benefit systems. However, in all the audited cases, the Court identified measures to provide workers with income support, which would have been paid by the Member States anyway. [216]

[214] Ecorys & PPMI (2016)
[215] European Court of Auditors (2017)
[216] European Court of Auditors (2013)

# 5. LESSONS, CONCLUSIONS AND RECOMMENDATIONS

**RESEARCH QUESTIONS ADDRESSED IN THIS CHAPTER**

- **RQ4:** What characteristics can be considered key to success in terms of quality and number of jobs created?
- **RQ5:** What recommendations could be made for the improvement of these instruments?

**KEY FINDINGS**

- The involvement of private companies (especially SMEs) was a key success factor in job creation in FP7/H2020. To further improve job creation and make these effects more equally distributed across the EU, future research and innovation programmes should aim to strengthen the participation of EU-13 beneficiaries where the growth and employment benefits have been more limited so far.
- The ability of the ESF to intervene from early childhood education until retirement is a unique and key characteristic of the fund in helping people find and keep their jobs. Yet, target setting in relation to employment effectiveness (and quality jobs) of ESF programmes should be considered with care as this bears the risks of 'creaming' and leaving those who most need the support without it.
- Indicators broken down by gender and corresponding reporting requirements of the ESF form a good practice that can and should be applied across all European funds and programmes. Similarly, efforts to conduct (more) CIEs should be commendable to other funds.
- A key success feature of the EGF (and to some extent the YEI) in terms of employment outcomes is its flexibility with regard to its intervention as well as with regard to the measures provided to beneficiaries.

This chapter comprises two sections. The first section presents lessons learned from the review of EU funds, their key characteristics and suggestions for improvements of the remaining funds (5.1). The second section outlines conclusions and brings to the fore key findings these are based on and, where appropriate, it formulates overall recommendations of our study (5.2).

## 5.1. LESSONS LEARNED

The available evidence showed that larger proportions of researchers employed by SMEs remained in their teams after the end of the projects compared to not-for-profit research organisations and public or government sector organisations. Similarly, an average number of jobs created per organisation was higher for SMEs then for higher education institutions and research organisations. Hence, the involvement of private companies (especially SMEs) should be considered as one of the key success factors in job creation in FP7/H2020.

The evidence also suggests that due to the labour productivity gains triggered by innovations, significant impact of the EU funding for research on national employment are only possible when the GDP gains reach an important level. To further improve job creation and make these effects more equally distributed across the EU, future programmes should aim to strengthen the participation of EU-13 beneficiaries. However, the lessons from FP7/H2020 cannot be automatically transferred to

other programmes, unless they focus on research funding, involve support for inter-sectoral mobility of researchers, development of innovative start-ups, innovation development, etc.

Currently the administrative system of H2020 does not collect any robust data which would allow regular tracking of the job creation effects of the programme. To facilitate and make more regular the measurement of job creation in H2020 and successor programmes it would be necessary to register additional information (e.g. contact details of the department within organization involved in the project, size of the team involved in the project). For private companies participating in H2020 projects it would be useful to collect information on their unique identification numbers (e.g. VAT number), which would then allow the matching of information with other databases. All these changes in the official monitoring system could facilitate the regular measurement and tracking of job creation effects within H2020. Yet, this could also add to administrative burdens and would be difficult to implement in the context of the shared management systems characteristic of the ESF and YEI.

The ability of the ESF to intervene from the early stages and throughout the journeys people take through their education system and labour market should be viewed a key characteristic of the fund in helping people find and keep their jobs. However, this feature is unique to the ESF and not transferable to other EU funds due to their complementary natures.

Another important lesson relates to target setting in relation to employment effectiveness of ESF programmes. There is some evidence of cherry-picking and supporting participants who were closer to the labour market (see Section 3.2.2) where such targets were introduced. While the improvement of the effectiveness of ESF implementation is understandable and desirable, it should not lead to leaving those who most need the support without it. Similar logic applies to employment quality: if the ESF was to support more quality jobs, there is a risk that it would focus on people who are closer to the labour market, while the fund aims to help those who are most vulnerable.

Monitoring indicators that are broken down by gender and corresponding reporting requirements of the ESF form a good practice that can and should be applied across all European funds and programmes, not just those falling under the portfolio of Directorate-General for Employment, Social Affairs and Inclusion (DG EMPL).

Similarly, efforts dedicated to promoting and building capacity for CIEs of ESF interventions should be commendable to other funds, especially those falling under direct management of the EC, where planning and conducting such studies at the EU level should be easier than for funds where the management responsibilities are shared between the EC and MS.

A key success feature of the EGF in terms of employment outcomes is its flexibility with regard to its intervention as well as with regards to the measures provided to beneficiaries. This, to some extent, has been shared by the YEI. Considering changing socio-economic situations over the seven-year period, the possibility of adapting the orientation and scope of interventions to changing needs of beneficiaries and changing social and political priorities seems an important characteristic to bear in mind.

## 5.2. OVERALL CONCLUSIONS AND RECOMMENDATIONS

**Conclusion 1: The EU funds can support job creation and job quality in diverse ways**

The review of the founding regulations showed that the EU funds can support job creation and job quality in different and mainly indirect ways. The objectives of H2020 seem to place more emphasis on growth (and thus on job creation), while the abilities of the ESF, YEI and EGF to create jobs are much more limited compared to funds investing in infrastructure, research and development (and are contained to self-employment and business start-ups). The ESF explicitly supports promoting sustainable and quality employment, and the YEI aims to provide a good-quality offer of employment, apprenticeship, further education or training to young persons within four months of becoming unemployed or of leaving formal education. However, the EGF seems to prioritise re-employment (including self-employment) of workers made redundant over considerations on the quality of their new employment.

**Recommendation 1: The concept of job quality could be better embedded in the founding regulations of the EU funds**

Job quality should not be overlooked within the EU funds and policy efforts need to consider it in conjunction with efforts to increase employment rates and investment. This may need to take into account different socio-economic contexts and phases of an economic cycle that countries and regions are at; during an economic crisis or slowdown job creation may seem to take a precedent, while when the situation improves, job quality finds its way back to the agenda. It is important to find the right balance between the quantity and quality of jobs and reflect this in the founding regulations. There are different options, depending on the level of ambition, that should be discussed and agreed with key stakeholders:

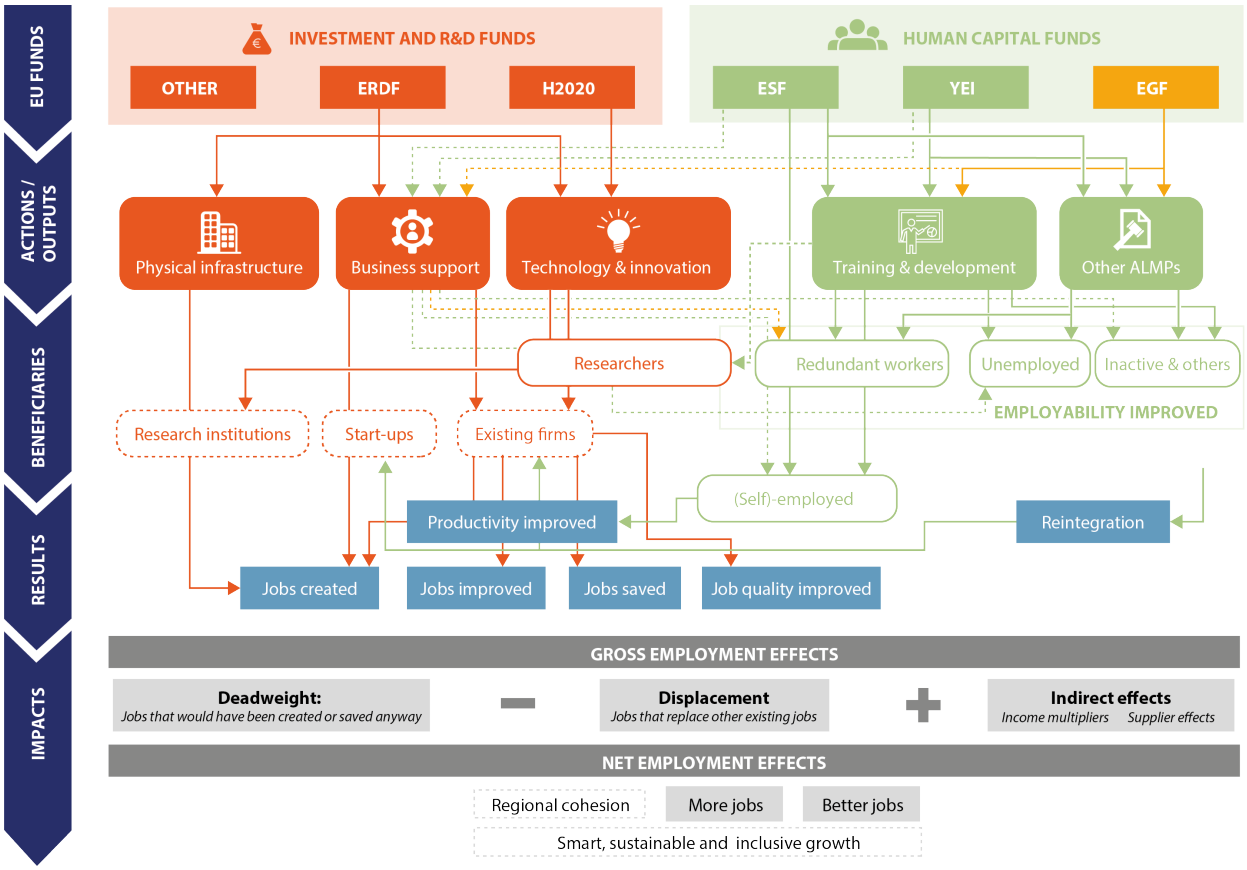
- Low: Acknowledge the importance of employment/job quality in the founding regulations and encourage examining these aspects against the evaluation criteria, such as relevance, effectiveness, efficiency, etc.
- Moderate: Emphasise the importance of employment/job quality in the founding regulations and provide non-binding but detailed guidelines and recommendations for fund/programme managers on how to assess employment/job quality and what dimensions to focus when doing so.
- High: Introduce provisions similar to those on the quality of job offer in the YEI that require periodic assessments and reporting in relation to employment/job quality.

**Conclusion 2: The evidence on job creation varies between the EU funds with the strongest data provided by H2020**

Of the four analysed instruments, only H2020 can demonstrate substantial job creation effects and strong evidence behind these. This reflects the very different character and purpose of the EU funds in question and it should be remembered that H2020 targets a very specific group (highly educated people), while other funds have different and much more vulnerable populations. We reiterate that the ERDF and CF may form better comparators for H2020.

The fundamental question is whether all funds should indeed aim to create jobs, or rather if their complementarity and synergies could be better explored. The EU funds follow the rules and can support what is included in their founding regulations. However, a high-level intervention logic model, where the contribution of different types of funds to EU overall objectives would be illustrated, would be helpful. Figure 7 attempts to illustrate the basic elements of such a model.

**Figure 7: Basic logic model of EU funds and jobs**




**Source:** RAND Europe based on European Commission (2017d, 2007b), ICF (2016b)

The main limitation of the ESF, YEI and EGF so far has not been the fact they do not create jobs (because they are not designed to and cannot do it), but that any claims about their effectiveness in bringing people (back) to employment are troubled by the lack of robust CIEs that can eliminate other factors explaining the changes observed among programme participants. This is not to say that such evaluations do not exist but as we have shown they are few of these at the EU level.

**Recommendation 2: The feasibility of EU-level counterfactual evaluations or meta-reviews of CIE studies carried out at national and regional levels could be further explored and exploited**

The examples of ESF studies, such as the JRC pilot projects, show that capacity building and data access are needed to fully exploit the potential of CIE methodologies. Given the possible breadth and depth of evidence at the national level, the EU could also consider conducting a review and a synthesis of such evidence in a more systematic way that it was possible in this study.

**Conclusion 3: Measuring job creation and job quality still comes with challenges**

Job creation and job quality are very difficult to measure and assess for many reasons. First, there is a lack of available, accurate and relevant data. Second, exogenous factors such as the economic context and individual factors (e.g. motivation of the unemployed) make very difficult to isolate the effects of a single policy action. Third, the traditional assessment of labour market performance based solely on aggregate employment and unemployment does not provide sufficient information on fundamental characteristics of job quality. Lastly, while it appears to be an agreement on the most relevant job quality dimensions to measure, there is still no agreed measurement framework or

system of indicators in the context of the EU funds and existing attempts to capture job quality in the EU funds have been rather modest.

**Conclusion 4: Evidence on job quality across the EU funds is very limited and incomparable at the moment**

The evidence on job quality across the EU funds is inconsistent. Firstly, the information is unevenly available between the EU-level studies and national evaluations; for H2020 and the EGF the evidence comes directly from EU-level studies, while for the ESF and the YEI, it is more likely to be found at the national level. To some extent this related to the way the funds are managed and evaluated. Where the EC remains in charge, the evidence is more readily available at the EU level. When these responsibilities are shared between the EC and MS, data might be available at the national level but they are not easily synthesised across the EU. The ESF and YEI illustrate this well.

Secondly, the available data focus on various (and often different) aspects of job quality and draw on different definitions (e.g. of a good quality offer), methodologies (from simple participants' feedback questionnaires, through to longitudinal panel studies or CIEs) and indicators (e.g. perceptions on 'fairness' of remuneration or objective measures of declared salary levels). For these reasons, comparing the evidence across the EU funds is impractical. However, we can identify features and characteristics that are often shared between the EU funds if and when they explore aspects related to job quality. Most commonly, the evidence addresses issues of job prospects, such as job security, career progression or contract quality, and earnings. Often, the measures rely on self-assessments and perceptions of programme participants.

Thirdly, the YEI has a potential to provide much more insights into job quality than other funds (the ESF, EGF or H2020). This is due to the provisions that require MS to assess and report on the quality of the offers for YEI participants.

**Conclusion 5: The EU funds have limited mechanisms in place to capture high-quality job creation**

Despite the described challenges, there are have been some attempts to measure job creation and job quality at the level of H2020, ESF, YEI and EGF. Monitoring systems and evaluations report very little information on job quality. Instead, a wide range of methods and methodologies was used, including econometric modelling, analysis of collected data, qualitative methods as surveys and interviews, and counterfactual analysis. Ex-post measurements are common to the four EU funds, while ex-ante estimates on job creation were provided only for the H2020. The documentation review has also identified some specific indicators and measures that are used in practice to measure and estimate job creation and job quality, as part of the EU funds.

**Recommendation 3: There could be more consistency in terms of dimensions of job quality explored across the EU funds**

There is still no established standard in the EU of what constitutes job quality and how it should be measured. European and international frameworks have been proposed, but while there is some agreement on the job quality dimensions to include, the views on how to measure and aggregate them are much more diverse. Eurofound provides a solid definition of job quality in all its multiple dimensions. However, such framework relies on the data collected by the EWCS, which present a number of limitations starting from the fact the data are only collected every five years.

This study only scratched the surface of national and regional level evidence on job quality in the EU funds, in particular in relation to the ESF. The EC could carry out an exercise to systematically map and collate existing data and evidence and assess what is practical to collect in future. The YEI reports on the quality of the offer expected in 2019 might provide a good opportunity to do so, but extending this exercise to the ESF (and national evaluations that voluntary embarked on job quality) would offer additional insights.

As there is no common approach to measure job quality, having a more operational approach for the EU funds could be beneficial. The framework could include the dimensions to measure, as well the specific indicators and data to use. While the scope of such a framework would be most likely more modest compared to the Eurofound model, it could provide a first step to more systematic and comparable assessments of job quality in the context of the EU funds.

**Recommendation 4: Further efforts are needed to address current data limitations**

An analysis for assessing the efficiency of EU budget instruments aiming to create high-quality jobs is inevitably constrained by data limitations. A solution to the problem is the use of a mixed methods research approach, pairing up empirical quantitative analysis with qualitative assessments of policy changes, ideally in a manner that is comparable across countries. Existing documentation and data sources provide useful but limited information. Further efforts are necessary to systematically collect data and information on all the dimensions of job quality. Reporting mechanisms could be designed to ensure that additional data and information are systematically collected. Timely, accurate and reliable data is key to evaluate policy measures and to foster the exchange of practices among the EU funds.

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# ANNEX A: CONCEPTUAL FRAMEWORK

## Conceptual framework for the study

| Key question / task | Sub-questions | How we will address these in the study | WP |
|---|---|---|---|
| 1. What is the evidence for high-quality job creation of the following EU instruments: H2020, ESF, YEI and EGF? | • How do the EU programmes support job creation and job quality? For example, the EU funds might help: (1) create high-quality jobs;, (2) improve quality of existing jobs; and (3) workers move from poorer to better quality jobs.<br>• What is the evidence for the EU programmes being successful in high-level job creation?<br>• Is there any evidence of type of interventions being more effective than others? For example, R&D investments might be more effective in creating high-quality jobs, but employee training or investments in health and safety may be effective in improving quality of existing jobs. | • For each programme, document review/analysis of:<br>– Founding regulation and scope of support for job creation and job quality<br>– EU-level evaluations and IAs – evidence for high-quality job creation<br>– Selected evaluations at the national or regional level – evidence for high-quality job creation<br>• Mapping key characteristics of the EU programmes to evidence of high-quality job creation | WP1, WP3, WP4 |
| 2. What indicators are best suited for assessing the efficiency of EU instruments aiming to create high-quality jobs? | • What indicators have been used in the literature?<br>• Which indicators have been used specifically at EU level and in the context of EU budget instruments aiming to create high-quality jobs?<br>• How can the efficiency of the EU programmes in high-quality job creation be measured/assessed? | • Refinement and agreement on the definition of 'high job quality'<br>• REA on:<br>– Indicators of job quality in the EU (update of the 2009 study)<br>– Job creation and job quality<br>• Review and synthesis of the evidence from the literature | WP1, WP2 |
| 3. Can expected quality and number of jobs created be measured or estimated ex-ante and if so, by what methods? | • How the EU programmes estimate/measure employment effect (job creation)?<br>• How do estimations of job creation compare before (IA) and after the implementation (ex-post evaluations)?<br>• How, if at all, is the quality of jobs created measured or estimated?<br>• Is there evidence on the share of high-quality jobs created by EU programmes? | • Documentation review (targeted review of selected IAs, evaluations, etc.)<br>• REA of relevant literature<br>• Comparison of the different estimation methods<br>• Comparison of results of ex-post evaluations with IAs for selected EU programmes | WP2 , WP1 |
| 4. What characteristics can be considered key to success in terms of quality and number of jobs created? | • How the number and the quality of jobs created depend on the characteristic of the type of funding?<br>• Could these characteristics be transferred to other EU programmes? For example, certain characteristics of EU funding might be more or less difficult to replicate, taking into consideration their different objectives, target audiences, management and implementation mechanisms. | • Interviews with stakeholders at the EU and MS level<br>• Compilation of examples of high-quality job creation<br>• Extrapolation of features ensuring high-quality job creation<br>• Internal validation workshop and triangulation of results | WP3, WP4, WP5 |
| 5. What recommendations could be made for the improvement of these instruments? | • What are the lessons learned on high-quality job creation from the EU programmes?<br>• How can the successful characteristics be integrated into other programmes? | • Interviews with stakeholders at the EU and MS level<br>• Internal validation workshop and triangulation of results<br>• Synthesis of evidence from WP1–4 | WP3, WP4. WP5 |

# ANNEX B: DOCUMENTATION REVIEW

## ROLE OF THE DOCUMENTATION REVIEW

This task aimed to collect and review documentation relating to the selected EU programmes (H2020, ESF, YEI and EGF – henceforth referred to as the EU funds) to understand if and how they can support high-quality job creation (or quality employment) and what evidence or estimates exists on their planned and actual impact on employment and job creation more broadly and on the creation of high-quality jobs in particular.

### Founding regulations for the scope of support for job creation and job quality

The review of the founding regulations provided an overview of if and how the EU funds can support job creation and job quality. It includes the regulations for the 2014–2020 period only:

- Regulation (EU) No 1291/2013 on H2020
- Regulation (EU) No 1304/2013 on the ESF
- Recommendation 2013/C 120/01 on the YG
- Regulation (EU) No 1309/2013 on the EGF.

If necessary, accompanying legislation and other documentation was reviewed as well, such as EU-level evaluations, IAs and studies.

As part of documentation review, we collected and reviewed four types of EU level documentation related to the EU funds:

- All EU-level ex-post evaluations of the EU funds for the 2007–2013 period, for example:
  - For H2020, these will include the FP7 ex-post evaluation(s)[217]
  - ESF ex-post evaluation synthesis, ESF ex-post evaluation studies on human capital (5 volumes), social inclusion (5 volumes), etc.
  - Ex-post evaluation of the EGF[218]
  - There is no such document for the YEI (since the initiative was introduced only in this programming period).
- All available interim evaluations of the EU funds for the 2014–2020 period, for example:
  - Interim evaluation of H2020[219,220]
  - ESF Performance and Thematic Reports 2014–2015 (on-going), if available
  - Study on the analysis of the first results of the implementation of the YEI and related ESF youth employment actions[221]
  - Mid-term evaluations of the EGF programme (on-going), if available.
- All IAs of the EU funds for the 2014–2020 period, for example:
  - H2020 IA[222]
  - ESF and EGF IA[223]

[217] https://ec.europa.eu/research/evaluations/index.cfm?pg=fp7
[218] http://ec.europa.eu/social/BlobServlet?docId=14371&langId=en
[219] https://ec.europa.eu/research/evaluations/pdf/book_interim_evaluation_horizon_2020.pdf#view=fit&pagemode=none
[220]http://ec.europa.eu/research/evaluations/pdf/archive/other_reports_studies_and_documents/assessment_of_the_union_added_value_and_the_economic_impact_of_the_eu_framework_programmes.pdf
[221] ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=7931
[222] http://ec.europa.eu/research/horizon2020/pdf/proposals/horizon_2020_impact_assessment_report.pdf
[223] http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52011SC1130&from=EN

    - There is no IA for the YEI.
- Selected (other EU-level) reports (e.g. by the EP, ECA, EESC, etc.) that include an assessment of the EU funds for the 2014–2020 period. The most relevant reports were selected relying on the expert knowledge of the EU funds and any pointers from the initial interviews.

### Selected evaluations and studies at the national or regional level, academic publications and other grey literature

These included evaluations and studies at national or regional levels, academic publications or grey literature that discussed the effectiveness of the EU funds in terms of job creation and job/employment quality. Given the limited resources within this project, we focused on a limited number of carefully selected publications. We identified possible publications drawing on:

- Expert knowledge of the research team members of available national or regional evaluations of the ESF, YEI and EGF interventions or academic literature on H2020 pertaining to the subject.
- Initial interviews: We asked for any pointers to websites/projects that would help illustrate how the EU funds support high-quality job creation.
- Additional targeted searches:
    - Advanced search on Google Scholar using the terms: ("Horizon 2020" AND "job creation" OR "job quality") between 2014 and 2018.
    - Search in national languages of up to five countries with the largest allocations/funding of the fund in question:
        - ESF: Italy, Poland, Germany, Spain, France[224]
        - YEI: Spain, Italy, France, Poland, UK[225]
        - EGF: Finland, Belgium, Germany, Greece, Sweden[226]
        - H2020: not applicable.

We drew on language skills of the research team (English, French, German, Italian, Lithuanian, Polish and Spanish) to review and synthesise relevant information.

### Selected internet sites dedicated to the assessment of EU funds or specific projects supporting high-quality job creation through the EU funds

Given the limited resources for this study, we focused on a limited number of Internet sites and projects (ensuring a good geographical balance). We identified possible internet sites drawing on:

- Expert knowledge of the research team members of websites dedicated to evaluations of the ESF, YEI and EGF interventions or academic literature on H2020 pertaining to the subject.
- Documentation review: EU-level reports and selected national and other studies (described above).
- Initial interviews: We asked for any pointers to websites/projects that would help illustrate how the EU funds support high-quality job creation.
- Additional targeted searches, for example:
    - RegioStars finalists search in the last two years for the ESF support (or equivalent competitions for other funds, e.g. Horizon Prizes) and 'quality jobs/employment'

[224] http://ec.europa.eu/esf/main.jsp?catId=443&langId=en
[225] http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/608688/EPRS_BRI%282017%29608688_EN.pdf
[226] European Commission (2017e)

- Google search and the following terms: 'YEI quality employment' or 'EGF new jobs'.

## STEPS IN UNDERTAKING THE DOCUMENTATION REVIEW

The steps included:

1) Identify relevant documents and sources
2) Store the documents and sources in the project folder
3) Review the documents and extract relevant information
4) Analyse data and synthesise findings using a reporting template.

# ANNEX C: RAPID EVIDENCE ASSESSMENT

## PURPOSE OF THE RAPID EVIDENCE ASSESMENT (REA)

The REA was conducted primarily to contribute to answering research questions 2 and 3. The REA largely focused on academic literature, as the documentation review covered grey EU literature (regulation, evaluation and IAs).

## SEARCH STRATEGY

A comprehensive review of job creation indicators was prepared for the EP in 2009.[227] In line with the proposed conceptual framework, the objective of the literature review was to collect available evidence in two distinct, yet related areas:

1) Indicators used to assess job quality in the EU (update of the 2009 study)
2) Measures and estimations of job creation and job quality present in the current literature (since 2009).

As part of the REA, we therefore also reviewed all the studies that referenced the 2009 study. A search in Google Scholar identified 62 articles citing the study. However, a quick scan through the results highlighted that only a few elaborated further on the 2009 study and presented new evidence, while the majority of the articles simply referenced the 2009 study. We reviewed only the studies which presented new evidence.

Below we provide an overview of the search strategy which was employed to search for relevant publications in academic databases. Searches were conducted in Google Scholar, Web of Science (WoS) and JSTOR.

Inclusion/exclusion criteria:

- Publication date: Published in 2010 or later
- Language: No limitation on language (although search terms kept in English only)
- Types of studies: No a priori limitation on method
- Types of sources: Master theses, dissertations, magazines and periodicals excluded
- Geographical scope: Only studies covering the EU (at least one MS) included
- Outcomes and outputs of interest: Only macroeconomic studies included

[227] Muñoz de Bustillo et al. (2009)

The REA used the following search strings.

"job quality" OR "work quality" OR "employment quality"
AND
"Europe"

| Search | Hits in Google Scholar[228] | Hits in WoS[229] | Hits in JSTOR[230] | Subtotal |
|---|---|---|---|---|
| "job quality" AND "Europe" | 36 | 25 | 10 | *71* |
| "work quality" AND "Europe" | 7 | 65 | 37 | *109* |
| "employment quality" AND "Europe" | 6 | 10 | 10 | *26* |
| Subtotal | *49* | *100* | *57* | *206* |

Searches were conducted limiting the scope to the abstract of publications available. For Google Scholar and WoS, we looked at the titles, while for JSTOR we looked in the abstracts. We used this combination in order to facilitate a manageable number of results while also sufficiently covering the most recent evidence on the topic. We removed duplicates that resulterd from similar searches in the same database and from the same search in different databases, as well as articles and studies that were already reviewed under WP1.

We compared each abstract against the inclusion inclusion/exclusion criteria mentioned above. We reviewed the abstract to understand whether the study provided evidence on the topics of interest, namely evidence for measuring and estimating job quality. If the abstract met these criteria, we reviewed the full study. The relevant content of the selected articles was then extracted in an Excel table, analysed and synthesised to provide evidence with regard to the research questions.

[228] All the words in the title. E.g. *allintitle: "job quality" Europe*
[229] All the words in the title. E.g. *TI=(job* quality AND Europe*)*
[230] All the words in the abstract. E.g. *(ab:(job quality) AND ab:(Europe))*

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# ANNEX D: INTERVIEW GUIDE

## STUDY OBJECTIVE

The European Parliament (EP) commissioned RAND Europe to analyse the EU funding programmes' potential to create high-quality jobs. The study will assess how job creation and quality can be measured in the EU funding framework and aims to identify the key characteristics for guaranteed success in creating high-quality jobs. The results will be shared with the European Parliament's Committee on Budgetary Control to inform efficient EU expenditure and management of EU finances.

The study will employ document and literature reviews, and stakeholder interviews.

## HOW WE WILL USE THE INFORMATION FROM YOUR INTERVIEW

- Interview findings may be included in a report that will be published on the EP website. Findings (including any direct quotes) used in the report will be anonymised and identifying details removed as far as possible. We will take care to remove information that could identify an individual as the source of the quote.
- Any information you provide will be held in the strictest confidence and will be handled securely throughout the study in line with the requirements of the general data protection regulation. The information you provide will be used only for research purposes.
- With your permission, we would like to record the interview with the only purpose of facilitating our note taking; this way we can make sure we record what you say exactly, but you do not have to be recorded if you would prefer not to. Recordings will be kept securely, inaccessible to anyone outside the research team and will be deleted at the end of the study.

## TOPICS FOR DISCUSSION DURING THE INTERVIEW

Below we provide a list of topics and questions we would like to raise with you. However, we understand that you might not feel able to comment on all of these issues and that you may have more knowledge on some than others. You can skip any question that you do not want to answer.

## Part A. Introduction

**1)** Welcome and brief about the study and housekeeping rules (RAND Europe).

**2)** Presentation of the interviewee(s) – your role and responsibilities in relation to the specific EU funding programme(s).

**3)** As part of the study, we will be investigating four EU funding programme: Horizon 2020 (H2020), the European Social Fund (ESF), the Youth Employment Initiative and the European Globalisation Adjustment Fund (EGF). Such a comparison is challenging because of the different purposes, designs and scope of the instruments. Do you have any views on this?

**4)** Do you have any suggestions for us how to approach/overcome these difficulties?

**5)** We are looking for relevant evidence on the performance of the different programmes and their efficiency on job creation, job quality and quality employment. We have been reviewing the founding regulation and related legislative acts, IAs, EU interim and ex-post evaluations. Are we missing anything important?

- Can you point us to additional useful reports/documentation (maybe even project examples)?
- Can you share any relevant information on forthcoming reports?
- Do you have any other data or documentation that you could share to further inform our study?

## Part B. Job Creation

**6)** Given the overall scope of H2020/ESF/YEI/EGF, what are your views on the characteristic that can/should support job creation? What is the evidence for H2020/ESF/YEI/EGF being successful in job creation?

**7)** Estimating and measuring job creation:

- What are your views on the methods or methodologies used to estimate or assess the performance of H2020/ESF/YEI/EGF in terms of job creation? For example economic modelling (e.g. NEMESIS model, surveys, quasi-experimental models, etc.)
- What are your views on the indicators and measures used to estimate (*a priori*) and assess (*ex post facto*) job creation effect of H2020/ESF/YEI/EGF?
- In your view, what other suitable and feasible methods/methodologies could be used to estimate/measure job creation?
- What would be most interesting / helpful in the future?

**8)** Which are the main challenges in measuring and estimating job creation?

- Is availability and comparability of data at EU level still an issue?

## Part C. Job Quality and Quality Employment

**9)** Which specific characteristics of the design of H2020/ESF/YEI/EGF can support job quality and quality employment? What is the evidence for H2020/ESF/YEI/EGF being successful in high-quality job creation?
- Which dimensions of job quality is H2020/ESF/YEI/EGF more likely to address? (e.g. labour market security, earnings quality, worker well-being, quality of the work environment, etc.)

**10)** Estimating and measuring job quality:
- What methods or methodologies, if any, are currently used to estimate or assess the performance of H2020/ESF/YEI/EGF in terms of job quality?
- In your view, what other suitable and feasible methods/methodologies could be used? Which other dimensions of job quality can be measured?
- In your view, how useful are/would such assessments and estimates of job quality and quality employment?

## Part D. Conclusion

**11)** Efficiency:
- What are your views on the efficiency of H2020/ESF/YEI/EGF in terms of job creation and job quality?
- What are your views on the indicators and measures that can be used to assess the efficiency of H2020/ESF/YEI/EGF in terms of job creation and job quality?
- What are the potential challenges and limitations of such indicators or measures?
- In your view, what other suitable and feasible indicator(s) or measures could be used?

**12)** Are there any lessons from one programme (H2020/ESF/YEI/EGF) that would benefit the others in terms of:
- Indicators to assess efficiency and effectiveness?
- Measuring and estimating job creation?
- Measuring and estimating job quality?

**13)** Do you have any final reflection on any key characteristic of H2020/ESF/YEI/EGF that can be considered an important element guaranteeing the success with view to quality and number of jobs created? Do you have any suggestion or recommendation that could be made for the improvement of other EU instruments?

**14)** In your opinion, how important it is to investigate and report on high-quality job creation at present at EU level?
- Do you expect this will (or should) change in future and if so, how and why?
- What would be most interesting/helpful in the future?

**15)** Do you think that measures/indicators of job creation and job quality could be further embedded in the design and reporting of EU funding?

**16)** Is there anything that we missed? Any final comments from you?

# ANNEX E: TEMPLATE FOR THE EU FUNDS REPORTS

The following template was used to structure individual reports of the EU funds (see Annex F-I):

**1.1 THE SCOPE: HOW CAN THE FUND SUPPORT JOB CREATION AND JOB QUALITY?**

**1.2 EVIDENCE FOR THE FUND BEING SUCCESSFUL IN (HIGH QUALITY) JOB CREATION (OR HIGH QUALITY EMPLOYMENT)**

- **1.2.1 Evidence on job creation**
- **1.2.2 Evidence on quality of new job**

**1.3 EVIDENCE FOR SOME INTERVENTIONS BEING MORE EFFECTIVE THAN OTHERS**

**1.4 THE MEASURES: HOW TO ESTIMATE AND ASSESS JOB CREATION AND JOB QUALITY?**

- **1.4.1 Employment effect (job creation) of the Fund**
- **1.4.2 Job quality in the context of the Fund interventions**
- **1.4.3 Indicators, measures or indices used**
- **1.4.4 Efficiency of the Fund in high quality job creation**

**1.5 VIGNETTES/EXAMPLES OF ELEMENTS SUPPORTING HIGH QUALITY JOBS CREATION**

**1.6 SUMMARY CONCLUSIONS**

- **1.6.1 How can the efficiency of the fund in high quality job creation (or employment quality) be best measured / assessed for the fund in question?**
- **1.6.2 Which characteristics of the fund in question can be considered key to success in terms of quality and number of jobs created?**
- **1.6.3 What recommendations (if any) could be made on that basis for the improvement of the other instruments?**

**1.7 REFERENCES**

# ANNEX F: H2020 REPORT

## 1.1 THE SCOPE: HOW CAN THE H2020 SUPPORT JOB CREATION AND JOB QUALITY?

European Framework Programmes (FPs) for Research and Technological Development are the main European instrument to achieve a structuring effect on the European Research Area (ERA) by strengthening the scientific and technological foundation of European industry and enhancing its international competitiveness. The Seventh Framework Programme (FP7) lasted for seven years (2007–2013) and included a total budget of over EUR 50 billion.[231] FP7 consisted of four main specific programmes: Cooperation, Ideas, People (or the Marie Skłodowska-Curie actions (MSCA)) and Capacities. Each of these specific programmes corresponded to the broad objectives and together aimed at promoting the creation of European poles of scientific excellence. Since 2014, FP7 was succeeded by H2020 (2014–2020), the new Framework Programme for Research and Innovation, which focuses on three key areas: excellent science, industrial leadership and societal challenges.[232]

Overall, in their overarching strategic objectives, neither the FP7 nor H2020 explicitly aimed at job creation. Instead, both programmes aimed at supporting research and development and represent a key investment for the realisation of the European research and innovation priorities. FP7 pursued two major strategic objectives: (1) strengthening Europe's scientific and technological base; and (2) supporting its international competitiveness and the EU policies.[233] However, the FP7 establishing document recognised the importance of research and innovation for the dynamic economy, as well as **the indirect contribution of FP7 to job creation**; mobilising and strengthening the necessary research and innovation capacities in Europe was already seen as a principal tool to develop competitive and dynamic knowledge-based economy, capable of sustainable economic growth with more and better jobs and greater social cohesion.[234]

In addition, to achieve its strategic objectives, however, FP7 envisaged a number of more specific actions, some of which are relevant for job creation, especially:

- Strengthening the human potential in research and technology in Europe, both quantitatively and qualitatively through: (1) better education and research training; (2) easier access to research opportunities; (3) the recognition of the profession of researcher, not least through a significant increase in the presence of women in research; and (4) encouraging researchers' mobility and career development.
- Facilitating the scientific career of researchers in the most productive period of life.
- Research and innovation capacities throughout Europe should be strengthened, both quantitatively and qualitatively.[235]

Thus, some of the specific objectives and actions for their implementation under FP7 were more relevant for job creation and career development than others. In this context, the most important specific programme under FP7 was the People Programme or MSCA. The overarching strategic aim of the FP7 People Programme was to make Europe more attractive for researchers and to increase the human R&D potential in Europe in terms of both quality and quantity.

[231] CORDIS (2018)
[232] European Commission (2011)
[233] European Commission (2007)
[234] European Parliament & Council of the European Union (2006)
[235] European Parliament & Council of the European Union (2006)

With the establishment of H2020, the principal novelty introduced by the new programme was shifting of focus towards a market-driven approach where commercialisation of research results and knowledge transfer is crucial. The underlying idea of H2020 states[236] that bridging the gap between research and the market is a direct path to address the economic, social and environmental challenges faced by Europe. Thus, although the direct strategic objective of the programme remained the development of research capacities in Europe through international cooperation, compared to its predecessor **H2020 even more explicitly recognised its importance in developing knowledge-based economy and growth and (indirect) creation of high-quality jobs in Europe**. It was recognised that 'research and innovation help deliver jobs, prosperity, quality of life and global public goods. They generate the scientific and technological breakthroughs needed to tackle the urgent challenges society faces. Investment in this area also leads to businesses opportunities by creating innovative products and services'.[237] The changing focus of the programme and its growing relevance for economic development was reflected in the specific objective and priorities of H2020:

- Excellent Science (ES) refers to raising the level of excellence in Europe's science base and ensure a steady stream of world-class research to secure Europe's long-term competitiveness. The key actions to achieve this include supporting the best ideas, developing talent within Europe, providing researchers with access to priority research infrastructure, and making Europe an attractive location for the world's best researchers.
- Industrial Leadership (IL) aims at making Europe a more attractive location to invest in research and innovation (including eco-innovation) by promoting activities where businesses set the agenda. The key actions here include providing major investment in key industrial technologies, maximising the growth potential of European companies by providing them with adequate levels of finance and helping innovative SMEs to grow into world-leading companies.
- Societal Challenges (SC) reflect the policy priorities of the Europe 2020 strategy and addresses major concerns shared by citizens in Europe and elsewhere. Under this priority, resources and knowledge across different fields, technologies and disciplines, including social sciences and the humanities will be united in a challenged-based approach. The specific activities here include piloting, demonstration, test-beds, and support for public procurement and market uptake. It will also include establishing links with the activities of the European Innovation Partnerships.[238]

As in the case of the predecessor FP7, some of the specific actions under H2020 were more relevant for job creation and career development (especially among researchers) than others. As the successor of FP7 People Programme, H2020 MSCA aims at 'ensuring the optimum development and dynamic use of Europe's intellectual capital in order to generate new skills and innovation'.[239] In comparison to its predecessor, it revealed a still stronger focus on innovation and market-oriented skills of researchers, which are all very important aspects of high-quality job creation and business expansion in Europe.

[236] European Commission (2011)
[237] European Commission (2011)
[238] European Commission (2011)
[239] European Commission (2013)

## 1.2 EVIDENCE FOR H2020 BEING SUCCESSFUL IN (HIGH-QUALITY) JOB CREATION (OR HIGH-QUALITY EMPLOYMENT)

### 1.2.1 Evidence on Job Creation

Although the FP7 and its successor H2020 had no direct objective of job creation in Europe, a number of studies, evaluations and impact assessments confirm that these research funding programmes already significantly contributed to the creation of jobs, especially in research, that have some characteristics associated with high-quality jobs (such as relatively good salary, good conditions for training and acquisition of skills, etc.). Moreover, future estimates based on extrapolations and economic modelling show that in the long-term perspective, the impact of both FP7 and H2020 on job creation in Europe will be even more significant. Thus, overall, recent evaluations, studies and impact assessments distinguish two ways in which FP7/H2020 contribute to job creation:

- **Direct job creation**, which refers to the creation of research jobs in the beneficiary organisations, when researcher hired during the project retains his/her position after the project end.
- **Indirect job creation**, which refers to the creation of jobs in the in the industries affected by RTD activities funded by FP7/H2020 (emergence of new technologies).

First of all, there is substantial empirical evidence that the financial support and the research activities triggered in FP7/H2020 beneficiary organisations contribute to the growth of these organisations and creation of research jobs within them. For instance, a recent evaluation of the FP7/H2020 Union Added Value, which followed a strict survey-based counterfactual logic, compared the performance of the EU FP beneficiary teams to the performance of control group consisting of unsuccessful applicants/high-quality research teams, which were very close to the funding threshold and did not participate in the programme due to budgetary constraints (i.e. the research teams that did not receive FP funding) in terms of their growth/job creation. The evaluation found that the EU FP research teams had, on average, 24.4% more researchers in 2015 compared to the year when the application for EU funding was made. The corresponding growth rate was estimated at 12.6% for the non-FP teams. Thus, EU FP teams grew 11.8 % faster than teams in the control group; aggregated for the whole programme, this difference amounts to some 53,000 additional research jobs created in FP7 alone. According to the evaluation, the estimated job creation represents a good overall value for money, as the EU FPs contributed to about 15% of the total increase in research jobs in Europe during 2007–2015 with about 10% of the total research funding in the EU.[240]

The same study also assessed the long-term job creation effects of FP7/H2020, based on the economic modelling. According to the economic modelling based on the NEMESIS model, it was estimated that on average, FP7 is forecasted to contribute to the creation of 123,000 jobs/year between 2007 and 2023, of which 52,000 are high-skilled jobs annually, including 42,000 research jobs (27,000 researcher jobs and 15,000 other research-related jobs). Similarly, the estimated employment effects of H2020 are significant with around 137,000 jobs being created annually between 2014 and 2030, of which around 58,000 are high-skilled jobs. The average employment gain in research provoked by H2020 between 2014 and 2030 is forecasted to be 29,500 researchers jobs and 18,500 other research-related jobs. This effect includes both the persons who were directly

[240] PPMI (2017)

employed during the H2020 projects and the indirect job-creation effect triggered by spin-offs and innovations resulting from H2020 funding.

Very similarly, a recent FP7 ex-post evaluation,[241] applying economic modelling methods on FP7 administrative data, estimated that FP7 contributes to job creation in two ways: directly and indirectly. The direct job creation consists of FP7 funding the annual staff costs of researchers, whereas indirect job creation refers to the creation of jobs in the industries affected by RTD activities funded by FP7, through the emergence of new technologies. When translating the economic impacts into job effects, the evaluations made estimates on the average annual staff costs of researchers (for the direct effects) and of employees in the industries effected by RTD (for the indirect effects). According to these assumptions, based on estimated annual staff costs for researchers of 70,000 euros, FP7 directly created 130,000 jobs in RTD over a period of ten years. When estimating the indirect job effects, the evaluation took into account that new technologies in some cases create new jobs while in other cases they might lead to job losses as well. By applying these and other theoretical assumptions made in the previous similar studies, the evaluation concluded that approximately 160,000 additional jobs are indirectly caused by FP7 over a period of 25 years.

Some of the studies made a **distinction between the hiring of new staff in the beneficiary organisations during the FP7/ 2020-supported project activities and the job creation defined as the number and share of these jobs retained after the project end**. According to the study on the assessment of the contribution of FPs to the development of human research capacity, about 54% of the FP7 beneficiary organisations hired new staff for their project activities, the majority of which coming from outside the organisation, resulting in more than 142,000 researchers hired on FP7 projects. However, only about 43% of these researchers (61,000) stay employed in the research team after the end of the project (this number does not include the replacement of internal staff recruited for an FP7 project (estimated to 12%)). As a result we see a net retention rate of 1 out of 2.3 hired researchers after the end of the project.[242]

**Table 1: Summary of findings on overall FP7/H2020 job creation effects**

| Source | Findings/estimates on job creation | Method | Programme covered |
|---|---|---|---|
| PPMI (2017) | 53,000 additional research jobs created in FP7 alone during 2007–2015 (based on survey data)<br><br>Estimated 624,000 high-skill jobs created by FP7 between 2007 and 2023 and 968,000 high-skills jobs created by H2020 between 2014–2020 (based on NEMESIS economic modelling) | Survey-based counterfactual analysis and economic modelling | FP7 and H2020 |
| High Level Expert Group (2015) | FP7 directly created 130,000 jobs in RTD over a period of ten years (2007–2017) and approximately 160,000 additional jobs are indirectly caused by FP7 over a period of 25 years | Economic modelling | FP7 |

[241] High Level Expert Group (2015)
[242] Idea Consult, IFQ & PPMI (2014)

| Source | Findings/estimates on job creation | Method | Programme covered |
|---|---|---|---|
| Idea Consult, IFQ and PPMI (2014) | Between 2007 and 2014, 142,000 researchers hired on FP7 projects, 43% of these researchers or 61,000 stay employed in the research team after the end of the project | Survey of beneficiary research teams | FP7 |

**Source:** PPMI (2017), High Level Expert Group (2015) and Idea Consult, IFQ and PPMI (2014)

A number of recent evaluations and studies also assessed the job creation effects of different specific actions under FP7/H2020. Of these, the most significant are the evaluations and studies on job creation of FP7/H2020 People Programme or the MSCA, which specifically focuses on training and career development of researchers in Europe. For instance, the recent FP7 ex-post and H2020 interim evaluation of MSCA[243] found that the MSCA programme contributed to the expansion of the beneficiary organisations by creating new research positions in addition to staff directly funded by the project: according to the survey results, 23% of organisations had created (or will create) one additional full-time equivalent job while 12% of organisations had created two or more FTE posts as a result of participation in MSCA, which translates to around 973 FTE jobs.

Some of the studies focused on the job creation effect of FP7/H2020 in among specific types of beneficiary organisations. For instance, a recent study on business participation in MSCA[244] found that the FP7 and H2020 MSCA project with business organisations involvement had on the average higher job creation effect, which was mainly achieved by retaining in the company of researchers that were hired for MSCA project or were seconded to business organisations for the project duration. The study found that the MSCA projects with business involvement had a considerable job-creation effect on beneficiary research fellows, mainly among early-stage researchers and experienced researchers hosted in industry under the Initial Training Networks (ITN) and Industry-Academia Partnerships and Pathways (IAPP) actions. According to the survey results, around 47% of all business beneficiaries indicated that as a result of their project at least one job (FTE equivalent) was/will be created in their organisation, with around 14% of respondents suggesting that more than one job was/will be newly created. Overall, this survey showed that 218.5 jobs (FTE equivalents) were/will be created in beneficiary business organisations (most of which are SMEs) as a consequence of their participation in the programme.

### 1.2.2 Evidence on the quality of new jobs

In addition to the evidence on job-creation, the above studies, evaluations and impact assessments provided strong evidence that FP7/H2020 significantly contributed to a number of dimensions and features of job quality among the beneficiaries, particularly researchers. More specifically, as a research funding programme both FP7 and H2020 **significantly contributes to improving career prospects, job security, career progression, remuneration and, to a somewhat lesser extent, contract quality of beneficiary researchers**. For example, the recent assessment of the Union Added Value asked about the changes in the beneficiaries' commercial position/advantage had their H2020 projects been implemented with national or regional funds. According to the survey results, the highest/most marked differences are in two aspects of commercial advantage, including the

[243] ICF (2017)
[244] PPMI group & partners (2017)

competitive position internationally of beneficiary researchers (78% expected a decrease in this area without H2020 funding) and access to new markets (71%). This evidence points to the international/intra-national dimension of H2020 and the benefits EU research brings as opposed to national or regional research activities. Without H2020 support, revenue would have decreased for 58% of survey respondents, and particularly in SC5 (65%), SC4 (69%), Nanotechnologies, Advanced Materials, Advanced Manufacturing and Processing, and Biotechnology Public Private Partnerships (NMPB PPPs) (71%) and SC5 (65%). Overall, the beneficiaries of these programmes and projects funded under the instrument appear to be experiencing relatively large impacts on their commercial position (i.e. not only in terms of revenue but also their competitive position nationally/internationally and their market share) relative to what would have been available nationally.[245]

Similarly, the study on FP contribution to human research capacities assumed that the ratio between fixed-term and open-ended contracts is a relevant proxy indicator of the job security and longer career perspectives of a researcher. According to the study findings, FP funding has contributed to a small overall change in the ratio of permanent (+20%) and fixed-term (+27%) contracts and a slight overall shift to the more widespread use of fixed-term contracts in the participating research teams. Although FP funding contributed to an increased use of fixed-term contracts, there was generally no long-term impact at the organisation level. Aside from the issue of job security, in the long term FP participation translates into formal advancement and better working conditions for the researchers that have been involved in FP activities. For instance, the highest share of researchers employed under permanent contracts was found among the participants of FP6 and FP7. The same study also found that almost half of the researchers perceive positive effects of FP participation on their research career. Around one quarter expect that FP participation will contribute to acquiring a new position in academia, and 17% into another sector.[246] The FP7 ex-post and H2020 interim evaluation of MSCA found that there is strong evidence that the MSCA programme is effective in boosting the career of researchers. Around 60% of past MSCA fellows believe that it would have taken them more time to attain their subsequent career stage without the MSCA fellowship, and 12% believed they would not have attained the subsequent career stage at all. Only 16% of fellows believed that they would have attained the subsequent career stage in a similar timeframe and only 2% of respondents believe they would have attained a subsequent career stage faster. Of the 21% of MSCA fellows who moved to a permanent position after their MSCA fellowship, more than half (56%) report that this was to a (very) large extent the result of MSCA support. In addition, 38% of respondents moved to a more senior position after their MSCA fellowship. Two thirds of these fellows attribute this career progression to a (very) great extent to participation in MSCA.

The available evidence also strongly indicates that the FP7/H2020 support significantly contributed to **on-the-job training and learning, acquisition of new skills and competences**, as well as personal development of beneficiary researchers. The study on FP contribution to human research capacities revealed that the acquisition of important skills for further career development and increased autonomy in terms of carrying out tasks are effects of FP participation that result in positive outcomes on researchers' careers in the longer run. The study results show that participation in FPs results in training and development of individual skills and expertise among researchers. Researchers that participate in FPs strengthen almost all skills and capacities, although this does depend on the career

[245] PPMI (2017)
[246] Idea Consult, IFQ & PPMI (2014)

stage of the researcher concerned. The share of respondents who assign the development of networking, leadership and negotiation skills, as well as skills regarding the use of science in policy-related contexts, to FP-related employment episodes is particularly high (between 64% and 76%) and these skills are moreover considered the more relevant for career development. Next to this, FP participation also contributes to strengthening researchers' autonomy and independence. Between 58% and 71% of FP participants were able to fulfil their tasks without supervision for the first time during FP-related employment episodes. As such, this process enabled them to become more autonomous through empowerment and increased levels of self-esteem.

Similarly, according to the study on business participation in FP7/H2020 MSCA findings,[247] being exposed to the industry environment through MSCA projects made the beneficiary fellows a highly attractive choice for private companies and increased their opportunities of employment in the business. Almost all of the interviewed beneficiary researchers confirmed that being hosted in business significantly increased his/her opportunity to get a job either in that same or in another company after the project completion. The main reason was that the MSCA projects with business involvement turned out to be a favourable framework to train researchers with industry-relevant skills and competences. A number of beneficiary fellows also indicated that these projects significantly extended their professional network and helped to develop the ties with potential employers in the business sector.

### 1.3 EVIDENCE FOR SOME INTERVENTIONS BEING MORE EFFECTIVE THAN OTHERS

Finally, the literature review carried out for this study also revealed that the effectiveness of FP7/H2020 in job creation/job quality **varied significantly, depending on various factors**, including:

- **Sector of economy:** According to the evidence provided by the evaluation of Union Added Value of Fp7/H2020, the high R&D intensive sectors, such as Chemical, High Technological Industries or Transports equipment that are those receiving the largest share of the FP7, are also the ones for which the employment impacts are the strongest. During the Maturation phase, which is characterised by important investments in R&D, these intensive sectors hire researchers and are penalised on the domestic market but also on the external markets especially because they are among the more exposed sectors to international competition. However, once the Innovation phase takes place, these intensive sectors benefit directly from the new innovation, as a result of which their employment and value added go up.[248] Similarly, the study on human research capacities revealed that projects in Engineering and Sciences or the multidisciplinary domains contributed to more than 80% of the hiring.[249]
- **Age and career stage of beneficiaries:** The MSCA business participation study found that the job-creation effect was mainly concentrated among the beneficiary PhD students and young post-doc fellows with very few beneficiary established researchers and no leading researchers transferring to the industry sector. Thus, it was revealed that job-creation/change of sector is more likely to result among the beneficiary early-stage researchers (ESRs) and other young researchers who still have not established their careers in academia.[250]

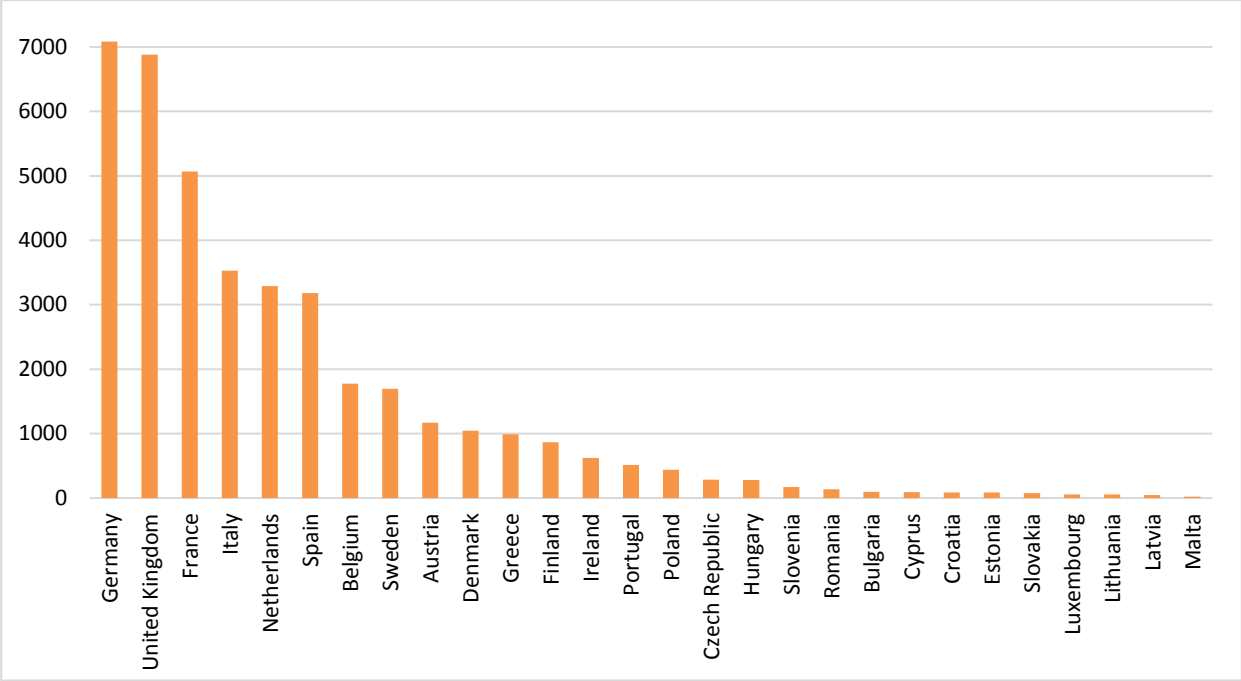
[247] PPMI group & partners (2017)
[248] PPMI (2017)
[249] Idea Consult, IFQ & PPMI (2014)
[250] PPMI group & partners (2017)

- **Type of Fp7/H2020 sub-programmes and sub-actions:** The study on contribution of FPs on human research capacities found that 26,000 researchers remain employed after an FP7 Cooperation project, 16,000 after an FP7 Capacities project; 11,000 after an FP7 People project and 8,000 after an FP7 Ideas project. It is thus noted that the specific programmes (Ideas and People) that hire the largest share of researchers at the start of the project have the lowest share of researchers staying after the project. However, after relating these absolute numbers to the total number of projects, it was found that the additional employment effect is relatively highest in the Capacities and People-specific Programmes, where respectively, 8.4 and 8.2 additional research positions per project were created. This compares to, respectively, 3.7 and 2.2 for the Cooperation and Ideas-specific Programmes.[251] Similarly, the evidence shows that employment effects differed between sub-actions within specific FP7/H2020 programmes. The analysis made in the study on business participation in MSCA demonstrated that the job creation effect was mainly the result of the Initial Training Networks (ITN) (both FP7 and H2020) and, to a somewhat lesser extent, FP7 Industry-Academia Partnerships and Pathways (IAPP) actions, with virtually no evidence on the transfer from academia to industry resulting from individual fellowships (IF), H2020 RISE or COFUND actions. It was concluded that the discontinuation of the possibility to hire new researchers (in addition to staff exchange) in the RISE action, however, decreased the action's potential for job creation and its attractiveness among business organisations, compared to the previous IAPP action.[252] Similarly, the interim evaluation of FP7 found slight variations by MSCA type: 92% of the ITN fellows assessed the MSCA impact on their career prospects as 'very good' or 'good', whereas 78% of the IAPP fellows and 75% of the IRSES seconded staff supported this statement. The highest number of fellows who indicated the 'poor' or 'very poor' impact on their future career also came from the International Research Staff Exchange Scheme (IRSES) action.[253]
- **Type of beneficiary organisation:** For instance, the available evidence showed that more than two-thirds of the researchers hired by private industry organisations and SMEs stayed in their teams after the end of the projects. The corresponding figures were significantly lower for private, not-for-profit research organisations (46%) and public or government sector organisations (39%). Furthermore, only 25% of the additionally hired researchers stayed in the teams of universities and HEIs after the end of the FP projects.[254] Similarly, study on business participation in MSCA showed that in terms of the average number of jobs per organisation created as a consequence of the MSCA, beneficiary SMEs surpassed both higher education institutions and research organisations (0.94 FTE job created, compared to 0.66 and 0.83 jobs per organisation respectively).[255]
- **EU geographical region:** According to the evaluation of the Union Added Value of FP7/H2020, the relative job-creation performance follows the share of the EC funding received by the different countries. Countries that receive very low amounts, such as Poland, encounter positive but limited impacts on GDP and employment. The evaluation estimated that due to the labour productivity gains provoked by the innovations, significant impact of the EC funding for research on national employment are only possible when the GDP gains reach an important level. As a consequence, in the EU-13 countries (such as the Czech

[251] Idea Consult, IFQ & PPMI (2014)
[252] PPMI group & partners (2017)
[253] PPMI (2013)
[254] Idea Consult, IFQ & PPMI (2014)
[255] PPMI group & partners (2017)

Republic, Hungary, Malta, Poland or Slovakia) employment creations are very limited, or even slightly negative like in Czech Republic (when the level of GDP growth does not outweigh the labour productivity gains/job losses provoked by the innovations). More than 70% of jobs at EU level in 2030 are concentrated in the larger EU-15 countries (France, Germany, Italy, Spain and the UK) that receive the greatest part (64% in all) of EC contribution for research.[256]

**Figure 1: EU contribution: FP7 2007–2014 (June) by country, EUR million**




**Source:** European Commission (2015)

## 1.4 THE MEASURES: HOW TO ESTIMATE AND ASSESS JOB CREATION AND JOB QUALITY?

The literature review of the most recent and relevant studies, evaluations and impact assessments of FP7/H2020 reveal that to assess the job creation and job quality effects the following methodologies and indicators are most often used.

### 1.4.1 Employment effect (job creation) of H2020

In terms of the methods used, surveys are usually used to assess the direct job creation effects of FP7/H2020 (i.e. the numbers of staff hired during the project and/or retained after the project end), whereas macro-econometric modelling (e.g. the NEMESIS model)[257] is usually the main method used to assess both direct and indirect job creation (i.e. number of jobs resulting from spillover of innovations/products/new technologies developed as a consequence of FP7/H2020 projects). To provide additional and more in-depth information on job-creation effects of FP7/H2020, surveys and macro-econometric modelling are often supplemented by other methods, such as literature review, interview with beneficiaries and other stakeholders and case studies. Overall, the following methods are usually used to assess the job creation effects of FP7/H2020:

[256] PPMI (2017)

[257] NEMESIS is a system of economic models devoted to study issues that link economic development, competitiveness, employment and public accounts to economic policies, and notably all structural policies that involve long-term effects, such as R&D public funding.

- Surveys (with or without counter-factual analysis dimension)
- Interviews
- Case studies
- Macro-econometric modelling
- Literature review.

Each of the main methods used to assess the job creation effects of FP7/H2020 has its strengths and weaknesses. The survey helps to collect empirical evidence on actual job creation effects of FP7/H2020, including the evidence on both the programme beneficiaries and unsuccessful applicants, therefore making it possible to compare the growth/job creation between two groups. However, in order to make the survey data statistically representative, it is necessary to achieve sufficient survey completion rates across different sample groups, programmes and themes/sub-programmes, which is often difficult. Moreover, regular use of surveys to collect evidence on the impacts of FP7/H2020 poses a risk of survey fatigue, which would reduce the effectiveness of this method in the future. In terms of the macro-econometric modelling, a major difference between this and other methods for assessing the economic impact of R&D public direct support is that simulations can estimate predicted results for future periods of time, while methods that collect data and measure impact at individual level cannot. However, a limitation of these simulation models is that they are able to assess economic impacts at a European, country and sectoral level, but cannot quantify policy effects for further breakdowns.

### 1.4.2 Job quality in the context of H2020 interventions

To assess aspects related to job quality (such as effects on career progression, remunerations, contract quality, training, development of competences and skills) the FP7/H2020 studies and evaluations usually rely on surveys of beneficiary/control group researchers and organisations, as well as interviews, literature review and case studies.

### 1.4.3 Indicators, measures or indices used

In the previous evaluations several type of indicator were used to assess the job creation effects of FP7/H2020, including:

- Survey-based indications on the **absolute number and share of researchers who were hired during FP7/H2020 project and retained their positions in the beneficiary organisations after the project end**. This type of indicator to assess the job-creation effect of FP7/H2020 was used by several studies/evaluations, including study of business participation and entrepreneurship in MSCA (FP7 and H2020), study on assessing the contribution of the framework programmes to the development of human research capacity, FP7 ex-post and H2020 interim evaluation of MSCA.
- Survey and counterfactual analysis-based indications on the **relative growth of the FP7/H2020 beneficiary research teams, compared to the growth of the control group** (those that did not receive FP7/H2020 support) research teams during the same period of time. This indicator of job creation effect was used by the assessment of the Union Added Value and the economic impact of the EU FPs.
- Various **macro-econometric modelling-based indicators**. The assessment of the Union Added Value and the economic impact of the EU FPs, for instance, used two NEMESIS

(European macro sectoral econometric model) based indicators to estimate job creation effect of FP7/H2020: (1) average employment gain provoked by FP between 2014 and 2030 (average annual change of total employment compared to its level in the reference scenario), with the distinction between high-skill jobs and the remaining jobs; and (2) average annual employment gain in research (average annual change of total employment in research compared to its level in the reference scenario), with the distinction between the researcher jobs and other research-related jobs (e.g. technicians). Similarly, the ex-post evaluation of FP7 applied macro-econometric modelling to the FP7 administrative data (monitoring reports), while taking into account: (1) the leverage effect that enables determination of total R&D expenditure; (2) the spillover of knowledge describes knowledge transfers to other sectors and other countries; and (3) the economic performance of knowledge.

Finally, in relation to the portion of high-skilled jobs in the overall number of jobs created, it is important to note that in the context of the FP7/H2020 this distinction is relevant only for indirect job creation effect. The direct job creation triggered by FP7/H2020 usually involved job creation among researchers and other research jobs (e.g. technicians), which can be considered as high-skilled jobs (although not necessarily high quality). In relation to the indirect job creation effects, as mentioned above, the NEMESIS model based indicator used in the assessment of the Union Added Value and the economic impact of the EU FPs made a distinction between high-skilled jobs and the remaining jobs. The evaluation estimated that FP7 is forecasted to contribute to the creation of 123,000 jobs per year between 2007 and 2023, of which 52,000 (42%) are high-skilled jobs. In relation to the job creation by H2020, it was estimated that the employment effects include 137,000 jobs being created annually between 2014 and 2030, of which around 58,000 (42%) are high-skilled jobs.[258] While high-skilled jobs clearly do not correspond to high-quality jobs, there is evidence[259] that the jobs traditionally recognised to be of high quality score highly in the indicators of skills.

### 1.5 VIGNETTES/EXAMPLES OF ELEMENTS SUPPORTING HIGH-QUALITY JOB CREATION

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| *General information* | H2020 (2014–2020).<br>Programming period: 2016–2020.<br>Country: Switzerland, Germany, Netherlands and Italy. |
| *About the project* | H2020 NOLOSS (Lossless Photon management – Optical design for manufacture at different length scales).<br>Funding: EUR 3 855 693,24<br>Timeframe: 1 April 2016 – 31 March 2020[260] |
| *Context* | NOLOSS is a H2020 MSCA ITN European Industrial Doctorates (EID) project encompassing 13 organisations from five European countries (nine of which are business companies, including four SMEs). |
| *Aims, beneficiaries, activities* | The aim of this project is to prepare and train future engineers for the design challenges and opportunities provided by modern optics technology. Such challenges include lossless photon management, modelling at the system, components and feature level, and the link between design and technology. The project includes nine activities forming nine teams with the aim to push micro-optics and nano-optics into applications and provide design for manufacture. Each |

[258] Low skilled jobs correspond to ISCED levels 0–4 (i.e. all non-tertiary education according to ISCED 1997 levels of education); high-skilled jobs correspond to ISCED level 5–6 (i.e. tertiary education according to ISCED 1997 levels of education).
[259] Eurofound (2016)
[260] PPMI group & partners (2017)

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| | of these activities is proposed and supervised by the industrial beneficiaries. The project is expected to hire 15 ESRs that will be exchanged during course of the project. An academic beneficiary will grant 15 PhD degrees as a result of the project. For clarity of the structure, each team reports to one of the three research training work packages, which outlines at the same time three competence areas: nano-photonics, micro-optics and system optics.<br>According to the project arrangement, more than 50% of time of the PhD candidates has to be spent at the industrial beneficiaries in order to achieve mutual understanding within each team on research tasks and training objectives. In addition to the three research training work packages, there are separate WPs for general management, for organising the network wide training, and for outreach and dissemination to the general public. |
| *Results* | According to the study of business participation and entrepreneurship in MSCA,[261] all of the interviewed stakeholders confirmed that a very strong presence and the role of the industry beneficiaries in the project substantially increases the opportunities of the beneficiary ESRs to be permanently employed in the business sector after the project end; a representative of an academic institution anticipated that the majority of the 15 beneficiary fellows will stay as the permanent employees after the period of their training in industry. Similarly, based on their previous experience with similar MSCA projects, several of the business organisation representatives estimated that around 75% of the beneficiary PhDs will be offered a permanent position in one of the beneficiary companies after the project completion.<br><br>According to all the representatives of both academic and business organisations, the NOLOSS project helps to equip the beneficiary fellows with the most relevant and industry-oriented skills making them a highly attractive choice for the companies. The business organisations also confirmed that the time spent by the beneficiary PhDs at their companies helps to identify the most talented and the most motivated researchers, whose personal and professional interests correspond most closely to the company's profile. Moreover, as a result of their participation in the project, the beneficiary fellows will have developed a general knowledge about how the business world works, whereas the presence of nine business organisations in the project will ensure that their professional network is supplemented by new connections with companies and their representatives.<br><br>Several courses for the beneficiary PhD students focusing on different areas of optics have already been planned in the NOLOSS project; usually, PhD students at universities do not have these type of training courses in their programmes. Finally, the evidence shows that being a part of a project with an active involvement of business organisations helps the beneficiary fellows to develop the network of ties that could later serve as a basis of their employment in industry. |
| Sources | Project case study from the PPMI group and partners (2017) |

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| *General information* | HIVE[262] is a FP7 (2007–2013) EU project, which lasted 2008–2012.<br>Countries involved: Spain, Portugal, Germany, France, Greece and the United Kingdom |
| *About the project* | Project name: HIVE (Hyper Interaction Viability Experiments), duration – 2008-2012, Budget: EUR 3 012 576 |

[261] PPMI group & partners (2017)
[262] PPMI (2017)

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| *Context* | HIVE followed the long-term vision of technologies enabling computer-mediated brain-to-brain interaction. Before the project started, the research team faced a number of research problems related to the improvement of non-invasive brain stimulation. There was a poor understanding of the effects of stimulation at neuron and neuronal ensemble level. Second, stimulation was usually done with two electrodes in transcranial direct current stimulation (tDCS). This technique was not precise enough and its applications lacked consistency in results across people. Third, there had been limited experimentation on animal and human brain stimulation. The HIVE project largely addressed these challenges and achieved potentially important advances in non-invasive brain stimulation technologies. |
| *Aims, beneficiaries, activities* | HIVE aimed at moving away from the widely used two tDCS devices by developing a new prototype of multichannel tDCS device.<br>In the first stage, HIVE developed transcranial electrical and magnetic brain stimulation models. At the same time, HIVE made key contributions to the understanding of the interaction of electric fields on single neurons and neuronal ensembles. Later, this knowledge was integrated into the Starstim prototype, a new system for brain stimulation. Using this information and the Starstim prototype, towards the end of the third year of the HIVE project, partners did experiments of brain stimulation on animals and humans. After the project completion, the Starstim system was piloted and marketed by Neuroelectrics, a high-tech spin-off created by the project coordinator (Starlab). |
| *Results* | The main output of the project was the prototype of the Starstim system – a lightweight, wireless multichannel transcranial current stimulator that allows both brain data collection through electroencephalogram (EEG) and stimulation with multichannel tDCS. Although the project only produced a prototype, Starstim quickly became a commercial product, which became marketed by Neuroelectrics as a certified medical device.<br>In terms of employment effects, HIVE also resulted in the direct creation of jobs in research and the high-tech sector. At the beginning of the HIVE project, Starlab had around 15 workers. In 2015, the project coordinator (Starlab) and its spin-off Neuroelectrics already had around 45 employees distributed across three offices in Barcelona, Oxford and Boston. |
| Sources | PPMI (2017) |

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| *General information* | FP7 (2007–2013)<br>Countries involved: Bulgaria, Denmark, Germany, Hungary, Italy, Lithuania, Norway, Spain and United Kingdom. |
| *About the project* | Project name: Work and Life Quality in New and Growing Jobs (Walqing)<br>Funding: EUR 3,285,987<br>Timeframe: From 1 December 2009 to 30 November 2012 |
| *Context* | The main contextual factors for Walqing project were Europe 2020 agenda, which set the goal of an employment rate of 75% for the population aged 20–64 for each Member State, and the 2012 'employment package', which aims to 'harness the potential of job-rich sectors' for employment creation.<br>The contemporary labour market situation in Europe also asked for more in-depth research that could improve the job-quality for millions of Europeans: around 16.67 million more jobs were created in Europe between 2000 and 2008, slightly more than half of these jobs were of low quality with different profiles of insecurity, low discretion and high strain. More specifically, several sectors were characterised by a number of problems usually associated with low-quality jobs: low wages, low or undervalued skills, problematic working conditions and precarious employment. This was particularly true for the sectors selected by Walqing for more in-depth investigation: construction and labour-intensive services 'on the ground', i.e. |

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| | cleaning, catering, elderly care and waste management. |
| *Aims, beneficiaries, activities* | The main objective of Walqing project was increasing the knowledge of the quality of work and life in new and growing jobs among researchers, stakeholders, managers and policymakers. More specific project objectives included the aim to:<br><br>• Identify expanding economic activities in Europe with problematic configurations in terms of low wages, precarious employment and lack of social integration.<br>• Reveal the existing social policies aiming to improve conditions in these industries and involve stakeholders.<br>• Assess relations between different contractual arrangements, working hours, etc., and the impact on the quality of work and life.<br>• Transfer examples of good practice beyond their national context and to explore the limitations of such transfers.<br>• Identify gaps in stakeholder, national and European policy that may contribute to locking organisations and individuals in patterns of low wages and poor job quality and investigate the possibilities to transfer examples of organisational strategies that support higher-quality paths.<br><br>The project's main target groups were employees in low-quality job sectors, companies employing them and policymakers. The project participants were a number of higher education and research institutions forming a project consortium.<br><br>The project's main activities were research activities, more specifically, in-depth analysis of the European Labour Force Survey, European Working Conditions Survey, Quality of Life Survey and EU statistics on income and living conditions. In addition, each of the selected sectors was investigated in four to five countries that represent different employment regimes. In each country, project partners assessed industrial relations in two sectors, conducted two to three company case studies in each of their sectors and investigated the work situations, careers and perspectives of individuals and vulnerable groups. In addition, Walqing conducted five small-scale action research interventions to further dialogues and sector- or company-level initiatives to improve the quality of work in construction, cleaning and waste disposal. |
| *Results* | Specific focus on job creation and high-quality employment, any lessons learnt or characteristics that could have contributed to the success of the project<br><br>The project results include new methods developed and knowledge generated in the field of tackling low-quality job-related issues:<br><br>• A balanced absolute and relative trend (BART) index was developed during the project, which allows researchers to study employment growth in each country.<br>• Research team identified growing sectors and functions (between the years 2000 and 2007) in Europe with problematic and precarious working conditions and low quality of work and life through an analysis of a number of datasets.<br>• The project revealed job market situation in Europe in terms of low-quality jobs. Half of the job growth in Europe from 2000 to 2008 consisted of jobs with below-average job quality, with most of jobs concentrating on basic needs of humans: clean shelter, food, care and waste disposal. In addition, the research revealed the economic factors and conditions that shape the job conditions for workers in these sectors; |

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| | • In-depth analysis revealed important characteristics of low-quality jobs in emerging markets, including low wages, physically hard work, low and misrecognised skills, patchy to low interest representation, and strong gender and ethnic segmentation.<br>• Among the institutional conditions that can improve job conditions in the above sectors, the study identified inclusive employment regimes, welfare state provisions, inclusive and collaborative working cultures and corporate social responsibility, a functioning social partnership, and worker voice. In addition, it was also found that smart organisational solutions and management strategies can render workflows more continuous, employment more secure and contribute to service innovations, whereas new technology can lessen health and safety hazards. |
| Sources | Cordis (2018)<br>Coordinator: Forschungs- und Beratungsstelle Arbeitswelt |

## 1.6 SUMMARY CONCLUSIONS

Based on the evidence collected, this section will aim to draw initial conclusions in relation to the following questions:

### 1.6.1 How can the efficiency of H2020 in high-quality job creation (or employment quality) be best measured/assessed for the fund in question?

Currently the administrative system of H2020 does not collect any robust data, which would allow regular tracking of job creation effects of the programme. The administrative data only provides the name of the beneficiary organisation (e.g. the university) and the contact person for the project. Therefore, to measure the job creation, the assessments must rely on surveys of beneficiaries and macroeconomic modelling. To facilitate and make more regular the measurement of job-creation in H2020 and successor programmes, it would be necessary to register in the official administrative system not only the organisation name and project contact person, but also the name and contact details of the department within the organisation (university/research institute) involved in the project, the information (size in terms of FTE) of research team and team members involved in the H2020 project. For beneficiary private companies, it would be useful to collect information on their unique identification numbers (e.g. VAT payer number), which would then allow relating specific H2020 beneficiary company to the data available on detailed global private company information databases (such as Orbis). All these improvements in the official monitoring system would allow regular measurement and tracking of job creation effects within H2020 without additional surveys.

### 1.6.2 Which characteristics of H2020 can be considered key to success in terms of quality and number of jobs created?

According to the above evidence, involvement of the private companies (especially SMEs) should be considered as one of the key success factors in job creation in FP7/H2020. In addition, allowing as many young persons (ESRs) as possible to participate in the programme should also boost the job creation effects. Moreover, to further improve the job creation effects and make these effects more equally distributed across the EU, in the future the scheme should enhance the participation of EU-13 beneficiaries in H2020 programme.

### 1.6.3 What recommendations (if any) could be made on that basis for the improvement of the other instruments?

FP7/H2020 are research funding programmes and all the job creation effects are related to research activities – direct job creation resulting from hiring researchers for research projects and indirect job creation resulting from technological spillovers and innovations triggered by FP7/H2020 research. Hence, the lessons and recommendations for FP7/H2020 cannot be automatically transferred to other programmes, unless they focus on research funding, involve support for inter-sectoral mobility of researchers, development of innovative-start-ups, innovation development, etc.

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# ANNEX G: ESF REPORT

## 1.1 THE SCOPE: HOW CAN THE ESF SUPPORT JOB CREATION AND JOB QUALITY?

### Introduction

The ESF is the European Union's main financial instrument for supporting employment in MS and promoting economic and social cohesion. It was established in 1957 by the Treaty of Rome to improve job opportunities in the community, to promote the geographical and occupational mobility of workers and to help them adapt to restructuring sectors of the economy through retraining. Over the years, the ESF has evolved to meet new challenges and needs. It became more critical in combating unemployment and has spilled over to areas such as education, health, entrepreneurship, social inclusion, tackling roots of gender inequality and more.[263]

Nowadays, the ESF contributes to a wide range of EU priorities by promoting high levels of employment and job quality, improving access to the labour market, supporting the geographical and occupational mobility of workers. It also facilitates the adaptation of EU priorities to industrial change and to changes in production systems needed for sustainable developments, encourages a high level of education and training for all and supporting the transition between education and employment for young people, combats poverty, enhances social inclusion, and promotes gender equality, non-discrimination, equal opportunities, and improving institutional capacity.[264] As a distinctive feature from H2020, the ESF aims to directly 'benefit people, including disadvantaged people such as the long-term unemployed, people with disabilities, migrants, ethnic minorities, marginalised communities and people of all ages facing poverty and social exclusion'.[265]

### Organisation and management

The ESF is organised, managed and funded on the basis of seven-year programmes agreed in partnership between MS and the EC, and implemented at the national and regional levels. The current period covers the years 2014–2020.

Each MS or region prepares their operational programme (or multiple programmes) to be funded by the ESF. Once agreed, operational programmes describe the priorities for ESF activities and their objectives and fund numerous projects run by a range of public and private organisations. The operational programmes are implemented by managing authorities (MAs) in collaboration with other partners.

The ESF priorities in each programme are the result of need analysis and decision-making processes, which involve a range of stakeholders from local to European levels. In short, the EU provides a set of general rules that guide the use and management of operational programmes. These rules include a general catalogue of options where the resources can be used. Based on this catalogue, MS decide what they wish to prioritise (and fund) in their countries. These more specific instructions are developed by MA for each programme and result in a great variety of funding possibilities that greatly vary between countries and regions.

[263] European Commission (2007)
[264] European Parliament & Council of the European Union (2013)
[265] European Parliament & Council of the European Union (2013)

### Funding and objectives

The allocation of ESF resources varies by the relative wealth of a region, meaning that the funds are more concentrated in poorer regions necessitating greater financial support than others. In the 2014–2020 funding cycle, more than EUR 83 billion has been dedicated to the ESF to primarily support the following thematic objectives (TO) (Table 1):

- Promoting sustainable and quality employment and supporting labour mobility (TO8) – amounting to 33% (accounting for approximately EUR 27 billion).
- Promoting social inclusion, combating poverty and any discrimination (TO9) – 25% (approximately EUR 21 billion).
- Investing in education, training and lifelong learning (TO10) – 33% (approximately EUR 27 billion).
- Improving the efficiency of public administration (TO11) – 4% (approximately EUR 3 billion).[266]

The remaining 4% (approximately EUR 3 billion) is channelled through technical assistance.[267]

**Table 1: Scope of the ESF support (2014–2020)**

| Thematic objectives | Specific priorities as defined in EU Regulation 1304/2013 |
|---|---|
| Promoting sustainable and quality employment and supporting labour mobility | • Access to employment for jobseekers and inactive people<br>• Sustainable integration into the labour market of young people<br>• Self-employment, entrepreneurship and business creation<br>• Equality between men and women in all areas, including in access to employment, career progression, reconciliation of work and private life, and promotion of equal pay for equal work<br>• Adaptation of workers, enterprises and entrepreneurs to change<br>• Active and healthy ageing<br>• Modernisation of labour market institutions and improving the matching of labour market needs |
| Promoting social inclusion, combating poverty and any discrimination | • Active inclusion, including promoting equal opportunities and active participation, and improving employability<br>• Socio-economic integration of marginalised communities such as the Roma<br>• Combating all forms of discrimination and promoting equal opportunities<br>• Enhancing access to affordable, sustainable and high-quality services, including healthcare and social services of general interest<br>• Promoting social entrepreneurship and vocational integration in social enterprises and the social and solidarity economy<br>• Community-led local development strategies |
| Investing in education, training and lifelong learning | • Reducing and preventing early school leaving and promoting equal access to good quality early childhood, primary and secondary education including formal, non-formal and informal learning pathways for reintegrating into education and training<br>• Improving the quality and efficiency of, and access to, tertiary and equivalent education<br>• Enhancing equal access to lifelong learning for all age groups, upgrading the knowledge, skills and competences of the workforce<br>• Improving the labour market relevance of education and training systems, facilitating the transition from education to work, and strengthening vocational education and training systems and their quality |

[266] The ESF can also contribute to other thematic objectives: (1) supporting the shift towards a low-carbon economy; (2) enhancing access to, and use and quality of, information and communication technologies; (3) strengthening research; (4) technological development and innovation; and (5) enhancing the competitiveness of SMEs.
[267] European Commission (2016a)

| | |
|---|---|
|  Improving the efficiency of public administration | • Investment in institutional capacity and in the efficiency of public administrations and public services<br>• Capacity building for all stakeholders delivering education, lifelong learning, training and employment and social policies |

**Source**: Adapted from EC, 2015[268] and EU Regulation 1304/2013

### Job creation and job quality in the ESF Regulation

The ESF is a tool that affects the supply, rather than the demand, for labour. It aims to help people find a job or get a better job (either newly created or offered due to replacement demand), rather than to create jobs. There are, however, some exceptions:

- Direct job creation by supporting self-employment, (social) entrepreneurship and business creation.
- Indirect job creation by supporting businesses through upskilling staff, adaptation of enterprises and entrepreneurs to change. These activities could contribute to increased productivity, competitiveness and, ultimately, growth of the supported firms (including job creation).

The ESF Regulation also stipulates that 'the Member States and the regions should be encouraged to leverage the ESF through financial instruments in order to support, for example, students, job creation, the mobility of workers, social inclusion and social entrepreneurship.'[269]

In terms of job quality, although the Regulation 1304/2013 stipulates that the ESF shall support 'promoting sustainable and quality employment',[270] it seems to put more emphasis on access to, integration and re-integration with the labour market over the quality of future employment. This is different compared to the Youth Employment Initiative (YEI) regulated by the same legislation, as described in Annex H.

As such, the ESF is an important instrument, but only one of a wider set, supporting Europe's strategy to remodel its economy, creating not just jobs but an inclusive society. In the following sections, we explore the evidence for employment effects of the ESF and for the quality of the employment following the ESF intervention.

## 1.2 EVIDENCE FOR THE ESF BEING SUCCESSFUL IN (HIGH-QUALITY) JOB CREATION (OR HIGH-QUALITY EMPLOYMENT)

### 1.2.1 Evidence on Job Creation

As explained above, the ESF does not aim to create jobs. Therefore, presenting evidence on its effectiveness in job creation is somewhat difficult. For this reason, we will first look at what data on direct job creation are available. We will then review ESF achievements, starting with the evidence available at the EU level and then providing some snapshots on data from selected MS. The main studies and their key findings are summarised in Table 2.

[268] European Commission (2015)
[269] European Parliament & Council of the European Union (2013)
[270] European Parliament & Council of the European Union (2013)

**Table 2: Summary of findings on the overall ESF job creation/employment effect**

| Source | Findings/estimates on job creation/employment effect | Method | Programme covered |
|---|---|---|---|
| European Commission (2017c)[271] | Participants:<br>• In employment, including self-employment*: 803,776<br>• In employment, including self-employment, six months after leaving: 232,881<br>• With an improved labour market situation six months after leaving: 19,570 | Member States reporting | 2014–2020 (2016 values only) |
| Panteia (2016)[272] | Over 300,000 individuals were supported by the ESF in starting their own business (direct job creation)<br>More broadly:<br>• 9.42 million people gained employment | Meta-analysis of secondary data | 2007–2013 |
| European Commission (2016)[273] | 2.4 million participants in ESF actions supporting access to employment found a job within six months (2007–2011) | Member States reporting | 2007–2013 |

**Note:** * Participants upon leaving
**Source:** RAND Europe based on European Commission (2017c; 2016b), Panteia (2016)

**Direct job creation: Self-employment**

Even though some jobs may be created through entrepreneurship supported by the ESF, the number of people who received ESF support and are self-employed upon leaving is not reported separately but aggregated with the number of participants in employment upon leaving. This means that the exact number of people self-employed thanks to the ESF is not available.

However, the 2007–2013 ex-post ESF evaluation reported that 'over 300,000 individuals were supported by the ESF in starting their own business, particularly in France, Germany, Spain and Finland. Given its explicit contribution to job creation, these have been included in the aggregated total of employment.'[274] Some partial results focused on enterprises created to support vulnerable populations in their integration with the labour market are presented in Box 1.

Two things are worth noting here. Firstly, the ESF support for self-employment forms a fraction of the possible range of measures this fund can support. Secondly, even this limited potential needs to be considered in the context of the survival rate of new businesses more broadly. According to Eurostat's business statistics, the five-year survival rate of enterprises (created in 2010) was on average about 50%. In some countries (Ireland, Finland, Malta, Norway, the Netherlands, Estonia, Luxembourg, Belgium, Latvia and Romania), employment in those enterprises that passed the five-year mark increased.[275] We provide an example of the evaluation of this form of support at a national level in Box 1 below.

[271] European Commission (2017c), )
[272] Panteia (2016)
[273] European Commission (2016b)
[274] Panteia (2016)
[275] Eurostat (2018)

**Box 1: ESF job creation in the social economy (2007–2013)**

The ex-post evaluation on supporting the integration of disadvantaged groups into the labour market and society provides numbers for various enterprise-creation indicators. In total, it reported that 20,367 jobs were created:

- Poland: Number of jobs created in the social economy sector due to ESF support (1,600)
- Romania: Number of jobs created by entities in the field of social economy (6,046)
- Slovenia: Number of gross jobs created (vulnerable groups) - cumulative (3,807)
- Slovakia: Number of jobs created (6,219)
- The Czech Republic: Number of newly created jobs for the disadvantaged groups (2,695).[276]

**ESF achievements: Observed changes**

The EC presents data on ESF achievements in the 2014–2020 period based on relevant common (result) indicators required by the ESF regulation. Values from fully implemented projects in 2016 showed that there were 803,776 participants in employment (including self-employment) upon leaving, **232,881 participants in employment (including self-employment) six months after leaving**, and **19,570 participants with an improved labour market situation six months after leaving**.[277] In interpreting these indicators, one needs to be cautious not to assume that success can be directly attributed to the ESF – there might have been other factors at play that have contributed to the participants' employment. Improved socio-economic conditions offer one (of many) plausible explanations for the observed changes in the labour market status of ESF participants. However, this data does point to the possible role of the ESF in bringing people closer to employment.

Given that the 2014–2020 data only refers to 2016, we looked for a more complete picture of ESF results in the previous programming period (2007–2013). The mentioned ex-post evaluation found that **over 9.42 million people were reported to be in employment** immediately or sometime after completing ESF support.[278] The EC reported that **2.4 million participants found a job within six months of receiving the support** (between 2007 and 2011).[279]

A wide range of other results have been reported by different EU-level studies and evaluations (Box 2).

**Box 2: Employment-related results of ESF interventions (2007–2013)**

The ex-post evaluation reported that around 8.7 million ESF participants received a qualification or certificate and approximately 13.67 million reported another positive result ('other than employment or qualification, such as improving skills and competences, or successfully completing the ESF supported intervention').[280]

The ex-post evaluation of ESF investment into human capital[281] found that at least 21 million results have been recorded and that the aggregated results ratio was 46.3% (calculated as 21,004,272 aggregated results divided by 45,384,631 participations), including:

[276] ICF (2016)
[277] European Commission (2017)
[278] Panteia (2016)
[279] European Commission (2013)
[280] Panteia (2016)
[281] ICF (2015)

- 25% other positive result rate
- 13% qualification result rate
- 8% employment result rate.

The study further reported that the result rate (results/participations) was highest in the Regional Competitiveness OPs (54%), followed by Convergence OPs (39%) and the Multi-objective OPs (37%). The study noted, however, that linking results and participations was problematic 'due to the data quality issues as participations include sometimes indirect participants for whom no results could be expected, but also one participation can be associated with [multiple] results'.[282] The study concluded that the ESF human capital annual activities reached a significant share of the targeted population: 4% of people aged 15–24 in the EU, 1% of people in employment, 3% of the unemployed people, 2% of long-term unemployed, 3% of the disabled people, 1% of the migrant population and 6% of low-skilled students (at levels 1 and 2 of the International Standard Classification of Education (ISCED)).[283]

**ESF results: Snapshots at the national level**

The responsibility for the evaluation of the ESF is shared between the EC and MS. There is an abundance of ESF evaluations carried out at the national and regional level. We will now look at the evidence from selected countries on the (expected and achieved) results of the ESF implementation, especially where the effects can be attributed to the ESF only. While the insights we provide in this report are far from comprehensive, they allow to understand what data and the level of detail can (and indeed are) available at the national and regional levels. Please refer to Section 1.5 and Annex B for the detailed explanation of the selection and scope of our review.

**In Poland**, a comprehensive study on the effectiveness of the ESF in 2007–2013[284] was carried out using a combination of ESF cohort and panel study and computer-assisted phone interviews with a sample of ESF participants.[285] The study showed that large proportions of the unemployed individuals received the ESF support: up to 19% of jobless people (15–49 years old) and up to 59% of the unemployed. Among these, young people (below 24 years old), those with higher education, as well as the long-term unemployed were overrepresented. On the other hand, people over 50 years old and individuals with lower levels of completed education were underrepresented when compared to the population of the unemployed.[286] This suggests and the study confirmed the creaming effect[287] associated with 'an increased share of the grants for business start-ups and the introduction of the requirement of employment effectiveness'.[288]

Overall, the study noted that in subsequent years of the implementation, the effectiveness of the programme increased and ESF support took time to bear fruit. Among the responding participants who completed support in 2012–2013, about 44% were employed six months upon leaving – this increased to 52% in employment 18 months upon leaving. However, among a later cohort

[282] ICF (2015)
[283] ICF (2015)
[284] PAG Uniconsult (2015)
[285] There were four cohorts (waves) with between 2,000 and 4,900 participants six months upon leaving in each of the cohort and two follow-ups (18 months and 29 months upon leaving). The main limitation of the study is that it did not involve the control or comparison groups and as such the results reported cannot be entirely attributed to the ESF support.
[286] PAG Uniconsult (2015)
[287] 'Creaming' occurs when groups with higher chances of success are selected for the intervention over those who require more intensive efforts to place in employment.
[288] PAG Uniconsult (2015)

(participants who completed support in mid-2013), the percentages were 70% and 75% respectively.[289] The assessment of the business start-up support is presented in Box 3.

The study further reported that almost all responding participants (93%–96%) had been satisfied with the ESF support. If after six months from completing the support respondents were employed, they often used the competencies gained through the project. Around a half of those who took part in an occupational training or a traineeship/internship and worked after six months had a job consistent with their vocation.

**Box 3: Effectiveness of ESF support for business start-ups in Poland (2007–2013)**

The study on the effectiveness of the ESF in Poland examined measures helping people set up their own businesses. It reported that the support in the form of grants for business start-ups allowed for the establishment of 187,000 businesses (direct job creation). The survival rate 18 months after the registration was 68% and it declined to 56% three years after the registration. The study concluded that these rates were aligned with the survival indicators of newly established companies in Poland and as such it was a good result given that a considerable proportion of those supported came from vulnerable groups.

On the other hand, the study revealed that even without financial support from the ESF about 35% of the businesses would have been established, indicating a considerable deadweight of this form of support.

Among examples of evaluations from other countries, we have reviewed the ex-ante evaluation of two national programmes **in Italy**. The evaluation highlighted the learning from previous studies. Firstly, the measures promoting self-employment were considered instrumental for fostering the emergence of new businesses and for allowing those without work to set up their own firms. Secondly, the combination of loans, training and coaching activities was considered key to success. According to the report, training on various aspects of business development improved the entrepreneurial and managerial skills of the participants and reduced the risk of failure and continuous assistance (from a business plan to becoming fully operational during the first year), ensuring efficient use of ESF resources.[290]

A relatively dated evaluation **in Italy** was carried out between 2002 and 2003.[291] It assessed the effectiveness of the ESF interventions with a sample of 15,357 units representing 27,679 individuals. The sample included individuals who participated in the interventions co-financed by the ESF concluded in 2001 in Objective 3 OPs and the survey was carried out by phone. The analysis of the results showed that 12 months after the closure of the intervention, among the people who participated in training/work experiences: 68.6% were employed; 11.4% were in the education system or alternatively followed another professional training course or repeated the job placement experience to refine the skills acquired or while waiting for better job opportunities; 16% were looking for a job; and 4% were inactive.[292] According to the study, the characteristics of the recipients, as well as the characteristics of the interventions, played a role:

[289] PAG Uniconsult (2015)
[290] PWC per il Ministero del Lavoro e delle Politiche Sociali (2015)
[291] Severati (2006)
[292] Severati (2006)

- Highly educated young people, who have been already looking for work before the start of the interventions, had the greatest chances to find a job.
- The number of years in education (a proxy for the highest level of education attainment) and good grades had a positive effect on the probability of finding work (the best educated were more easily employable).
- The best results in terms of job placement were recorded for the post-university training and post-diploma training.
- The probability of finding a job increased with the intensity (duration/frequency) of the course.
- Among the training sectors, socio-educational services, mechanics and metallurgy (and to a more marginal extent, the applied IT sector) had a positive effect on the probability of finding a job; the opposite situation was the result for hospitality and construction sectors, even if the estimate was not significant for the latter.

**In Spain**, a thematic evaluation examined the effects of ESF support for a migrant population and reported that among surveyed participants, 94% participated in training activities to increase their chances of finding a job or improve their work situation and 93% considered that their participation contributed to the achievement of their objectives. [293] The ex-post evaluation of the effectiveness of the ESF in 2007–2013 was undertaken in 2016. The study showed that of the 13.8 million participants who registered for at least one ESF activity, 32% were aged below 25, 63% were unemployed, 46% had low educational attainment, and 21% were of a disadvantaged background. The study recorded 3,160,266 as having entered into employment, 97,587 gaining a qualification and 11,888 businesses created.[294]

No evidence on employment effect was found through the review of selected reports from **Germany** other than those reported by the ex-post evaluation for the EC. The study found that 247,000 participants achieved some form of employment after the intervention and around 50,000 became self-employed.[295] The same source also reported that according to a survey among those unemployed supported by the national OP, 57% per cent of the participants stated that the intervention increased their employability and 25% found a new job six months after having completed the measure (with the expected target set at 15%).[296]

### 1.2.2 Evidence on the quality of new jobs

The EU-level studies and evaluations have not provided much insight on job quality (or quality employment) supported by the ESF other than information on the status of the participants six months after completing project activities. While this information provides some indication on the sustainability of the support, it is not helpful as a proxy indicator for job prospects.

This does not mean that the concept of job quality is not considered. There are many studies that aim to shed more light on what happened to the ESF participants after the support ceased and how they are doing. This evidence is available at the national and regional level, but it is much more difficult to compare due to different methodologies used. Below, we provide a sample of findings from a few MS. **In Poland**, the study of the 2007–2013 period found that the quality of employment of people who found a job was varied but often low (the aspects examined included: forms of employment, salary

[293] European Union (2011)
[294] Metis GmbH, Fondazione Brodolini & Panteia (2016)
[295] Metis GmbH, Fondazione Brodolini & Panteia (2016)
[296] Metis GmbH, Fondazione Brodolini & Panteia (2016)

level, working conditions and satisfaction). Depending on the cohort, between 17% and 25% of participants (or between 25% and 58% of those employed) had low-quality jobs. According to the study, those with higher chances of finding a job more generally (such as men or people with higher education) tended to secure jobs of higher quality.[297]

The study found that some participants moved between periods of employment (having a job, usually of poor quality[298]) and unemployment (being without a job), but the relative size of this group of participants was uncertain. Flows to (and from) jobs of higher quality were rare – these jobs usually offered more stability and were difficult to access for those long-term unemployed or 'stuck' in jobs of poor quality. Sustainable integration with the labour market was most frequently achieved by people who had high-quality jobs.[299]

Some specific findings of this study include:

- **Prospects:** Only 9% of those who found jobs had permanent employment contracts, 41% had fixed-time employment contracts and 16% worked in other forms of employment than the employment contract (contract of mandate, task-specific contract, managerial contract, mixed form, other civil law agreement). The flows to more secure and stable contracts were limited.
- **Earnings:** Salaries of some participants were measured between the 6- and 18-month follow-ups. An average salary of a person who had a job at the 6-month follow-up was 1 475 PLN and 1 779 PLN at the 18-month follow up. This was reported to be just above the minimum wage (1 178 PLN and 1 237 PLN respectively).
- **Working conditions:** About 32% of those who found a job and remained employed at the 18-month follow-up worked shifts and 11% worked at night. Still, 89% were satisfied with the working conditions.

Finally, the study examined the quality of jobs created by the ESF through business start-ups (Box 4).

**Box 4: Job quality in the ESF supported business start-ups in Poland (2007–2013)**

The study on the effectiveness of the ESF in Poland[300] examined the jobs created through business start-ups and concluded that they were of a rather low quality. Employees who found a job in companies formed from the ESF grants were characterised by the following features:

- Having an employment contract – 26% of employees (however, if the company employed only one employee, 64% of them had a contract of employment).
- Having a permanent contract (but work based on a contract of any type – 31% of employees (regardless of the size of the company).
- Having a full-time job – 52% of employees (71% if the company employed only one employee).
- Providing training opportunities – 37% of companies employing staff.
- Average remuneration – 1 700 PLN (if disclosed).

[297] PAG Uniconsult (2015)
[298] The study used a classification system for job quality and one of the categories referred to 'poor jobs'.
[299] PAG Uniconsult (2015)
[300] PAG Uniconsult (2015)

**In Italy**, the evaluation from the previous programming period analysed the characteristic of the employed 12 months after the completing the training course (68% of the total sample of the participants to ESF interventions). The study found that approximately 81.2% of the individuals were employed by an employer, 8.9% are employed in the form of co-ordinated and continuous collaboration (specific type of Italian contract), 5.4% are self-employed, 2.9% work as occasional/seasonal employees and 1.6% are in employment without a formal contract/relationship.[301] Regarding the type of relationship/employment contract, among the employed persons about 37% had a permanent employment contract, about 30.5% had a fixed-term contract, 20.4% had a contract of employment apprenticeship, 9.8% had a 'training and work experience' contract and 2.7% an irregular employment contract. In the sample analysed, about 15% of the employed had a part-time job. The evaluation also found that on the basis of some objective characteristics (safety in terms of contractual protection, hourly wages, access to training and/or career opportunities), four job types are identified:

- Jobs without prospects: Temporary contracts (duration less than three years), income below the threshold value and/or professional position with low decision-making/autonomy level.
- Low-paid jobs: Income below the threshold value but with a permanent contract or with a professional position with a medium-high decision-making level.
- Properly paid jobs: Income above the threshold value but with a temporary contract or a professional position with a medium/low level of decision-making authority.
- Quality jobs: Permanent contract (or with a term of more than three years), income above the threshold value and professional position with a medium/high level of decision-making authority. [302]

According to the study, just over 27% of those employed in the sample found employment in jobs without prospects both in terms of pay and of contractual protection and decision-making autonomy. The number of those who had a low-paid job of any kind increased to 63.5%, while 36.5% had a work with at least a decent level of pay, but only 9.3% had a job of good quality in terms of pay and of contractual protection and decision-making autonomy. [303]

A greater contribution to the probability of obtaining 'appropriately paid jobs' was provided by intensive courses (+4.1%) and higher training courses (+9.1%). On the other hand, compared to the probability of obtaining 'quality work', the positive contribution of the intensive courses fell to 2.6% while the effect linked to participation in the advanced training courses was practically non-existing. The frequency of courses within the compulsory education had a negative effect both in the probability of the category 'adequately paid jobs' (-7.7%) and in the probability of the category 'quality work' (-5%). Specifically, the specular aspect for the training obligation was shown by an increase in the probability of obtaining 'unpaid jobs' (+11.6%). With the exception of high-level training courses (-11.4%), the different characteristics of the interventions had no statistically significant impact on the probability of obtaining poor jobs.

The analysis looked also at the effects of the interventions related to the characteristics of the recipients. There was a positive relationship between the estimated probabilities of getting 'appropriately paid jobs' and 'quality jobs' with the years of study/education. The grade of the qualification also had a positive relationship with the probability of finding a job that was decently

[301] Severati (2006)
[302] Severati (2006)
[303] Severati (2006)

remunerated. There was a gender difference in relation to the probability of obtaining jobs (the gap between men and women in the cumulative probability of obtaining good quality jobs increased to 10.6 percentage points).

Lastly, it is worth noting that the survey included a specific question on matching qualifications with job demands: 'With respect to the tasks you carry out, do you consider that your educational qualification or certificate of professional training is excessive, adequate or insufficient?' The results were dominated by 'adequate' (almost 85% of the answers). In order to take these results into account, the author suggests in the future to insert new dimensions into the synthetic indicator that capture other aspects that are obviously not adequately taken into account in the current index, such as, for example, the type of work task.

**In Spain**, as part of a thematic evaluation, a survey of immigrants who had participated in ESF programmes included some questions with respect to aspects of job quality. It found that, of those who reported finding a job as a result of the ESF programme, 98% stated that their working conditions had improved compared with previous employment. This was reported by 99% of those between 25 and 45 years of age and 94% of those over the age of 45. It was also consistent across education level, with 93% of people with primary education, 99% of people with secondary level education and 97% of people with tertiary-level education reporting that their working conditions had improved. No difference was recorded between genders. However, in the same survey, 61% of respondents reported that they did not consider their income sufficient to 'live with dignity'.[304]

The ESF does not only support people who are unemployed – it also supports a wide range of other possible beneficiaries, including enterprises and their employees. A survey with ESF-supported companies **in Germany** examined the effects on the beneficiaries but no comparison group was used.[305] The survey was carried out with two waves of beneficiaries in 2011 (with over 100 companies) and 2015 (with over 250 companies) but the exact sample sizes and methods were not provided. The findings of the survey showed that among the effects of the training measures for the employees were (declared) improvements in working conditions (2011 and 2015: 28%) and career progression (taking up a higher occupational position) (2011: 15%, 2015: 14%). Overall, the results of the combined surveys indicated that the ESF training measures 'increase the competitiveness of the companies concerned, but also ensure and enhance the employability of the participating workers or the self-employed.'[306]

Also **in Germany**, a survey among those unemployed supported by the national OP showed that the proportion of respondents, who stated that the participation has increased their security of employment, was 27% (against the 20% target) and 17% of respondents reported that their participation in the measure could increase the promotion prospects (against the 19% target).[307]

### 1.3 EVIDENCE FOR SOME INTERVENTIONS BEING MORE EFFECTIVE THAN OTHERS

The ex-post evaluation of the 2007–2013 ESF support for disadvantaged groups found some evidence for certain interventions being more successful than others for different participants:

[304] Ministerio de Trabajo e Inmigración de España (2011)
[305] isw (2015)
[306] isw (2015)
[307] Metis GmbH, Fondazione Brodolini & Panteia (2016)

- Specific training courses for (existing or prospective) early school leavers combined with integrated support measures were successful.
- For young people seeking to enter employment, the career guidance and learning experiences afforded by vocational apprenticeships and internships were successful.
- Training and activities for adults was most successful when connected to gaps in the labour market (e.g. sector-specific training, entrepreneurship skills), when activities were well promoted to participants and companies, and the access to training for participants was simple and flexible.
- For higher education students, successful activities were those linked to the national reform agenda and connected to needs to the sector.
- For disadvantaged groups, targeted, tailored interventions to address labour market entry barriers with multi-agency support were effective for target groups.[308]

The evaluation also compared the employment results across different thematic clusters of activities. It found that the highest share of employment outcomes was achieved by interventions that had employment as a target outcome (such as wage subsidies, rather than those focusing on preparatory or holistic actions).

## 1.4 THE MEASURES: HOW TO ESTIMATE AND ASSESS JOB CREATION AND JOB QUALITY?

### 1.4.1 Employment effect (job creation) of the ESF

With regards to the other EU funds, in terms of ex-ante assessments, the IA accompanying the proposal for the ESF Regulation[309] did not contain any estimates or quantified projections on the employment effects.[310]

However, in ex-post evaluations (or after the implementation has started) the measurements of employment effects are more common. These measurements include drawing on monitoring data from the Annual Implementation Reports (AIRs) and reporting the number (or proportion) of participants in employment (including self-employment). Having said that, OPs use a broad variety of result indicators and aggregating or analysing them is challenging, as affirmed by the ex-post evaluation.[311] Of the 3,489 result indicators identified by the evaluation, only about a third (1,137) could be used for the analysis and eventually simplified into five categories: employment gained, qualification gained, other positive result, product created or entities improved.[312]

In order to estimate success rates the ex-post evaluation:

- Compared participation data to results: While assuming a link between individual participations and results, such comparisons might be helpful to show patterns between countries, regions or ESF priorities. The analysis revealed that the overall such a calculated success rate across all ESF priorities was at 44% – with the highest for social inclusion (52%), average for human capital (46%) and the lowest for Access to Employment (38%).

[308] ICF (2016)
[309] European Commission (2011)
[310] However, the ESF IA provides a qualitative assessment of the various options against a number of criteria (including Contribution to Employment).
[311] Metis GmbH, Fondazione Brodolini & Panteia (2016)
[312] Metis GmbH, Fondazione Brodolini & Panteia (2016)

- Compared actual achievements against target values (where output and result targets were actually set, which was not as common as one could expect, for example of 3,680 output indicators no targets were defined for 40% (1,489) and of 3,489 result indicators 35% (1,238) did not have a target. Some other indicators – though with set target values – were not used for monitoring altogether. The evaluation showed that the majority of the result indicators have met or exceeded their target values;[313] however, such comparison are also problematic because they may tell more about the accuracy of planning or the levels of ambition, than the true effectiveness of ESF interventions.

A second common methodology employed is to commission studies that involve data collection through surveys with ESF participants or businesses/organisations who had engaged with the ESF programme. These surveys, which were primarily conducted by telephone, were used to assess the status of individual ESF participants at a set time following the completion of ESF support (for example, their employment status or, in the case of business-creation measures, the survival of the business).

### 1.4.2 Job quality in the context of the ESF interventions

To assess aspects related to job quality (such as effects on career progression, remunerations, contract quality, training, development of competences and skills) the ESF studies and evaluations usually rely on surveys of participants and beneficiary organisations, as well as interviews, literature review and case studies.

Information on certain aspects of job quality came entirely from evaluations carried out at the national (or regional) levels. These studies involved qualitative and quantitative methods, including surveys and interviews with project beneficiaries and other stakeholders. For example, an evaluation in **Poland** used a telephone survey with four cohorts of ESF beneficiaries (between 2,000 and 4,900 participants in each cohort) and up to two follow-ups with each cohort (18 months and 29 months upon completing project activities).[314] The study developed a synthetic employment quality index that took into account three dimensions: stability of employment, professional position and income. Using the index, four categories of jobs have been distinguished: (1) high-quality jobs, i.e. those with high salaries (over 50% of the average salary in the industry sector) and high or medium professional position; (2) jobs with an adequate salary, i.e. those with high salaries and stable employment but low professional position or with an unstable form of employment; (3) low-salary jobs, i.e. those with low salaries but where employment is stable or where it is unstable but compensated with high professional position; and (4) jobs without prospects, i.e. low paid, unstable and with medium or low professional position. The study found that if the participants found a job, they usually occupied jobs without prospects (between 25% and 17% of participants). However, participants from later cohorts tended to find high-quality jobs more often (12%–17%) than those from earlier cohorts (3%–5%).[315]

A national-level evaluation from **Italy** also constructed a typology based on three indicators of quality employment to assess the quality of jobs found through the ESF programme: contract duration, income and level of decision-making/autonomy. The evaluation considered the number of participants who had achieved jobs without prospects (temporary contracts, low income and low autonomy); low-paid jobs (permanent jobs or jobs with high autonomy but with low income);

[313] Metis GmbH, Fondazione Brodolini & Panteia (2016)
[314] PAG Uniconsult (2015)
[315] PAG Uniconsult (2015)

properly paid jobs (jobs with an income above the threshold but lacking in either job autonomy or permanent contract); and quality jobs (permanent contract with an income above the threshold and at least medium level of autonomy).

Other national-level evaluations from **Spain** and **Germany** used surveys to ask about specific elements of job quality in the context of wider studies (focusing on businesses in the case of Germany and the experience of immigrants in the case of Spain), such as perceptions of working conditions, salary, prospects of career progression and appropriateness of former qualifications.

### 1.4.3 Indicators, measures or indices used

The ESF Regulation itself does not require specific data collection on the number of jobs created, meaning employment effect can be assessed at EU level primarily by using indicators such as numbers of participants entering and remaining in employment, and analysing this in the context of broader regional employment trends. However, data may be gathered based on the particular intent of the OPs.

As mentioned earlier, the variety and limitations of indicators caused a major obstacle in the said ex-post evaluation of the ESF (2007–2013). The report called for: (1) higher standardisation of programme indicators across OPs and MS; (2) consistent and reliable data reporting; and (3) improving longitudinal data for participations to measure effects over time.[316] Considerable efforts at the EU level have been dedicated to improve the robustness of monitoring systems; currently, there are 12 common result indicators (and many OP-specific indicators) and the consistency in reporting has improved in comparison to 2015.[317]

As specified in the Regulation 1304/2013, MS have to submit AIRs each year in line with Article 50(1) and (2) and Article 111(1). These reports should contain gender-sensitive result indicators, which are used to capture the employment effect of ESF interventions. The Regulation does not specify the collection of particular data, but specifies common short measures (which capture the employment effects immediate after an ESF intervention) and long-term measures (which seek to understand the impact after a specific period of time).

Short-term measures used in studies to assess the employment effect of ESF measures include:

- Participants in employment, including self-employment, upon leaving.
- Inactive participants engaged in job searching upon leaving.
- Disadvantaged participants engaged in job searching, education/training, gaining a qualification or in employment, including self-employment, upon leaving.

Longer-term result indicators that measure ESF employment effects include:

- Participants in employment, including self-employment, six months after leaving.
- Participants with an improved labour market situation six months after leaving.
- Participants above 54 years of age in employment, including self-employment, six months after leaving.

[316] Metis GmbH, Fondazione Brodolini & Panteia (2016)
[317] Fondazione Brodolini & COWI (2017)

- Disadvantaged participants in employment, including self-employment, six months after leaving.
- Participants in employment, including in self-employment, six months after leaving the intervention.

It should be noted that where applicable, ESF indicators are broken down by gender. This relates to common output indicators for participants, immediate and long-term result indicators for participants. The ESF has a long tradition of supporting gender equality objectives, also through the monitoring and evaluation systems.

However, the use of indicators across programmes and funds varies and there is still room for improvement.[318] A comprehensive study has been commissioned by DG EMPL to assess the implementation of monitoring and evaluation systems, identify challenges and make proposals to improve requirements for the next programming period. Some preliminary problems have been already identified and grouped in four main categories:

- Monitoring requirements: These were still considered complex and regulations had been viewed as too detailed and indicators focused on the labour market status as inappropriate for all priority axes.
- Data collection: Overall, there was a high volume of data requested but difficulties were encountered with data collection on entry as well as upon and after exit (e.g. participants refuse or are unable to provide personal data, some groups are hard to reach, there are low response rates, data protection laws add further requirements and restrictions). When relying on administrative data, such registers do not always cover all variables and/or population, use different definitions and require cooperation of relevant organisations in the country, which cannot always be taken for granted.
- Data management: There are practical challenges with data storage, transmissions and processing (from technical difficulties, lack of instructions or procedures, to insufficient expertise or capacity), as well as some teething problems with the electronic system to exchange of information concerning shared Fund management between MS and the EC (SFC2014)
- Use of data: There are still difficulties with the assessment of performance/progress and available data from impact evaluations are limited. The study also pointed to unintended outcomes of introducing performance incentives/targets; these included using targets to limit funding, discouraging potential beneficiaries, encouraging rapid spending ahead of expected or planned result orientation, and creaming of participants.[319]

Given that many ESF actions focused specifically on encouraging the creation of businesses and other entrepreneurial activities (which may create additional jobs as a result of commercial activity, in addition to the self-employment of the direct beneficiary), some indicators focused on estimating the rate of successful and sustainable business creation. At the national level, some countries examine and report on the number of participants in self-employment, jobs created in the social economy ( Box 1), or businesses/start-ups created (Box 3). An ex-ante evaluation of an Italian programme to support youth entrepreneurship estimated the change in the 'youth entrepreneurship rate' in the target region based on the number of individual business owners younger than thirty years of age as a percentage of total number registered with the Italian Chambers of Commerce.[320]

[318] Tóth G. (2017)
[319] Applica, wiiw & TARKI (2017)
[320] PWC per il Ministero del Lavoro e delle Politiche Sociali (2015)

On the other hand, the number of indicators and measures dealing with job quality aspect is rather limited. Nonetheless, some indicators were used at project level to record outputs relating to job quality. The evaluation of the ESF programme from 2007–2013 found that some projects aimed at currently employed persons were measuring the percentage of participants whose income increased and the percentage of participants who shifted from fixed-term contract to open-ended contact for those already employed (the data itself was not available in the evaluation). Some of the job quality indices created for the national level evaluations have been presented above (evidence on quality of jobs).

### 1.4.4 Efficiency of the ESF in high-quality job creation

Efficiency of ESF interventions can be assessed by: (1) comparing the cost per participation; (2) comparing the cost per type of result achieved; or (3) comparing the cost of different types of interventions across ESF priorities. However, the imperfections of cost data, as well as the range of indicators presented above, mean that such estimates at the EU level are crude. In addition, differences in the type of interventions offered (in-depth and tailored vs basic and standardised), target groups intended, and diversity of socio-economic context in which these interventions are delivered add to the list of cautions before any attempts to compare these estimates across countries, regions or ESF investment priorities.

According to the ex-post evaluation, the average cost per participation for all interventions across the EU28 was EUR 897.[321] The study showed that interventions in the field of human capital were less expensive (EUR 681 per participation) compared to those targeting more vulnerable groups (access to employment interventions cost on average EUR 1,113 per participation and social inclusion actions EUR 1,763 per participation). Costs per result ranged between EUR 401 (quality of school education), EUR 3,548 (employed) and EUR 8,340 (upskilling of adults) pointing to a link between the average costs of results achieved and the intensity of the support received.[322]

No evidence was found on the efficiency of ESF interventions in the reviewed evaluations carried out at the national and regional levels.

## 1.5 VIGNETTES/EXAMPLES OF ELEMENTS SUPPORTING HIGH-QUALITY JOB CREATION

The projects listed below were selected based on the EU and national level documentation review, targeted searches of RegioStar finalists and targeted online search.

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| *General information* | ESF (Operational Programme of Lombardy Region)<br>Programming period: 2007–2013<br>Country: Italy |
| *About the project* | Dote Unica Lavoro ran from 2013–2015 and provided tailored support to jobseekers and promotion of entrepreneurial activities via a basket of services offered at different levels and compositions.<br>Funding: EUR 61 624 808<br>Timeframe: 2013–2015 |
| *Context* | Dote Unica Lavoro was a project implemented in Lombardy, Italy, recovering from a period of slow economic growth and high unemployment rates. The project |

[321] Metis GmbH, Fondazione Brodolini and Panteia (2016), ESF Ex-post Evaluation Synthesis 2007-2013. EU synthesis report – final version

[322] Metis GmbH, Fondazione Brodolini and Panteia (2016), ESF Ex-post Evaluation Synthesis 2007-2013. EU synthesis report – final version

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| | implemented a new policy model to get people back into work and offered a customised tool for jobseekers. |
| *Aims, beneficiaries, activities* | The project assessed the situation of individual jobseekers (including employment status, education level, gender, age and distance from the job market) in order to match with them with a relevant agency. The agency was then able to provide tailored support to their assigned jobseekers within a particular budget.<br>Agencies were reimbursed only for support they provided to jobseekers who ultimately found job placements. The efficiency and effectiveness of the agency is assisting jobseekers was also evaluated annually in order to set budget thresholds, with good agency performance resulting in an increased budget. |
| *Results* | The project reports that 70,607 were able to access training, assistance, support and advice to support their job searching as a result of the initiative, including 57,275 who began a work experience placement. |
| Sources | European Commission (2018a) |

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| *General information* | Job'In – Support to self-entrepreneurship, ESF and ERDF operational programme for Wallonia<br>Programming period: 2014–2020<br>Country: Belgium |
| *About the project* | The project history goes as far as 1997. Job'In has been helping people to set up their own sustainable companies.<br>Funding: EUR 2,340,000<br>Timeframe: 2014–2020 |
| *Context* | The Wallonia economy is dominated by small companies and regional authorities have set up a range of tools to support them. These include opportunities for jobseekers, self-employed and those looking to change their carrier path and set up their own business. One quarter of newly founded companies in Wallonia are created by jobseekers who transform into self-entrepreneurs. |
| *Aims, beneficiaries, activities* | Job'In is an entrepreneurship programme which began operating in 1997 and is currently run across six sites in Wallonia, Belgium.<br>The programme seeks to support the entry of unemployed persons into the labour market by supporting entrepreneurship and providing a 'one-stop shop' and follow-up guidance to help individuals set up their own company. This includes initial group information sessions and one-on-one meetings with advisors, followed by individual personalised support plans that are implemented over three to six months with the support of a dedicated advisor. These plans may involve supporting individuals in seeking funding for their business idea.<br>A business incubator is also available to allow individuals to launch their business while retaining social security benefits (e.g. unemployment support) for a time-limited period.<br>The programme also includes a separate strand, Job'In Design, which focuses on supporting design and craft businesses. |
| *Results* | Since 1997, Job'In reports that it has assisted the establishment of around 2,000 new firms, of which 82% have survived for at least three years (2016 figure). In 2016, this included supporting 90 separate start-ups. Of all entrants to the programme in 2016, over 85% were unemployed. |
| Sources | European Commission (2018b)<br>Job'In (2016)Job<br>Job'In (2018) |

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| *General information* | Qualification of health operators<br>Programming period: 2007–2013<br>Country: Italy |
| *About the project* | The project financed training and retraining courses for healthcare operators in order to foster their inclusion in the (regional) labour market and in the social health system. |
| *Context* | Demographic and social changes are affecting the Italian society and increasing the needs for specialised and personal healthcare assistance. Healthcare operators need to |

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| | be better equipped to address this demand. |
| *Aims, beneficiaries, activities* | The project sought to both reduce unemployment and support the regional healthcare system in Apulia by supporting the requalification and upskilling of healthcare assistants, and providing training to unemployed persons wishing to enter the sector.<br>Healthcare assistants were provided 400 hours of training towards a sectoral qualification to support their move into sectors with labour shortages (for example, the care giving sector which is experiencing greater demand due to population ageing). The programme cost an estimated EUR 10,000 per participant. |
| *Results* | The programme reached 92% of its target population. 80% of those who received training were employed, compared to 27% of those who had not. In addition, participants reported that they have observed an improvement in their new position on particular aspects of job quality: income increased for over 75% of those who had undertaken ESF-supported training compared to 27% who had not, and 34% reported an improvement in their occupational status (e.g. entering employment; a shift from fixed-term to permanent contract) compared to 20% of those who did not benefit from the training.<br>The evaluation also reported wider economic benefits for the Apulia region. |
| Sources | IPRES (2013) |

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| *General information* | Grant Scheme for Facilitating Access to Employment of People from vulnerable groups<br>Programming period: 2007–2013<br>Country: Cyprus |
| *About the project* | The Grant Scheme aims to encourage the employment of vulnerable population groups by offering a time-limited subsidy (comprising 65% of annual wages and commuting costs) to businesses and local authorities who offer full-time jobs to particular groups. |
| *Context* | The programme was designed by the Ministry of Labour in collaboration with the Managing Authority for Cyprus. |
| *Aims, beneficiaries, activities* | Population groups eligible for the subsidy include early school leavers; young people (aged 15–24) or older workers (aged 50+); single parents or workers with other dependents; persons with disabilities; former drug users; victims of trafficking; and minority language groups within Cyprus. |
| *Results* | The Ministry of Labour reports the results of an internal evaluation found the intervention to be effective in supporting people into employment. Of 979 people who were supported, more than 60% remained in the same job placement two-year period after the subsidy had ended. The cost per result was EUR 13,531. |
| Sources | ICF (2016) |

## 1.6 SUMMARY CONCLUSIONS

Based on the evidence collected, this section will aim to draw initial conclusions in relation to the following questions:

### 1.6.1 How can the efficiency of the ESF in high-quality job creation (or employment quality) be best measured/assessed for the fund in question?

As shown in the report, the measuring of the efficiency of ESF interventions is problematic at the EU level and it is not very common at the national and regional level. The interpretation of existing efficiency indicators need to be carried out with caution and account for data quality issues, socio-economic contexts in which the interventions are implemented and other considerations. Currently, none of common result indicators refers to job quality. As such, existing efficiency estimates relate to supporting people into jobs more broadly, rather than specifically to high-quality jobs.

The ESF Regulation does not place much attention to job quality in the ESF evaluation and reporting requirements. While some assessments of this aspect exist at the national and regional level, it is unclear how common such evaluations are and what they find across the EU.

Continuous efforts to improve ESF indicators, monitoring, evaluation and reporting systems demonstrate the tensions between harmonising key indicators across the MS and OPs to improve combined reporting on the one hand, and leaving sufficient room for customised indicators that reflect specific characteristics of each MS and OPs on the other. The evidence shows that a better balance between the two needs to be found and that further adjustments to the common indicators may be needed. Whether (and which) job quality aspects should be incorporated into the systems remains an open question. This is because additional efforts would be required from all stakeholders involved – from the EU institutions, including the EC and the EP, MAs and other implementing bodies, through to beneficiaries and ESF participants themselves, since in one way or the other they would be involved in providing, collecting, transmitting, matching or using the data.

### 1.6.2 Which characteristics of the ESF can be considered key to success in terms of quality and number of jobs created?

The data and evidence examined show that that projects aiming at supporting entrepreneurship translate directly into job creation. While self-employment and business start-ups are good examples of job creation, it is questionable whether this can be considered as key to success in terms of number of jobs created. It is important to acknowledge that not everyone can or wants to be an entrepreneur and as such, ESF supports these interventions as a fraction of its activities.

This begs a bigger question: whether the ESF should indeed aim to create job, or rather – as it is at the moment – address issues related to labour supply from early childhood education and fighting school drop out to improve children's life chances and future employment opportunities, through to facilitating the first entry (and re-entry) to the labour market, supporting people in advancing or changing their professional carrier paths, etc. Indeed, the ability of the ESF to intervene from the early stages and throughout the journeys people take through their education system and labour market should be considered a key characteristic of the fund in helping people find and keep their jobs. However, this feature is unique to the ESF and not transferable to other EU funds due to their complementary natures.

Another important issue relates to target setting in relation to employment effectiveness. The review of documentation revealed some evidence of creaming effects for programmes where such targets were introduced. This is supported by wider literature on the subject.[323] While the improvement of the effectiveness of ESF implementation is understandable and desirable, it should not lead to leaving those who most need the support without it.

Finally, there is a related question of characteristics that are key to success in terms of job quality. If the ESF was to support more quality jobs, there is a risk that it would focus on those who are closer to the labour market. The anecdotal evidence from a few national evaluations shows that the majority of people find jobs that lack on certain, if not most, dimensions of quality. It should be remembered,

[323] See for example Carter & Whitworth (2015)

however, that the fund aims to help those who are in most difficult situations and sometimes having a job that does not meet all criteria for high quality might be better than not having any.

### 1.6.3 What recommendations (if any) could be made on that basis for the improvement of the other instruments?

Job quality should not be overlooked within the ESF and policy efforts need to consider job quality in conjunction with efforts to increase employment rates.

With regard to lessons and recommendations from the ESF to other EU funds, we conclude that monitoring indicators that are broken down by gender and corresponding reporting requirements form a good practice that can and should be applied across all European funds and programmes, not just those falling under the portfolio of DG EMPL.

Similarly, efforts dedicated to promote and build capacity for counterfactual impact evaluations of ESF interventions should be commendable to other funds, especially those falling under direct management of the EC, where planning and conducting such studies at the EU level should be easier than for funds where the management responsibilities are shared between the EC and MS.

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# ANNEX H: YEI REPORT

## 1.1 THE SCOPE: HOW CAN THE YEI SUPPORT JOB CREATION AND JOB QUALITY?

The EC established the YEI in 2013 in response to increasing youth unemployment across Europe. The YEI was created to support the implementation of the YG, a political commitment by MS to combat youth unemployment and social exclusion by providing 'a good quality offer of employment, continued education, an apprenticeship or a traineeship within a period of four months of becoming unemployed or leaving formal education'.[324] OPs in the MS – through which the YEI is implemented – primarily target young people under 25 years old, although MS can expand the scope to include young people between 25–30 years old if MS consider it necessary.[325] The initiative targets vulnerable groups such as young people who are neither in employment, education or training (NEETs), young women, young mothers, migrants, and early school leavers.[326]

The budget for the YEI is EUR 6.4 billion for 2014–2020 period, with an additional EUR 2.4 billion agreed in 2016 for the period 2017–2020. Of this, half is drawn from a reserved resource under the ESF and the rest comes from a dedicated YEI budget agreed for the 2014–2020 MFF.[327] Regions across 20 MS with youth unemployment higher than 25% can benefit from the YEI funding.[328,329] The countries that received the biggest shares of the YEI budget in 2015–2017 were France, Poland, Italy, Spain and the United Kingdom.[330] Therefore, while analysing the national implementation of the YEI, the more detailed focus was on the countries mentioned above.

Please see Table 1 for the full list of the documents analysed in this report. There were three EU level and seven national-level evaluations analysed together with the additional literature.

**Table 1: List of the national- and EU-level evaluations analysed in this report**

| Source | Level of evaluation |
|---|---|
| Ecorys & PPMI (2016) | EU level |
| European Court of Auditors (2017) | EU level |
| Núñez Ferrer et al. (2016) | EU level |
| Ministerio de Empleo y Seguridad Social (2016) | National level |
| IBS (2015) | National level |
| IBS (2017) | National level |
| Capgémini & Asdo (2016) | National level |
| ANPAL (2017) | National level |

[324] The Council of the European Union (2013)
[325] European Commission (2014)
[326] The Council of the European Union (2013)
[327] European Commission (2015)
[328] European Commission (2018)
[329] Ecorys & PPMI (2016)
[330] European Commission (2017b)

| | |
|---|---|
| DWP (2017) | National level |
| The Scottish Government (2016) | National level |

**Source:** RAND Europe

According to the Council Recommendation establishing the Youth Guarantee, [331] the purpose is to:

a) Create more opportunities for young people to undertake employment, apprenticeship or traineeship offers.
b) Support labour market integration measures.
c) Overcome youth unemployment issues by targeting NEETs residing in areas where youth unemployment rates are the highest.

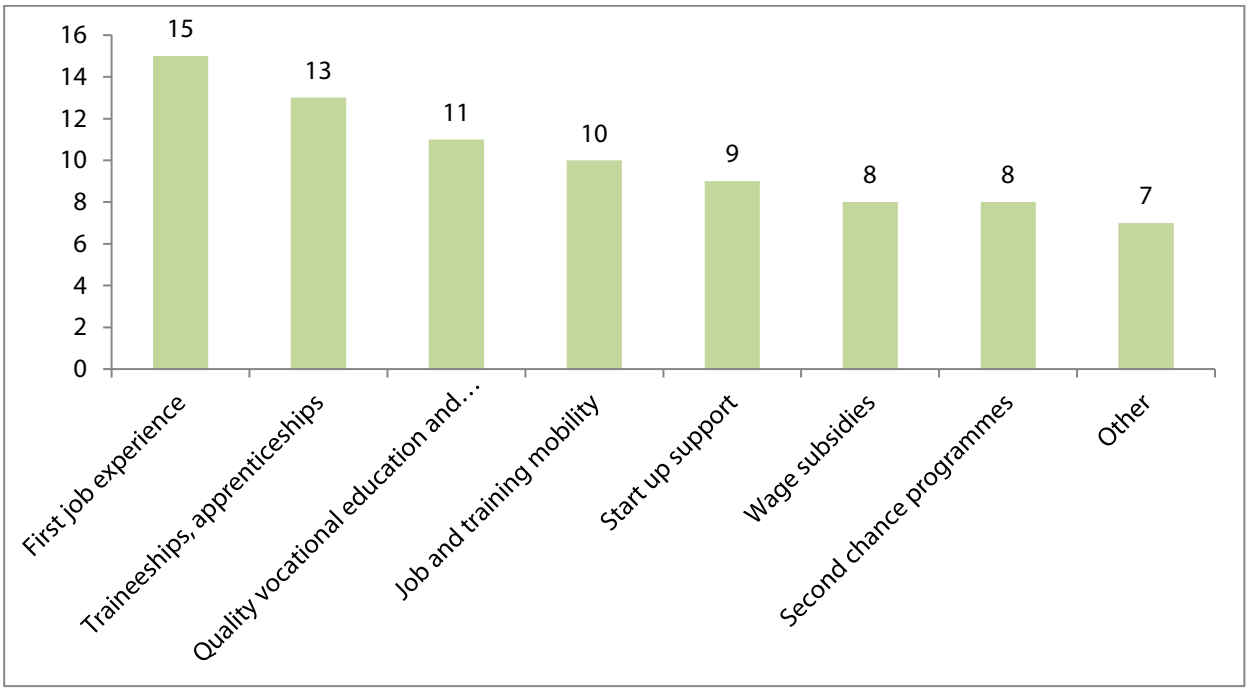
The first comprehensive assessment of the YEI so far[332] suggests that opportunities created across the EU have been primarily in the form of apprenticeships, traineeships, short-term work placements, internships or subsidised jobs.[333] Moreover, according to the study, young people had received training, education or qualifications, and were provided with counselling and guidance in their job search as a result of the YEI. Some MS had also funded volunteering or labour mobility initiatives, personal development and social inclusion activities, and job shadowing.

The most common measure in the MS to engage young people in 2015 used by the 28 MAs was to provide them with their first work experience or to offer traineeships/apprenticeships. Measures such as vocational education and training together with job and training mobility measures were implemented by 11 and 10 managing authorities (MA) respectively. Over half (53%) of the MAs included support for start-ups and entrepreneurship in their operational programmes and 47% included wage subsidies for employers.[334]

Figure 1 shows the number of MAs that were implementing various measures to support youth employment.

[331] The Council of the European Union (2013)
[332] Ecorys & PPMI (2016)
[333] Ecorys & PPMI (2016)
[334] Ecorys & PPMI (2016)

**Figure 1: Number of managing authorities implementing various YEI measures until the end of 2015**




**Source:** Ecorys & PPMI (2016)

YEI funding is not designed to create jobs per se, but to reduce youth unemployment while integrating young people into the labour market. In this regard, the fund is more focused on helping young people to acquire new skills or necessary education so they can integrate in a job market faster and more easily. Nonetheless, the fund supports activities that can result in job creation, including support to start-ups, entrepreneurship and self-employment, and offering financial incentives to encourage employers to hire young people.

An in-depth analysis of the YEI for the EP shows that a growing number of people participated in the YEI activities across 2014 and 2015: 110,300[335] young people participated in 2014 and 320,000 in 2015.[336,337] By the end of 2015, EUR 1.3 billion had been allocated to OPs and 18 countries had started actions under the YEI. Examples of operational programmes at the national or regional level include:

- **Spain** has implemented the Operational Programme for Youth Employment (Programa Operativo de Empleo Juvenil[338]) in the whole country for the 2014–2020 programming period. The programme funds activities such as traineeships, apprenticeships and unpaid internships. It includes training, quality vocational education, labour mobility measures and start-up support. Young people can also get a professional advice or get involved in the 'second chance' programmes.[339]

[335] Núñez Ferrer et al. (2016)
[336] The actual numbers can vary due to the incomplete data collection in the report.
[337] Ecorys & PPMI (2016)
[338] Government of Spain (2014)
[339] Ecorys & PPMI (2016)

- The implementation of the YEI programme[340] in **France** aims to strengthen the existing policies for youth employment. The most important part of the programme has been enhancing support actions (actions d'accompagnement renforcé).[341] These actions mostly include professional development activities such as individual counselling at an early stage of unemployment.[342]
- The operational programme in **Italy**[343] entails several measures: (1) training; (2) job support; apprenticeship, extra-curricular traineeships (including those that require travelling); (3) regional and National Civic Service; (4) measures for geographic and transnational professional mobility; and (5) employment bonuses. Additionally, the programme aims to engage 10,000 young people in self-employment and entrepreneurship activities.[344]
- The OP 'Knowledge, Education, Development' (Wiedza, Edukacja Rozwój)[345] in **Poland** particularly emphasises the need to combat long-term youth unemployment, in particular NEETs and young people with disabilities.[346] Participants are offered at least three types of support from the following: (1) needs assessment, professional counselling or job search assistance/brokerage; (2) continued education or training; (3) apprenticeship/internship/traineeship or subsidised employment; (4) support for sectoral or occupational mobility (via up/re-skilling through training, apprenticeships or internships) or geographical mobility (via reimbursing costs of commuting or re-location); (5) funding a job assistant for a young person with disabilities; and (6) grants for start-ups and relevant training and counselling.[347]
- The **United Kingdom** has introduced two YEI operational programmes: Scottish OP and England OP.[348] The Scottish OP includes a range of support measures such as: (1) recruitment incentives to employers; (2) removing barriers for disadvantaged young people to enter the labour market; and (3) education and vocational training measures.[349] In England, the YEI OP focuses on the provision of traineeships, apprenticeships and other employment options together with the development of employability, functional or networking skills. England's OP is aligned with the already existing provisions offered by the state; however, it aims to provide activities that are more tailored to the needs of specific target groups, particularly long-term unemployed young people. [350]

Evidence regarding the extent to which the YEI has supported job creation and the quality of the jobs created is presented in the next sections.

[340] Ministère du Travail (2018)
[341] Capgémini & Asdo (2016)
[342] Ecorys & PPMI (2016)
[343] Government of the Republic of Italy (2014)
[344] Ecorys & PPMI (2016)
[345] Government of the Republic of Poland (2014)
[346] Ecorys & PPMI (2016)
[347] IBS (2015)
[348] European Commission (2015)
[349] The Scottish Government (2016)
[350] DWP (2017)

## 1.2 EVIDENCE FOR THE YEI BEING SUCCESSFUL IN (HIGH-QUALITY) JOB CREATION (OR HIGH-QUALITY EMPLOYMENT)

### 1.2.1 Evidence on Job Creation

There was limited explicit information about the direct contribution of the YEI to job creation in the EU- and national-level evaluation reports and studies reviewed. The majority of those evaluations and studies have therefore focused on the absolute number of participants who met particular output targets (for example, finding employment or acquiring a qualification). In some cases, the studies examined whether those who found jobs through the YEI had displaced other jobseekers (however, such analyses offer little insights on whether the jobs have been newly created or existing ones). So far, two EU-level studies of the YEI have been conducted. They present results of the YEI implementation dated 2013–2015 and look at the extent to which the YEI contributed to achieve YG target results. We present findings from these two studies below.

A report by the ECA[351] showed that initial results of the YEI implementation were falling short of the expectations. This ECA report evaluated the results from five countries that are implementing the YEI activities.[352] According to the report, by the end of 2015, the progress in the MS varied with regard to the achievement of YEI output targets: in France (Nord-Pas-de-Calais), the output targets, were already met 111% of its target, FR national -41%, Spain -2%[353], Portugal -38%, Italy 23%, and Spain -43% (in 2014)[354]. The report concluded that after three years of YEI implementation, MS could not ensure that all NEETs will integrate into the labour market and receive a job offer within four months.[355]

Given that there are such high differences in the achieved result indicators, the ECA report concludes that it might be caused by the lack of ex-ante assessments that would facilitate an examination of the market and gaps, and subsequently understanding of the most suitable measures to integrate NEETs in the labour market (see Section 1.3.3.). The report also claimed that it was difficult to interpret the reliability of the result indicators because they lacked supportive data[356] or the information available was not sufficient.[357]

The ECA report reviewed data about a sample of 175 participants who were involved in the YG activities.[358] According to the information provided by the MS to the ECA, 29% of the participants received an offer of employment, 45% of a traineeship, 8% of an apprenticeship and 18% were in education in less than four months.[359] The average duration between registering to the YG and receiving an offer varied. About one third of the participants had to wait longer than four months and 7% waited longer than a year to receive an offer.[360]

[351] European Court of Auditors (2017)
[352] The report assesses the implementation of the YEI in Spain, France, Italy and Poland from 2013 onwards. For more information about evaluation methodology, please refer to Section 1.3.1.
[353] The results from Spain were available only for 2014.
[354] European Court of Auditors (2017)
[355] European Court of Auditors (2017)
[356] For more information please refer to Section 1.3.3.
[357] European Court of Auditors (2017)
[358] More information about the sample characteristics, please refer to Section 1.3.1.
[359] European Court of Auditors (2017)
[360] European Court of Auditors (2017)

In the section below, we present the national-level results from 2015 in the countries that were the largest beneficiaries of YEI funding, drawn from the report on initial results of the YEI.[361] However, the evidence on job creation per se is scarce:

- In **France**, the OP aimed to reach 300,000 young NEETs. By the end of 2015, 94% of the target result had been achieved: of the 234,000 unemployed participants who completed YEI actions, 30,000 of them were in employment six months after completing the programme and 104,500 unemployed young people had received an offer of employment, continuing education, apprenticeships or traineeships.[362]
- The data available for **France** shows that at the end of the actions supported by the YEI in 2015, the number of young people who successfully completed the YEI intervention was higher than expected.[363] In fact, of those participants who completed an exit questionnaire,[364] 31% obtained a temporary contract (Contrat à durée déterminée) of more than six months or a permanent contract; 7% were in other employment situations (temporary, short-term contracts of less than six months, subsidised contracts or entrepreneurship) and 14% were in training or studies. It is important to state that entrepreneurship that can lead to the job creation was not reported separately, meaning specific data is not available. In total, 52% positive outputs were reported amongst participants (almost double the stated objective of the OP).
- The OP in **Italy** is expected to reach 560,000 participants by the end of 2018. This figure represents almost 25% of the total NEET population recorded in 2013.[365] Between 2014–2015, 758,000 NEETs were registered for the YG programme (amounting to 50% of all eligible young people in 2015).[366] Of these 71% were contacted and profiled and 100,000 were enrolled in the YEI supported actions, the majority of which were actions such as traineeships and work placements. Measures also included a microfinance instrument for self-employment support. However, no information about the effectiveness of this instrument is available.

  The study by Ecorys & PPMI showed that in 2015, 165,061 young people in Italy had engaged in one of the measures, out of 545,821 who were on the waiting list. From those who participated, 31.9% received apprenticeship contracts, 35% received fixed-term contracts and 26.4% were offered an employment offer or a job placement.[367] Updated information about results is also available from the national reports that are released every three months.[368] They also include data on employment by the type of contract. As of September 2017, 1.441 million people were registered, 430,551 had completed at least one of the measures and 209,144 result employed (14.5%). Out of those, 209,144 people, 62,109 are employed with a permanent contract (30%), 85,702 are employed with a temporary contract (41%), 54,156 are doing an apprenticeship (26%) and the other 7,177 result employed with other non-standard temporary contracts (3%).

[361] Ecorys & PPMI (2016)
[362] Ecorys & PPMI (2016).
[363] Capgémini & Asdo (2016)
[364] Sample size unknown, please refer to Section 3.3.
[365] Ecorys & PPMI (2016)
[366] Núñez Ferrer et al. (2016)
[367] Ecorys & PPMI (2016)
[368] ANPAL (2017)

- In **Spain**, 168,000 young people registered for the YG scheme in 2014.[369] Of these, 6,379 completed YEI actions and 1,940 of those who participated have received an offer of employment, continued education, apprenticeship or traineeship afterwards. According to the 'Comprehensive Programme for Capacitation and Employment (Programa integral de cualificación y empleo)' offered by the Chamber of Commerce, 14,911 NEETs were registered by November 2015. From those registered 11,367 had received professional advice, 5,278 had finished training and 1,657 were participating in training. 57 participants received an internship offer and seven were reintegrated into the job market.[370] The assessment of YEI support in 2014 and 2015 mentioned that support to young entrepreneurs and start-ups was included in the OP in Spain; however, no data was available on the effectiveness of this measure.[371]
- In **Poland,** a first national Polish evaluation examined the effectiveness of the support as well as the quality of apprenticeships and training offered until the second half of 2015. On average, 62% of YEI and ESF project participants reported receiving an offer of an apprenticeship (42%), vocational education (23%), job (22%) or training (12%) following their participation in the project. Those who had not received any offer reported gaining a job (34%), apprenticeship (24%) or vocational education (13%) through their own efforts. Taking these into account, only 15% of project participants had no job prospects (whether through a project or found themselves) after completing a YEI activity. Of these, 89% of apprenticeship offers and 72% of job offers had been accepted. In the case of apprenticeships, the most frequent reason to decline these opportunities was receiving an alternative job offer.[372]

  According to another study,[373] 1,661 participants completed YEI activities in Poland by 2015. Of these, 1,137 young people were in education/training, gained a qualification, or were in employment, including self-employment after leaving the programme. After three to four months of enrolment in the programme, 76% of participants were in employment, education or training, 10% had returned to school to finish compulsory education and 11% had begun a higher education course.[374]

  A national evaluation[375] published in 2017 covers the period between July 2015 and June 2016 and is based on a survey with 1,418 participants who completed their their participation in projects. The results show that 28% of respondents were in education six months after the programme, 58% were in employment and 14% were self-employed. The types of support received by the participants that immediately resulted in employment were subsidies for new businesses (99%) and vouchers for settlement (90%).
- The information about the results of the OPs in the **United Kingdom** is limited due to the late implementation. The EU-level evaluations that were completed in 2016–2017 offer descriptive analyses on the activities and do not include any data on the achieved results.[376] According to the 2017 data provided by the EC,[377] 588 participants (330 long-term unemployed) completed the YEI programmes and 201 received an offer afterwards; from

[369] Ecorys & PPMI (2016)
[370] Ministerio de Empleo y Seguridad Social (2016)
[371] Ecorys & PPMI (2016)
[372] IBS (2015)
[373] Núñez Ferrer et al. (2016)
[374] Ecorys & PPMI (2016)
[375] IBS (2017)
[376] The Scottish Government (2016); DWP (2017)
[377] European Commission (2017a)

those, 37 were long-term unemployed. The data on how many participants were employed after six months or were self-employed was unavailable. The national evaluations of the OPs are descriptive and focus on the implementation process rather than the results and impact achieved.[378]

### 1.2.2 Evidence on the quality of new jobs

Based on Article 19(4) of the ESF Regulation, the annual implementation and progress reports prepared by MS have to assess the quality of the jobs offered to YEI participants, including to specific target groups.[379] The evaluation guidance for the YEI prepared by the EC in 2015 takes into account various criteria to describe a 'quality' offer.[380] Most importantly the assessments must take into account 'characteristics of the employment offer, the relevance to the participant needs and the labour market outcomes produced by the offer after a certain period of time'.[381] Given that the regional/national context should be taken into account, the guidance acknowledges that the final definition of a quality offer has to be agreed at the national level with reference to the specific country context.

Based on a small sample of 175 YEI participants analysed by the ECA, 91% of job offers analysed were considered to be a 'good quality' offer. The criteria used to judge the quality of an offer were taken from the definitions put forward by each MS.[382] However, no more information on the criteria was provided in the report. The study by Ecorys & PPMI[383] found limited information available regarding the data of the quality of job offers received by participants. This may be due in part to the late start of the activities funded by the YEI, which begun in 2015 or in 2016 only.

There was little apparent evidence on the proportion of the high-quality offers relative to the overall number of offers for YEI participants. However, anecdotal evidence from the Polish national evaluations covering the first three years of YEI implementation (2014–2016) showed that the quality of job offers can be assessed in part by the type of employment contract and working time.[384]

According to the recent report,[385] 88% participants who were in employment after six months had mostly fixed-term employment contracts and 16% were employed under the civic contracts. This showed an improvement of 37% when compared to the earlier results. The initial national evaluation showed that 51% the same category of participants (who were in employment after six months) were offered a fixed-term employment contract and 15% were offered an employment contract for a probation period. A permanent employment contract was proposed to every tenth survey respondent. An employment offer based on a civil-legal contract (work which is not covered by a standard employment contract, e.g. contracts with self-employed, contracts to perform specified tasks) concerned 18% of respondents. The frequency of civil law contracts could be assessed negatively in this regard, but at the same time, a negligible number of black market job offers can be interpreted as a positive phenomenon.

[378] The Scottish Government (2016); DWP (2017)
[379] European Parliament & Council of the European Union (2013)
[380] European Commission (2014)
[381] European Commission (2014)
[382] European Court of Auditors (2017)
[383] Ecorys & PPMI (2016)
[384] IBS (2015)
[385] IBS (2017)

According to the initial national evaluation, during 2014–2015 full-time job offers accounted for 89% of offers.[386] Although full-time employment in Poland is generally more preferred by employees than part-time work, the preferences of individuals, especially those combining work with caring for family members, may be different. The evaluation also shows that it is not necessarily true that the high percentage of full-time employment offers demonstrates the quality of these offers. The same is true of the changing nature of work. Shift offers accounted for 36% of offers. The nature and experience of shift work is strongly related to the profession and the business sector. Nevertheless, in the question about satisfaction with working hours, 86% of the respondents reported that they were rather or very satisfied with the proposed working hours. Women and men equally pointed to satisfaction with the offer in this respect.[387] Similarly, the study showed that among those working at the time of the survey, 77% of people declared that their work allowed them to reconcile both work and family life. The majority of respondents (83%) agreed or strongly agreed that they gained new skills or improved their skills, and 74% agreed or strongly agreed that they had learned to work in a team.[388]

The most recent results[389] revealed that 96% of women and 80% of men who were employed received wages lower than 2,000 PLN (EUR 475[390]) per month (the minimum wage in Poland in 2017). The wages of the self-employed on average varied between 1,783 PLN for women and 2,672 PLN for men. The average proposed remuneration, for 2014-2015 respondents who provided this information, amounted to 1,636 PLN (EUR 389) net per month (in full-time equivalents). The salary offered to women was on average lower than those offered to men: 1,587 PLN and 1,680 PLN respectively.[391] One third of respondents said they felt the proposed pay was lower or significantly lower than the remuneration of other people doing similar work. Just over half (58%) of the respondents stated that the proposed remuneration was at a similar level, but only 9% of the respondents considered that they received an offer more favourable than the average remuneration for this kind of work. Men were more critical with regard to the salary offer – 40% of male respondents reported that the salary offered was lower or significantly lower than the earnings of people in similar positions, compared to 24% of women.[392]

The Polish initial national evaluation[393] also conducted telephone interviews with programme participants to enquire about their level of satisfaction of the offers received. The evaluation looked at six dimensions[394] of a high-quality job offers. 64% participants responded that the offer they received was relevant to the education and qualifications they had obtained in the past, and 60% were offered an employment contract which offered a degree of stability of employment and job protection. Looking at the earning indices, 54% of respondents received a salary which amounted to at least two thirds of the average salary in a given profession (controlled for changes in the labour market), while 67% of respondents perceived their salary as 'fair'. Furthermore, 86% of the respondents were

[386] IBS (2015)
[387] IBS (2015)
[388] IBS (2015)
[389] IBS (2017)
[390] Exchange rate used in the report is 1PLN = 0.24 €.
[391] The minimum wage in Poland in 2016 was €417. In January 2016, the average gross salary was around €968.
[392] IBS (2015)
[393] Methodology of the evaluation is described in Section 1.3.
[394] The six dimensions in question are: (1) relevant to education and qualifications obtained in the past; (2) stability of employment and job protection; (3) a decent salary which amounts to at least two thirds of an average salary in a given profession and controlled for changes in the labour market; (4) a salary perceived as 'fair' by respondents; (5) good working conditions; and (6) participants satisfaction with the offer received.

satisfied with their working time and conditions. Taking into account all six dimensions and the extent to which each has met the set thresholds, the quality of the job offer was high according to 67% of the respondents. Women more often rated the quality of offers as 'high' more often than men (74% and 61% respectively).[395] No other characteristics were analysed.

In summary, a lack of a common definition results in variability of data regarding quality offers to young people, making it difficult to make comparison between the MS. There is also limited data on the quality of offers received in the EU-level evaluations analysed. Only Polish national evaluations have provided more extensive information about the quality of the offers received. Therefore, no comparison between countries is possible.

## 1.4 THE MEASURES: HOW TO ESTIMATE AND ASSESS JOB CREATION AND JOB QUALITY?

### 1.4.1 Employment effect (job creation) of the YEI

The YEI is monitored and evaluated in line with the standard European Structural and Investment Funds (ESIF) requirements. As specified in the Regulation 1304/2013, from April 2015 MS have to submit the YEI outcome and result indicators every year together with annual reports regarding the implementation of their operational programmes (OP). According to Articles 50(1) and (2) of Regulation 1303/2013, MS have to also submit progress reports on the implementation of their partnership agreements in 2017 and 2019. The EC summarises the findings of both annual implementation and progress reports and presents them to the EP.[396] Moreover, national evaluations by the MS were conducted in 2015 and a second round is planned for 2018, with a focus on the efficiency, effectiveness and impact of the YEI programmes. According to the EC communication, the result indicators, together with the target values and specified interventions, should allow evaluators to establish a direct connection between the allocated funds and achieved results as well as to monitor the progress and suggest any improvements for the future.[397]

Table 2 summarises the monitoring and evaluation instruments of the YEI.

**Table 2: Planned YEI reporting milestones**

| Evaluation | Date |
|---|---|
| Data on output and result indicators | Annually 2015–2023 |
| Implementation reports | Annually 2016–2023 |
| Progress reports | August 2017; August 2019 |
| Evaluations by the MS | December 2015; December 2018 |
| Commission report on the YG and the YEI | 2016 |

**Source:** European Parliament (2016)

[395] IBS (2015)
[396] Núñez Ferrer et al. (2016)
[397] European Commission (2016)

All MS collect monitoring data about the outputs of YEI activity. As discussed above, there is limited evidence in estimating the numbers of jobs created as a result of the intervention, although the number of participants who found, and remained in, employment during a specified period was a commonly used output indicator for the programmes. At programme level, a number of specific indicators (such as participants who entered self-employment) have been used depending on the purpose of the particular intervention. As a result, the majority of evaluations focused on reporting the main outputs in comparison to the target values.[398]

The most common methodologies employed in evaluations of YEI were surveys, document reviews and interviews with national authorities, participants and other stakeholders. Some evaluations (e.g. the recent national evaluation for Poland) made use of YEI support recipient databases in order to analyse the outcomes of YEI interventions and provided counterfactual evidence. With some exceptions (such as the cited Polish evaluation), information about the sample sizes was scarce which makes it difficult to interpret the figures reported.

### 1.4.2 Job quality in the context of the YEI interventions

There is limited information at EU level about the measurement of the quality of job offers received as a result of YEI activities. The study by Ecorys & PPMI[399] found limited information available regarding the measurement of the quality of job offers received by participants due to a lack of definitions included in the OPs in the MS (or higher-level documents). From the available information, the study classified the quality of job offers into five categories:

1. A suitable offer (judged by the participant's characteristics)
2. A sustainable offer (emphasis on the duration and type of the contract)
3. A satisfactory offer (based on employees' perception)
4. A fast offer (emphasis on the time when the offer was received)
5. A well-designed offer based on the labour market needs. [400]

Table 3 summarises various interpretations of the 'quality offer' compared against the job quality dimensions by Eurofound.[401]

**Table 3: Example interpretations of a 'quality offer' against dimensions of job quality**

| Country | Earnings | Prospects | Intrinsic job quality | Working time quality | Other |
|---|---|---|---|---|---|
| Bulgaria | Salary | Contract quality | Skills use and education | | Personal satisfaction |
| Greece | Salary | Job security | Skills use and experience | | |
| Lithuania | | | Skills use, experience and education | Flexibility | Health |
| Slovakia | | Job security | Skills use, | Duration | Health |

[398] Ecorys & PPMI (2016)
[399] Ecorys & PPMI (2016)
[400] Ecorys & PPMI (2016)
[401] Eurofound (2017)

| | | | | | |
|---|---|---|---|---|---|
| | | | experience and education | | |
| Croatia | | | | | Immediate offer[402] |
| Ireland | | Job security | | | |
| Poland | | | Skill use and discretion (on the job training and learning) | | |

**Source:** RAND Europe based on Ecorys & PPMI (2016)

Examples show what a 'quality offer' for unemployed young people means in different MS:

- In Slovakia, a 'quality offer' comprises any job offer that provides minimum working hours, and for which the duration of the contract or self-employment activity will outlast the period of YEI support. It also has to ensure some level of sustainability when the YEI/ESF support is terminated. Extra features like participant's health, qualification, skills and previous experience have to be taken into account.[403]
- In Lithuania, a quality job offer is one that is compatible with individual qualifications, work experience, health condition and family obligations. The external evaluation of the national programme recommended that in order to evaluate the quality of the offer, the situation of every NEET should be taken into consideration, looking at the circumstances before and after the support and any changes observed.[404]
- In Greece, work sustainability, salary and the relationship to the individual's work experience and education are taken into account.
- In Bulgaria, the quality is judged by work satisfaction, salary, duration, type of contract and relationship to the individual's education.
- In Croatia, no particular job features are specified; therefore, any job placement received within four months of completing education constitutes as a quality offer.
- In Ireland, a quality offer is one with a long-term duration (at least two years) and that is in emerging and growth industry areas (based on labour market analysis).[405]
- In Poland, relevance to previous experience and knowledge, prospect of gaining new knowledge and high participant's satisfaction are taken into account.[406]

### 1.4.3 Indicators, measures or indices used

The majority of indicators used to capture the programmes' outcomes relate to the active labour market integration of young people. Box 1 lists the result indicators which can capture the employment effect of the YEI interventions.[407]

[402] Any job placement received in four months after completing education, training or becoming unemployed.
[403] European Court of Auditors (2017)
[404] Ecorys & PPMI (2016)
[405] Ecorys & PPMI (2016)
[406] IBS (2015)
[407] European Parliament & Council of the European Union (2013)

**Box 1: The YEI result indicators as listed in the Regulation 1304/2013**

- Unemployed participants who complete the YEI supported intervention.
- Unemployed participants who receive an offer of employment, continued education, apprenticeship or traineeship upon leaving.
- Unemployed participants who are in education/training, gain a qualification or are in employment, including self-employment, upon leaving.
- Long-term unemployed participants who complete the YEI supported intervention.
- Long-term unemployed participants who receive an offer of employment, continued education, apprenticeship or traineeship upon leaving.
- Long-term unemployed participants who are in education/training, gain a qualification or are in employment, including self-employment, upon leaving.
- Inactive participants not in education or training who complete the YEI supported intervention.
- Inactive participants not in education or training who receive an offer of employment, continued education, apprenticeship or traineeship upon leaving.
- Inactive participants not in education or training who are in education/training, gain a qualification or are in employment, including self-employment, upon leaving.

**Source:** European Parliament & Council of the European Union (2013a)

Longer-term result indicators that measure job creation include the number of participants in employment, training programmes and self-employment six months after completing the intervention. The result indicators are sent to the EC annually and are captured in the national evaluation reports.

The EC prepared the guiding document on how the baselines should be established. However, as pointed out in the ECA evaluation,[408] no assessment studies were completed prior to the implementation. The result indicators that were used in OPs in the MS were based on already existing information such as previous data, success rates in completing similar measures, etc. Based on the evaluation guidance, YEI/ESF outcome indicators have to measure whether participants finish a YEI programme, any change in the labour market situation of participants (whether or not they finish the programme) and whether the YEI activity is linked to any job offer received.[409]

The ECA emphasised a lack of 'gap assessments and market analyses prior to setting up the schemes', in particular relating to skills and gaps mismatch, target population and its location, economic and social backgrounds that affected the design of the types and numbers of offers created, and difficulties in the sustainable integration of NEETs in a job market.[410] According to the ECA report, no studies were previously conducted to examine the most suitable measures to use while integrating NEETs in the labour market. Moreover, market assessments were not used to estimate the number of people who intended to participate in YEI activities.[411] ECA analysis showed that the national

[408] European Court of Auditors (2017)
[409] European Court of Auditors (2017)
[410] European Court of Auditors (2017)
[411] Ecorys & PPMI (2016)

evaluations that were completed by 2015 have not assessed the efficiency, cost-effectiveness or impact of YEI funded measures because of the late implementation of the OPs in the MS.[412]

The YEI aims to reach the most disadvantaged young people. Therefore, some countries specified the relevant target groups. However, there is limited information in the OPs about the result indicators and their relation to the target groups or how specific activities are planning to reach the particular groups. For example, Greece separates outcomes by age and gender, and Bulgaria by different educational backgrounds.[413]

### 1.4.4 Efficiency and effectiveness of the YEI in high-quality job creation

We found limited information on the efficiency of the YEI interventions, instead focusing more on the effectiveness (although there are some plans to examine the efficiency at a later stage). Only some evaluations at European and national levels included analysis as to why some activities were more or less effective than others. Both the Ecorys & PPMI study and the ECA evaluation report[414] contained examples of MS that used YEI funding to continue to finance existing measures that were already resulting in positive outcomes for youth employment. Funding existing measures resulted in less innovative approaches that struggled to reach the target groups and identify NEETs. Therefore, initially most of the programmes in the MS involved highly educated NEETs.[415]

According to the Ecorys & PPMI study,[416] in the first implementation phase the effectiveness of the new YEI activities depended on the 'quality of employment, education and training services' that already existed in the MS. As identified in the ECA evaluation report, the employers' capacity to hire young people (specifically NEETs) was the main reason for the successful allocation of YEI funds. The report also noted that 'the people benefiting most from the YEI were the ones who were most qualified and better educated'.[417] Moreover, according to ECA, it is difficult to evaluate the overall added value of the YEI funds to support the NEETs. The overall efficiency of the YEI could not be determined because at the time of evaluation, the MS used only limited amount of the funding available.[418]

We could not find evidence relating to any direct link between the YEI activities and decreased youth unemployment since 2013. Youth unemployment rates, together with the number of NEETs, have decreased across the MS. The EC acknowledges that this could have been caused by 'a greater cyclical sensitivity of young people to macroeconomic conditions and structural reforms of the labour market' rather than solely the training and education policies supported by the YG.[419]

The recent national evaluation in Poland[420] estimated the net effectiveness of the support by using a database from the public employment services. The database includes information about all the unemployed young people who are 18–29 years old and their employment status. Using propensity score matching, the results of the YEI participants were compared with a comparison group, which

[412] European Court of Auditors (2017)
[413] Ecorys & PPMI (2016)
[414] Ecorys & PPMI (2016)
[415] Ecorys & PPMI (2016)
[416] Ecorys & PPMI (2016)
[417] European Court of Auditors (2017)
[418] European Court of Auditors (2017)
[419] European Commission (2016)
[420] IBS (2017)

showed that the participants of 'Knowledge, Education, Development' programme were more likely to leave the registry after six months than the others. The largest difference and the highest net effectiveness were observed with the most disadvantaged young people including: long-term unemployed, with lower education levels, those who lived in rural areas, etc.

Evidence from the national evaluations, which were taken into account in the Ecorys & PPMI[421] study, show that it was difficult for MS to ensure high-quality opportunities such as vocational education, training or traineeships were available to jobseekers due to the lack of practice in these areas in various countries. Some countries do not have a tradition of traineeships or vocational education, meaning these measures were introduced to some sectors for the first time. For example, the national evaluation in Italy showed a 'low degree of effectiveness of the traineeship activity compared to traditional provision'.[422] Therefore, the measures were revised to take into account these observations.

## 1.5 VIGNETTES/EXAMPLES OF ELEMENTS SUPPORTING HIGH-QUALITY JOB CREATION

The projects listed below were selected from the EU- and national-level documentation review and targeted online search. The main criterion for selection was that outputs of projects or practices were related to job creation or affected any dimension of job quality. The analysis of both national- and EU-level evaluations provided a number of projects that are implemented in the MS.

| General information | ESF/YEI (2014–2020), Italy |
|---|---|
| About the project | SELFIEmployment (Fondo Rotativo Nazionale)<br>Funding: EUR 103 million; YEI contribution: EUR 53 million<br>Timeframe: 2016 March – ongoing. |
| Context | The SELFIEmployment project has started to support the implementation of YG in the context of high youth unemployment in Italy, particularly in providing young people who are NEET with the opportunity to start their own businesses or become entrepreneurs. It is the first national policy in Italy that promotes self-employment. |
| Aims, beneficiaries, activities | The aim of the project is to increase the number of self-employed young people while providing them with microcredit or loans and support them while becoming entrepreneurs or self-employed. The target group is young people aged 18 to 29 who are NEETs and are enrolled in the YG programme.<br>The implementation of the project is carried out by the ANPAL (National Agency for Active Labour Policies) together with Invitalia (Italian Government in-house body), fund manager, all regional governments, chambers of commerce and a national microcredit institute (*Ente Nazionale Microcredit*).<br>The main activities of the project include:<br>• Awareness raising campaign<br>• Submission of the business plan by the recipient<br>• The assessment of the proposal by the fund manager (Invitalia)<br>• Positive/negative decision is made within 60 days<br>• The positive decision can provide three types of financial support:<br>1. Microcredit (EUR 5,000 to EUR 25,000)<br>2. Extended microcredit (EUR 25,001 to EUR 35,000)<br>3. Small loans (EUR 35,001 to EUR 50,000).<br>• The loan is agreed by Invitalia and is provided in the beginning of the start-up.<br>• Successful applicants receive a training plan with counselling support |

[421] Ecorys & PPMI (2016)
[422] Ecorys & PPMI (2016)

| | |
|---|---|
| | during the entire period of the funding. |
| Results | The project specifically focuses on job creation, particularly self-employment. According to the data as of 1 February 2018:[423]<br>• 624 start-ups were funded<br>• The total value of credit granted was EUR 21 million<br>• 1,154 new jobs were created in enterprises supported by these loans.<br>The long-term outcomes reportedly achieved by the programme were:<br>• The programme attracted regional resources that were concentrated in the regions where youth unemployment was the highest.<br>• The entrepreneurship experience and training enabled young people to stay active in the labour market despite their start-up failure.<br>The factors that contributed to the success of the project related to the communication campaign and awareness of the funding opportunities for young people in Italy. Moreover, the entire application could be completed online which made the access easier. Finally, the counselling programme after the loan was granted was crucial since the applicants lacked the experience in entrepreneurship. |
| Sources | Invitalia (2018); European Commission (2017c) |

| | |
|---|---|
| General information | YEI, 2014–2020, Spain |
| About the project | Tarifa Joven programme, 2014–2016 |
| Context | The programme was implemented by the PES (Servicio Público de Empleo Estatal) |
| Aims, beneficiaries, activities | The programme aimed to encourage the hiring of young people through employment subsidies that gave employers a six-month reduction of EUR 300/month (on a pro-rata contract basis) from social security contributions for each young person they hired and who was registered with the YG services.<br><br>In order to avoid a replacement effect, the employer was required to maintain or increase overall organisational employment levels (both permanent contracts and total employment levels). If they failed to meet this criterion, the incentive had to be returned. |
| Results | The project ran from 2015 to 2016 with a EUR 1.43 million budget (of which EUR 1.31 million was drawn from the YEI/ESF) and is reported to have supported an estimated 4,500 young people during this time. |
| Sources | European Commission (2017d) |

| | |
|---|---|
| General information | YEI, 2014–2020, Spain |
| About the project | Digital Marketing and Branding Programme, 2014–present |
| Context | The programme was developed by the Generation Spain and INCYDE. It is co-financed by the ESF through the Youth Employment OP and is free for students. The programme was created to lower the numbers of unemployed young people and provide them with skills they need for entry-level job positions. |
| Aims, beneficiaries, activities | The duration of the programme is eight weeks, five days per week, and comprises of face-to-face courses during the entire day. The courses focus on entrepreneurship and employment, while developing technical and professional skills that are needed in the digital sector. The applicants have to be between 18–29 years old, have a high school diploma and be registered in the Youth Guarantee System. |

[423] http://www.invitalia.it/site/new/home/cosa-facciamo/creiamo-nuove-aziende/selfiemployment.html

| | |
|---|---|
| | The programme develops following technical skills: marketing strategy; digital; SEO; SEM; display; social media; personal branding; corporate branding; analytics and metrics; communication skills; teamwork; time management; communication; leadership and e-skills: self-knowledge and the development of digital job search skills; creation of your personal digital identity; career guidance and assistance searching for a job in the new digital professions; evaluation and development of digital skills; and digital entrepreneurship.<br>After the completion of the programme, the participants have access to a network with a wide variety of employers and recruiting companies. |
| Results | Results achieved so far: 67% of graduates received a job contract; 98% of the employed remained in their first job placement after three months; 97% of graduates have a permanent job contract after 12 months; 90% of employers were satisfied with the employees and would hire again. |
| Sources | Digital Marketing and Branding (2018) |

## 1.6 SUMMARY CONCLUSIONS

Based on the evidence collected, this section will aim to draw initial conclusions in relation to the following questions:

### 1.6.1 How can the efficiency of the YEI in high-quality job creation (or employment quality) be best measured/assessed for the fund in question?

The focus of the fund is not explicitly on job creation. YEI programmes regularly monitor and report on the number of participants who have subsequently secured employment (and are in employment after six months), which provides a proxy for the employment effect of particular interventions.

However, in order to fully understand the impact of the fund in practice, the challenge is interpreting these results in light of broader economic and employment trends and attributing the observable results to the interventions, rather than other influencing factors. The effectiveness of the YEI in terms of employment effects (rather than job creation rates) can therefore be better estimated by using counterfactual scenarios (as in the Italian or Polish national evaluations). The effectiveness of YEI measures could be further improved by building mitigation measures directly into a programme or project (for example, the organisational commitment to maintain the employment level as in the case of the Tarifa Joven programme). However, these measures need to be considered with caution, given that the existing evidence already suggests that the YEI activities target participants who are closer to the labour market, rather than harder-to-reach groups.

The quality of jobs found and created as a result of YEI interventions is challenging to assess, in view of the lack of common indicators and agreement amongst countries on what constitutes a 'quality' offer. Unlike some data collected for the ESF (see Annex G), because of a lack or little job experience due to the young age of the YEI participants a comparison with previous employment may not be a good metric of job quality in this regard. However, participants' surveys (such as those in the Polish national evaluation) collected data on key aspects of job quality, such as salary and contract type, in addition to asking directly about participants' satisfaction with the offer. Wider collection of data such as this could facilitate more comparisons with regard to the quality of jobs offered across different activity types and MS.

### 1.6.2 Which characteristics of the YEI can be considered key to success in terms of quality and number of jobs created?

Given the limited data available on the number and quality of jobs created by the YEI, we cannot reach a conclusion on the contribution of specific characteristics of the fund to its success. However, as in the case of the ESF and EGF, the flexibility of the fund and the ability to tailor the offer to local labour market needs and economic circumstances are considered promising practices. In addition, this flexibility allowed the implementation of projects with direct job creation effects in the form of assistance to youth seeking to become self-employed. However, evidence on the effectiveness and sustainability of this form of support, as well as the quality of such employment, has not yet been found.

### 1.6.3 What recommendations (if any) could be made on that basis for the improvement of the other instruments?

The successful implementation of the YEI depended largely on the conditions and contexts in the MS (for example, the vocational and training capacity within the country). The flexibility of the YEI allowed countries to focus on priorities and schemes that suit their particular economic and business landscapes. However, both the ESF and the EGF already have a high degree of flexibility for recipients to tailor assistance to local circumstances

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# ANNEX I: EGF REPORT

## 1.1 THE SCOPE: HOW CAN THE EGF SUPPORT JOB CREATION AND JOB QUALITY?

The EGF was established in 2006 with the aim of supporting 'workers made redundant as a result of major structural changes in world trade patterns due to globalisation where these redundancies have a significant adverse impact on the regional or local economy'.[424] Following the financial crisis in 2007, the scope of the fund was broadened in that it is able to intervene in case workers who are made redundant as a result of 'the financial and economic crisis'. Whereas the trade-related intervention criterion has never been changed, the crisis-related intervention criterion was initially introduced in 2009 merely as a temporary provision until 2011.[425] However, with the reform of the EGF for the funding period 2014–2020, the crisis criterion has become an integral part of the scope of the EGF. The EGF has, as opposed to the ESF, no budgetary line in the multiannual financial framework (MFF). This is due to its character as a flexible fund that should intervene in unexpected circumstances.[426] Although the ESF and EGF have similar objectives, they differ in their functioning; while the ESF specifically intervenes in order to support long-term goals, the EGF is supposed to provide short-term support.[427]

As determined in the first EGF Regulation of 2006, eligible actions under the fund were 'active labour market measures that form part of coordinated package of personalized services designed to re-integrate redundant workers into the labour market'.[428] While this overall aim has not changed, the fund now supports not only 'workers' but also 'self-employed persons' and explicitly targets 'disadvantaged, older and young unemployed persons'.[429] Eligible actions under the coordinated packages of personalised services are the following:

a) Tailor-made training and retraining, including information and communication technology skills and certification of acquired experience, job-search assistance, occupational guidance, advisory services, mentoring, outplacement assistance, entrepreneurship promotion, aid for self-employment, business start-ups and employee take-overs, and co-operation activities.
b) Special time-limited measures, such as job-search allowances, employers' recruitment incentives, mobility allowances and subsistence or training allowances (including allowances for carers).
c) Measures to stimulate in particular disadvantaged, older and young unemployed persons to remain in or return to the labour market.[430]

The fund therefore foresees the financing of training and active assistance as well as allowances that can support the re-integration of the targeted beneficiaries. In total, assistance through the EGF has an annual budget of EUR 150 million. As it is the case with the European Structural and Investment Funds (ESIF), the EGF also functions based on the logic of co-funding, which can reach up to 60% of the total estimated costs.

[424] European Union (2006)
[425] European Union (2006)
[426] European Union (2013)
[427] Reynolds & Sacher (2016)
[428] European Union (2006)
[429] European Union (2013)
[430] European Union (2013)

The founding regulation of the EGF clearly focuses on the objective of supporting workers and self-employed persons that have been made redundant in their reintegration into the labour market. Whether the job that workers find after the EGF intervention is pre-existent or newly created is not mentioned in the Regulation. In general, we can therefore not claim that the EGF directly supports job creation. However, eligible actions under the fund such as 'aid for self-employment, business start-ups and employee takeovers' have the potential of creating or at least saving existing jobs. Given the overall objective of the fund, this aims at increasing the chances of beneficiaries to re-enter the labour market; however, the quality of such future employment is not mentioned in the Regulation.

Nevertheless, in the following sections we will see whether there is evidence for employment effects of the fund and whether we can find evidence on the quality of the jobs workers and self-employed find after the EGF's intervention.

## 1.2 EVIDENCE FOR THE EGF BEING SUCCESSFUL IN (HIGH-QUALITY) JOB CREATION (OR HIGH-QUALITY EMPLOYMENT)

### 1.2.1 Evidence on Job Creation

The EC's ex-post evaluation of the EGF covers the funding period 2007–2013 and contains information on 73 cases implemented in this period. Between 2007 and 2013, the majority of measures undertaken with EGF funding has been individual case management, which amounted to 44% of the total output. Training and retraining was the second most used measure and amounted to 23% of the output. Measures aiming at 'direct job creation' (expenditure category 6) have not been directly provided to dismissed workers in the context of EGF interventions in this period. In terms of allowances, the job search allowances were the measure most used and amounted to 8% of total output.[431]

The evaluation indicates that while the average re-employment rate across the cases studied[432] was at 49%, the re-employment rate at the end of the EGF support varied considerable between 4% and 86%. The self-employment rate varied between 44% and 0%, amounting to an average share of 5%.[433] In addition, a survey undertaken for the evaluation shows that the time in which beneficiaries found a job varied, with people finding jobs during the measures (13%), people finding new jobs between 1 and 3 months after the intervention (18%), 3–6 months after the measure (14%) and longer than 6 month after the EGF measures (47%). With regard to the long-term effect of the measures, comparing the re-employment rate at EGF completion with the re-employment rate 12 months after the completion, in the majority of cases analysed (33 out of 51), an increase in the re-employment rate took place. In 7 cases out of 51, the re-employment rate was stable and in 11 cases, a decline in the re-employment rate after 12 months could be observed. It is further worth noting that the survey that was conducted as part of the evaluation shows that of 66% of those beneficiaries that reported they had found new jobs since the EGF intervention, 52% were still in employment at the time the survey was conducted. The authors of the evaluation note that the falling re-employment

[431] European Commission (2015a)

[432] The European Commission's ex-post evaluation covers 73 EGF cases that were implemented between 2007 and 2013, in which a total of 55,302 dismisses workers were supported. In line with the founding Regulations, interventions were based both on the crisis and the trade criterion, including the textiles, automotive, printing, retail, machinery, electronics, construction, transport, telecommunications and other sectors. The cases cover a majority of EU MS except for EL, RO, BG, HR, CY, EE, HU, LV, LU, SK and the UK. For more information about this , please refer to Section 1.3.1

[433] European Commission (2015a)

rate may be linked to low demand on the local labour market at a time of substantial economic contraction across Europe.[434]

The ECA, in an evaluation published in 2013, concluded that under the cases studied (2009–2010), the 'services offered to the potential beneficiaries were generally tailored to their needs and therefore most likely to get results'.[435]

With regard to the period 2013 and 2014, the highest amount of EGF funding has been spent on financial allowances for workers, which amounted to 38.8% (EUR 68.5 million) of the total personalised services. Measures on training and retraining, amounting to 32% (EUR 56.5 million) of the total personalised services.[436]For this period, the EC reports that at the end of the EGF implementation, 44.9% (7,656) of the beneficiaries (18,848) had found new employment or were self-employed. The share of beneficiaries unemployed or inactive for personal reasons was 39.1%, while 6% were in education or training. It is further noted that based on MS information, the reintegration rates tend to improve a few months after the final reports on the EGF assistance had been submitted and that a further increase in re-employment rates can be observed in the medium term.[437]

In the period 2015–2016, job search allowances were again the measure that was financed the most by the EGF and represented 41% (EUR 48.8 million) of the total amount or personalised services. Individual case management amounted to 20% (EUR 24.2 million) and training and retraining to 19% (EUR 23.3 million).[438] For this period, the EC reports that at the end of the implementation period of the EGF cases, 47% (9,072) of the beneficiaries (19,434) had found new jobs. Of those, 7,601 have found employment as dependent employees and 1,471 as self-employed (7.6%). The share of people that were assisted by EGF measures and were unemployed or inactive for various reasons at the end of the implementation period was 48%, while approximately 3% were in education or training, and for 2% the employment status was not known. The Commission further states that the absorption capacities of the local and regional labour market after the economic and financial crisis have influenced the reintegration of beneficiaries into the labour market. As already stated for the period 2013–2014, and based on MS information, reintegration rates tend to rise after the end of the measures, with further increases in the medium term and most measures showing additional positive long-term impact.[439]

According to Regulation (EU) No 1309/2013, Article 20 (EGF Regulation), the European Commission carried out a mid-term evaluation of the EGF for the current funding period (2014–2020). This evaluation will be published in April. The Commission's mid-term evaluation is based on 29 cases for which a funding request was made in 2014 and 2015.[440] In this time, and based on the 13 cases in which EGF implementation has been completed, the re-employment rate varied between 23% and 88%, with the average re-employment rate at 56%. This is higher than the average re-employment

[434] European Commission (2015a)
[435] European Court of Auditors (2013)
[436] European Commission (2015b)
[437] European Commission (2015b)
[438] European Commission (2017)
[439] European Commission (2017)
[440] The Commission's mid-term evaluation covers 29 cases in Greece, Belgium, France, Finland, Ireland, Germany, Spain, Italy, the Netherlands and Sweden. The cases were based both on the globalisation and the crisis criterion and were spread over 21 sectors, such as the automotive sector, retail trade, road transport, aircraft maintenance and machinery and equipment manufacture (those sectors had two or more cases).

rate of 49% over the 2007–2013 period. The mid-term evaluation also contains a survey among beneficiaries. This survey shows that 49% of the beneficiaries have found employment since their redundancy. This number is lower, than the 56% rate, as it has been calculated based on the cases for which data was available and as the survey included beneficiaries for whose cases no employment outcome was reported.[441] In none of the EGF cases covered by the evaluation, data on the long-term effect on re-employment was available. Therefore, the report considers the contract type of new jobs as an alternative indicator to measure sustainability and concludes, given that 74% of beneficiaries that responded to the survey indicated having found a permanent job, that there are 'strong indications of significant positive sustainable outcomes for EGF beneficiaries'.[442]

The Eurofound conducted two case studies on EGF assistance in Finland and Germany, where intervention has been justified by redundancies due to changes in market patterns. The study concludes that the EGF was a valuable addition to other national and EU funding sources and that it increased the number of opportunities for retraining.[443] The EGF financially supported the transfer company model[444] in Germany and the change security model[445] in Finland and therefore the main added value of the EGF were the additional resources provided. Furthermore, older workers, low-skilled workers and women were the groups of workers that reportedly benefited the most from the additional assistance provided with the support of EGF funding.[446] There is further evidence that the EGF has a supporting role to the German transfer company model, as through the EGF support assistance can be provided for longer than 12 months as in the transfer company model and in a more intensive and individual manner.[447]

### 1.2.2 Evidence on the quality of new jobs

In the context of the Commission's ex-post evaluation of the EGF in 2007–2013, a beneficiary survey was conducted that provides evidence on some dimensions of the quality of the jobs beneficiaries found after the intervention of the fund. The survey shows that roughly 89% of those that found a job work full-time, with the rest (11%) working part-time. 81% of the people that found a job work under permanent contracts, while 19% work under a temporary contract.

The survey further provides evidence on the satisfaction of the beneficiaries with their new employment. With regard to the comparison with their former employment, 9% answered that the quality of their new employment was far worse than their former job, for 32% it was worse. 24% of the respondents see the quality as the same, 24% better and 11% far better. This means that 41% see their new job as worse or far worse, while 35% see it as better or far better. With regard to payment, while 50% indicate that it is the same, 14% say it is better of far better and 36% see it as worse of far worse. With regard to the 'match between skills and role', 35% of the respondents say it is the same,

[441] European Commission (2018)
[442] European Commission (2018)
[443] Eurofound (2009)
[444] The transfer company model aims at the allowing for the transfer of dismissed employees into new employment without a period of unemployment. Therefore, dismissed employees are transferred to a transfer company where employees receive allowances for up to 12 months. (See http://www.bmas.de/DE/Themen/Arbeitsmarkt/Arbeitsfoerderung/transferleistungen.html)
[445] The change security model aims at reemploying dismissed employees and contains counselling and job-seeking support (See https://www.eurofound.europa.eu/observatories/emcc/erm/support-instrument/change-security-model)
[446] European Foundation for the Improvement of Living and Working Conditions (2009), Added value of the European Globalisation Adjustment Fund: A comparison of experiences in Germany and Finland, p. 27
[447] Bundesministerium für Arbeit und Soziales (2012)

41% worse or far worse, and 23% as far better or better. 35% of the respondents indicate that training and support provided in the new job is the same as in their old job, 21% say it is far better or better and 41% say it is worse or far worse. With regard to their work–life balance, 28% say it is the same, 33% say it is far better or better and 39% say it is worse or far worse.[448]

The EC's mid-term evaluation of the 2014–2020 funding period sheds light on the labour market status of beneficiaries after EGF implementation for the years 2013–2015. The beneficiaries' survey shows that 49% of total beneficiaries found employment since their redundancy. 38% of the respondents were employed at the time of the survey and 2% self-employed. Further 40% were unemployed, others were in full-time training or retired. Of those beneficiaries that are currently employed, 59% have a permanent full-time job, 4% a permanent part-time job, 29% a temporary full-time and 7% a temporary part-time job. Put differently, 63% of the beneficiaries that found a job now work under a permanent contract, 36% under a temporary contract, 88% work full-time and 11% part-time. [449] For nine cases out of 29, statistical evidence on the new employment status was available, showing an average of permanent jobs of 52% across the cases where data was available. In 19 cases, evidence on sectoral employment was available. In eight cases, evidence shows a significant shift towards other sectors than those of the previous employment.[450] The mid-term evaluation also provides information on the quality of the new jobs compared to old jobs. However, this data is only presented at the case level and unlike in the ex-post evaluation of the EGF in 2007–2013, not provided at a general level. Out of the seven cases for which an approximate evaluation is given, in three cases, the new positions of beneficiaries were at least equal ('in most cases' or 'in many cases'). In two cases, the new jobs were found to be similar ('in many cases' or 'in general'). In one case, the conditions were unlikely to be similar, and in another case, the new positions were on average worse.[451]

### 1.3 EVIDENCE FOR SOME INTERVENTIONS BEING MORE EFFECTIVE THAN OTHERS

With regard to the effectiveness of different measures under the EGF, some trends can be observed. As mentioned above, EGF assistance can be justified by redundancies that are the result of either changes in trade patterns or of economic and financial crises. As pointed out in the Commission's 2007–2013 ex-post evaluation, the average re-employment rate for EGF interventions under the trade criterion was 41%. This was lower than the average re-employment rate for cases under the crisis criterion, which amounted to 53%. The explanation given for this is that cases under the trade criterion are implemented in sectors in decline in Europe with fewer employment opportunities. Sectoral trends beyond the trade/crisis criteria can also be observed: the average re-employment rate in the printing industry was 69% and therefore comparatively high. In the machinery and equipment sector, the average re-employment rate was 49%. In the automotive sector, the re-employment rate was lower, with an average of 41%. In the construction, textiles or retail sectors, a significant variation between the cases was observed.[452]

Using a regression model, the ex-post evaluation analysed the impact of EGF measures as well as of supply and demand side factors on the re-employment rate. With regard to EGF policy measures, the

[448] European Commission (2015a)
[449] European Commission (2018)
[450] European Commission (2018)
[451] European Commission (2018)
[452] European Commission (2015a)

analysis focused on individual case-management and training/retraining. While for both measures a positive relationship with re-employment rates was found, only for individual case management statistical significance could be observed. Given that the measures can, according to the authors not be captured by a variable, further trends were detected based on anecdotal evidence and survey results. This analysis shows that the availability of tailored, individualised and intensive support was an important success factor. Also, a strong link between training provisions and the local labour market need was a positive factor in the integration of workers. Another positive factor was the additionality and difference of measures to those normally offered in the country. The possibility to shift funding between measures and therefore the flexibility of the measures is also identified as a success factor. The influence of the national policy environment was also part of the analysis. While the impact of this variable was positive, no conclusive statistical finding could be found. However, based on qualitative evidence, it is expected that the support of the external policy environment would contribute to the re-employment rate.[453]

With regard to supply side factors, the statistical regression analysis found that beneficiaries under 25 years old, workers with high education levels and female beneficiaries were associated with higher re-employment rates. Accordingly, it could be observed that the proportion of workers with a low education attainment as well as the proportion of workers over 55 years had a negative relationship with re-employment rates. On the demand side, the analysis found that the unemployment rate and the long-term unemployment rate were negatively linked to the re-employment rate. Positive relationships with the re-employment rate were detected with change in regional GDP and the level of urbanisation.[454]

In another statistical model, the relationship between self-employment take-up rate and the proportion of outputs used on promoting entrepreneurship under the EGF was analysed and a positive relationship observed. While the gender of the beneficiaries had no significant relationship with the self-employment rate, the sector from which beneficiaries were made redundant had an impact. In the automotive sector, for example, the average self-employment rate was 9%, while in the printing sector the rate was 0% and in the textiles sector 3%. Furthermore, in particular countries, such as Lithuania, Portugal, Poland and France, higher self-employment rates were observed, which could be linked to the economic conditions and a potential limitation of alternative employment opportunities.[455]

The Commission's ex-post evaluation of the EGF in 2007–2013 further contains a counterfactual impact evaluation (CIE) in order to assess the impact of the EGF interventions. Comparator cases were selected on the basis of temporal, geographical, sectoral and beneficiary congruence as well as based on the similarities in the measures being offered[456]. The comparison aimed at the explanation of the differences in success between the compared cases. Reasons why EGF employment outcomes are lower than their comparators can be found in the low qualification level of beneficiaries as well as in their higher age. Furthermore, dispersed populations and limited labour market opportunities in some regions as well as limited time for the implementation of measures due to less effective coordination of delivery were reasons for lower re-employment rates. In addition, participation in measures was greater in other cases, possibly because training in comparator cases led to certified

[453] European Commission (2015a)
[454] European Commission (2015a)
[455] European Commission (2015a)
[456] More information about this evaluation is provided in Section 1.3.1.

qualifications necessary for re-employment. Lower re-employment rates might also be due to more effective targeting of measures to the demand in the local labour market in comparator cases.

There are however also cases where employment outcomes are higher in EGF cases than in comparator cases. With regard to the beneficiary profile, a lower education attainment level in one case probably led to a greater dependence on support, which provided the possibility for more significant retraining and an improved labour market position. The possibility to provide more intensive and longer-term support can also lead to higher re-employment rates. With regard to the coordination of delivery, partner involvement as well as measures to improve contact with the beneficiaries may have contributed to higher re-employment rates. Regional economic conditions that influenced the ability of employers to take on workers was another positive factor. The combination of support from different funding sources led to better integration outcomes, the design of EGF measures and innovative measures, such as career guidance and motivational workshops, as well as measures targeted on the local and seasonal labour market were deemed beneficial for the re-employment rates of EGF funded interventions.[457]

Evidence from 2015–2016 also points out that re-employment rates are case specific and depend on the economic situation in the area, the institutional capacity and experience of the MS, as well as the early involvement of beneficiaries in the design and implementation of the EGF intervention.[458]

The EC's mid-term evaluation that covers EGF cases for which funding applications were submitted in 2014 and 2015, presents some country trends in re-employment rates. In Ireland, Italy and Finland re-employment rates over 50% were achieved in all completed EGF cases. In Belgium, however, re-employment rates among the EGF cases diverged, which can partly be due to the inclusion of pre-pensioners among the beneficiaries.[459] Data on the re-employment rate per age was only available in three cases. It is, however, noted that re-employment rates were higher among young and middle-aged beneficiaries than among older workers. With regard to gender, in five cases data was available, showing an average of 67% of male and 66% of female beneficiaries that were re-employed.

In the absence of data available in the cases covered by the mid-term evaluation that would allow for a multi-variate analysis, a qualitative analysis of patterns of effects of supply, demand and policy mix factors on re-employment rates is conducted. With regard to the supply side factors, the analysis shows that the profile of the beneficiaries was an important factor. This was especially the case when the EGF measures targeted older workers that were lacking job search skills and apparent for relatively skilled workers with higher chances of finding new jobs. With regard to demand side factors, the evaluation points to the importance of conditions in local labour markets, making re-integration easier when local labour demand exists, compared to conditions characterised by relatively high unemployment rates. The policy factors that facilitated re-employment of beneficiaries were effective partnerships and appropriate delivery mechanisms based on: learning from previous EGF cases; targeted, individualised and early assistance; strong cooperation between the delivery partners; and effective integration of the assistance into the existing restructuring support framework.[460]

[457] European Commission (2015a)
[458] European Commission (2017)
[459] European Commission (2018)
[460] European Commission (2018)

The mid-term evaluation also contains a comparison of EGF cases with similar cases. These comparators were selected based on temporal, geographical, sectoral and beneficiary congruence as well as based on the congruence in the mix of measures. The evaluation concludes that in seven out of 13 compared cases, EGF re-employment rates were higher or similar than in the comparator cases, pointing at a more effective performance of the EGF cases. A detailed overall explanation of the lower re-employment rates in the other cases is however not provided.[461]

A recent EGF study carried out by the EC[462] highlights some findings from the EGF mid-term evaluation 2014–2020. Therein it is stated that a functioning domestic labour market, as well as MS as coordinators of active labour market policies can have a positive impact on the EGF implementation. Where well-developed active labour market policies are present, the EGF can reinforce and improve their efficiency.[463]

## 1.4 THE MEASURES: HOW TO ESTIMATE AND ASSESS JOB CREATION AND JOB QUALITY?

### 1.4.1 Employment effect (job creation) of the EGF

In terms of ex-ante assessments of the EGF, two relevant documents can be identified. First of all, the impact assessment (IA) accompanying the proposal for the ESF Regulation (SEC (2011) 1130 final) and second the ex-ante evaluation on the EGF 2014–2020 (SEC (2011) 1133 final). The first document does not contain any quantitative projections on the impact of the EGF on job creation. If focuses however on the institutional projections in terms of the inclusion of the EGF into the framework of the ESF. The three scenarios of the IA are the no-change baseline scenario, the inclusion in the ESF and the possibility of the EGF to stay a separate fund however with an own MFF budget line. The IA takes into account the speed of delivery, the efficiency and the effectiveness of the intervention under the three different scenarios. However, the effectiveness of the EGF does not change in any of these cases according to the report. This assessment is based on qualitative projections on the likely future functioning of the EGF, which were informed by stakeholder conferences and a survey among MS experts and European social partner organisations.[464] The ex-ante evaluation on the EGF 2014–2020 also does not contain any quantified projections on the employment effect of the EGF. It rather aims at predicting the effectiveness of the EGF when opening the scope of the fund to different categories of workers and changing the intervention criteria. These measures are qualitatively assessed.[465]

In terms of the measurement of the employment effect of the EGF, overall figures are mostly provided based on numbers of reintegrated beneficiaries reported by the MS (ex-post evaluation (COM), reports on the activities of the EGF 2013–2014 and 2015–2016 (COM) and mid-term evaluation (COM)). Furthermore, the Commission's ex-post evaluation 2007–2013 contains findings from a beneficiaries' survey that provides further details on the employment effect of the interventions. In the same document, a statistical regression analysis is used to analyse the impact of EGF measures as well as of other supply and demand side factors on the re-employment rate. Furthermore, findings are supported based on anecdotal evidence. In order to find more evidence on the employment effect of EGF cases compared to other cases, a counterfactual impact evaluation is used. The Commission's mid-term evaluation also presents findings from a beneficiaries' survey that provides

[461] European Commission (2018)
[462] Cernat & Mustilli (2017)
[463] Cernat & Mustilli, (2017)
[464] European Commission (2011a)
[465] European Commission (2011b))

information on the employment status of EGF beneficiaries after the intervention. Supply, demand and policy factors that have an effect on re-employment rates are qualitatively identified. Furthermore, EGF interventions are compared to relevant comparator cases in order to find evidence on the performance of the EGF.

### 1.4.2 Job quality in the context of the EGF interventions

Information on the quality of the jobs that beneficiaries have found after the EGF intervention can be found in the Commission's ex-post evaluation 2007–2013 as well as in the Commission's mid-term evaluation.[466] In the ex-post evaluation, a beneficiaries' survey has been conducted, where beneficiaries were asked about their employment status, contract type (full-time/part-time/permanent/temporary) as well as on their impression of the new job in terms of total pay of the new job, the match between skills and role, training and support provided, work–life balance and overall satisfaction. Beneficiaries could indicate for these categories whether they felt that their new job was far better, better, the same, worse or far worse.[467] The sample size for the different questions varied between 420 and 440 respondents, out of 724 beneficiaries surveyed in total. According to the Commission, the survey sample reflects an over-representation of males, of those aged 55–65 as well as of those with an education level corresponding to ISCED 1 and 2 (primary and lower secondary education). This means that those who find it more difficult to find employment, such as older people and less educated, are over-represented.[468]

For the Commission's mid-term evaluation another survey has been conducted that provides information on the contract types of the beneficiaries. Information has been provided on whether beneficiaries have found any form of employment since their redundancy, on their current labour market status as well as on the quality of their current job in terms of permanent/temporary and full-time/part-time positions. The sample size of the survey is indicated at 1,116 respondents.[469] Further information on the quality of new jobs that beneficiaries found after the intervention is provided at the case level and only on a small number of EGF cases. Where this information has been collected is not explicitly indicated.[470]

### 1.4.3 Indicators, measures or indices used

The document that contains the most exhaustive measurements of job creation and job quality with regard to the EGF interventions is the EC's 2007–2013 ex-post evaluation. First of all, the employment effect is covered by the re-employment rate, which takes into account the number of workers assisted as part of the EGF who have found an employment at the end of EGF-funded measures and for whom the employment status was known.[471] The evaluation further contains information on the re-employment rate 12 months after the intervention in order to measure sustainability of the interventions. Furthermore, the evaluation differentiates between those who are employed or self-employed. Information on these indicators are largely based on national reports submitted at the end of the EGF implementation as well as on a beneficiary survey undertaken for the purpose of the ex-post evaluation. This beneficiary survey also contains measurements of the quality of the jobs

[466] Cernat & Mustilli, (2017)
[467] European Commission (2015a)
[468] European Commission (2015a)
[469] European Commission (2018)
[470] European Commission (2018)
[471] European Commission (2015a)

beneficiaries found after the EGF support. Indicators used were the type of the contract in terms of full-time/part-time and temporary/permanent contracts. Further indicators were the total pay of the new job, the match between skills and role, training and support provided, work–life balance and overall satisfaction. Beneficiaries could indicate for these categories whether they felt that their new job was far better, better, the same, worse or far worse.[472]

The Commission's mid-term evaluation also uses the re-employment rate as primary measure of the employment effect. Information on the employment status of beneficiaries is largely based on a beneficiaries' survey undertaken for the evaluation. This survey contains measurements of the quality of beneficiaries' new jobs in terms of full-time/part-time and temporary/permanent contract, as already applied in the ex-post evaluation. Further measures of the quality of new jobs are indicated at the case level for some cases and are presented in the form of new positions being 'in most cases'/'in many cases' 'at least equal', 'in many cases'/'in general' 'similar', 'unlikely to be similar', or 'on average worse' compared to previous positions. [473]

The biennial reports the Commission has issued since 2014 are based on the same indicators of the employment effect as already present in the ex-post evaluation – the re-employment rate as well as the employment status. The latter differentiates between dependent employees and self-employed, still in education or training, unemployed or inactive for various reasons as well as those for which the status is not available.[474]

The ECA criticised the way reintegration rates are established. The existing data would not be adequate for assessing the effectiveness of the EGF measures aiming at the reintegration of workers. This is due to a variety of reasons. First of all, data, such as on the reintegration rates after 12 months, is often not available. Second, MS did not set quantitative reintegration objectives. Therefore, it is not possible to assess whether the measures were effective, taking their ability to achieve their objectives as a measure. Furthermore, there is often no distinction between the EGF, the ESF and other measures when reintegration data is collected and no distinction between active labour market policies and income support that is paid to workers is made. Is it worth further noting that EGF reintegration data is difficult to compare as both supply and demand side factors might have influenced the reintegration results. In addition, the Commission does not provide information on ESF or national measures that have preceded or complemented the EGF intervention, making comparison between EGF cases and measures difficult.[475]

In an assessment study of the EGF in 2007–2013 undertaken by the EP, the Commission's calculation of the re-employment rates is criticised in terms of its transparency. The Commission indicates the re-employment rate as a share of the workers that found employment out of the workers assisted by EGF measures. Given a low average budget implementation rate, and less workers assisted than initially targeted, the effective re-employment rate of the workers initially targeted would be lower than the rate indicated by the Commission. Furthermore, according to the EP, an accurate re-employment rate of workers initially targeted should take out of the calculation the targeted workers who returned to employment out of their own effort, which is not the case in the Commission's methodology.[476]

[472] European Commission (2015a)
[473] European Commission (2018)
[474] European Commission (2015b)
[475] European Court of Auditors (2013)
[476] Reynolds & Sacher (2016)

### 1.4.4 Efficiency of the EGF in high-quality job creation

The EC's ex-post evaluation finds no clear trend in the relation between the level of expenditure and the re-employment rates. While for some cases, a high expenditure level per beneficiary does not go with high re-employment rates, some cases with low expenditure per beneficiary are associated with high re-employment rates. In the medium range, spending per beneficiary was mostly associated with medium re-employment rates. Furthermore, the Commission does not find a clear trend between the level of expenditure for a specific measure and the re-employment rate.[477]

The Commission's mid-term evaluation analysed the relation between case expenditure and re-employment rates. However, no correlation could be detected between re-employment rates and financial resources allocated to cases. The evaluation concludes that other factors, such as education and skill profiles of beneficiaries, economic performance of the affected region and responsiveness of measures with needs of beneficiaries have a greater impact on re-employment rates.[478]

## 1.5 VIGNETTES/EXAMPLES OF ELEMENTS SUPPORTING HIGH-QUALITY JOB CREATION

| | |
|---|---|
| *General information* | EGF (2014–2020)<br>Country: The Netherlands |
| *About the project* | EGF/2014/002 NL/Gelderland-Overijssel construction[479]<br>Total budget: EUR 2,709,635<br>Financial contribution from the EGF: EUR 1,625,781<br>Average EGF amount/worker: EUR 3,423<br>Application date: 20/02/2014. End of delivery period: 20/02/2016. |
| *Context* | EGF/2014/002 NL/Gelderland-Overijssel construction is a project in the construction of buildings sector, based on the crisis intervention criterion of the EGF. Since 2008, the construction sector in the Netherlands has been in decline, with the reasons for the decline being related to the financial and economic crisis. During the reference period 01/03/2013 – 01/12/2013, 562 redundancies in 89 enterprises in the regions Gelderland and Overijssel have occurred. |
| *Aims, beneficiaries, activities* | This project aimed at the re-employment of 562 dismissed workers and eventually targeted 475 workers. The average EGF amount per worker amounted to EUR 3,423. The measures that funding has been requested for included job search assistance, intakes, training and retraining, outplacement assistance and a mobility pool. Planned expenditure for individual case management amounted to 40% of expenditures, training and retraining to 39%, employment and recruitment incentives to 6% and supported employment and rehabilitation to 15%. |
| *Results* | In the Commission's mid-term evaluation of the EGF in 2014–2020, this project showed the highest re-employment rate, amounting to 88%. In more detail, re-employment rates by age varied, showing 100% in the groups aged 15–24 and 25–29 years, 93% for beneficiaries aged 30–54 and 71% for those aged 55–64. In terms of the contractual status of re-integrated beneficiaries, 34% found new jobs with a permanent contract, 55% with a fixed-term or temporary contract and 11% of beneficiaries were self-employed. |

[477] European Commission (2015a)
[478] European Commission (2018)
[479] This EGF project has been selected due to its very high re-employment rate of workers (88%).

| | |
|---|---|
| | The Commission's mid-term evaluation of the EGF in 2014–2020 reports that most beneficiaries that found new employment remained in the construction industry (76.7%). According to the Commission, the factors that affected the re-employment outcome of the project were that older workers' needs were addressed via targeted assistance and that the decline in the sector was counteracted by the support to move to other sectors. Furthermore, policy mix factors that contributed to the outcome were individual intense support to beneficiaries that was especially useful for older workers, the motivation of stakeholders of the project to cooperate as well as learning from previous cases. For example, the project manager of the case was already the project manager of a previous EGF case in Gelderland. Another helping factor was that in the Netherlands workers in the construction sector aged 61+ have to stay in the same sector, as stipulated by the sectoral collective labour agreement.<br><br>The Commission's mid-term evaluation further presents some good practices present in this EGF case. First of all, a data management system that held information on the progress of beneficiaries and captured notes from job coaching discussions was purchased for the project. This helped, according to the Commission, to provide right support and the measurement of the outcomes. The second good practice is represented by the fact that the coordinator quickly contacted all the relevant stakeholders of the project. Furthermore, a six-weekly steering group meeting was held that ensured continued engagement and allowed for the use of all the available resources. |
| Sources | European Commission (2015c)<br>European Commission (2014)<br>European Commission (2018) |

| | |
|---|---|
| *General information* | EGF (2014–2020)<br>Country: Belgium |
| *About the project* | EGF/2015/007 BE/Hainaut-Namur Glass[480]<br>Total budget: EUR 1,825,907<br>Financial contribution from EGF: EUR 1,095,544[481]<br>Average EGF amount/worker: EUR 1,638<br>Application date: 19/08/2015, End of delivery period: 18/08/2017 |
| *Context* | EGF/2015/007 BE/Hainaut-Namur Glass is a project in the manufacture of glass sector and was at the time of writing of the European Commission's mid-term evaluation still ongoing. It is based on the globalisation intervention criterion of the EGF.<br><br>Between 2000 and 2010, the employment in the glass sector in Europe decreased by 32%, with the loss of jobs in the glass sector in Hainaut and Namur being considerably more significant than in Wallonia or Belgium as a whole. This project is based on the redundancies of 412 workers due to the closure of two production sites in the Belgian regions Hainaut and Namur: AGC Europe SA and Saint-Gobain Glass Benelux. |
| *Aims, beneficiaries,* | This project aimed at the re-employment of 412 workers[482] and eventually targeted 512 workers[483], including NEETS, this initiative being made eligible by the YEI. The |

[480] This EGF project has been selected due to its high re-employment rate (77%) as well as due to the overall assessment of the Commission in its mid-term evaluation of the EGF in 2014-2020 that the quality of new employment beneficiaries found was in many cases similar to the quality of previous employment.
[481] European Commission (2014) ; European Commission (2016)
[482] European Commission (2016)

| | |
|---|---|
| *activities* | average amount per worker amounted to EUR 1,638. The measures that funding has been requested for included redeployment, facilitating job search, training, transfer of experience and promotion of entrepreneurship. Planned expenditures for individual case management amounted to 77% of expenditures, training and retraining to 9%, promotion of entrepreneurship to 9%, job search allowances to 4% and training allowances to 1%. |
| *Results* | In the Commission's mid-term evaluation of the EGF in 2014–2020, this project is shown to have a very high re-employment rate of 77%. In more detail, the re-employment rates by age varied, showing 100% for those aged 15–14, 82% for those aged 25–29, 67% for those between 30–54 and 32% for those aged 55–64. In terms of the quality of the contract of the new employment found by beneficiaries, 69% of those that found a job worked under a permanent contract, 26% under a fixed-term or temporary contract and 5% were self-employed.<br><br>The EC's mid-term evaluation reports that the majority of beneficiaries that found work did so outside of the glass production sector. Approximately half of the workers of the AGC unit stayed in the same sector, with a majority again working for ACG Glass, the other half found work outside of the glass production sector.<br><br>In terms of quality of the new employment beneficiaries found, the Commission states in its mid-term evaluation that in many cases, the quality of work was similar to the quality of beneficiaries' previous jobs. Compared to other cases for which evidence on the quality of new employment was present in official documents, this is a comparatively good outcome. However, the Commission also states that there were many beneficiaries as well that were working for lower wages than in their previous jobs.<br><br>With regard to factors that affected the re-employment rate of this EGF case, the Commission points to the labour demand that arose from other sectors, including in other regions. It is important to note here that the EGF assistance also included mobility support. Furthermore, the Commission mentions that the measures were intense and individually targeted, that there were well-adapted delivery structures and that the partnership with social partners and training providers also affected the outcome. The Commission also mentions the presence of mobilised 'social counsellors', meaning individuals that were appointed by trade unions that had experience in restructuring situations and that provided peer support to beneficiaries as a good practice. |
| Sources | European Commission (2015)<br>European Commission (2016)<br>European Commission (2018) |

## 1.6 SUMMARY CONCLUSIONS

Based on the evidence collected, this section will aim to draw initial conclusions in relation to the following questions:

[483] European Commission (2018)

### 1.6.1 How can the efficiency of the EGF in high-quality job creation (or employment quality) be best measured/assessed for the fund in question?

The measurement of the efficiency of the EGF in high-quality job creation or employment quality is difficult to assess. The main problem lies in terms of the reporting on the EGF, which is aligned to its objectives. These being mainly the re-integration of workers and self-employed made redundant by globalisation or economic and financial crises, the main focus is not on job creation or on the quality of new jobs. However, the employment effect of the EGF can, and is measured via the re-employment rates of EGF beneficiaries. This indicator represents a very useful measure of how efficient the fund is in providing assistance that eventually leads to beneficiaries finding a new job. It is however methodologically difficult to single out the intervention of the EGF as a factor in the re-employment of beneficiaries, as other factors, such as the labour market situation, the level of skills of assisted beneficiaries and other support affect the outcome in practice. The Commission's analyses however take into account these factors and thereby provide contextual explanations of the re-employment rates. Furthermore, it is helpful in explaining the effect of measures funded under the EGF to go on the case level and provide qualitative assessments of the impact of single measures in the context of the EGF intervention in question. The measurement of the quality of jobs that beneficiaries found after the EGF intervention is similarly difficult to assess as the employment effect. The EC, however, uses survey data and case-specific research in order to assess the quality of new jobs. By presenting the contract type of newly found jobs, an overall assessment of the quality is possible. However, it would be useful to compare this situation with the share of contract types before redundancies occurred in order to undertake a representative assessment of the changes in quality. Nevertheless, the beneficiaries' survey undertaken by the Commission for the ex-post evaluation of the EGF in 2007–2014 captures the beneficiaries' assessment of the changes in job quality and provides useful information on the overall quality of jobs EGF beneficiaries found after EGF support was provided.

### 1.6.2 Which characteristics of the EGF can be considered key to success in terms of quality and number of jobs created?

The efficiency of the EGF in assisting beneficiaries in finding new employment is very case-specific and depends on a high number of supply and demand side factors as well as on the measures being provided and their fit to the needs of beneficiaries. This being said, the main advantage of the EGF is indeed its flexibility instrument character that allows its intervention in times of need. Despite the length of the application procedure, funding can be requested that has not been allocated beforehand. Another key characteristic is the flexibility of the measures that can be provided to the funds' beneficiaries, which allows for an adequate tailoring of the support measures to the needs of the beneficiaries. It is further worth mentioning that the additionally of EGF support to national support measures has been beneficial to employment outcomes. The general limits of the fund in terms of job creation are linked to its overall supply-side character, which mainly allows for the upskilling of workers. In situations of low labour demand, these measures can therefore only support job creation in a very limited manner. One can however argue that improvements in supported worker's skills can improve the chance of workers in finding high-quality employment or work in other sectors. Furthermore, with the latest reform of the EGF in 2013, the promotion of entrepreneurship, including investments for the promotion of business start-ups is now an eligible action under the EGF. This measure has the potential of promoting self-employment and thereby direct job creation.

### 1.6.3 What recommendations (if any) could be made on that basis for the improvement of the other instruments?

A key success feature of the EGF in terms of employment outcomes is its flexibility with regard to its intervention as well as with regard to the measures provided to beneficiaries. Considering changing socio-economic situations over the seven-year period of the MFF, other funds could benefit from the possibility of adapting their orientation and scope to changing needs of beneficiaries and changing social and political priorities.

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This study examines four EU funds and programmes in how they support job creation and quality employment. It also assesses the methodologies and indicators used to measure job quality and it identifies lessons and recommendations to improve current practices.

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