

Social Investment for resilient economies

Technical Note



This technical note includes a synthesis of the activities carried in the Informal Working Group on Social Investment launched by Spain and Belgium, holding the Presidency of the Council of the European Union between July 2023 and June 2024, to improve our common understanding of the interplay between economic growth, fiscal sustainability, and social cohesion in social investment policies.

This synthesis has been prepared by the Belgian Presidency of the Council of the EU with a view to the Council meeting of 12 March 2024 and therefore does not represent the views of the members of the IW/GSI.

Social investment: an operational definition

Over the past two decades, academic experts from various disciplines have started to rethink the interaction between economic progress and social policy (Esping-Andersen et al, 2002; Esping-Andersen, 2009; Morel et al, 2012; Hemerijck, 2013; 2017; Hemerijck et al., 2016). Social investment is today understood as welfare provision that helps ‘prepare’ individuals, families and societies ex ante to respond to the changing nature of social risks in advanced economies, by investing in, upkeeping and protecting human capabilities from early childhood.

The **economic logic of social investment** explicitly focuses on increasing the number (quantity) and productivity (quality) of current and future employees. Against this background, social investment is defined as public spending related to investments and reforms¹ that, on top of pursuing social objectives, are expected to produce returns in terms of economic growth through their impact on human capital and productivity, including via stronger innovative capacity and absorption of new technologies, and/or labour supply². Thus, social investment includes:

- **Lifelong learning and up- and re-skilling** of the adult population, which support a better matching between skills demand and supply, with positive implications for labour market integration and growth potential.
- **Education**, in particular **quality and affordable early childhood education and care**, which help provide a strong basis for further learning later in life for all children, while facilitating the labour market participation of their parents, notably boosting female employment.
- **Active labour market policies**, which facilitate entry into the labour market as well as job matches, help reduce mismatches, quality jobs and support job transitions (easing structural adjustments in the economy), thereby fostering inclusive and sustainable growth.
- Policies to prevent illness related to work and **integrate in the labour market persons with disabilities and/or workers after an episode of illness**.
- Reforms to **reduce labour market segmentation** and reforms of **tax-and-benefit systems** to incentivise labour market participation and quality jobs.

Investing in human capital for inclusive and sustainable growth

Technological progress, environmental sustainability concerns, demographic change, political challenges – including growing inequality – are having a profound impact on the European economies and societies. Investment in human capital can help unlock the still large pool of unused talent in Europe. **Investing in human capital is among the key drivers of economic growth, productivity and innovation through enhancement in the stock and quality of human capital, which is even more important in a context of labour and skills shortages** (European Commission 2017). Growth theory has evolved over time to fully embed the role of human capital formation in fostering growth (Barro, Sala-i-Martin, 2003). Such measures are found to *directly* foster economic growth, including via higher employment,³ and increase productivity, including via a stronger innovative capacity and the

¹ In the domain of skills, employment and inclusion policies. This definition has been proposed by the Belgian Presidency in the context of the IWGSI.

² The qualification of social spending as investment is done therefore based on its growth impact, which is the object of interest of this note. This does not imply that other types of spending are less valuable.

³ The positive impact on economic growth is recorded despite the costs that may be entailed by some of these measures (Gemell, Kneller, Sanz, 2016) and possible delayed positive effects (Card, Kluve, Weber, 2018).

absorption of new technologies, and also by ensuring a better matching between skills demand and supply (European Commission, 2022a; Thum-Thysen, Vandeplas, 2019; European Commission, 2019).

More specifically, reforms and investments in the human capital domain that directly support economic growth include:

- **Up- and re-skilling of the adult population, including in view of mitigating skills shortages and preparing for the green and digital transformations.** Measures in this area are found to yield a positive impact on productivity and growth (Sekmokas et. Al., 2020; OECD, 2020). Training programmes are found to be among the most effective active labour market policies (Card, Kluve, Weber, 2018). In particular, general training programmes help better matching skills demand and supply, especially after the entry into the labour market, while (certified) vocational training programmes (workplace-based or combined with school-based) were shown to be effective in facilitating the transition from education to work. Employers also favour training programmes as a way to mitigate skills shortages (European Commission, 2023). In 2017, Cedefop produced an in-depth study titled *Investing in skills pays off*. Results from the microeconomic analysis show substantial gross earnings increases, including tax revenues, as well as substantial positive effects for individuals in terms of health and crime reduction. Results from the macroeconomic analysis show that the increase in annual GDP due to the reduction in the share of low-skilled adults would be over EUR 200 billion in the 25 years taken as reference period (2025-50).
- Reforms and investments in **quality and affordable early childhood education and care (ECEC)** are known to have the greatest returns on investment (Carneiro, Heckman, 2003), including by providing a sound basis for further learning later in life, supporting equality of opportunities for vulnerable children (i.e. from lower socio-economic backgrounds) and helping harnessing their full potential. A recent study by the OECD (2022) finds that quality human capital investments have a strong link to productivity, and the magnitude of these potential gains in MFP is comparable to a similarly standardised improvement in product market regulation. Investments in ECEC further contribute to stronger growth potential via increased labour market participation of parents. Nazareni et al. (2022) show that the achievement of an increase in availability and participation in formal childcare to 50% of children below the age of 3 would lead to significant increases in the labour supply of mothers (at the extensive and intensive margins), especially in countries where the current labour participation of women and the share of formal childcare is low (Nazareni et al. 2022).
- Reforms and investments in **mental health**, in association with policies to reintegrate people with disabilities and/or after an episode of illness in the labour market. A key challenge for all countries is mental illness, which accounts for 38% of all illness in EU countries. People who are mentally ill are less likely to be in work and, if in work, are more likely to be out sick or working below par. The economic costs of mental illness are related to non-employment, absenteeism and presenteeism. Mental illness also imposes costs on physical health care. Layard (2017) shows that psychological therapy is a bargain: for each 1 Euro spent, roughly 1 Euro is saved on welfare benefits and another 1 Euro is saved on physical health care. Psychological treatment can reduce a person's annual physical health care costs by 20%.

Reforms supporting the functioning of labour markets

There is a set of selected policy measures, mainly reforms, that directly enhance economic growth by increasing the efficient functioning of the labour market, and mitigating skills mis-matches and shortages; some of them also directly support fiscal sustainability. Well-functioning and effective public employment services and active labour market programmes, for instance, reduce frictions in the labour market by decreasing the direct cost and time required for a worker to be matched to a job, as well as by improving the quality and duration of such a match (Pissarides, 2010). Measures that support labour market participation or facilitate return to work can be particularly important to enhance growth potential, in particular in the light of the increasing labour and skills shortages that the EU economies have been facing:

- **Reforms in active labour market policies (ALMPs)** facilitate entry into the labour market as well as job matches, help reduce mismatches, and support job transitions (easing structural adjustments in the economy), thereby fostering inclusive and sustainable growth.⁴ Recent studies show that ALMPs can be cost-effective in the longer run, and some can be self-financing (Brown, Koettl, 2012). Measures that are particularly relevant in this respect include, for instance, those related to the provision of effective support to job-seekers and skills intelligence, and integrated employment and social services, as well as their digitalisation (Ekkehard, Merola, Reljic, 2022).
- **Removing disincentives to labour market participation**, via a better design of tax and benefit systems (notably by shifting taxation away from labour to other sources less detrimental to growth, and by promoting an equitable taxation of second earners), as well as by ensuring fair and well-adapted working conditions (including in relation to specific groups like older workers or persons with disabilities). These measures can be expected to support growth potential via increased labour supply.

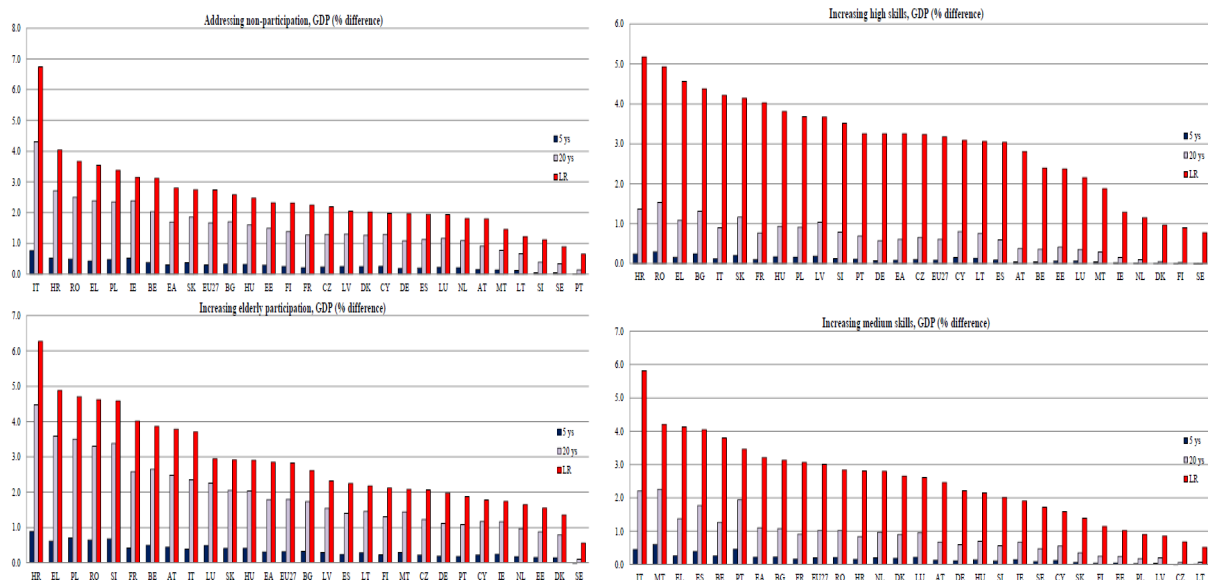
⁴ For policy guidance by the Commission services relevant for some of the aforementioned elements see [Commission Recommendation \(EU\) 2021/402 of 4 March 2021 on an effective active support to employment following the COVID-19 crisis \(EASE\)](#) (OJ L 80 08.03.2021, p. 1).

- Reforms that reduce labour market segmentation** were found to support productivity growth in the longer term by internalising the social costs of dismissals and increasing incentives for firms to adopt more productive work practices and for employees to invest into job-related training (OECD, 2018). Also, fostering stable forms of employment contributes to broadening the fiscal base and strengthening the fiscal sustainability of the social protection system.

Overall, modelling the returns of reforms is in general a difficult exercise and lead very often to uncertain empirical effects. Therefore, their use should be done with much care. In a recent paper, Pfeiffer et al (2023) employ a benchmarking approach to quantify the potential impact of structural reforms in the EU Member States. Based on a comprehensive collection of structural indicators and the QUEST IIIR&D model, they evaluate stylistic reforms in different policy areas, including skills and education and labour markets. Two main skills enhancing reforms are considered: 1) increasing the share of high-skilled workers; and 2) increasing average medium skills. In the case of labour market, two main measures are considered: 1) participation of elderly workers (55-64 years); and 2) increasing labour force participation (25-55).

The authors map these indicators into the QUEST III R&D model designed to assess the reform potential for each EU27 country. For each area and country, they apply a distance-to-frontier approach and simulate a gradual closing of half of the gap vis-à-vis the three best EU performers. In the domain of social and employment policies, the study finds that – in the short to medium run – labour market reforms dominate in terms of GDP effects, and in the longer run, progress on closing the gaps in terms of human capital yields the most significant gains. For example, closing half of the gaps in educational quality and human capital could increase EU GDP by almost 10% relative to the baseline in the long run⁵.

Figure 1. Skill and labour market reforms growth effect



Source: Pfeiffer et al. (2023) Unleashing Potential: Model-Based Reform Benchmarking for EU Member States, p. 21-23

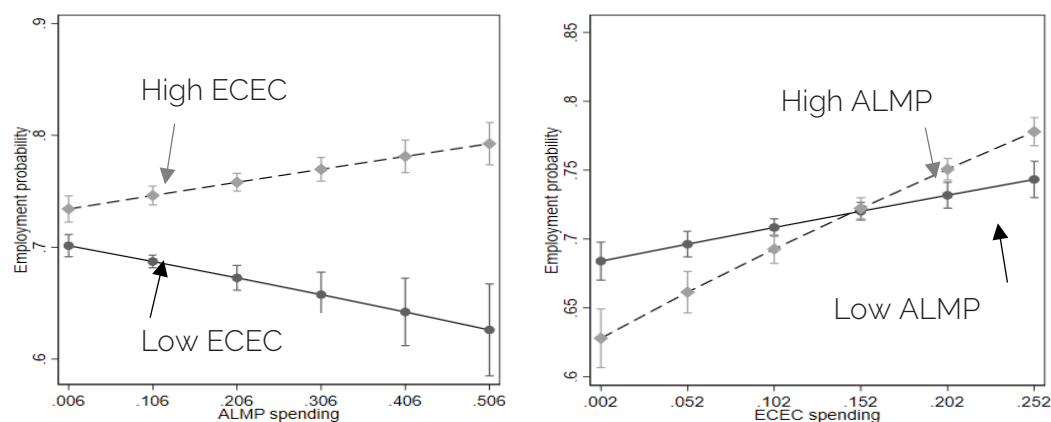
⁵ Limitations need to be acknowledged when capturing negative externalities, for example on issues like poverty, the absence of social mobility, and the perpetuation of poor social conditions.

Accounting for complementarity effects of social policies

At the core of the social investment paradigm is the **life-course multiplier** effect (Hemerijck 2015; 2016; 2017) whereby high quality early childhood care over time contributes to higher levels of educational attainment, which in turn, together with more tailor-made vocational training, can spill over into higher and more productive employment in the medium term. To the extent that employment participation is furthermore supported by effective work-life balance policies, including adequately funded and publicly available childcare, higher levels of (female) employment with lower gender pay and employment gaps and ultimately pension gaps can be foreseen.

Hemerijck et al. (2024)⁶ have focused also on the complementarity of ALMP and ECEC and how they affect people's employment chances. This is captured by marginal effect estimates plotted in the figure below. Both ECEC and ALMP efforts are associated with a higher individual employment likelihood, but the marginal effect of higher spending effort in one policy increases spending levels in the other policy⁷. The complementary policy effects are somewhat stronger among female respondents. To visualise this, the figure graphically plots predicted probabilities to be employed among female respondents at different levels of national ALMP and ECEC spending levels. In the left panel, probabilities are plotted across the full sample distribution in ALMP spending in settings with low and high levels of ECEC spending efforts. In the right panel, the same is plotted across the full distribution in ECEC spending in settings with low and high levels of ALMP spending efforts.

Figure 2. Predicted probability of employment among female respondents with children for ALMP effects by ECEC spending level (left-hand panel) and for ECEC effects by ALMP spending level (right-hand panel)



Source: Hemerijck et al. (2024)

The plotted estimates in the left panel show a clear pattern of the complementary role of ECEC on the association between ALMP spending and employment. In contexts with high ECEC spending (the 90th percentile), the employment probability among women with children is high and increases with higher ALMP spending levels, from 74 to 79 per cent across the ALMP spending distribution. By contrast, when ECEC spending effort is low (10th percentile), the employment probability is overall lower and

⁶ The study has been commissioned by the Belgian Presidency of the Council of the EU and will soon be publicly available on the European University Institute website. The study has been prepared by Anton Hemerijck (European University Institute), Brian Burgoon (University of Amsterdam), Daniel Fernandes (Leiden University), Annika Lehmus-Sun (European University Institute), Ilze Plavgo (University of Mannheim and European University Institute), and Heta Poylio (European University Institute).

⁷ This pattern is stable across all subsamples and alternative model specifications.

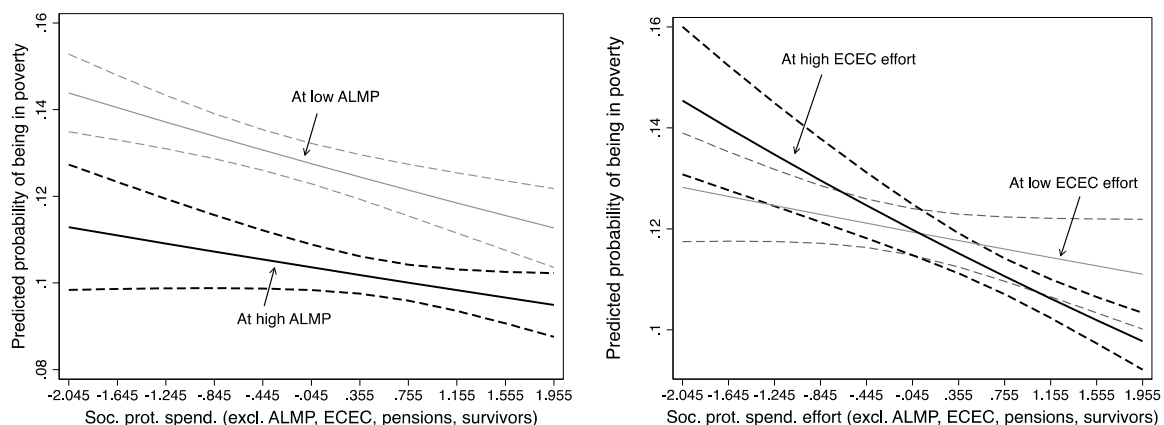
decreases with higher ALMP spending levels. Such patterns suggest that at low ECEC levels, ALMP might be unemployment – or inactivity – promoting for families with children, especially among mothers, whereby ALMP-enhanced employment take-up is likely to be concentrated among adults without care responsibilities.

The right-hand-side panel graphically shows a similar complementarity pattern in how ALMP enhances ECEC’s employment promotion among female respondents. We see that ECEC is significantly more employment-promoting at higher levels of ALMP effort. When ALMP effort is high (the steeper dashed line), the positive association between ECEC spending and employment is significantly stronger than when ALMP effort is low (the flatter line). In settings with high ALMP spending, the predicted employment probability among women with children increases by fifteen percentage points across the ECEC spending distribution (from around 63 to 78 per cent). In settings with low ALMP spending, the estimated increase is only around six percentage points. The complementarity dynamics are weaker but still significant for the total workforce, pointing at somewhat weaker ALMP–ECEC policy interdependencies for male respondents with children.

Clearly, the strength of the identified reinforcement effect is bound to vary by the quality of ALMP and ECEC services, employment protection legislation (EPL), and other factors not studied here that directly affect parents’ likelihood to engage in paid employment. Auxiliary analyses assessing different country clusters separately reveal cross-country variation in the strength of ALMP-ECEC interaction effect on the employment probability. While the direction of the estimated interaction effect across different country clusters remains positive and is therefore in line with the overall conclusions, the identified variation points that the extent to which the two social investment policies reinforce each other’s effectiveness is shaped by policy design and other country specificities.

Hemerijck et al. (2024) also assessed how policy complementarity shape individual-level poverty risk. In particular, they investigate if there are any possible broader complementarities or conflicts between social investment provisions (e.g. ECEC and ALMP) on the one hand, and social protection provisions (e.g. income, health, unemployment, and other transfers and services) on the other in shaping the chances that an individual is in or falls into poverty. The two panels below show how the full sample variation in social protection spending effort predicts lower probability of a given respondent being in poverty in settings with low (bottom 10th percentile) and with high levels (top 90th percentile) of social investment with respect to ALMP (left-hand panel) and ECEC (right-hand panel).

Figure 3. Conditional effects of Social Protection on probability of poverty among low-educated, in high vs. low ALMP settings (left-hand panel) and ECEC settings (right-hand panel)



Source: Hemerijck et al. (2024)

While the two panels capture quite different joint and interactive effects for poverty-fighting, they both show complementarity in their joint effects. One can see in the various schedules that settings characterized by generous social protection *combined with* generous ALMP or ECEC (the darker schedules in the panels) are associated with lowest probability of an individual falling into household poverty compared to individuals in settings marked by social protection without generous social investment.

Accounting for certain employment, skills and social policies' returns in the analysis of fiscal sustainability

Assessing the impact of social reforms and investments on fiscal sustainability is not an easy exercise. When they are disbursed, what we call 'social investments' are considered as public spending programmes while public investments refer only to gross fixed capital formation. However, social reforms and investments can still positively affect long term debt sustainability. Social policies can impact fiscal sustainability through the following channels. First, the costs related to their implementation increase public spending participating to a degradation of the primary balance. Second, they can lower the debt-to-GDP ratio both by increasing the GDP denominator or by higher tax revenues which contribute to an improvement of the primary balance. The impact on GDP occurs mainly through increasing potential output, i.e. the production capacity of the economy, determined by the stock of production factors, capital and labour, and by the total factor productivity (TFP). Some social reforms and investments can boost TFP through either a level shift or a persistent increase in its growth rate (for example, better skills could raise the productivity of the workforce) and/or can increase the labour input, by encouraging greater labour force participation and reducing the structural level of unemployment. They can also increase the capital stock via the share of social expenditures devoted to gross fixed capital formation (buildings or software for instance)⁸.

Due to methodological and data challenges academic research in this field is limited. A recent study by Darvas, Weslau and Zettelmeyer (2024)⁹ attempts to illustrate the effects of social investments and reforms on the fiscal adjustment needs of EU Member States based on their interpretation of the new EU fiscal framework. In particular, the authors consider a childcare policy to boost labour supply and a labour market policy aimed at increasing the share of high-skilled workers¹⁰.

Childcare policy to boost labour supply

In the case of childcare policy, Darvas, Weslau and Zettelmeyer (2024) rely on Narazani et al. (2022) who quantify the impact on labour market participation and employment following formal childcare policies for seven EU countries. Using the EU labour supply-demand microsimulation model (EUROLAB), Narazani et al. (2022) found that introducing formal childcare for 50% of under 3-year-olds would increase the overall labour market participation by 18% for Austria, 20% for Estonia, 10% for

⁸ The examples presented in what follows relate rather to the former (TFP and labour input channels).

⁹ The study has been commissioned by the Belgian Presidency of the Council of the EU and is publicly available on Bruegel website: <https://www.bruegel.org/working-paper/incorporating-impact-social-investments-and-reforms-european-unions-new-fiscal>. The study has been prepared by Zsolt Darvas, Lennard Welslau, and Jeromin Zettelmeyer.

¹⁰ To do so they rely on the existing literature produced by European Commission's researchers on estimated effects of such stylised policy interventions.

Finland, 8% for Ireland, 3% for Italy, 10% for Poland, and 2% for Portugal. These differences are primarily determined by the initial childcare participation (column (1) in Table 1).

Darvas, Weslau and Zettelmeyer (2024) assume a gradual (linear) phase-in of the childcare policy over five years from 2025 to 2029, which gradually boosts the labour force participation rate and potential GDP. To include a simple estimate of the fiscal effort required to finance the childcare programmes, they assume that the cost of the policy is proportional to the spending on current childcare shares. For example, if a country currently spends €1 billion to provide care to 25% of young children, they assume that the provision of care to 50% would cost €2 billion. The costs, in current prices and as a share of GDP in 2028, when the programme is assumed to be fully implemented, are shown in columns 2 and 3 of Table 1.

The fiscal adjustment efforts are reported in columns 5-6 of Table 1. Targets are calculated for four and seven-year adjustment periods, using either baseline or policy-implied assumptions. As expected, the social policy measure considered reduces fiscal adjustment efforts needed to comply with the new fiscal rules for most of the countries under examination. The effect is larger for countries with a lower initial childcare participation. The starkest example is Finland, which faces a binding debt safeguard in the 4-year scenario under baseline assumptions, but not after introducing the growth-enhancing social policy measure. Therefore, the childcare policy would reduce the Finish structural primary balance requirement to comply with the new fiscal rules by the end of the 4-year adjustment period by 1.78% of GDP, a huge impact (column 9 of Table 1). Poland, one of the countries with the lowest initial childcare share, records the largest reduction in required fiscal adjustment efforts. For other countries, the impacts on the stochastic target in the 4-year case vary between -0.34 (Estonia) and -0.06 (Portugal).

Table 1. The effects of a formal childcare programme on fiscal adjustment needs (end of adjustment period value of the structural primary balance)

	Childcare participation	Cost of policy (EUR bn)	Cost of policy (% of 2030 GDP)	Change in 2030 GDP	Baseline SPB effort		Policy SPB effort		Effect on SPB effort	
					4 year adj.	7 year adj.	4 year adj.	7 year adj.	4 year adj.	7 year adj.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Austria	0.23	3.5	0.6	11.4	1.0	1.1	0.7	0.9	-0.25	-0.21
Estonia	0.34	-	-	12.6	-2.5	-2.4	-2.5	-2.4	0.00	0.00
Finland	0.40	0.8	0.3	6.4	2.1	0.3	0.3	0.3	-1.78	0.00
Ireland	0.19	-	-	5.1	-1.4	-1.4	-1.4	-1.4	0.00	0.00
Italy	0.31	1.0	0.00	1.9	3.3	2.9	3.3	2.9	-0.04	-0.04
Poland	0.16	47	1.1	6.4	0.0	0.1	-0.3	-0.2	-0.31	-0.26
Portugal	0.47	0.0	0.0	1.3	2.8	2.6	2.7	2.6	-0.06	-0.02

Source: Bruegel based on European Commission November 2023 forecasts, Bloomberg, ECB and Narazani et al. (2022).

Note: SPB = structural primary balance at the end of the adjustment period (2028 for 4-year adjustments, 2031 for 7-year adjustments).

Increasing share of high-skilled workers

As a second example, Darvas, Weslau and Zettelmeyer (2024) consider a stylistic labour market policy aimed at increasing the share of high-skilled workers. They build on the estimates by Pfeiffer et al. (2023), who report significant effects on GDP as a result of direct effects on final goods production and R&D activities. Their simulations assume a gradual entry of new, higher skilled cohorts into the labour market over the course of 45 years. As with the education policy, they adopt the growth projections underlying the public debt sustainability analysis by assuming a gradual increase of GDP from the start

of the adjustment period to 20 years after the start of the period by the medium-term (20-year) effect reported by Pfeiffer et al. (2023).

Table 2 shows the resulting effects on fiscal adjustment efforts. The effects on the end-of-adjustment period structural primary balance effort is modest across countries, with an average reduction by circa 0.03 percentage points. The largest reductions are observed for Greece (0.1 percentage points) and for Spain (0.11 percentage points).

Table 2: The effects of increasing the share of high-skilled workers on fiscal adjustment needs (end of adjustment period value of the structural primary balance)

	Change in 2045 GDP (%)	Baseline SPB effort		Policy SPB effort		Effect on SPB effort	
		4 year adj.	7 year adj.	4 year adj.	7 year adj.	4 year adj.	7 year adj.
	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Austria	0.4	1.0	1.1	1.0	1.1	-0.01	-0.03
Belgium	0.4	2.2	2.3	2.1	2.3	-0.02	-0.02
Bulgaria	1.3	-1.1	-0.7	-1.1	-0.7	-0.01	-0.01
Cyprus	0.8	0.2	-0.4	0.2	-0.4	-0.05	-0.04
Czech Republic	0.7	0.4	0.7	0.4	0.7	-0.01	-0.01
Germany	0.6	0.5	0.2	0.5	0.1	-0.02	-0.04
Denmark	0.1	-1.5	-1.7	-1.5	-1.7	0.0	0.0
Estonia	0.4	-2.5	-2.4	-2.5	-2.4	0.0	0.0
Greece	1.1	2.2	2.0	2.1	1.9	-0.1	-0.08
Spain	0.6	2.3	2.7	2.2	2.6	-0.11	-0.09
Finland	0.0	2.1	0.3	2.1	0.3	0.0	-0.01
Hungary	0.9	2.4	2.6	2.4	2.5	-0.02	-0.06
Ireland	0.1	-1.4	-1.4	-1.4	-1.4	0.0	0.0
Italy	0.9	3.3	2.9	3.3	2.9	-0.05	-0.05
Lithuania	0.8	-0.7	-0.9	-0.7	-0.9	0.0	0.0
Luxembourg	0.3	-0.2	-0.2	-0.2	-0.2	0.0	0.0
Latvia	1.0	-1.4	-1.1	-1.5	-1.2	-0.03	-0.03
Malta	0.3	-0.3	0.0	-0.30	0.0	-0.03	-0.01
Netherlands	0.1	1.6	1.4	1.6	1.4	0.0	0.0
Poland	0.9	0.0	0.1	0.0	0.0	-0.04	-0.02
Portugal	0.9	0.0	0.1	0.0	0.0	-0.04	-0.05
Romania	1.5	1.3	2.1	1.3	2.0	-0.07	-0.10
Sweden	0.0	-1.2	-1.1	-1.2	-1.1	0.0	0.0
Slovenia	0.8	1.7	1.9	1.7	1.9	-0.01	-0.01
Slovakia	1.2	1.2	1.6	1.1	1.6	-0.04	-0.04

Source: Bruegel based on European Commission November 2023 forecasts, Bloomberg, ECB, Pfeiffer et al. (2023).

Note: Column 1 shows the effect of closing half of the gap to the EU top-performer in terms of share of high-skilled workers. Columns 2-13 show the effects of fiscal adjustment targets when phasing in the increase in growth over a period from 2025 to 2045. Missing stochastic targets were outside the bounds of the optimization.

Assumptions about the size and the timing of growth effects associated with social reforms and investments matter for the resulting implications on fiscal adjustment efforts. Country-specific differences in the elasticity of growth to policy intervention and the macroeconomic fundamentals driving public debt trajectories also influence the outcomes.

Improving the efficiency and effectiveness of social investments: data and evaluations

Reinforcing social reforms and especially investments is about spending efficiently and effectively. This implies maximising outcomes given the available resources (efficiency or “doing things right”) and achieving the mix of outcomes desired by society (effectiveness or “doing the right thing”) (Drucker 1967). Recent studies have focused on the efficiency of human capital spending, in particular in the field of education. Calculations by the European Commission suggest that although, over the past 20 years, the efficiency of public spending in EU Member States in achieving higher educational attainment has increased notably, significant room for efficiency improvement remains in many Member States in terms of 'quality' and 'inclusion' (Canton et al 2018).

Adequate monitoring and evaluating systems are instrumental to track the efficiency and effectiveness of social investments. Monitoring is a continuous and organised process of systematic data collection (or access) throughout the life-cycle of any initiative to oversee its progress. It is necessary to understand how policies are implemented, it informs evidence based policy making, and can serve as an early warning system, for instance in case of weak progress of an initiative or unexpected or unintended findings, when it may suggest a need for subsequent corrective adjustments. As such, monitoring is an integral part of the evaluation process. Evaluations go beyond a factual assessment of ‘what’ has happened to consider ‘why’ it has happened, how much change can be attributed to the intervention and to what extent this change meets the original expectations or projections.

The **evaluation of micro and macroeconomic returns relies on various analytical methods possibly employed in the Member States**, also depending on the **different levels of administrative capacity** to carry out adequate evaluations. As put it in the EU better regulation guideline, 'social investment has positive consequences for economic growth and societal well-being in general. However, as in any category of economic decisions, social investments have to consider their opportunity cost. Economists try to answer these questions by considering the costs and benefits linked to each option. **Cost-benefit analysis (CBA)** is characterised by the attempt of measuring all effects of a policy option in monetary units. In the realm of social investments, it is particularly challenging to express costs, and especially benefits, in monetary terms. Some of the effects do not typically have a monetary value, even though there is an economic impact. A **multi-criteria decision analysis (MCDA)** allows considering a wide range of assessment criteria.

Some EU Member States have integrated a CBA or MCDA into their social policy planning.

The **Danish socio-economic investment model** (Socioøkonomisk Investerings model, SØM) is an example of an applied cost-benefit approach. The aim of the SØM is to provide “economic analysis to anyone interested in how a social policy affects the public economy in both the short and longer term and in knowing what the economic costs and benefits of particular social investments are” (Kvist, 2018). It consists of a database of effective practices and a calculation framework to determine the implementation costs. When the user selects the policy initiative to consider, and characteristics of the target persons, the model calculates direct cost and possible outcomes. These are calculated using estimates from register data on success rates for participants and impacts on public spending such as changes in demand for public transfers/benefits, tax revenues etc. The first version, published in January 2018, included adult target groups only. The model has now been updated to include vulnerable children and young people aged 6 to 17 and will soon include children aged 0 to 5.

Similarly, in the **Netherlands** the social policy planning is underpinned by a number of cost-benefit analyses conducted by the Centraal Planbureau (the Netherlands Bureau for Economic Policy Analysis (CPB)), which is one of the Netherlands’ three national policy assessment agencies. For example, one of the recent analyses considered calculation of policy options for an alternative allowance system (CPB, 2020) and its effects on budget balance, employment and inequality (Gini coefficient). Another analysis (CPB, 2020) focused on GroenLinks social security and tax system reform and its impact on the purchasing power of households and structural labour supply. Similar effects have been investigated for social policy changes proposed by the Labour Party (PvdA) (CPB, 2020).

- A complementary approach to CBA is **Distributional Impact Assessment (DIA)**. This entails a quantitative analysis providing an assessment of the distributional effects of reforms and investments, hence of their impacts on the incomes of different groups, and ultimately on income inequality and poverty. In terms of use of DIA across Member States, almost all of them use DIA at least to some extent, while tools and approaches vary according to the national context and significant differences emerge in the way DIA is used in the budgetary process (including Draft Budgetary Plans in the context of the EU economic governance) across Member States, as illustrated in the figure below. Some Member States use systematically DIAs in their budgetary process and for related documents (AT, SE, FR, LV, DK, HR, IE and NL), some do so rather moderately. Only very few MSs do not appear to conduct or make very little use of DIA analysis for budgetary purposes (CY, LU, RO, DE, BE, SK, BG, CZ). Different approaches are also found regarding dissemination.
- Some do DIAs and publish full results in their national budgetary documents. Others carry out the analysis without making it public. Others present generally only a descriptive analysis of the distributional impact of their policies.

Methods to assess social and employment policies' returns¹¹

Various methodologies are employed in the literature to measure the returns of social investments and reforms, ranging from micro to macro analysis, ex-ante and ex-post evaluations, and employing regression-based methods, microsimulation, cost-benefit analysis, and Social Accounting Matrix (SAM) based modelling. The table below highlights the main methods available to assess the returns on social investments, combining ex-ante and ex-post approaches together with micro and macro level assessments:

- As for the micro dimension, a number of studies rely on microsimulation, experimental and quasi experimental methods.
- As for the macro dimension, a large part of the literature available relates to ex post regression-based methods, as well as micro-macro modelling.

Table 3. Typology of main methods available to assess social investment returns

	Ex-ante	Ex-post
Micro-level	Microsimulation Randomised control trials	Randomised control trials Quasi-experimental methods, (counterfactual simulation, Propensity Score Matching. Diff in diff, discontinuity regression),
Macro-level	Macro-economic modelling (including social accounting matrixes or general equilibrium models)	Ex post evaluation (of macro variables, including through regression Models and frontier analysis)
Both	Cost Benefit Analysis, Distributional Impact Assessment	

Source: own elaboration.

Given the difficulties to identify returns, the various methods are in general very intensive both in terms of the data needed to actually be able to elaborate some (granular) estimates and the complexity of the methods needed to allow the calculation of the estimates (such as through actual experiments or through various types of ex ante or ex post estimations or modelling). The table below presents some of the advantages and limitations of the main methods identified. Overall, the impact of social investment is challenging to measure and quantify, as there are many elements that can also affect economic and social outcomes and some of their effects may only materialise in the long-term. The selection of the relevant approach and factors included in the modelling is bound by these limitations and challenges. While no model can account for all these elements at once, it is important that the choices of assumptions and methods are based on informed analysis.

¹¹ This section benefitted from the precious support of the European Commission Directorate-General for Employment, social affairs and inclusion. The Belgian Presidency would like to thank in particular Olivier Bontout.

Table 4. Advantages and limitations of various methods to measure returns to social investments

Methods	Type of data	Main advantage	Limitations	Types of social protection returns commonly analysed
Fixed Effects (FE) panel regression	Country-year data	Reduces the bias from other unobserved variables	Requires many observations – Difficult to identify causality	Economic growth Inequality reduction
FE panel regression with System Generalized Methods of Moments (GMM)	Country-year data	Allows tackling endogeneity effects and causality problems	Requires many observations – Difficult to identify causality	Economic growth Inequality reduction
Simple regressions (bivariate or multivariate)	Cross-sectional or panel data	Applicable to different types of data	Risk of biased results from unobserved variables – Difficult to identify causality	Poverty reduction Health outcomes
Multi-level regression models	Cross-sectional or panel data	Allows detecting relations at different levels of for nested data	Requires sufficient sample size at every level– Difficult to identify causality	Poverty reduction Health outcomes
Quasi- experimental methods (counterfactual simulation, regression discontinuity design)	Cross-sectional or panel data	Allows analysing causality and quasi-treatment effects of policy change by defining treatment and control groups ex post	Requires very careful specification of treatment groups or control variables to isolate the effect	Outcomes of single policy or targeted measures, for example
Microsimulations	Micro data on units (households and persons)	Simulating effects of policy interventions on units at the micro level – clearly identifies assumptions	Inherently reduces the scope to the elements modelled	Primarily income-related outcomes, poverty, social participation
Social Accounting Matrix and micro-macro approaches	All-economy data collection framework	Allows accounting for a large set of factors, reproducing entire economy within general equilibrium (CGE) modeling	Difficulties to ensure proper modelling of all aspects and detailed measurement of returns due to high level of generality	Diverse social policy interventions
RCT	Micro data on units (households and persons)	Allows analysing causality effects of policy change by randomly choosing units for the treatment and control group	Requires very good randomization of treatment groups or control variables to isolate the effect of the policy	Outcomes of single policy or targeted measures, for example

Source –Study on assessment of micro and macro-economic returns of social protection expenditure (forthcoming)

The challenge of data to evaluate social and employment policies

In order to perform any kind of monitoring and evaluation of social investment returns, access to quality, robust and timely data is key. The possibility, accuracy and quality of the results provided by the various assessment tools available (whether they are macro or micro, ex ante or ex post) are indeed largely dependent on the data available. Data play a crucial role in the development, update, and utilization of various monitoring and evaluation methods.

Survey data allow for the inclusion of specific or ad hoc questions and generally offer extensive coverage of households, their composition, and individual characteristics. Indicators based on data derived from surveys conducted on a sample of the population, such as the EU-SILC survey data or the Labour Force Survey data, carry a certain time lag and a statistical margin of error which may become problematic when looking at smaller subpopulations.. Additionally, variations over time and across different regions within the sample may not always be generalizable to the entire population. Surveys also face issues like low response rates, often have limited coverage of high-income individuals and can be quite expensive. **Administrative data**, on the other hand, are relatively cost-effective as they are routinely collected by public administrations. They help reduce measurement errors, eliminate recall errors, provide comprehensive coverage of the population, and can capture the high-income distribution effectively. Importantly, they usually allow for larger samples, allowing analysis of smaller population categories and more detailed policy measures. However, they often have a limited coverage of the bottom tail and can pose challenges in identifying families and households.

Over the last decade important steps have been made at the European level to enhance statistical capacity required for social policy impact assessments. Flash estimates for income poverty and inequality are currently provided by Eurostat and in several Member States to reduce the time lag in assessing poverty and inequality trends and it would be important to aim at a more systematic use of these. Importantly, there is the 2019 Framework regulation on social statistics ((EU) 2019/1700), which offers a sound legal basis for EU social data collections (e.g. EU-SILC, LFS, EHIS,) allows some flexibility regarding the information collected and improves timeliness of social indicators. However, to further extend the range of possible impact assessments more detailed data are required. To achieve a comprehensive analysis, it is imperative to employ a sizeable and representative sample that encompasses all the requisite components of the policies under examination and takes subpopulations into account. For this purpose, enhanced availability of administrative data for policy impact assessments is a priority. Currently, the use of administrative data for policy development differs strongly between Member States.

While in a number of Member States extensive administrative data is widely used, in many other Member States there remain important barriers for their effective use. Both privacy considerations as well as institutional rigidities play a role. The resistance of some government agencies to share their data or collaborate with third parties to evaluate their public policies is a topic of ongoing debate in the field of public administration and governance. This resistance can be attributed to various reasons, including concerns about privacy, data security, bureaucracy, and a lack of incentives for transparency, competition between institutions, etc. The General Data Protection Regulation (GDPR) adds a layer of complexity to data accessibility, presenting a notable challenge, particularly in a European context. However, several EU Member States have developed technical solutions to strictly comply with GDPR, while at the same time maximizing access to anonymized data for research and public policy evaluation. Finding a sound approach for access to administrative data, while setting standards for their use is essential to facilitate meaningful data-driven endeavors. Support for further opening up

administrative data for secondary use, while fully complying to GDPR is in line with recent initiatives, launched by the Commissions' communication on an EU data strategy (EU(COM) 2020/66) and with the Data governance act ((EU) 2022/868), which became applicable in September 2023.

The Data Governance Act seeks to *increase trust in data sharing, strengthen mechanisms to increase data availability and support the set-up and development of common European data spaces*. The idea of the initiative is to *make more data available and facilitate data sharing across sectors and EU countries*. Notably, work is in progress on the European Health Data Space (EHDS), which should (among other objectives) enhance the quality of public health policies. The EHDS Regulation has been proposed in 2022 by the Commission (2022/0140(COD) with the purpose to facilitate informed policy-making and decision-making on the basis of high-quality health data, to improve the well-being of citizens. Thus, the EHDS fits in in the broader ambition of evidence-based social investment, for which accurate and comprehensive data are needed. The Data Act, which entered into force in January 2024, further complements the data framework and aims to regulate who can use which data under which conditions. Currently a Commission proposal amending Regulation (EC) No 223/2009 on European statistics is under discussion. The proposal aims at improving the access, reuse and integration of administrative data for the development of European Statistics. The latter is of particular interest to enhance the use of administrative data for policy monitoring. However, much will depend on the scope of the amendment regarding data and the actors that will have improved access to the data. In this regard it is relevant to note that in many countries, impact assessment capacities are mainly situated outside the National Statistical Institute.

The Communication on the EU data strategy underlines that sharing of data between public authorities is important as it can make a considerable contribution to improving policy making and public services, but also to reducing administrative burden on companies and citizens. The strategy also puts forward the idea of creating data spaces in different sectors, among which, if adopted, the European Health Data Space will be the first of its kind. Interestingly, among the proposed data spaces figure also: Common European data spaces for public administration, to improve transparency and accountability of public spending and spending quality, fighting corruption, both at EU and national level, and to address law enforcement needs and support the effective application of EU law and enable innovative 'gov tech', 'reg tech' and 'legal tech' applications supporting practitioners as well as other services of public interest. Creating such data spaces around socio-economic data and implementing the provisions of the data act, i.e. regarding data intermediation services and a related regulatory framework can be crucial enhancements of the capacity to evaluate social investments and of evidence based policy making in general.