Economic inequalities in the EU

Key trends and policies

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ABSTRACT

This paper reviews **trends in income inequality** in the EU over the last fifteen years and presents a comprehensive framework to assess and monitor income inequalities and **related key policy areas**. It relies on a three-stages approach, namely considering pre-market, in-market and post-market stages in income inequality in order to present an integrated policy approach. For each of these different stages, specific (proxy) indicators help identifying relevant policy approaches.

Four out of five EU citizens perceive inequality is too high in their country, a proportion that has remained fairly stable since 2017. On average in the EU, **income inequality levels are broadly back to those from before the double-dip recession of 2009 and 2012**. There have been, however, significant fluctuations over the period, as well as some convergence in trends across Member States and different evolutions at the bottom and at the top of the income distribution.

Distributional Impact Assessment (DIA) is presented as a cross-cutting policy tool that can help steering policy change safeguarding fairness, streamlining inequality and poverty reduction considerations in policy making, including in the context of the digital and green transition.

Contents

1. Introduction

Income inequalities are now broadly back to the levels from before the 2008-crisis. After a significant increase in the early 2010s following the double-dip recession, they declined in the mid and late 2010s, until the pandemic and the energy and cost of living crisis. The recent stability (and even slight decline) contrasts with the increase in income inequalities during the financial and sovereign debt crisis (2009-2014) and highlights the effectiveness of the substantial national and EU policy measures in mitigating the negative consequences of shocks.

Yet, the level of inequalities remains one of the main concerns of citizens in the EU. According to a 2022 Eurobarometer survey, 81% of EU citizens believe that income inequality is too high in their country (compared to 85% in 2017). At the same time, the perception of fairness declined substantially: the share of individuals agreeing that things that happen in their life are fair decreased from 51% in 2017 to 38% in 2022.

The arguments to tackle economic inequalities are multifaceted. Normative discourse relates to the promotion of social justice which is one of the objectives of the European Union as set in the Treaties (Art. 3 TUE). Similarly, reducing inequalities is one of the UN Sustainable Development Goals (SDG 10). Yet, there is also an economic rationale to tackling structural inequalities: High income inequality tends to drag down GDP growth by, inter alia, undermining the ability of a large part of the population to invest in education, affecting their opportunities and productivity, as well as those of their children ([1]).

Several EU policy frameworks relate to economic inequalities. Most notably, the three chapters of the **European Pillar of Social Rights** focus respectively on equal opportunities, fair working conditions, social protection and inclusion. Namely, the Pillar principles on equal opportunities and access to the labour market pertain especially to tackling pre-market inequalities, those on fair working conditions to contribute to deal with in-market inequalities and those on social protection and inclusion to address inequalities in the post-market phase. Furthermore, the Pillar Action Plan ([2]) sets three headline targets for the EU to be achieved by 2030, including one for reducing the population at risk of poverty or social exclusion by at least 15 million persons (including at least 5 million children), which also entails a reduction in income inequality.

Differences in income vary not only along different income groups, but also along individual socio-economic characteristics, such as gender, health conditions, age, labour market status, which lay however beyond the scope of the analysis in this paper. Furthermore, income inequalities have a spatial dimension, for example across regions or between urban and rural areas. Although these too tend to overlap with income inequalities (e.g. persons living in poorer regions can also be expected to be more often in lower quintiles than persons living in richer regions), spatial inequalities remain also outside the scope of this paper. At the same time, this paper focuses on income inequalities at individual level *within* Member States, and not considering comparisons among individuals across Member States in the EU as a whole ([3]).

Given the prominence of economic inequalities in the policy and public debate, this paper aims to contribute to better **define and measure economic inequalities** in the policy

([1]) See for example OECD (2018a).

([2]) COM(2021) 102 final, see here: The European Pillar of Social Rights Action Plan (europa.eu).

([3]) For such an approach see instead for example Fisher and Filauro (2021).

framework provided by the European Pillar of Social Rights. This would allow to monitor and decompose trends of income inequalities and track down where changes take place along the income distribution, as well as to analyse which policies can effectively address income inequalities in the EU.

In this context, distributional Impact Assessments (DIA) contributes to build awareness and a sense of the impact of various policies on poverty and inequality. In the current context of uncertainty, characterised by multiple shocks (such as the war in Ukraine or the Covid-19 pandemic), as well as by structural long-term transformations (such as demographic change or the green and digital transition), policy changes are needed to swiftly respond, while increasing both resilience and sustainability of the economy and the society. Having a sound understanding of the income distribution implications of the policy responses to ongoing transformations and shocks is crucial. For this, DIA is a useful tool and all public policies with potential distributional effects should in principle be accounted for in this respect: not only tax and benefit policies, but also for instance environmental and climate policies, which can have different distributional impacts depending on their design.

2. Income inequality developments in the EU

2.1. Definitions and scope of the analysis

The analysis of this paper is focused on income inequalities in the EU-27 and its Member States. Income inequalities relate to differences in income across income groups of the population (see box 1) and can be measured through several indicators.

Among the most common indicators ([4]), the **S80/S20 income quintile share ratio** is a basic, robust and conceptually straightforward way of quantifying income inequality in a single figure. The following analysis focuses extensively on this indicator which is the related Social Scoreboard headline indicator ([5]) and hence the main indicator used to measure and monitor income inequalities in the EU. It is defined as the ratio of total income received by the 20% of the population with the highest income (top quintile) to that received by the 20% of the population with the lowest income (lowest quintile), where income must be understood as equivalised disposable income ([6]).To put it in simpler words, it quantifies how much income the richest (20%) people have in comparison to the poorest (20%) ones. It does not give an indication on the levels of income of these groups but informs on the overall spread of income differences. As an example, if the

([4]) For instance, other commonly used indicators to measure inequalities are the Gini Index, the Theil Index and the Atkinson Index.

([5]) The Social Scoreboard is a list of headline indicators agreed at EU level to monitor the implementation of the European Pillar of Social Rights, by tracking trends and performances across EU countries in 12 areas. Such monitoring feeds into the European Semester of economic policy coordination. The Social Scoreboard is structured along three dimensions that mirror the three chapters of the Pillar, namely "Equal opportunities and access to the labour market", "Dynamic labour markets and fair working conditions" and "Public support / Social protection and inclusion". The income quintile share ratio is included in the first dimension.

([6]) See Eurostat [tessi180] and the related Eurostat Glossary webpage. Disposable income is defined as the total income of an individual or household, after direct taxes and social security contributions, i.e. the income available for spending or saving. Equivalised disposable income is defined as the total disposable income of a household adjusted for the household composition by taking into account economies of scale. The standard scale used is the OECD modified equalised scale, assigning a weight of 1 to the household head, 0.5 to other adults (14 year-old or older) and 0.3 to children (younger than 14). See Box 1 also for the definition of quintile.

S80/S20 is 2, the income of the richest part of the population is double the income of the poorest one.

The S80/S20, however, does not allow to have an understanding of where, along the income distribution, income inequality is higher and from where income inequalities evolutions stem, e.g. whether inequality is rising because the rich are getting richer, or because the poor are getting poorer. Supporting indicators allow such a decomposition by focusing on **inequalities at the bottom (S50/S20) or at the top (S80/S50) of the income distribution**. The intuitive interpretation of these indicators is that if the S80/S50 is rising, the rich are getting richer and if the S50/S20 is rising, the poor are getting poorer.

In addition, another similar indicator frequently used at the EU level, and importantly in the context of monitoring the Sustainable Development Goals, is **the S40 indicator**. It measures the income share of the lowest 40% persons in the income distribution.

Due to the nature of the EU statistics on income and living conditions survey (SILC), the income distribution data and, accordingly, the indicators of the income quintile share ratios have some limitations. On the one hand, the data collected may not capture well the extreme tails of the income distribution, e.g. the top and bottom 1% (for example homeless persons, as expression of one form of extreme poverty, as well as million- or billionaires, are in general not (well) taken into account in the SILC-based surveys) ([7]). A few strategies exist to adjust such data to have a more accurate picture on income inequalities on both tails. Carranza et al. (2023), for instance, refer to re-weighting techniques (to correct sampling issues), as well as to replacement methods using parametric distribution or imputation techniques (to address issues of under-reporting or under-sampling at the top of the income distribution) including through external information such as income tax data. Moreover, while SILC-based indicators of income inequalities are published by Eurostat on an annual basis, gaps in timeliness remain, as they relate to income with a time lag of more than one year ([8]). To address this, Eurostat has developed annual Flash Estimates ([9]) of monetary poverty and inequality indicators, including the S80/S20, referring to the previous income year and therefore allowing to have an indication of inequality evolutions with a reduced time lag.

Finally, the concept of (economic) inequality is much broader than income inequalities. Still, income often interacts and overlaps with other aspects, inequalities are multifaceted, for instance relating to unequal access to education, healthcare or other services that are key for individuals to develop and participate in the economy and in the society. In this respect, the concept of **inequalities of opportunities** is particularly relevant (see section 3). At the same time, the concept of **wealth inequality** is related, but yet different from that of income inequality (see box 2).

([7]) While administrative data will be needed to develop actual figures regarding these tails of the income distribution, a few estimates exist, such as those provided by the World Inequality Lab, or by Oxfam International's Inequality Report 2024, but also those on homelessness by Abbé Pierre Foundation and FEANTSA.

([8]) i.e., in June 2023, Eurostat published 2022 SILC indicators based on 2021 incomes.

([9]) See Flash estimates experimental results for income year 2022, published in June 2023.

Box 1: Constructing the income distribution

At EU-level, income distributions are available from the EU Surveys on Income and Living Conditions (SILC). This annual survey is conducted by the National Statistics Institutes of all EU countries (as well as some others) and the data are consolidated and published by Eurostat (see here). In EU-SILC, total household income includes all income, like income from work, meaning employee or self-employment income, private income from investment and property, transfers between households. Disposable household income adds social transfers to the above and deducts taxes and inter-households transfers paid (see here).

Standard income analyses based on SILC use an 'equivalised household' income concept, meaning income for all household members is pooled, divided by an 'equivalisation factor' ([10]) and attributed to every household member. Every person is then part of the income distribution. Income quintiles can then be understood as 20% 'shares' of the population, when it has been ranked by income from poorest to richest. An alternative classification is by income deciles, which can be understood as 10% 'shares' of the population when ranked from poorest to richest according to income ([11]).

The household equivalised income concept has important implications for the interpretation of income distribution. Specifically, SILC makes no assumptions about intra-household income sharing, instead allocating an equal 'share' to each household member. This has implications for the interpretation of inequality indicators by individual characteristic (gender especially, but also age and activity status).

Box 2: Wealth inequalities

Wealth (the difference between assets and liabilities) helps households to smooth consumption over time and to protect themselves from unexpected income shocks. Information on the distribution of wealth across households can help identify groups most vulnerable to income shocks (e.g. with high levels of debt or low savings) and better design policies in view of targeting the most disadvantaged groups. While wealth inequalities are usually measured through a range of indicators, a common one used at EU level is the share of net wealth owned by the top income decile (the top 10% of the income distribution).

Wealth concentration is much more pronounced than income concentration in all EU countries where data is available. On average in the EU, top 10% households have around 25% of total disposable income compared to around 53% of total wealth (HFCS fourth wave, 2021). At the other side of the spectrum, the bottom 40% hold on average less than 5% of total net wealth in the EU. This also has implications for the financial resilience and over-indebtedness for low-income households during shocks (OECD, 2021).

([10]) The equivalisation factor is calculated as (1 for the first adult + 0.5 for every additional adult + 0.3 for every child). The fact that 2nd and subsequent adults are factored at only one half takes account of the scale economies enjoyed by multi-person households when compared to single-person households (i.e., no need for two toasters). The even lower factor for children accounts for their assumed lesser financial needs compared to adults.

([11]) Income deciles are groups of individuals with equal population size sorted by (equivalised) disposable income. The first decile represents 10% of the population with the lowest income, and the tenth decile represents 10% of the population with the highest income. Quintiles are built on the same logic but using 5 groups representing 20% of the population each.

2.2. Evolution of income inequalities

This section analyses the **evolution of income inequalities in the EU and in the Member States, covering the period 2007-2023** (SILC survey years, reflecting 2006 to 2022 income years respectively) ([12]) hence considering developments since before the double-dip recession of 2009-2012. In doing so a particular attention has been paid to ensuring that breaks in time series do not impact on the analysis ([13]). In complement, it is also relevant to consider the evolution of purchasing power (i.e. nominal disposable income versus the evolution of prices). ([14])

2.2.1. Evolution of income inequality in the EU and Member States

Stability in the overall inequality in the EU

At EU level, the S80/S20 ratio slightly declined over the last 15 years, by around 0.4 pps from 4.95 (SILC 2007 ([15])) to 4.57 (SILC 2023 ([16])), after peaking at 5.12 (in the mid-2010s ([17])). Over the period analysed, this reflects an overall stability of income inequalities at the bottom of the income distribution and a slight decline at the top. The S80/S50, measuring inequalities between the top and the middle quintiles, dropped by 0.13 pps (from 2.20 in SILC 2007 to 2.07 in SILC 2023, based on recomputed data to neutralise breaks). At the same time, the S50/S20, measuring inequalities between the middle and the bottom quintiles, remained stable (from 2.22 in SILC 2007 to 2.21 in SILC 2023, based on recomputed data to neutralise breaks).

Over the period under analysis, the yearly developments of the S80/S20 were mostly driven by developments at the bottom of the income distribution. While the S80/S50 mostly shows a slow steady decline throughout the period considered, the S50/S20, shows instead a significant increase in the years of the recession that followed the financial and sovereign debt crises (in SILC 2010-2012 and 2013-2014) and then a

([12]) Part of the analysis of this paper was concluded before the SILC 2023 release and it is therefore based on data up to SILC 2022. The overall EU trend and underlying background analysis consider the changes between 2022 and 2023 do not point to any change that might lead to different findings and conclusions of the overall analysis. The SILC year (*t*) refers to the income of the previous year (*t-1*), except for IE.

([13]) See footnotes 15 and 16.

([14]) For instance, a reduction in income inequality may be overshadowed by a decrease in purchasing power.

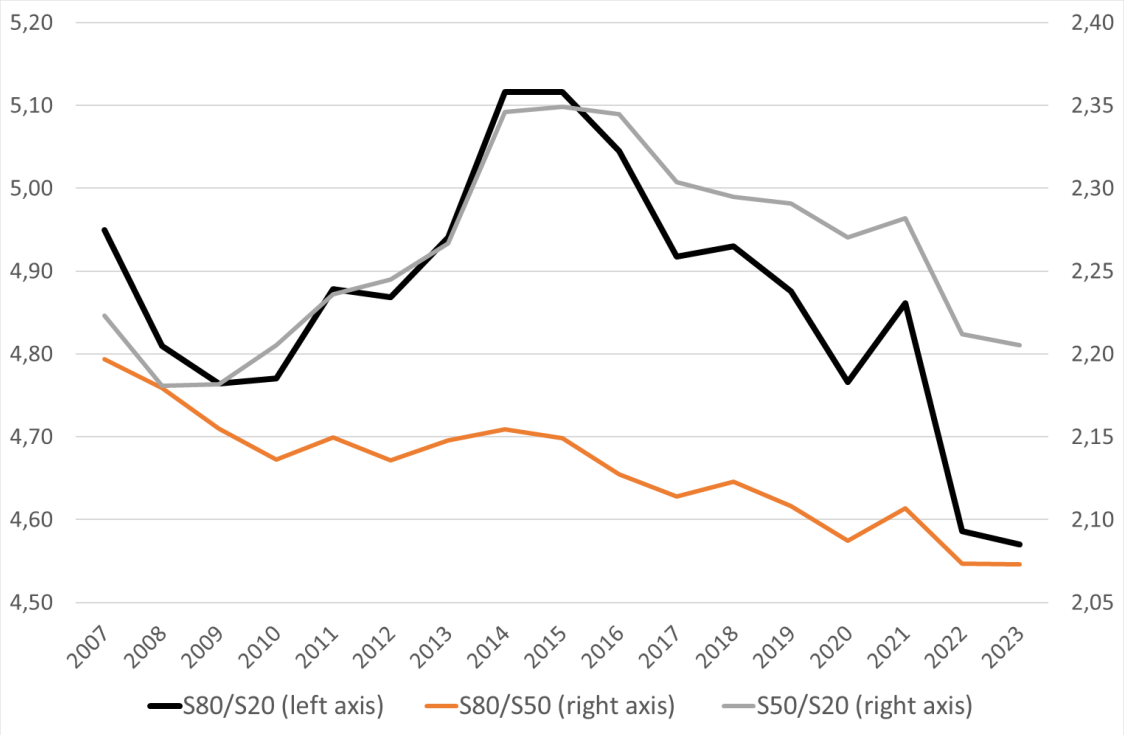
([15]) Based on recomputed data (for Croatia, data are not available in the beginning of the period and values are then kept constant from SILC 2007 to the ones of the earliest year available, SILC 2010).

([16]) Based on recomputed data to neutralise for the potential impact of breaks on the main results of the analysis. All figures presented in this section are based on recomputed data to neutralise for the potential of breaks in series. While the adjustment done aims at preventing breaks to have an impact on the results, please note hoewer that break-neutralised data is not the same as break-free data. In this note, break-neutralised data series have been computed by considering that there was no change in the original data series in a break year (year N = year of break) compared to the year before (year N-1), with thus the data value for year N in the break-neutralised series being changed to equal data of year N-1 of the original data series. Then, data for year N+1 in the break-neutralised data series has been set to equal: value in year N in the break-neutralised data series (= value of year N-1 in the original data series, cf. above) + evolution between year N and year N+1 in the original data series (with break). Therefore, year N+1 data value in the break-neutralised series = year N-1 data value from the original series + (year N+1 data value from the original series – year N data value from the original series). This approach prevents that breaks in the available data may impact on the main elements of the analysis of the trends in income inequalities ; it is not an estimate of the actual development of inequalities when there are breaks in the series which would require the development of a specific methodology presumably relying on various types of assumptions.

([17]) Recomputed data to neutralised breaks in MS data series over SILC 2007-2022.

significant decline during the recovery (SILC 2015-2020), until the Covid-19 crisis hit. This reflects the disproportionate effect that shocks had in the first half of 2010s on lower income households in comparison to the rest of the population. Actually, income inequalities remained overall stable and even slightly further declined since the pandemic (SILC 2020-2023).

Figure 1: Over 2007-2023 in EU, income inequalities are broadly back to the pre-financial crisis levels, after a sharp increase during the double-dip recession in 2009-2012



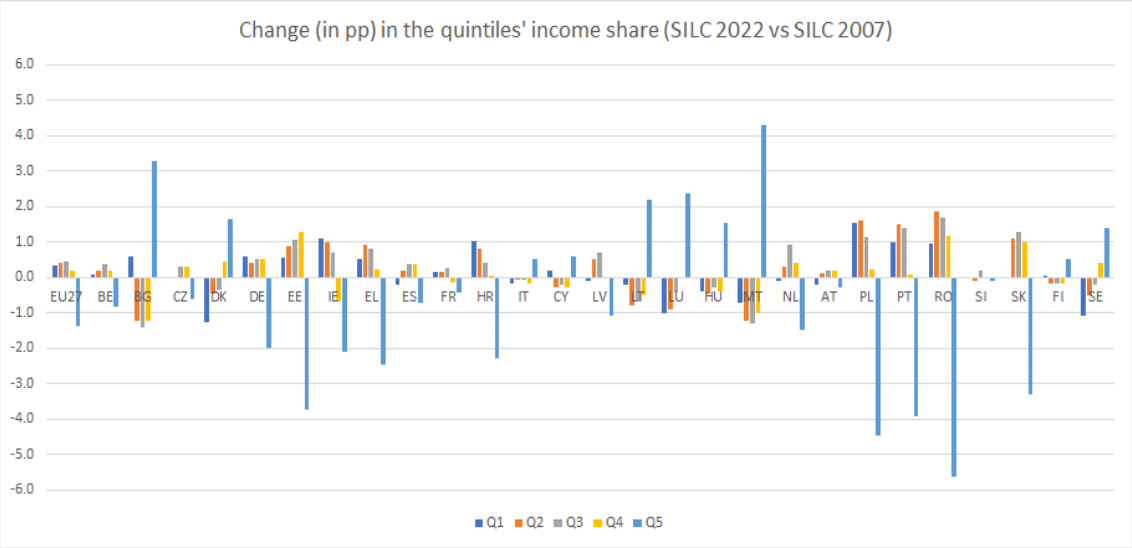
Note: Based on break-neutralised data. Quintile share ratios S80/S20 (left axis), S80/S50 (higher end, right axis) and S50/S20 (lower end, right axis). The Figure displays survey years. Survey year *t* corresponds to income year *t-1*.
Source: Own calculation based on Eurostat [tessi180], [ilc_di11d], [ilc_di11e], EU-SILC.

Over the same period, income growth has been somehow stronger at the bottom or the middle of the income distribution than at the top. When zooming on trends by income quintiles at EU level, the income shares of the first four quintiles all increased (respectively by +0.3pp for Q1, +0.4pp for Q2, +0.4pp for Q3 and by +0.2pp for Q4, see chart 2) while the one of the fifth quintile decreased (by -1.4 pp ([18])). The decline in the S80/S20 was due to a moderate increase in the income share of the bottom (i.e. first) income quintile and to a (stronger) decrease in the income share of the top (i.e. fifth) income quintile. The cumulated income share of the two first income quintiles – which corresponds to the S40(/S100) indicator – increased by 0.7 pp. Moreover, taken together, the cumulated income share of the third and fourth income quintiles increased by 0.6 pp, similar to the increase in the S40(/S100)). All this points towards a drop – regarding the income share – at the top of the income distribution ([19]) to the benefit of both the bottom and the middle of the income distribution.

([18]) Due to rounding, this is not exactly equal to the opposite of the sum of the changes mentioned above for the first four income quintiles (=-1.5pp).

([19]) Note: a drop in the income share at the top of the income distribution does not imply that disposable incomes at the top of the income distribution dropped. What matters here - assuming for instance that all incomes evolved positively (in nominal terms) - is the difference, between the income quintiles, in the extent of this positive evolution for their (respective) average disposable income.

Figure 2: Between 2007 and 2022, income shares increased for lower quintiles, rather than for the top one, in the EU on average and in most Member States



Note: Breaks in the original MS times series have been neutralised in the years when they occur, which reduces to some extent comparison issues across years but is however not the same as having break-free series. Data has been slightly recalibrated for some MS to ensure that the sum of the quintiles' income shares is equal to 100% exactly. Data for HR for SILC 2007 was not available and is considered to be equal to SILC 2010. Since data for EU27 for SILC 2007 was not available and since MS time series were modified to neutralise breaks, EU27 was (re)computed for both SILC 2007 and SILC 2022 (as a population weighted average of MS). SILC 2007 corresponds to income year 2006 (except in IE) and SILC 2022 corresponds to income year 2022 (except in IE).
Source: own computation based on Eurostat data.

For instance, there has been **convergence in income across quintiles in 10 Member States,** with income shares increasing for the lower (or middle) income quintiles**, while there has been some income polarisation**, with income share increasing at the top:

- **Convergence from both the bottom and middle** in 10 Member States (BE, DE, EE, IE, EL, FR, HR, PL, PT, RO): only Q1, Q2, Q3 and sometimes also Q4 increased at the expense of other quintiles.
- **Polarisation from the top** (only Q5 increased at the expense of all/some of the other quintiles) in 5 Member States (IT, LT, LU, HU, MT) while in 2 other Member States (DK, SE), Q4 and Q5 increased at the expense of all/some of the other quintiles.
- **Expanding middle** in 6 Member States (CZ ([20]), ES, LV ([21]), NL, AT, SK): only Q2, Q3 and Q4 increased at the expense of all/some of the other quintiles.
- **Shrinking middle**, in 3 Member States (BG, CY, FI), polarisation from the top and the bottom (only Q1 and Q5 increased at the expense of all/some of the other quintiles).
- **Overall stability** in SI.

Overall, the third quintile is the quintile whose share increased the most often (in 17 MS), followed by the second and fourth quintiles (15 Member States). The fifth quintile is the quintile whose share decreased the most often (in 17 MS), followed by the first quintile (12 Member States, though in many instances the decrease was rather low).

([20]) In CZ, Q2 stayed stable.

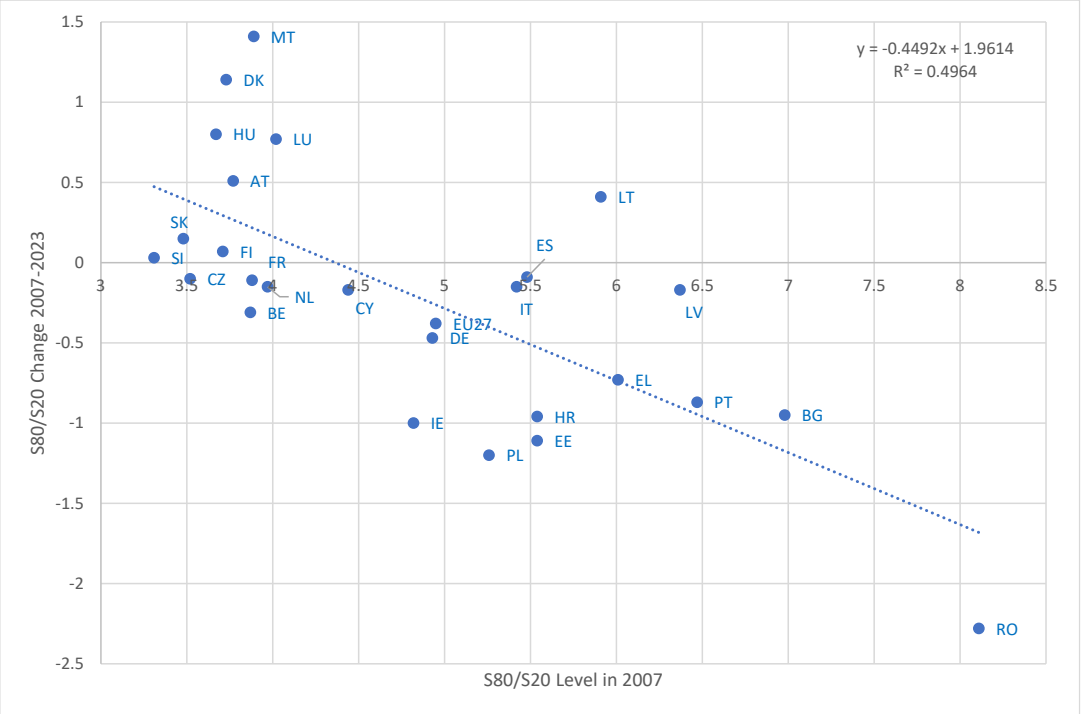
([21]) In LV, Q4 stayed stable.

These EU and national trends of the evolution of the income quintile shares also point to **a slight increase of the income share in the so-called middle class** (considering here the middle (third) quintile plus the second and the fourth quintiles), at the EU aggregate level. This is especially the case in CZ, ES, NL, LV, AT and SK, as well as in a group of Member States where the income share of the first quintile also increased (BE, DE, EE, IE, EL, FR, HR, PL, PT, RO). On the reverse, the middle class has seen its income share eroding in BG, CY, FI and to some extent also in IT, LT, LU, HU, MT and DK and SE ([22]).

Some convergence between Member States

Declines in S80/S20 were on average stronger among Member States with higher initial levels. The S80/S20 actually declined in 17 MS over the period from SILC 2007 to SILC 2023, ranging from a drop of 0.09 (ES) to 2.28 (RO), while it increased in the 10 other MS, ranging from an increase of 0.03 (SI) to 1.41 (MT). Except for a few Member States, the S80/S50 and the S50/S20 tend to have similar values within each country. Yet, most Member States with the highest overall income inequalities in the EU tend to display higher levels of income inequalities at the top than at the bottom end of the income distribution, and larger gaps between the two.

Figure 3: Between 2007 and 2023, there has been some sign of convergence in the levels of income inequality among Member States



Note: The Figure displays adjusted values for 2023 for breaks in series. Data for HR for SILC 2007 was not available and is considered to be equal to SILC 2010. SILC 2007 corresponds to income year 2006 (except in IE) and SILC 2022 corresponds to income year 2022 (except in IE).
Source: Own calculation based on Eurostat [tessi180]

([22]) Additional information on the evolution of the middle class can be found in OECD (2019) or in Eurofound (2024), which indicate that the size of the middle class fell in almost two-thirds of Member States, but do not point to a generalised significant shrinking of the middle class.

Box 3: Evolution of purchasing power

To complement the analysis of the evolution of income inequality, it is relevant to analyse the evolution of purchasing power. For instance, a reduction in income inequality in a given Member State may also be accompanied by a loss in or sluggish evolution of their purchasing power, meaning that the overall economic conditions have not improved ([23]). Due to data availability this type of analysis is done here from SILC 2010 (income year 2009) to SILC 2023 (income year 2022). SILC 2020 (income year 2019) is also considered to look specifically at evolutions in purchasing power in the aftermath of the pandemic and the energy and cost of living crisis. It should be noted that taking SILC 2010, corresponding to income year 2009, as starting point partly influence the outcome of the analysis, as this can be considered as a point of low in the purchasing power evolution over the last two decades, due to the effect of the financial crisis.

The purchasing power, represented here by the median income in real terms, increased by 18.5 % at EU level between SILC 2010 and SILC 2023, referring respectively to income years 2009 and 2022 ([24]). It first decreased by 5.2% between SILC 2010 and 2013 (income years 2009 and 2012 respectively), before continually picking up until SILC 2022 reaching an increase by 19.7%, after which it slightly declined by less than 2 percentage points between SILC 2022 and 2023 (respectively income years 2021 and 2022). This positive evolution of 18.5% on the overall 2010-2023 SILC period corresponds to an average ([25]) annual evolution of around 1.4% in purchasing power at EU level.

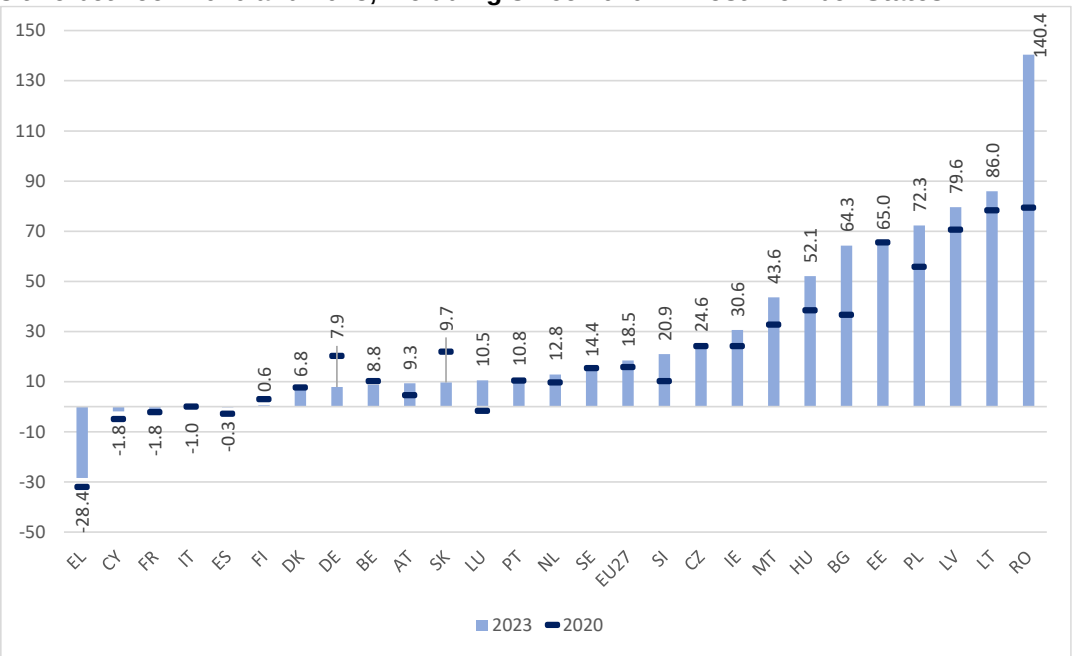
There were, however, some large disparities among Member States over this period. As in the Figure Box 3.1 below, the overall evolution of purchasing power was very negative in EL (-28.4%) and slightly negative in some other countries (CY, FR, IT, ES). In FI the evolution was slightly positive, while being more positive for another larger group of countries (DK, DE, BE, AT, SK, LU, PT, NL, SE). Purchasing power evolved more strongly positive (SI, CZ, IE, MT, HU, BG, EE) and even very positively (PL, LV, LT, RO) in the rest of the Member States. When considering the evolution of purchasing power since before the pandemic, namely looking at changes since SILC 2020, referring to income year 2019, purchasing power has continued to increase or remained broadly stable in most countries. It dropped moderately in BE and FI and more markedly in DE and SK.

([23]) For instance, if a reduction income inequality (e.g. in S80/S20) has been achieved thanks to lower incomes having had a slightly more positive evolution in amount than higher incomes but that, whatever the part of the income distribution considered, this positive evolution in income amount has been in itself very small, then there is a possibility that this evolution has been outweighed by the increase in prices (despite inflation was low before 2021), thereby resulting in a loss of purchasing power for households.

([24]) Income year 2009 (SILC 2010) was chosen as the start year for this analysis as it is the first year for which data is available for all EU MS. As well, when considering the evolution of purchasing power over the period income years 2009 to 2021, it is important however to keep in mind that there is a break in data in income year 2019.

([25]) Compounded annual growth rate.

Figure Box 3.1: Across the EU and on average the evolution of purchasing power has been positive between 2010 and 2023, including since 2020 in most Member States



Note: Median equivalised disposable income in real terms computed as: median equivalised disposable income in nominal terms HICP. There are breaks in data for some MS (e.g. DE) and EU27 between SILC 2010 and 2023. Median equivalised disposable income in real terms for EU27 is computed as the weighted average across MS (using population size of MS as weights) of the median equivalised disposable income in real terms of MS. Data is not available for HR. The Figure displays survey years. Survey year *t* corresponds to income year *t-1* (except in IE).
Source: Own calculation from Eurostat [ilc_di18].

The analysis of the median income in real terms, here presented, allows to avoid that higher incomes are overweighted, as it would be the case if using the average income. However, also when looking at the real gross disposable income of households per capita ([26]) as an alternative measure, purchasing power has increased (by approximately 10%) between 2008 and 2022 in the EU on average. In fact, it decreased between 2008 and 2014, to then start to increase since 2015 and until 2021, remaining broadly stable in 2022. Differences across Member States are however noticeable. The cumulative evolutions 2008-2022 across Member States range between a decrease by approximately 20% in Greece to an increase of approximately 50% in Poland.

Moreover, the analysis of purchasing power should account for various consumption patterns of different income groups and relative price evolutions. In fact, especially the recent price shock in 2021-2023 has had a disproportionate effect on lower income households that tend to spend higher income proportions in energy, food and housing. In September 2022, the divide in effective inflation rate between low-income (bottom quintile) and high income (top quintile) households reached a peak of 2 percentage points, the highest gap since 2006 (Charalampakis et al., 2022).

Overall, while useful to complement the overall picture, the analysis of purchasing power evolution goes beyond the pure analysis of income inequalities, as it introduces multiple aspects of prices and consumption and would hence deserve extensive and standalone examination.

([26]) Available at the Eurostat table [tepsr_wc310].

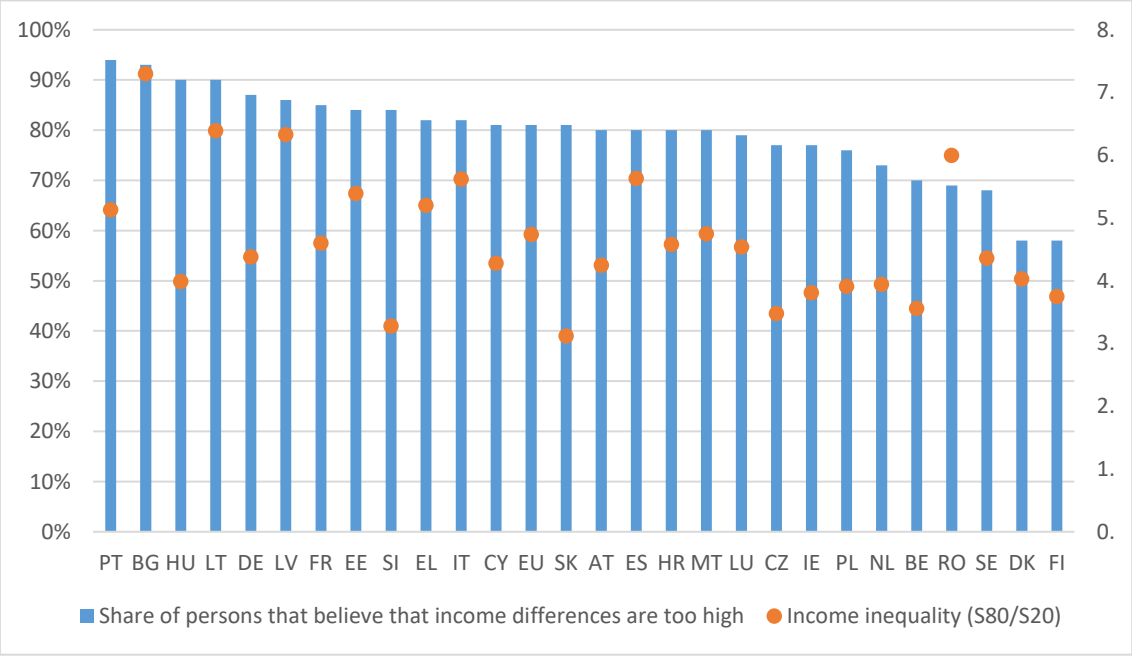
2.2.2. Trends in the perception of inequality

While it appears that over the last two decades income inequality first increased and then declined broadly back to initial levels, it is useful to consider **how perceptions of inequalities have evolved** in the meanwhile. Adverse perceptions are likely to undermine trust in institutions and give rise to social discontent (Díaz-Lanchas et al., 2021; Rodríguez-Pose et al., 2023). Information on EU citizens' perceptions of fairness and equality, their attitudes towards redistributive policies, as well as intergenerational social mobility has been collected through two Eurobarometer surveys in 2017 and 2022, thereby allowing to analyse related trends.

Inequality perceptions stable over 2017-2022

Inequality is one of the main concerns for EU citizens. The 2022 Eurobarometer survey showed that a large majority (81%) of the EU population believes that income differences are too high in their countries. While there are strong cross-country variations (with levels ranging between 58 % and 94 %) it is interesting to note that even in countries with the lowest levels of concern (DK, FI), a majority of the population shares this perception.

Figure 4: Even in countries with relatively lower income inequality the share of persons concerned about high level of income inequalities is significant



Note: The share of persons that believe that income differences are too high is plotted against the left-hand axis, the S80/S20 against the right-hand axis. For S80/S20 data refer to SILC 2022, referring to income year 2021 (except for IE).
Source: 2022 Eurobarometer survey and Eurostat [tessi180].

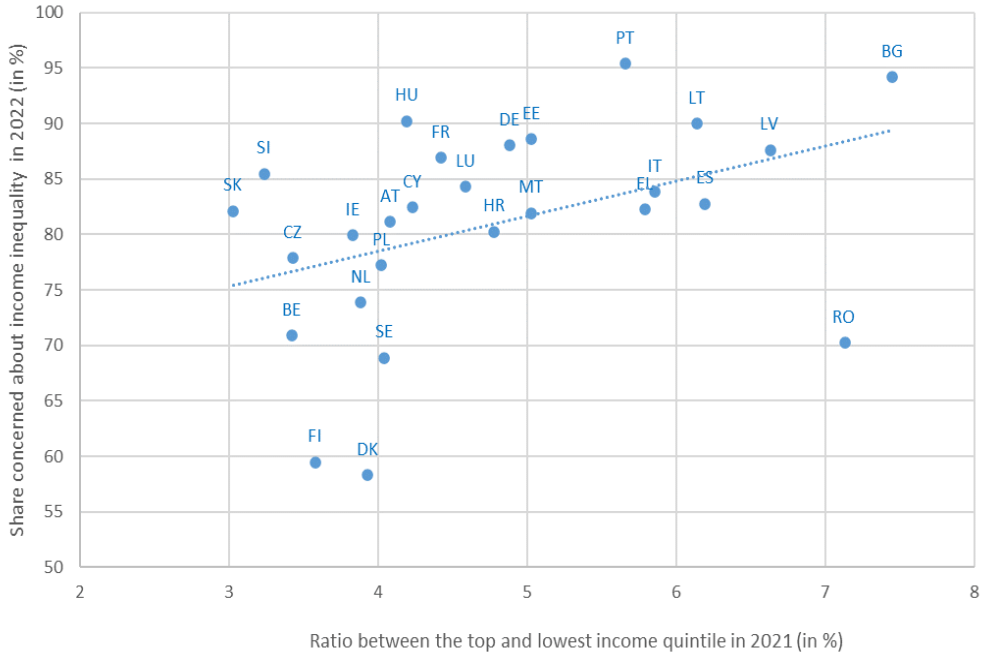
Furthermore, the overall level of concern about income inequality is actually slightly lower than in 2017 (85%). [27] This stability (or slight decline) is quite remarkable in the context of the COVID-19 crisis, and is spread over most socio-economic groups, with largest declines for older individuals (- 7 pp, from 89% in 2017 to 82% in 2022) and those living in rural areas (-6 pp, from 87% to 81%). The lowest declines were recorded

([27]) 2017 Eurobarometer survey on fairness.

for young people (15-24 years) and for people living in large towns (-1 pp for both groups over the same period), according to Berlingieri, Casabianca et al.(2023).

The level of concern about income inequalities actually increases with the level of income inequalities in the country. There is a positive relationship at the country level between actual income inequality and the concern about inequality being too high in 2022 (corr. 0.40). A similar relationship is found for 2017 (corr. 0.47).

Figure 5: There is a positive correlation between the actual level of income inequality in the country and the share of persons concerned by it



Note: the dots represent the 27 EU Member States, while the dotted line is the linear fit. The y-axis shows the share of respondents agreeing with income differences being too great. The x-axis shows the S80/S20. *Source:* Berlingieri, Casabianca et al. (2023).

In contrast, the perception of fairness declined in the past 5 years more substantially: the share of individuals agreeing that things that happen in their life are fair decreased from 51% in 2017 to 38% in 2022. Fairness perceptions diminished especially among young people (- 16 pp between 2017 and 2022) and students (-18 pp), but relatively less so among lower-educated individuals (-9 pp) and those with financial difficulties (-7 pp). Evidence suggests that the direct economic consequences of the COVID-19 pandemic may not have been a major driver behind decreased fairness perceptions, illustrating the strong impact of supportive labour market and social policies implemented during the crisis. Potential drivers rather include uncertainties about the future, perceived inequality of opportunity, and a discontent with the set of public health-related measures implemented to contain the pandemic, either because they were perceived as too stringent (e.g. limiting personal freedom more than necessary), too lenient, or ineffective.

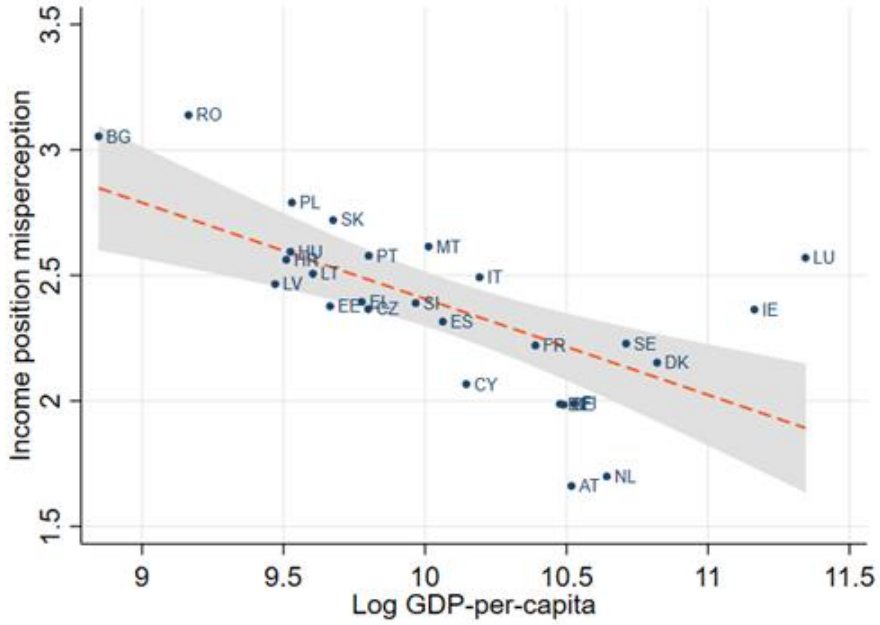
Income misperceptions at both ends of the income distribution

People tend to perceive their income as closer to the middle of their country's income distribution than they are in reality. Such misperceptions about relative income positions which might also have implications on how different policies are considered. The 2022 Eurobarometer survey confirms the results found in previous studies.

Overall, more than 40% of EU citizens underestimate their income position, while circa 15% overestimate it. According to Berlingieri, Dhombres et al. (2023), lower income households tend to overestimate their income position, while higher income households tend to underestimate it. This tendency holds across all countries. The level of income position misperception also depends on socio-demographic characteristics: it tends to decrease with education and age, younger people, women and less educated people having higher misperceptions than the average.

In a cross-country comparison, average levels of income position misperceptions tend to be larger in countries with lower GDP per capita and in countries that have experienced faster income growth in recent years, and in countries with higher inequality.

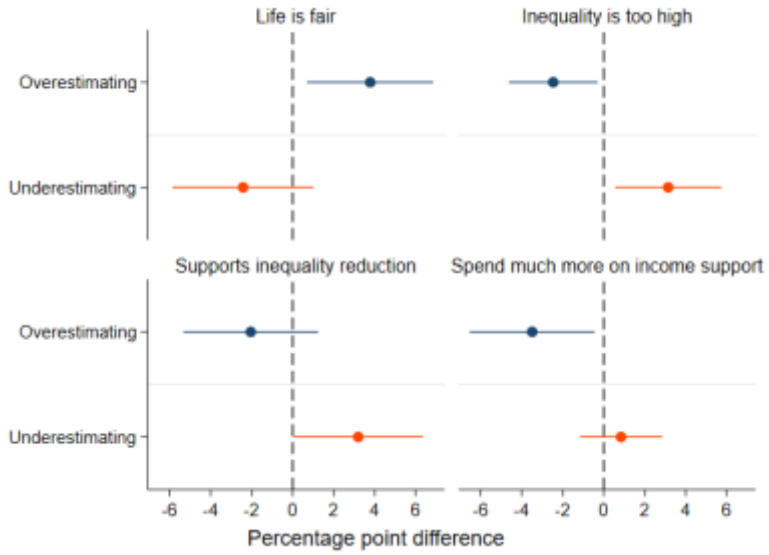
Figure 6: Income position misperceptions tend to be higher in countries with lower GDP *per* capita



Note: the y-axis refers to the absolute value of the income position misperception (0-9 index). The dashed line displays a linear regression fit. The grey area is a 95% confidence band. R-squared: 0.43
Source: Berlingieri, Dhombres et al. (2023)

Income misperceptions impact on the demand for government intervention. Respondents who overestimate their income position report higher life fairness perceptions are less concerned about income inequality and are less likely to favour a spending increase on income support policies. Correspondingly, those who underestimate their income position are more concerned about inequality and are more supportive of income redistribution. Furthermore, evidence suggests that providing correct information about people's position in the income distribution increases demand for redistribution for those who previously overestimated their position and decreases it for those who underestimated their position (Ciani et al., 2021).

Figure 7: Overestimation of income position is associated with lower inequalities concerns and lower demand for redistributive policies



Note: each column displays the percentage point difference for a given variable between respondents who correctly positioned themselves on a national income distribution (reference group) and those overestimating (in red) or underestimating (in blue) their income position. Results are based on multivariate OLS regressions. The lines show 95% confidence intervals.
Source: Berlingieri , Dhombres et al. (2023)

2.3. Megatrends and their expected impact

Along with the observed trends of economic inequalities - and those related to inequality perceptions - , structural transformations, so-called megatrends, simultaneously shape our societies, economies and labour markets and as such can have an impact on income inequalities.

Demographic changes (including changes in family structures, population ageing and intra-EU mobility and migration) might have an impact on the household composition as well as on the wage structure. This in turn can impact on income inequalities. Recent empirical studies have investigated such impacts of demographic change. For instance, Dolls et al. (2019) estimate that demographic change (meant as both population ageing and change in the educational structure of the population), is likely to increase inequalities, although wage adjustments work in the opposite direction and the tax-benefit systems appear able to absorb possible negative impacts.

Digitalisation and technological change bring both risks and opportunities for labour markets and the economy at large. While new technologies can generate some job losses and polarisation at least in the medium term, they can result in net employment growth overall in the long-term. Technological innovation and its impact on business models can boost productivity, while also affecting output distribution and production shares. The platform economy, as an example, is characterised by a high share of precarious work and high market concentration, while gaps in skills and access to digital technologies can bring in risks of increasing inequalities. There is some evidence of this impact in the empirical literature, which also shows however the important mitigating effect that taxes and benefits can have as well as how regulations can influence the

impact of certain technologies in the labour market and ultimately on inequalities. For instance, Doorley et al. (2023) shows that industrial robot penetration can increase household income inequalities through labour market effects, although this impact is cautioned through the tax-benefit systems, so that the final net result of automation is actually neutral on households income. Pizzinelli et al. (2023) focus on Artificial Intelligence (AI) and find that jobs at the opposite side of the earnings distribution can be exposed to AI substitution effects (e.g. both judges and telemarketers). The authors also underline that the impact of regulatory settings (in turn linked in particular to ethical concerns and risk management), can translate into that the jobs at the higher end of the earning distribution remain protected and complementary to AI (e.g. judges), while other jobs are potentially exposed to substitution effects (e.g. telemarketers), which may have important negative effects in terms of income inequalities.

Climate change and the green transition also impact on the labour market, the economy and society at large with implications on living costs. While everyone is affected by climate change, the new challenges risk aggravating inequalities as low-income households tend to be more exposed to the so-called costs of the transition. While the green transition can deliver on jobs and business opportunities, it also has potentially negative employment and social implications that need to be addressed, such as employment sectoral shifts and higher energy costs. This includes reducing labour shortages in key occupations, supporting transitions for workers employed in sectors at risk of phasing-out and guaranteeing access to essential services, including transport and energy services. Support will in particular be crucial to mitigate rising energy costs that may result from the deployment of a sustainable energy system, as well as to most vulnerable households to implement solutions towards energy efficiency in housing or transport. ([28]) For example, in the context of the recent energy crisis, Fulvimari et al. (2023) show that, in the absence of subsidies or other public support measures promptly put in place, the negative impact of rising energy prices would have been much larger and would have affected low-income household significantly more than households on higher income.

As a result of the trends above and of other drivers (such as the welfare state transformation and new methods of production), **the changing world of work has major implications for income inequalities**. Higher employment levels in quality jobs are meant to have a positive impact on households' incomes. Although the employment rate has increased in recent decades and reached some record high in the EU, low employment rates (or high prevalence of involuntary part-time) remain especially for lower skilled workers, young people, women, older workers, people with disabilities, and those with a migrant background (see also European Commission – DG EMPL, 2023). While they can offer flexibility to both workers and companies, non-standard forms of work can also be associated with poor quality jobs and low total working hours, leading to risks of in-work poverty and income insecurity that can be detrimental to income inequalities. Cohen and Ladaique (2018), for example, identify regulatory reforms in the labour market as well as precariousness and poor working conditions often associated with non-standard forms of work among the drivers of income inequalities.

All these megatrends are at play simultaneously and are shaping the transformation of our societies, economies and labour markets. As such, their impacts are likely to influence the developments of inequalities in a complex and multifaceted economic and social reality. This calls for a comprehensive analytical and

([28]) 2023 Report on access to essential services in the EU

policy framework that allows monitoring such developments and the formulation of related policy action.

3. Analytical framework

This section presents an analytical framework focussing on the fabric of inequality and reflecting on related policy responses. It considers and systematises the different channels that fuel income inequality along with the policy streams that can lead to its reduction, by identifying three phases: pre-market, in market and post-market. For each phase, monitoring can be achieved through various specific indicators and policy options can be elaborated accordingly.

It is worth keeping in mind, however, that **these three phases are interrelated with each other**, as economic inequality is a complex phenomenon, layered throughout different dimensions of the economy and the society. As such, indicators, as well as policy actions should not be considered in silos or as alternatives, but rather as complementary.

3.1. The fabric of income inequality – a three-phases approach

Tackling income inequalities entails policy actions in several areas, including inclusiveness and equal opportunities in education (starting from early age) and training, wage setting mechanisms, tax and benefit systems, support to access to quality employment and access to affordable and quality services for all. Redistribution systems alone can most probably not suffice to address the long-term challenges of income inequality. Fostering growth while addressing inequality actually requires a comprehensive approach.

Income inequality is driven by market incomes, which in turn may partially, however, depend on pre-market conditions, and is then impacted by the inequality-reducing effect of tax-benefit systems. Depending on the drivers of income inequality, policy responses can focus on addressing the pre-market stage (endowing people and firms with the means to carry out economic activity), the in-market stage (helping to improve functioning of the economy so that it supports sustainable inclusive growth) and the post market stage (alleviating market income inequality through the redistributive function of tax and benefit systems) ([29]).

([29]) This approach to income inequality and related policy to address it is presented in the Technical note to the Eurogroup on "Delivering inclusive growth - thematic discussions on growth and jobs", prepared by the European Commission – DG ECFIN and discussed on 28 May 2019. A similar approach, referring to pre-production, production-stage and post-production distribution is adopted by the OECD (2023a) , also based on Rodrik and Stantcheva (2021).

Figure 8: Income inequalities result from three phases related to pre-market, in-market and post-market dynamics

Source: Technical note to the Eurogroup on "Delivering inclusive growth - thematic discussions on growth and jobs", 28/05/2019, p.8.

3.1.1. The pre-market stage

The pre-market stage has to do with the initial conditions at which individuals enter into economic interactions and refers to endowing people (and firms) with equal means to carry out economic activity. In particular, this can be done by equipping people with skills, and ensuring appropriate infrastructure and services. The latter include access to publicly provided social services such as education, healthcare or housing. These elements are important to ensure individuals' equality of opportunities from early stages of the life cycle and especially before entering the labour market and carrying out economic activity. In other words, acting on the pre-market stage is about providing a level playing field for future economic interactions in life, but also social relationships, that can generate fair outcomes for all.

Ensuring children's access to key services from early ages is essential to address inequality. As highlighted in the Commission Recommendation on 'Investing in children' ([30]), children growing up in poverty are less likely than their better-off peers to do well in school, enjoy good health, professionally thrive, and realise their full potential later in life — children in poverty are for instance more likely to be unemployed and earn less than other children (Clarke, C., et al. (2022)). To address these inequalities of opportunity, which in turn are likely to lead to income inequalities, early intervention and prevention are effective and efficient policies. Public expenditure addressing the consequences of child poverty at later stage tends to be higher than that needed for intervening at an early age. In this vein, ensuring disadvantaged children's access to quality early childhood education and care is of particular importance, given its crucial role in improving children's cognitive, social and education development, putting aside its positive impact on parents' employment and earnings. According to Clarke et al.

([30]) 2013/112/EU: Commission Recommendation of 20 February 2013 Investing in children: breaking the cycle of disadvantage.

(2022), historic childhood disadvantage costs the equivalent of 3.4% of GDP annually in lost employment, earnings and health on average across European OECD countries.

Policy intervention at classroom, school and education system level also play an important role to ensure equal opportunities in educational outcomes and reduce the negative impact of socio-economic background on student performance and participation. ([31]) The quality of teachers and trainers is instrumental for achieving inclusion. Adequate salaries and working conditions can help school systems attract candidates to the teaching profession and other incentives can support teachers in more "difficult" schools. Non-monetary conditions matter too, such as high-quality initial teacher education and measures to keep teachers motivated throughout their careers (e.g. career structures, opportunities for professional development, job security) and well prepared to address diversity in the classroom.

Combating segregation, in particular for vulnerable children such as Roma ([32]) and migrant children and promoting the use of special needs education for marginalised groups can help reduce performance differences between and within schools. Disadvantaged students have generally been shown to benefit from sharing school with more advantaged peers, while the implications for advantaged students have been less clear-cut. Providing appropriate infrastructure, including student housing, promoting a more equitable allocation of resources among schools and offering adequate financial support and other incentives to help students from disadvantaged backgrounds to access education are essential elements to ensure equality of opportunities.

The COVID-19 crisis affected vulnerable learners most, which also calls for specific measures such as the additional learning support to counterbalance the impact.

3.1.2. The in-market stage

The in-market stage pertains the domain of economic transactions and refers to functioning of the economy in a way that supports inclusive growth and does not exacerbate income inequality. From a broad perspective**,** in-market policy levers include the creation of an attractive business environment and competition-friendly regulation for well-functioning markets for capital, goods and services that prevent market concentration, as well as encourage innovation and create conditions for a smooth absorption and diffusion of new technologies. In-market actions may also refer, however, to policy actions related to the development of prices on some markets, as experienced for instance during the recent energy crisis.

Importantly, at the in-market stage, well-functioning labour markets are a cornerstone of any policy to address inequality. Obstacles to good labour markets performance tend to exacerbate inequalities (for example through excessive qualification barriers for sheltered sectors of the economy or through discrimination). At the same time, adequate wage setting mechanisms and effective social dialogue can improve the allocation of resources. Job creation and high employment rates of underrepresented groups are key factors for raising households' incomes and thus reduce income inequalities, but fair working conditions and job quality, including but not limited to earnings, are essential elements to look at to prevent the growing income inequality at the market stage. In-work-poverty still remains a challenge in the EU. To make work pay,

([31]) OECD (2023b): PISA 2022 classifies performance-targeted policies, socio-economically-targeted policies or mixed targeted policies.

([32]) European Union Agency for Fundamental Rights (2023): The report presents the state of play, including education and employment of the EU Roma Strategic Framework for equality, inclusion and participation.

ensuring an adequate amount of hours worked per person and also allowing the integration of work income with social benefits when needed can help addressing income inequalities that stem from the labour market.

It is key to encourage lifelong learning, which is an element of job quality, especially in the context of the digital and green transition. This entails to make sure that firms and workers have the opportunities and incentives to continuously adapt the set of skills to evolving technologies and also the requirements to adapt to climate change.

Active Labour Market Policies (ALMPs) also play an important role in matching job seekers to employment opportunities, thereby improving the efficiency of the labour market for instance by overcoming informational asymmetries. While their design and the combination with other policy measures can influence outcomes on inequalities, AMLPs should importantly benefit low-income labour market participants beyond higher income labour market participants. This can help mitigate the fact that job matching tends to be slower among the low-skilled than among the high-skilled and contribute to reduce income inequalities among the working-age population.

3.1.3. The post-market stage

The post-market stage is about alleviating market income inequality through the redistributive function of tax and benefit systems. While income taxation is an effective way of ensuring redistribution, it is of great importance to assess the overall progressivity of the tax structure, taking account of consumption, property and wealth and environmental taxation, especially in tax shift reforms that reduce the tax burden on labour. The adequacy and overall design of social benefits are equally key to address economic inequalities.

The **personal income tax** is the most important tax instrument for both raising revenue and redistributing income (European Commission - DG TAXUD 2023). It is the only major tax type which can be (and in most countries is) designed in an explicitly progressive way, where higher tax rates apply to higher incomes than to lower ones. The total tax burden placed in particular on low-income earners (including social security contributions), can however have a negative impact on employment which is the main route out of poverty and social exclusion. The tax wedge ([33]) on labour in most Member States, though decreasing, remains high. Reducing the tax burden on labour has the potential to support consumption, stimulate labour demand and labour supply (also by strengthening work incentives for low-income earners).

The design of **social benefits, namely in terms of adequacy and eligibility criteria,** matters as much as their effective coverage and take up for their effect on inequality. Questions of effective coverage related to eligibility requirements can have a considerable impact on how benefits actually impact on incomes and their distribution, and at the same time whether those in need take the benefits up and receive an adequate amount to raise their living standards also influences the final outcome on income inequalities. In general, universal benefits may be less efficient at reducing inequality, yet often enjoy a high level of political and societal acceptance. Targeted measures with means-testing are more efficient, yet can also result in stigmatisation and lower take-up rates. A possible alternative is universal benefits, included as part of the taxable base for the purposes of income tax. Where personal income tax systems are sufficiently

([33]) Tax wedge comprises personal income tax and social contributions payable by the employer as well as by the employee; and is expressed as a % of total labour cost to the employer.

progressive (see above) this prevents the stigma effect, yet allows some degree of progressivity through the tax system. ([34])

3.2. Monitoring and policies in the three stages of inequalities

Acknowledging the complex nature of economic inequality and the different layers that fuel it through the channels presented above enables a thorough understanding of the dynamics at place. Accordingly, it is possible to identify appropriate indicators that can capture the level and evolutions of inequalities at different stages. At the same time, various related policy measures can be designed at each stage.

3.2.1. Pre-market: the role of education and childcare

There is a wide policy consensus around the need to create equal opportunities for all, which in turn supports the reduction in income inequality. However, equality of opportunities is more difficult to measure, since the extent to which opportunities are equal cannot be directly observed. Therefore, proxy indicators are used.

Creating a level playing field begins in childhood and hence the importance of looking at indicators of outcomes for children. This is based on the logic that a fair society is one in which all children start life on an equal footing, such that their accomplishments in life and on the labour market reflect more their individual efforts than their life circumstances. A standard indicator such as the At-Risk-of Poverty or Social Exclusion (AROPE) rate for children ([35]) can be used either for the total population of children (0-17), or for the sub-population of children who are more likely to come from a disadvantaged background, for example AROPE for migrant children or of children with parents with low skills. In a similar way, the population of young people (15-24) not in employment, education or training (NEET) can be taken as a proxy for equality of opportunity.

The gap between AROPE for children by educational attainment of their parents is another proxy indicator for assessing inequality of opportunity. ([36]) Member States displaying particularly high inequality of opportunities in this sense, with a large gap in AROPE between children of highly educated parents and children of parents with lower educational attainment in 2023 are BG, RO, HU, SI, and BE ([37]).

Ensuring the access of children in AROPE to key services, ranging from early childhood education and care, to education or healthcare, **plays a key role in fostering equal opportunities**, and is the key objective of the Council Recommendation establishing the European Child Guarantee.([38]) According to the EU-level monitoring

([34]) See for instance Atkinson (2015).

([35]) Note that the risk of poverty or social exclusion is measured at the level of the household. In other words, these are children living in a household where all members are at risk.

([36]) Monitoring framework for the European Child Guarantee.

([37]) Latest available data using ilc_peps60n.

([38]) Council Recommendation (EU) 2021/1004 of 14 June 2021 establishing a European Child Guarantee.

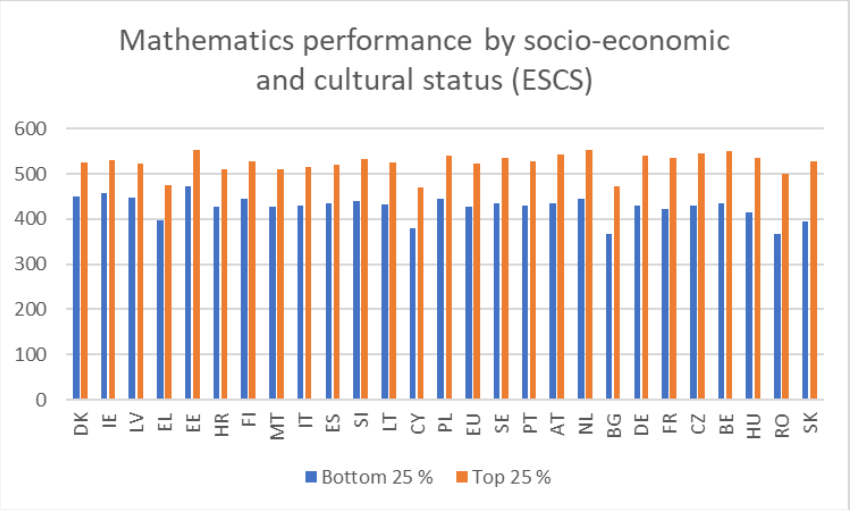
framework of the Guarantee ([39]), the participation rate of children in AROPE to these key services is however systematically lower than the rate of other children, highlighting the need to further step up the effort to address remaining financial and non-financial barriers hindering their access and equality of opportunities. As an illustration, there was a 17 percentage points gap between the participation rate in early childhood education and care of children below 3 years old in AROPE and those of the same age groups not in AROPE on average in the EU, in 2022.

Another indicator that is useful in assessing opportunities for 15-year-olds is the extent to which the educational **performance gap can be explained by socio-economic status** ([40]). In many EU countries, this gap reproduces existing patterns of socio-economic advantage (see Box 4).

Box 4 – Equity in education

According to the PISA 2022 results, socio-economically advantaged students scored 97 points more in mathematics than disadvantaged students on average across the EU (excluding LU). The performance gap attributed to students' socio-economic status is particularly high (more than 120 points) in HU, RO and SK. 20 points represent the average annual pace of learning of 15-year-olds in countries that participate in PISA.

Figure Box 4.1: Students with higher economic, social and cultural status perform better in mathematics in all EU countries



Note: No data for LU available. Caution is required when interpreting estimates because one or more PISA sampling standards were not met for DK, IE, LV, NL. The ESCS refers to the PISA index of economic, social and cultural status.
Source: Own calculation based on PISA 2022 Results (Table I.B1.4.3 of the report)

Furthermore, addressing performance gaps at later education stages is important. **Inequality in access to tertiary education has been shown to impact significantly future careers and several other socio-economic outcomes** (Oreopoulos and

([39]) Monitoring framework for the European Child Guarantee.

([40]) In PISA, a student's socio-economic status is estimated by the index of economic, social and cultural status (ESCS). The index is derived from several variables related to students' family background: parents' education, parents' occupations, a number of home possessions that can be taken as proxies for material wealth, and the number of books and other educational resources available at home.

Petronijevic, 2013). Therefore, increasing opportunities for higher education, remains also key for a more mobile and equitable society.

3.2.2. In-market: the role of labour market policies and institutions

Labour market institutions can contribute to well-functioning labour markets. By creating conditions for higher employment rates, for wage setting mechanisms to ensure adequate wages and for effective social dialogue, they can improve the allocation of resources and their remuneration, and thus directly impact on inequality.

Policies to promote well-functioning labour market and quality employment can address some of the root causes of inequalities at the market stage, for example unemployment or underemployment, as well as wage developments.

Trends over the last 20 years highlight the risk of less dynamic labour market trends among lower skilled workers. While between 2002 and 2023, the total employment rate increased by more than 7 points (from 68,9% to 76,2%), the developments have actually been uneven along skills levels, with less dynamic developments among lower skilled (+1,9ppt) than middle or high skilled workers (+4ppts). Importantly this actually highlights the key contribution of the shift towards higher skills levels, that accounts for a major share of the workforce and makes a large part of the overall increase in the employment rates.

Employment policies can impact the development of inequalities of income by paving the ground for higher employment rates, combating or preventing unemployment or underemployment and being conducive for higher household incomes. ALMPs and up- and re-skilling programmes can facilitate labour market pathways and transitions, including through better skills matching, and, especially when targeted, can bring into employment also those further away from the labour market, who are likely to benefit most from work income sources.

Research ([41]) has shown that the likelihood of entering employment increases with the availability of active labour market programmes, including job counselling, social assistance services and enabling services, such as childcare, as well as by preferable macroeconomic circumstances. However, evidence also suggests ([42]) that a large proportion of minimum income beneficiaries are not subject to ALMP measures, even though they might be available to work. From those who are registered in Public Employment Services (PES), in some Member States, less than 15% of beneficiaries are participating on an ALMP measure ([43]). According to data for 2020 from the EU Labour Market Policies database, the labour market activation rate was lower for long-term unemployed than for all registered unemployed in twelve of the seventeen countries for which data was available for both groups.

Therefore, well-tailored ALMPs, also combined with the provision of integrated services, can contribute to employment growth and reduce unemployment and

([41]) Se for instance Study about the Methodology to Measure the Returns on Investment from Integrated Social Assistance Schemes Final report VC2018-0711, prepared by Ecorys / Budapest Institute in August 2020.

([42]) 'Exploratory study: filling in the knowledge gaps and identifying strengths and challenges in the effectiveness of EU Member States' minimum income schemes, prepared by ICF/Applica 2022.

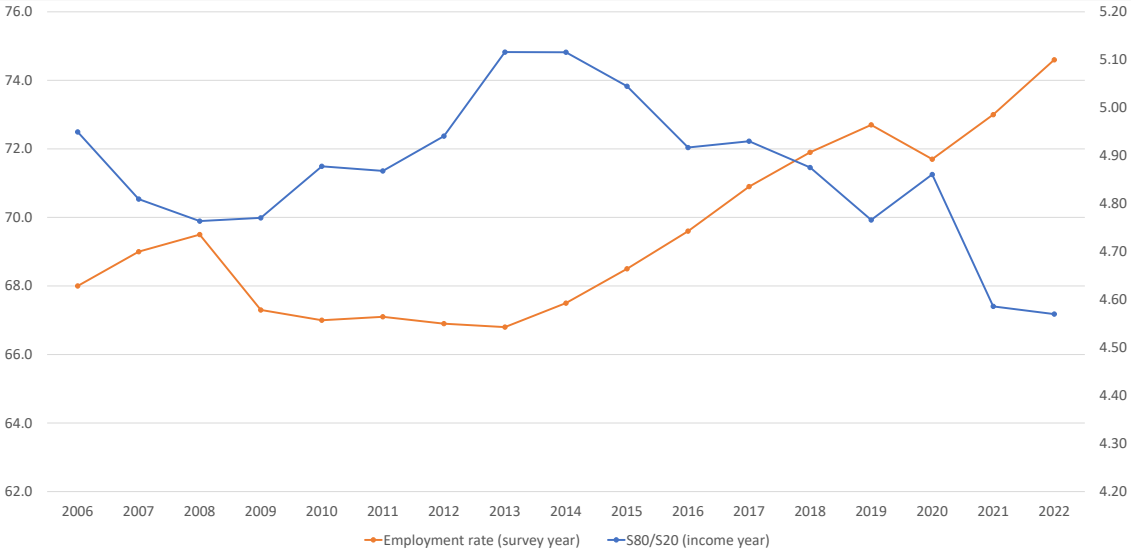
([43]) In the social assistance schemes of EL, HR, IT, LT, LU, FI and in the basic income support for jobseekers in DE.

inequalities in the labour market. The Council Recommendation on adequate minimum income ensuring active inclusion ([44]) advocates an 'active inclusion' approach to the implementation of ALMPs**,** whereby labour market supports are linked to adequate income support (also giving jobseekers time to make more efficient job matching decisions), and to the provision of quality social services, to facilitate transitions to work for those who can work.

Up- and re-skilling policies are conducive to employment, especially in the context of the green and digital transition, but also in this case the share of actual beneficiaries may differ significantly across different population groups. Participation in up- and re-skilling activities is in fact strongly influenced by educational level (as well as by the type of firm and sector of employment). In 2023, in the EU, on average, only 5.2% of low-educated adults participated in education and training activities in the last four weeks, while this share was almost three times higher among those with higher levels of education (14.6%), and specifically 9.7% among medium-educated and 20.8% among highly-educated adults ([45]). Targeting adult learning support to those mostly excluded remains essential to make up- and re-skilling conducive to better employment opportunities for all and to reduce inequalities in the labour market.

Employment rates are a key driver of income inequality, also strongly depending on whom among the labour force benefits from new and better employment opportunities. As shown below, the trends of employment and income inequality have mirrored each other in the last 15 years or so. Employment rates in the EU were increasing up to the financial crisis, and then decreased during and immediately after it, while they increased steadily since 2013 (except for 2020). At the same time, income inequalities had been on a declining path until the financial crisis and started to increase since then, up to 2013, when they started to decrease, with the exception of 2020 and a couple of years of broad stability.

Figure 9: Over the last two decades, in the EU on average, income inequalities tended to decrease when the employment rate increased



Note: The employment rate refers to survey year; the S80/S20 refers to income year and it is based on a break-neutralised series.
Source: Own calculation based on Eurostat [lfsi_emp_a] (2009-2023) and [lfsi_emp_a_h] (2006-2008) for employment rate and [tessi180] for S80/S20

([44]) Council Recommendation on adequate minimum income ensuring active inclusion (2023/C 41/01).

([45]) *Source*: Eurostat [trng_lfse_03], EU LFS.

Nevertheless, having a job does not always guarantee adequate income, as evident by persisting in-work poverty that affects 8.5% of persons at work in the EU, **just as higher employment rates do not necessarily translate into a decline in income inequalities**. In fact, quality of employment, including but not limited to adequate wages, is an important dimension to take into account when looking at in-market inequality.

Among others, social dialogue and collective bargaining contribute to quality employment and fairness in the labour market. Social dialogue is a cornerstone of the European social model. Social dialogue and collective bargaining are fundamental ways of improving living and working conditions, contributing to higher productivity while also ensuring social fairness, by improving wages and working conditions and reducing wage inequality. However, the share of workers covered by collective agreements has declined significantly in the past 20 years. It decreased from an estimated EU average of about 66% in 2000 to about 56% in 2019 with particularly big drops in central and eastern Europe (see the Figure below from the Commission Communication on Strengthening social dialogue in the European Union). ([46])

Figure 10: Between 2000 and 2019, collective bargaining coverage decreased in most EU countries

Number of employees covered by the collective agreement, divided by the total number of wage and salary-earners (in %, 2000 and 2019).

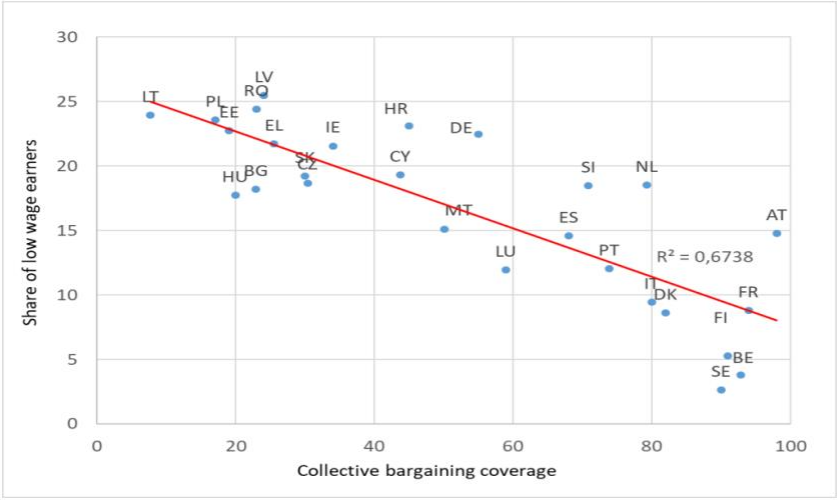
Note: (1) Latest available data is from: 2019 (AT, BE, CZ, HU, IT, LT, NL, PL, PT), 2018 (BG, DE, DK, ES, FR, LU, LV, SE), 2017 (EL, FI, IE, SI, RO), 2016 (CY, MT), 2015 (SK) and 2014 (HR). (2) For IT the coverage has been revised to 100% reflecting the fact that the base wages fixed in collective agreements are used by labour courts as a reference for the application of the constitutional principle of commensurate and sufficient remuneration. The 100% level of collective bargaining coverage in RO and EL in 2000 are explained by the existence of mechanisms extending collective agreements to all companies while the drop results mainly as a consequence of abolishing those extension mechanisms and other changes leading to decentralisation of collective bargaining.

Source: For 2000 or closest - ICTWSS database, Version 6.1, University of Amsterdam. Variable AdjCov (# 111). For latest available data - OECD/AIAS database (2021)

([46]) Commission Communication on Strengthening social dialogue in the European Union, COM(2023) 40 final

Across Member States, a broad move towards the decentralisation of bargaining towards company level has been observed. Newer forms of work such as platform work and certain groups such as young people are also less likely to be unionised, with some sectors like care seeing a near-total absence of collective bargaining. The decline in collective bargaining on wage setting therefore contributes to increased wage inequality. By strengthening the bargaining power of low-wage workers, collective bargaining supports higher wages at the bottom end of the wage scale and thus contributes to limiting wage inequality. ([47]) Furthermore, evidence shows that sectoral and multi-level collective bargaining systems are associated with lower wage inequality, by around 20-25 percent (OECD 2018 b). As a result, high collective bargaining coverage is associated with lower shares of low-wage workers, as shown below.

Figure 11: The share of low wage earners tends to be lower in countries with higher collective bargaining coverage



Source: Collective bargaining coverage: ICTWSS database, Version 6.1, University of Amsterdam. Variable AdjCov (# 111). Share of low-wage workers: Eurostat, Structure of Earnings Survey.

Recent EU initiatives, such as in particular the 2022 Directive on adequate minimum wages in the European Union ([48]) and the 2023 Council Recommendation on strengthening social dialogue in the European Union ([49]) are expected to have a positive impact on reducing wage inequalities and thus contributing to reduce income inequalities.

3.2.3. In-market vs. post-market inequalities

The evolution of income inequalities can be driven by the evolution of (gross) market income inequality and by that of the inequality reducing effect of taxes and social transfers. The first effect can be monitored through trends in the S80/S20 on gross market income while the second can be monitored by trends in the impact of taxes and social transfers (excluding pensions) on inequalities.

([47]) SWD(2020) 245 final.

([48]) Directive (EU) 2022/2041 of the European Parliament and of the Council of 19 October 2022 on adequate minimum wages in the European Union.

([49]) Council Recommendation of 12 June 2023 on strengthening social dialogue in the European Union.

Overall, over the period between SILC 2007 (income year 2006) and SILC 2022 (income year 2021) ([50]), the decline in disposable income inequality, as a measure of post-market income inequality because it accounts also for social benefits and taxes, was rather similar to that of in-market income inequality (respectively -8% and -6%) on average in the EU level. This suggests that **the capacity of the tax and benefit system to address inequalities has remained broadly stable**, though there are however wide variations among Member States in this respect.

In particular, **the overall evolution of disposable income inequality has been more favourable than that of market income inequality in 9 Member States** ([51]), suggesting that the effect of taxes and social transfers in reducing (market) income inequality in those Member States overall improved in this period. **In 4 Member States, disposable income inequality and market income inequality had a rather similar overall evolution**, ([52]) suggesting that the effect of taxes and social transfers remained broadly stable in those Member States. **In the other 14 Member States, disposable income inequality had a less favourable evolution than market income inequality** (i.e. the former increased more or decreased less than the latter), suggesting that the effect of taxes and social transfers in reducing (market) income inequality weakened in those Member States.

Table 1: There is heterogeneity in the trends of the inequality reducing effect of tax-benefits system in the EU between 2007 and 2022, with a weakening in half of the countries.

		Comparison with trends in disposable income inequality		
		Less favourable: **Weakening** of the inequality reducing effect of the tax and benefit system	Change of similar extent: **Stability** of the inequality reducing effect of the tax and benefit system	More favourable: **strengthening** of the inequality reducing effect of the tax and benefit system
Trend in market income inequalities	**Declined**	(*) BE, CZ, DK, DE, IE, EL, HR, HU, NL, PL, RO, SI, SK.	PT	
	Stable		LV, FI	EE (***)
	Increased	MT (**)	LU	(****) BG, ES, FR, IT, CY, LT, AT, SE

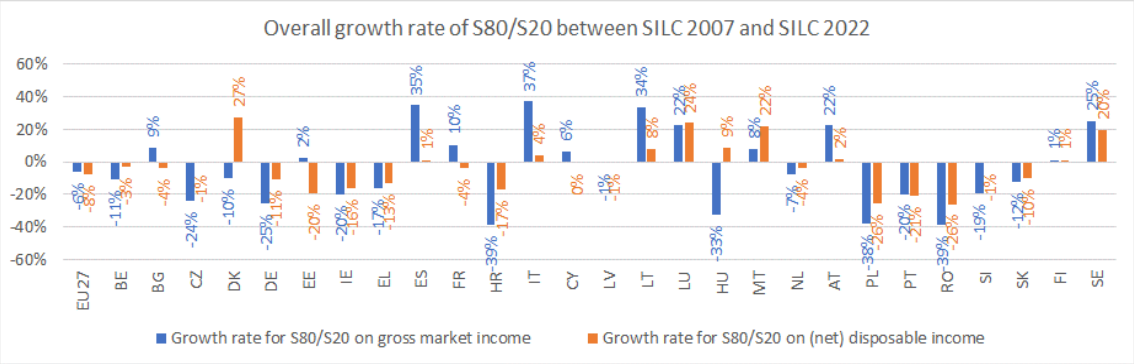
Note: valid for each group of Member States (*) Disposable income inequality didn't decline to the same extent (or increased); (**) Disposable income inequality increased more; (***) Disposable income inequality decreased; (****) Disposable income inequality didn't increase to the same extent (or even decreased).

([50]) As mentioned in previous footnote, this part of the analysis of this paper was concluded before the SILC 2023 release and it is therefore based on data up to SILC 2022.

([51]) I.e. disposable income inequality increased less or dropped more than market income inequality overall between SILC 2007 and SILC 2022.

([52]) Of which 1 Member State in which they both decreased to a rather similar extent, 1 Member State in which they both increased to a rather similar extent and 2 Member States in which they both had an overall rather stable evolution.

Figure 12: In a large majority of countries market income and disposable income inequalities evolved in the same direction, although in some cases at a very different extent



Note: Breaks in the original MS times series have been neutralised in the years when they occur, which reduces to some extent comparison issues across years but is however not the same as having break-free series. Data for HR for SILC 2007 was not available and is considered to be equal to SILC 2010. SILC 2007 corresponds to income year 2006 (except in IE) and SILC 2022 corresponds to income year 2021 (except in IE). Overall growth rate between SILC 2007 and SILC 2022 is computed as = (S80/S20 in SILC 2022 – S80/S20 in SILC 2007) / (S80/S20 in SILC 2007). *Source*: own computation based on Eurostat data.

3.2.4. Post-market: the role of the tax and benefit systems

This section focuses on the inequality reducing effects of taxes and of monetary social transfers (excluding pensions), considering their impact on S80/S20. ([53]) **Social transfers are playing a stronger role than taxes in reducing market income inequality**. The level of the inequality reducing effect of taxes (e.g. close to 10% in SILC 2023) is on average far lower than that of the level of the inequality reducing effect of social transfers, which stood for instance close to 30% in SILC 2023.

The overall inequality reducing effect of taxes and social transfers (excl. pensions) remained broadly stable between SILC 2023 (income year 2022) at 43.9% and fifteen years before in SILC 2007 (income year 2006) at 45.1%. This indicates that taxes and social transfers enable together to nearly halve market income inequality ([54]). Levels however fluctuated over time. The inequality reducing effect first increased as of SILC 2009 (income year 2008, which corresponds to the first year of the financial crisis) until SILC 2013 ([55]), when it reached 51.9%. It then started to decrease until SILC 2020 (income year 2019), likely partly thanks to the improved employment situation ([56]) and then increased again between SILC 2020 (income year 2019) (at 44.7%) and SILC 2021 (income year 2020) (at 47.1%), which are the years marked by the Covid-19, energy and cost-of-living crises.

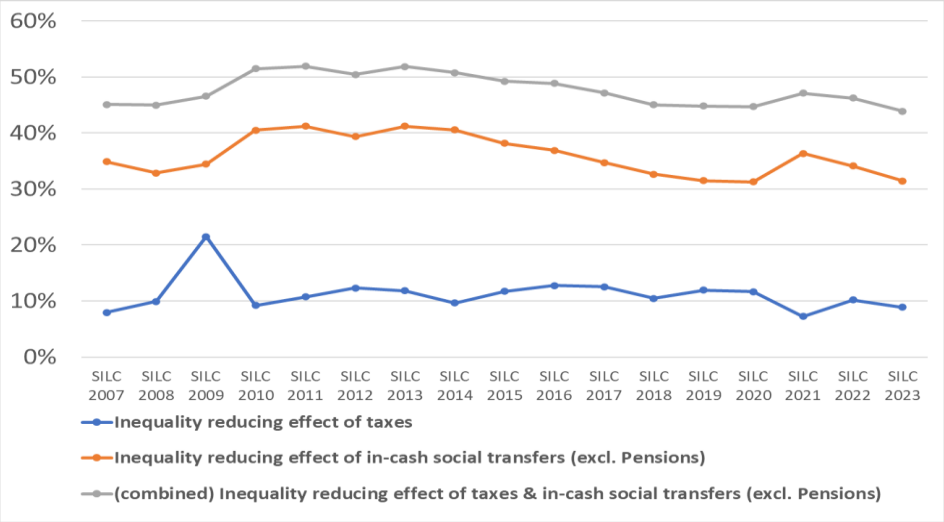
([53]) The inequality reducing effect can be analysed by looking respectively at: the inequality reducing effect of taxes, the inequality reducing effect of in-cash social transfers (excl. Pensions) and the (combined) inequality reducing effect of taxes and in-cash social transfers (excl. Pensions). The reducing effect is expressed as a percentage reduction from the initial level of inequality (i.e. before tax and transfers).

([54]) Considering here as indicator the S80/S20. Using other indicators (e.g. Gini) may give a different picture.

([55]) And despite a small drop between SILC 2011 and SILC 2012.

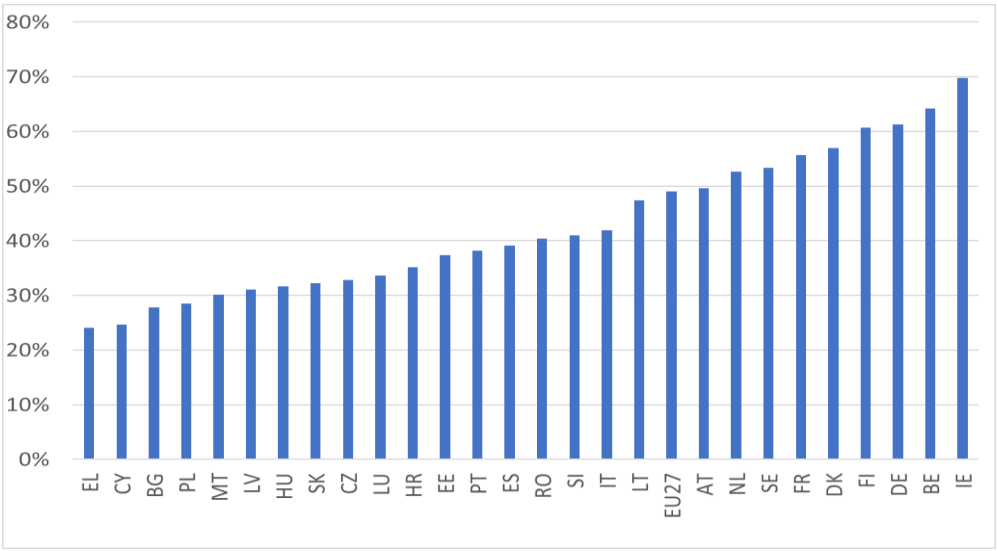
([56]) An overall drop in this effect as of SILC 2014 until SILC 2020 is consistent with the S80/S20 on gross market income having dropped relatively more over this period (from 10.31 in SILC 2013 to 8.62 in SILC 2020, i.e. an overall relative drop of -16.4%) than the S80/S20 on disposable market income (from 4.96 in SILC 2013 to 4.77 in SILC 2020, i.e. an overall relative drop of -3.9%).

Figure 13: In the EU, social transfers substantially outweigh taxes in inequality reduction



Note: Breaks in the original times series have been neutralised in the years when they occur, which reduces to some extent comparison issues across years but is however not the same as having break-free series. SILC 2007 corresponds to income year 2006 and SILC 2023 corresponds to income year 2022. The (combined) Income inequality reducing effect of taxes and in-cash social transfers (excl. pensions) doesn't - due to how it is computed (cf. below) – match exactly the sum of the income inequality reducing effect of taxes and of the income inequality reducing effect of in-cash social transfers (excl. pensions). Income inequality reducing effect of taxes computed as = [(S80/S20 for gross market income) – (S80/S20 for net market income)] / (S80/S20 for gross market income). Income inequality reducing effect of in-cash social transfers (excl. pensions, old-age benefits and survivor's benefits) computed as = [(S80/S20 for gross market income) - (S80/S20 for gross total disposable income)] / (S80/S20 for gross market income). (combined) Income inequality reducing effect of taxes and in-cash social transfers (excl. pensions, old-age benefits and survivor's benefits) computed as = [(S80/S20 for gross market income) - (S80/S20 for (net) disposable income)] / (S80/S20 for gross market income). *Source*: own computation based on Eurostat data.

Figure 14: In 2023, there were still significant differences in the (combined) inequality reducing effect of tax and transfers across the EU countries



Note: SILC 2022 corresponds to income year 2021 (except in IE). The (combined) Income inequality reducing effect of taxes and in-cash social transfers (excl. pensions, old-age benefits and survivor's benefits) is computed as = [(S80/S20 for gross market income) - (S80/S20 for (net) disposable income)] / (S80/S20 for gross market income). *Source*: own computation based on Eurostat data.

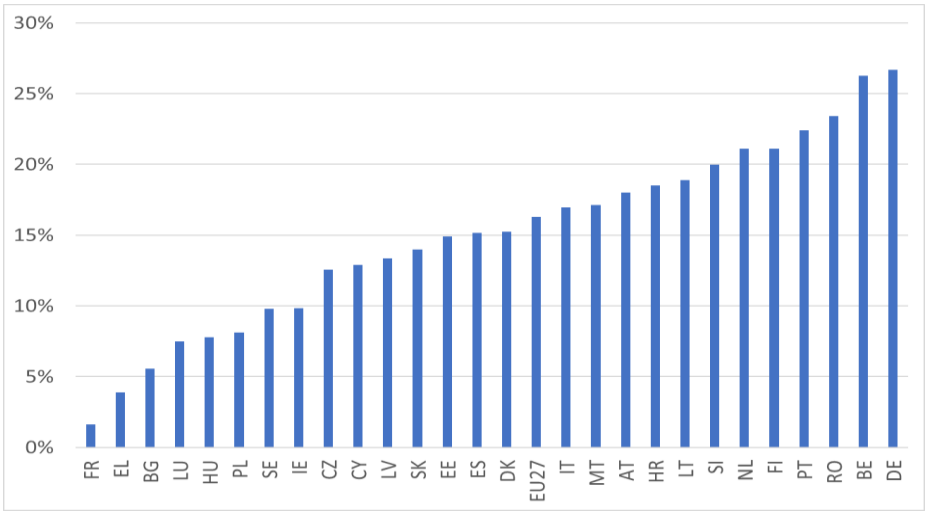
At the Member State level, the overall inequality reducing effect of taxes and social transfers ranges (SILC 2023) from 24% in EL to 70% in IE, as can be seen in the Figure above. There are 9 Member States with an effect above the EU27 average (49.1%). When it comes to the overall change - comparing SILC 2022 (income year 2021) to SILC 2007 (income year 2006) - the (combined) inequality reducing effect of taxes and social transfers (excl. pensions) decreased in 14 Member States, increased in 9 Member States and was broadly stable in 4 Member States. In some Member States, the overall change in this effect was quite large (e.g. dropping by -25.9 pp in HU or increasing by 18.7 pp in ES). It was rather stable at the EU level (see Figure Annex 7.1).

Tax policies

Beyond their substantial contribution to governments' revenues, direct taxes are an essential redistributive tool. Redistribution is achieved in several ways, notably via social transfers, the provision of public services and public goods and progressive taxation.

In recent years the statutory tax rate of top earners in the EU has generally decreased, hence reducing the scope for redistribution. In most EU Member States and at EU level there is a decrease in the top tax rates (between 1995 and 2022) and the top tax rate increased only in a few countries (Greece, Portugal, and Latvia, though for Latvia it remains at a low rate). ([57]) Research confirms that while tax cuts for top earners increases their income share, they do not necessarily appear to promote overall economic growth (Piketty et al., 2014).

Figure 15: In 2023, there were significant differences in the inequality reducing effect of taxes across the EU



Note: SILC 2022 corresponds to income year 2021 (except in IE). The income inequality reducing effect of taxes is computed as = [(S80/S20 for gross market income) – (S80/S20 for net market income)] / (S80/S20 for gross market income).
Source: own computation based on Eurostat data.

On average for the EU (as can be seen in Figure 13), **the inequality reducing effect of taxes remained also broadly stable**, from 8.0% in SILC 2007 (income year 2006) to 10.2% in SILC 2022 (income year 2021). The (two) largest changes occurred in crisis

([57]) Taxes in Europe Database and Data on Taxation Trends.

years: in SILC 2009 (income year 2008) where it very strongly increased and in SILC 2021 (income year 2020) where it strongly declined.

At Member States level, the figure below shows that the effect ranged (SILC 2023), from less than 5% in FR and EL to slightly more than 25% in BE and DE. There are 15 Member States with an effect above the EU27 average (15.7%).

As regards the evolution of the inequality reducing effect of taxes between SILC 2007 (=income year 2006) and SILC 2022 (=income year 2021), it is worth mentioning that there were some Member States (e.g. LU, EL) where there was a strong decrease. As well, there were some Member States in which this effect strongly increased (e.g. DK, IE) and others in which it was rather stable (e.g. PL, LV). It was rather stable at the EU level (see Figure Annex 7.2).

Social transfers

The formal and effective coverage of social benefits matters as much as their adequacy for their effect on income inequality. The Council Recommendation on access to social protection for workers and the self-employed ([58]) encourages Member States to close formal coverage gaps, ensure effective coverage, provide an adequate level of protection, ensure transparency of the conditions and rules governing social protection schemes, as well as administrative simplification.

Reducing gaps in access to social protection for non-standard forms of work would help reduce inequalities, including gender pay and pension gaps. However, the report on the implementation of the Council Recommendation on access to social protection for workers and the self-employed ([59]) concluded that "*significant gaps in formal and effective coverage remain for both groups, and are likely to continue in the absence of further reforms".* Regarding adequacy, it highlights that *"rates of material and social deprivation are higher for temporary-contract employees than permanent-contract employees and for part-timers compared to full-time workers. Self-employed people and temporary-contract employees are also more at risk of poverty than those in standard forms of employment.*"

The Council Recommendation on adequate minimum income ensuring active inclusion ([60]) encourages Member States **to improve the adequacy of minimum income, the coverage and take-up of minimum income, the access to labour markets for those who can work, access to enabling and essential services and promoting individualised support**. The non take-up of social benefits also remains a challenge. Available estimates of non-take-up typically range around from 30% to 50% of the eligible population. Eurofound (2015) estimates that non-take-up of monetary social benefits ranges between approximately 25% to 80% in fifteen Member States. A recent study (Céline Marc at al., 2022) provides estimates of the non-take-up of minimum income benefits in four Member States (Germany, Belgium, Finland, the Netherlands) and highlights that non-take-up of minimum income benefits typically ranges around 30% to 50% of the eligible population.

([58]) Council Recommendation of 8 November 2019 on access to social protection for workers and the self-employed 2019/C 387/01.

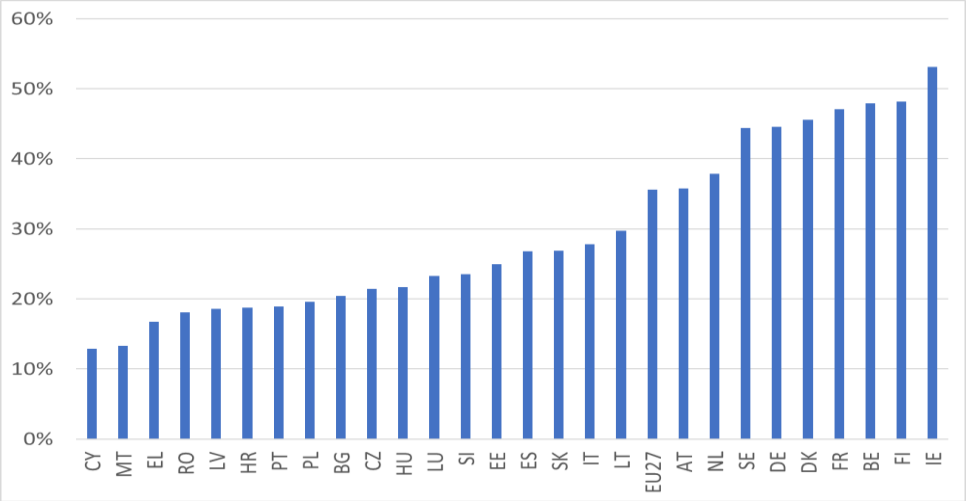
([59]) Report from the Commission to the Council on the implementation of the Council Recommendation on access to social protection for workers and the self-employed, COM/2023/43 final.

([60]) Council Recommendation of 30 January 2023 on adequate minimum income ensuring active inclusion, 2023/C 41/01.

The inequality reducing effect of social transfers (excl. pensions) remained on average at a similar level in SILC 2022 (income year 2021) (at 34.1%) compared to fifteen years before in SILC 2007 (income year 2006) (at 34.9%) Figure 13**.** It first increased as of SILC 2009 (income year 2008) until SILC 2013 (income year 2012) ([61]), where it reached 41.2% and then declined with recovery until SILC 2020 (income year 2019) (at 31.3%). It then strongly increased again in SILC 2021 (income year 2020, the first covid year) where it reached 36.4%.

As shown in the figure below, at the Member States level, this effect ranged (in SILC 2023) from between 10% and 15% in CY and MT to more than 50% in IE. There are 9 Member States with an effect above the EU27 average (36.7%)**.**

Figure 16: In 2023, there were significant differences in the inequality reducing effect of social transfers across the EU



Note: SILC 2022 corresponds to income year 2022 (except in IE). The income inequality reducing effect of in-cash social transfers (excl. Pensions) is computed as = [(S80/S20 for gross market income) – (S80/S20 for gross total disposable income)] / (S80/S20 for gross market income).
Source: own computation based on Eurostat data.

As regards the overall evolution of the inequality reducing effect of social transfers (excl. pensions) between SILC 2007 (income year 2006) and SILC 2022 (income year 2021), it is worth mentioning that in some Member States (e.g. HR, HU), there was a strong decrease, while in some others there was a strong increase (e.g. IT, ES) and others in which it was rather stable (e.g. LV, SK). It was rather stable at the EU level (see Figure Annex 7.3).

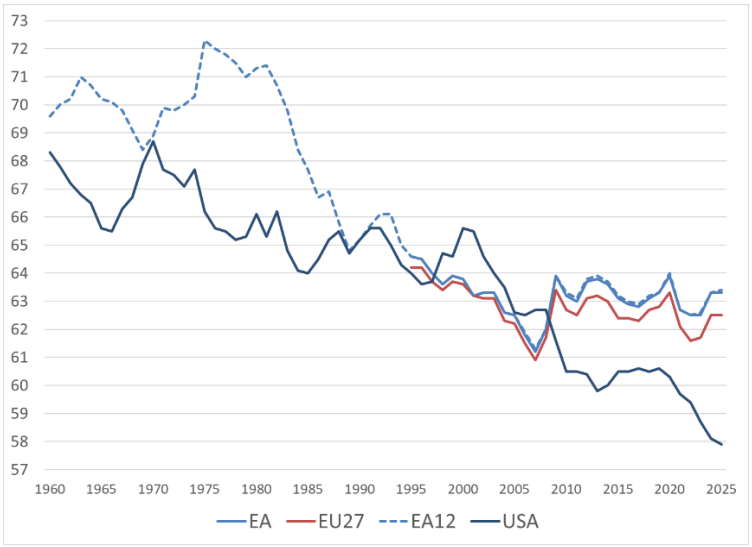
3.2.5. Evolution of the labour share of income

Market income inequality is also captured by the remuneration shares of the production factors, namely labour and capital. **The labour share is the share of income allocated to labour and developments reflect drivers from these three stages of inequality:** the pre-market stage (such as developments in the educational attainments that later determine labour market outcomes), the in-market (such as typically employment and wage developments) as well as post-market drivers (as tax and benefit systems can also impact on market developments for instance through various incentives to work).

([61]) And despite a small drop between SILC 2011 and SILC 2012.

Overall, the labour share in national income has decreased in the 1970s and 1990s but has remained broadly stable since around 2000. It was at the lowest just before the financial crisis and the following recession, but it has, since then, rebounded moderately. The only sharp change registered in recent decades is its peak in 2020, due to large job retention schemes adopted as response to the Covid-19 pandemic, which decreased again as of beginning of 2022, when such schemes started to be phased out (Bodnàr and Mohr, 2023). The long-term overall fall in the labour share took place essentially between the late 1970s and late 1990s. The labour share in the EU, on average, has not returned to the levels reached in the 1970s. In several Member States it has even continued to fall, also pointing to a decoupling of wages from productivity growth (see for instance ETUI and ETUC, 2021; OECD and ILO, 2015).

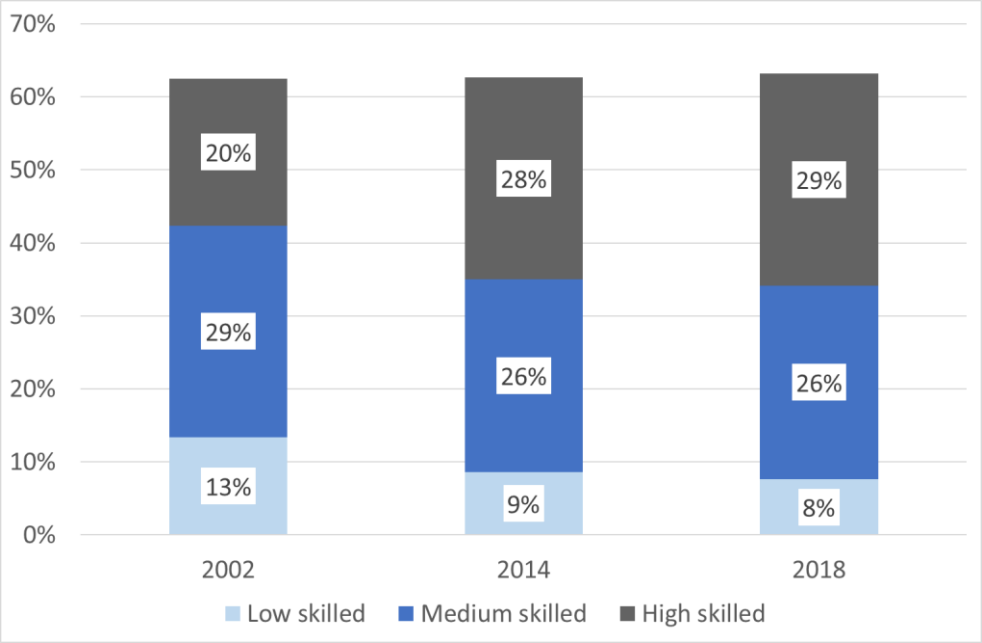
Figure 17: In the EU, the labour share has remained broadly stable since the early 2000s, albeit fluctuations



Source: AMECO - Adjusted wage share, percentage of GDP at current factor cost (ALCD2)

However, this stability of the total labour share since the early 2000s hides **shifts within the labour share by educational levels, with an increase of the high skilled labour share** (broadly from 20% to 29% of GDP) **and a decline of the low skilled labour share** (broadly from 13% towards 8% of GDP). While this also reflects trends in employment structures with a decline in low skilled employment and an increase in high skilled one, it also relates to changes in relative wages. Such structural shifts in the labour share may typically question whether the progressivity of the tax and benefit system needs to be further reviewed. For instance, in some Member States social contributions that are financing social protection schemes are capped up to some thresholds, and such structural shifts may challenge the budgetary balance of social protection schemes in the long run.

Figure 18: In the EU, the average stability of the labour share since 2002 reflects a shift from the low skilled workers to the high skilled workers



Note: The total labour share is decomposed into three components relating to skills levels that account for both employment and relative wages dimensions. Calculations are based on the ESCO classification 0-2 for low skilled, 3-4 for medium skilled and 5-6 for high skilled.
Source: calculations based on Eurostat SES, LFS and National accounts (AMECO).

4. Assessing the distributional impact of policies

Distributional impact assessment (DIA) can be used to assess the distributional effects of policies on the income of different groups of the population. An appropriate account of the impact of existing and new measures on the income distribution contributes to better policy making and builds up a comprehensive framework where costs and benefits of existing or new policy measures are considered, both in terms of their overall budgetary impact but also related to whether they may affect, in a disproportionate way, different groups of the population.

In 2022, the European Commission released a **Communication on Better assessing the distributional impact of Member States' policies** (and a related Staff Working Document) ([62]) emphasizing the importance of DIA defined as "*an analysis, usually quantitative in nature, which assesses the distributional effects of policies on the income of various groups across the population. More specifically, DIA refers to the assessment of the impact of policies on the income distribution in a country by analysing their impact on disposable income, poverty and income inequality*."

Recent years have indeed seen an increase in the calls for a better understanding of the distributional impacts of policies. The challenges brought about by the green and digital transitions, and the COVID-19 pandemic and energy and inflation crisis also

([62]) COM(2022)494 final - Communication on Better assessing the distributional impact of Member States' policies and SWD(2022)323 final - Commission Staff Working Document accompanying the Communication.

contributed further to highlighting the importance of a wider use of the analyses of the impact of reforms and investments on poverty and economic inequality.

By shedding the light on distributional consequences of various policy choices, DIA contributes to **evidence-based policies that support inclusive growth.** The Communication provided guidance for Member States to conduct, improve, and enhance the quality of DIA, acknowledging that DIA practices are very widespread, but these differ across Member States and DIA results are not always included in publicly available documents.

The Communication encourages the **systematic use of DIA for all policies that could have an impact on people's income, both ex-ante and ex-post policy implementation**. It also stresses the importance to assess the combined effects of policies rather than considering individual policies in isolation and to support independent institutions to do DIA. It also encourages Member States to use DIA on more traditional policies with income-related effects, such as direct taxes and social benefits, but also to explore its use to assess the impact of indirect and wealth taxation and of in-kind benefits. A multi-annual approach to DIA is also recommended. The communication also provides broad guidelines on the methodological tools (e.g. micro-simulation models), the data (e.g. combined survey and administrative data) and the indicators (e.g. poverty and inequality indicators, possibly by different population groups) to use. Finally, The Communication encourages the **publication and dissemination of DIA**, in a way that can be accessible to the general public, to increase transparency, accountability and public engagement around policy making.

In this context, DIA can also be a very useful tool to assist Member States in meeting the 2030 poverty reduction target outlined in the European Pillar of Social Rights Action Plan. The European Commission has been actively supporting the use of DIA by Member States, including within their national budgetary process and the European Semester. While some Member States rely on national approaches and tools for DIA, an important tool for DIAs is EUROMOD, a harmonized microsimulation model for the EU maintained by the Commission (Joint Research Centre, JRC).

Box 5: Ex-ante and ex-post evaluations of the new minimum income scheme in Spain

In Spain, the Ministry of Inclusion, Social Security, and Migration conducted a pre-implementation DIA before the launch of a national minimum income scheme. This new non-contributory benefit from social security was introduced to complement existing regional-level policies, featuring a targeted design aimed at achieving maximum redistributive impact, including income and wealth tests for applicants. The scheme was implemented in May 2020. The post-implementation evaluation of the minimum income scheme aims to bolster the formulation of data-driven policies and identify relevant measures to improve management procedures and address non take-up.

A mapping of the use of DIA studies in the EU has evidenced that DIA is widespread across Member States, although to a varying degree and with different methods and practices. To further strengthening the reliance of DIA in the Member States ([63]), the Commission has since December 2021, and also based on the provisions in the Communication, supported a series of mutual learning events. Based on presentations from national experts from about half Member States and from academia, this has allowed to cover over seven sessions a variety of subjects, such as the application of DIA in different policy areas and measures (including child tax benefits and exceptional

([63]) Distributional Impact Assessment - Employment, Social Affairs & Inclusion - European Commission (europa.eu)

measures taken to address the rise in energy costs and living costs), the use of EUROMOD model and national models, how models can account for behavioural responses and second-round effects in DIA analysis, the access and use of administrative data for DIA, nowcasting techniques and the timely assessment of impacts of policies and the dissemination of results of DIA.

5. Conclusions

Addressing economic inequalities relates to EU core objectives of social justice enshrined in the Treaties and it is intrinsically linked to boosting progress to achieve the **EU 2030 headline targets for employment, skills and poverty reduction** set in the European Pillar of Social Rights Action Plan.

The framework presented in this paper can contribute to a sound monitoring of inequality and to comprehensive policies to tackle it. It discusses **income inequality as a complex phenomenon**, linking it to other forms of economic inequality and to inequality of opportunities. This is reflected in a set of indicators to monitor inequality in its different facets and in integrated policy actions, ranging from access to early education to labour market interventions and social dialogue, to tax and benefit systems.

In spite of significant fluctuations, there has been an overall stability of the S80/S20 interquintile income ratio in the EU over the last decades. It first, increased with the double-dip recession in the 2010s, and then declined to be broadly back to its levels of fifteen years ago, with a slight decline in the most recent years. While income inequality at the bottom of the income distribution (S50/S20) is broadly back to initial levels, it slightly declined at the top (S80/S50). On the one hand, the sharp increase in inequality at the beginning of the period was progressively balanced, highlighting the impact of swift and effective policy responses in the EU in a context of multiple negative shocks (especially when comparing the overall stability following the Covid-19 pandemic and the cost-of-living crisis in 2020-2023, with the sharp increase during the double-dip recession in 2009-2012). On the other hand, this also highlights the lack of significant long-term improvements over the period, which, when paired with still high perceptions of inequalities among EU citizens, calls for a thorough understanding of the dynamics at play and convergence towards more effective policies.

Across the EU, there was some upward convergence across Member States, though evolutions differ quite largely. Often, the income shares has improved for lower quintiles, but there are also cases of polarization in the income distribution in some Member States (namely Italy, Lithuania, Luxembourg, Hungary, Malta, Denmark and Sweden). There is also evidence **that the middle class has slightly increased its income share over the period** in the EU on average as well as in several Member States, albeit with a few important exceptions in countries that experienced a shrink in the middle of the income distribution (namely Bulgaria, Cyprus and Finland).

Perceptions about income inequality remain broadly negative, with 81% of the EU citizens that think that the differences in income are too high in their country. Importantly, perceptions of inequality appear to be correlated with actual inequality levels, while there is widespread evidence of misperceptions about one's level of income and position in the income distribution. Such misperceptions can also influence concerns about inequalities and the demand for redistributive policies (for instance, overestimating one's income position is associated with lower inequalities concerns and weaker demand for redistribution, and *vice versa*).

Inequalities and related policies are analysed at three different but intertwined stages: pre-market, in-market and post-market stages. In the pre-market stage, coinciding with early life stages, economic inequalities stem in particular from education. To prevent the transmission of inequalities across generations, it is essential to prevent child poverty and provide access to a wide range of services to disadvantaged children and students. At the in-market stage, income inequalities stem mainly from the labour market and it is paramount to foster quality employment. Well-designed ALMPs and up- and re-skilling programmes are especially important in particular for those mostly excluded from the labour market or affected by the ongoing twin transition. Supporting collective bargaining and social dialogue remains essential to promote fair working conditions, including but not limited to adequate wages. In the post-market stage, the design of taxes and social transfers is key. Trends in the inequality reducing effect of taxes and social transfers indicate that the capacity of tax-benefit systems to reduce income inequalities has remained broadly stable over the last fifteen years in the EU, although with large differences across Member States and sharp fluctuations during economic shocks.

Finally, a better assessment of the distributional impacts of reforms and investments is key in the context of multiple economic shocks and of the green, digital and demographic transformations, that require reforms and investments that can have a significant impact on inequality. The 2022 Communication on Distributional Impact Assessment (DIA) elaborates guidance to quality DIA and the Commission provides support to the Member States to advance on DIA across the EU. While being widespread in the EU, with a rising interest and reliance on DIA for policy making in several Member States, DIA is used to different extent across Member States, relying on various methods and practices. For example, recently, DIA has proved useful in assessing the impact on different income groups of the exceptional policy measures put in place by Member States in response to the energy and cost of living crisis.

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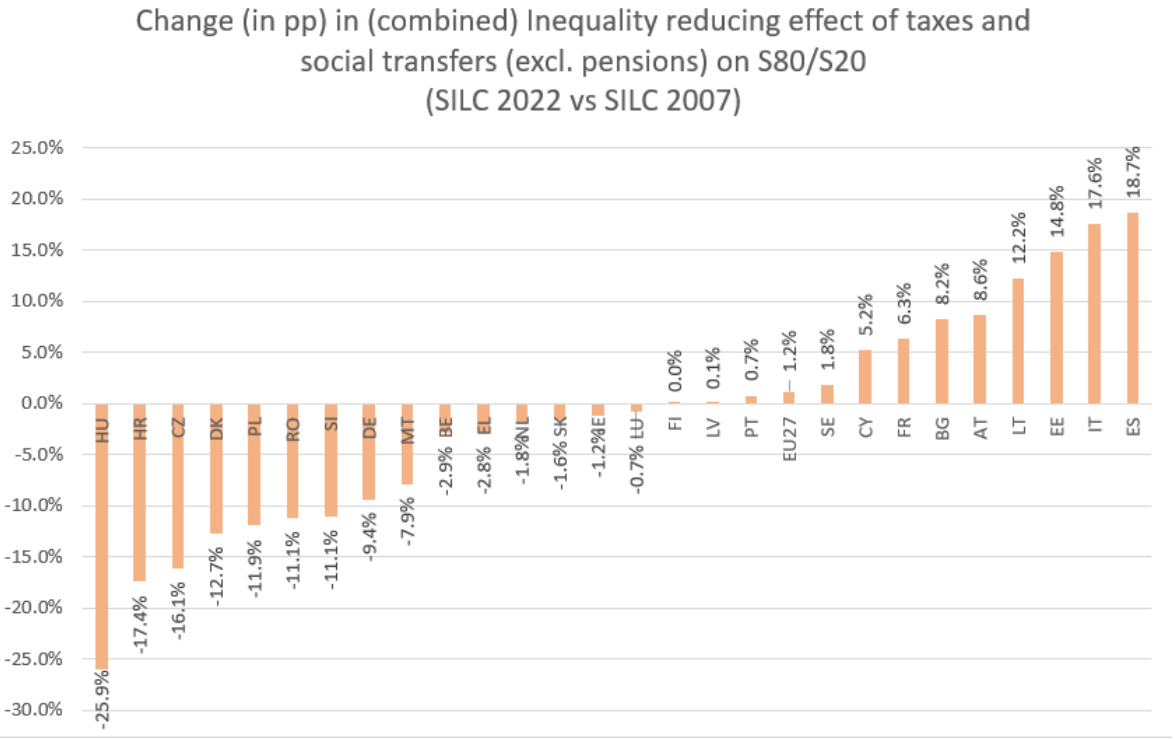
7. Annex

Country analysis – combined inequality reducing effect of taxes and social transfers

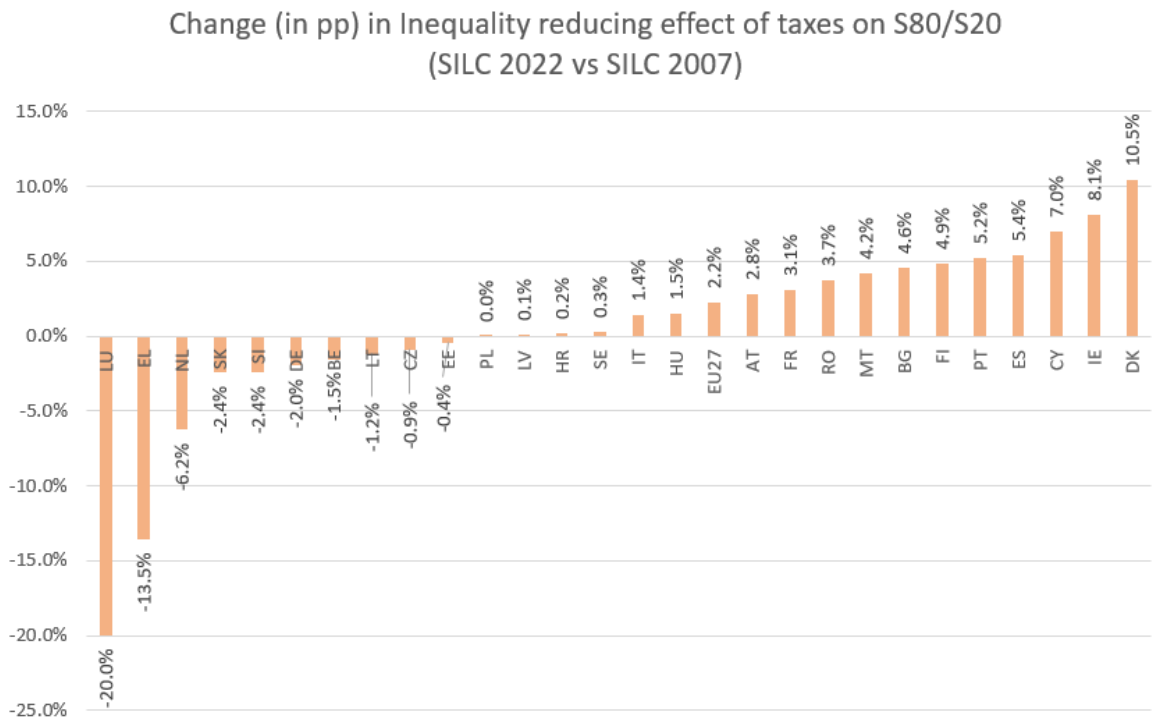
Figure Annex 7.1: Change in the (combined) inequality reducing effect (on S80/S20) of taxes and social transfers (excl. pensions)



Note: Breaks in the original MS times series have been neutralised in the years when they occur, which reduces to some extent comparison issues across years but is however not the same as having break-free series. Data for HR for SILC 2007 was not available and is considered to be equal to SILC 2010. SILC 2007 corresponds to income year 2006 (except in IE) and SILC 2022 corresponds to income year 2021 (except in IE). The (combined) Income inequality reducing effect of taxes and in-cash social transfers (excl. pensions, old-age benefits and survivor's benefits) is computed as = [(S80/S20 for gross market income) - (S80/S20 for (net) disposable income)] / (S80/S20 for gross market income). *Source*: own computation on Eurostat data.

Country analysis – inequality reducing effect of taxes

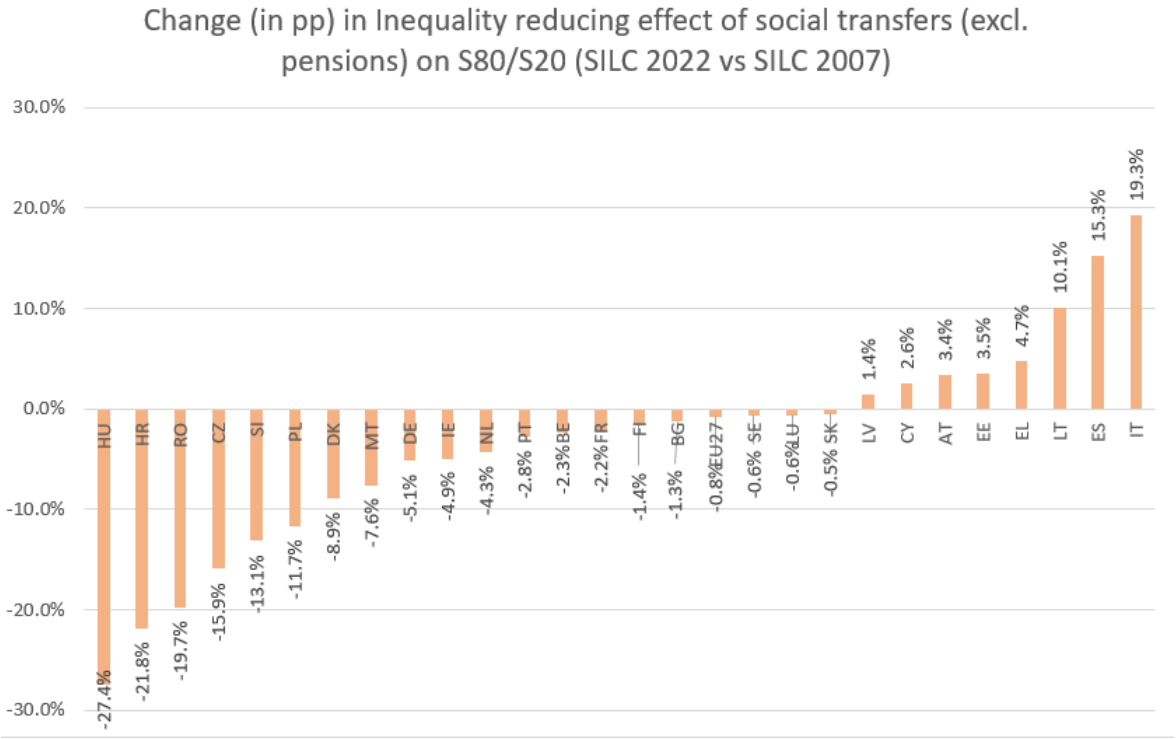
Figure Annex 7.2: Change in the inequality reducing effect (on S80/S20) of taxes



Note: Breaks in the original MS times series have been neutralised in the years when they occur, which reduces to some extent comparison issues across years but is however not the same as having break-free series. Data for HR for SILC 2007 was not available and is considered to be equal to SILC 2010. SILC 2007 corresponds to income year 2006 (except in IE) and SILC 2022 corresponds to income year 2021 (except in IE). The income inequality reducing effect of taxes is computed as = [(S80/S20 for gross market income) – (S80/S20 for net market income)] / (S80/S20 for gross market income).
Source: own computation on Eurostat data.

Country analysis – inequality reducing effect of in-cash social transfers

Figure Annex 7.3: Change in the Inequality reducing effect (on S80/S20) of in-cash social transfers (excl. pensions)



Note:.Breaks in the original MS times series have been neutralised in the years when they occur, which reduces to some extent comparison issues across years but is however not the same as having break-free series. Data for HR for SILC 2007 was not available and is considered to be equal to SILC 2010. SILC 2007 corresponds to income year 2006 (except in IE) and SILC 2022 corresponds to income year 2022 (except in IE). The income inequality reducing effect of in-cash social transfers (excl. Pensions) is computed as = [(S80/S20 for gross market income) – (S80/S20 for gross total disposable income)] / (S80/S20 for gross market income).
Source: own computation on Eurostat data.

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