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# The Lost Decade

## Reducing European Income Disparities

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## AT A GLANCE

**After a decade, EU-wide inequality finally regained its previous low level of 2009. This achievement was driven by the relatively strong growth in the poorer member states between the Baltics and the Balkan. The second driver of EU-wide inequality, within-country inequality, has hardly contributed to this development, as it has remained relatively stable or even increased. The EU could and should do more to promote catch-up growth and to encourage redistributive policies within member states.**

On January 31, 2020, Great Britain left the European Union (EU) after a referendum in favor of a Brexit in 2016. One of the main drivers of the discontent behind that vote has been immigration, primarily from poorer EU member states. When these countries joined the EU in 2004 or 2007, their citizens benefitted from the free movement of labor within the Single Market. The huge disparities between wages in the rich Northwest of the EU (e.g. the UK) and the poor East/Southeast led to migration (as soon as it was possible) and also to the relocation of some manufacturing jobs from high-wage to low-wage countries. Both developments affected less-skilled workers and specific regions in the richer member states leading to disgruntlement and a rise of nativist parties. In the following paper we analyze the development of income disparities in the EU.

## THE EU'S MULTI-LEVEL INCOME DISTRIBUTION

The EU is an entity with 28 (now 27) member states[1]. Thus, its income distribution can be decomposed into the within-country and the between-country distribution. Actually, the Statistical Office of the EU (Eurostat) and most research based on its data work from bottom up starting from the national income distribution and constructing the EU-wide income distribution. Eurostat itself provides values for the whole EU by calculating weighted (by population) averages of the national values of certain indicators. This method delivers wrong estimates as it neglects the big income disparities between countries. The present analysis intends to correct that mistake by providing estimates of the »true« EU-wide inequality combining both dimensions.

Before looking at the data, some technical details have to be clarified:

– First, the income considered here is disposable income; that is market income minus taxes plus transfers received (e.g. pensions). Usually, the distribution of disposable income is less unequal than the distribution of market income as the state redistributes income from the rich to poor households. More precisely the income data provided by Eurostat, which come from household surveys (EU-SILC = Survey of Income and Living Conditions) are adjusted for household type and size, thus becoming so-called »equivalized disposable income«.

As household surveys are notoriously unreliable and patchy at the top and the bottom of the income distribution, all findings based on them are likely to underestimate the true inequality. Sometimes, Gross Domestic Product (GDP) per capita is also used in this paper.

– Second; the indicators of inequality used here are primarily the quintile or S80/S20 ratio, which gives the relation between the income of the richest quintile (= 20 percent) of the population to the poorest quintile, and occasionally the Gini-index, which ranges from zero for perfect equality to one (or 100) for maximum inequality (i. e. all income goes to one person or household) and some other indicators.

Three levels of inequality can be distinguished:

## INCOME DISPARITIES WITHIN MEMBER STATES

The distribution of income within a national economy is relatively well documented and researched. Within the EU, the inequality within countries varies strongly between member states. As Table 1 shows, the most equal ones are some Central European countries (e. g. Czech Republic, Slovakia, or Slovenia, and the Scandinavian countries). The most unequal member states are Bulgaria and Romania and some Mediterranean countries.

In most countries, income inequality has increased over the last decades. Between 1980 and 2017, the income shares of the richest decile (= 10 percent) have increased in all countries except Belgium (Blanchet et al. 2019, Fig.7, p. 29). Most of the increase of inequality within countries happened before 2005. Since 2005 (when Eurostat data started being available), this trend continued with some fluctuation (see Table 1). Eurostat's misconceived S80/S20-indicator of EU inequality, which gives the weighted average of all national S80/S20 indicators, hardly moved since 2005 (oscillating between 4.9 and 5.2; see Table 1 first row or Figure 1 lowest curve). The development of national inequality is driven by politics (adopting neoliberal labor market reforms, cutting welfare), system change from socialism to capitalism in Central and Eastern Europe (CEE), globalization (as above mentioned, increased competition by migrants and low-wage locations), technology (substituting capital for labor), growing regional disparities and some social changes (rise of single households, assortative mating etc.). The most remarkable and alarming aspect is the rise of inequality in formerly egalitarian societies such as Sweden or Germany.

## INCOME DISPARITIES BETWEEN MEMBER STATES

Reducing income disparities between the member states and regions has been an official goal of the EU, which is anchored in the Treaties. It has gained importance with the accession of poorer countries: Ireland in 1972, Greece in 1981, Portugal and Spain in 1986 and – by far the biggest challenge – the post-communist countries of CEE after 2004. The income disparities between the poor new member states and the old EU were very high. In 2000, average national GDP per capita in CEE was below 10,000 € while in the old member states it was above 25,000 €, when measured at Purchasing Power Parities (PPP). PPP measurement delivers higher values for GDP in poor countries because prices are lower there. At exchange rates, GDP per capita in CEE turns out to be much lower (often less than 5,000 €).

The EU has tried to foster catch-up growth and regional cohesion by various policies and institutions, in particular through the regional and structural funds. The success has been mixed. Ireland started to catch up only in the 1990s, long after becoming a member state. Greece's per capita income fell as a percentage of the EU average after accession. Portugal and Spain fared better thanks to a more favorable global economic context (declining oil prices, stronger global growth). The most surprising success story has been the new post-communist member states of CEE. After the transition crisis in the early 1990s they started to grow relatively fast (see table 2). Poorer Eurozone members (mainly in Southern Europe) benefitted after 1998 from declining real interest rates and subsequent debt-driven consumption and investment booms.

As one can see in Table 2, the Eastern periphery was growing much faster than the Centre between 2000 and 2008 and continued to do so, albeit no longer that much stronger, after 2008. The Southern periphery also succeeded to grow faster than the Centre until 2008, but then has fallen back. The decline was absolute between 2008 and 2013 due to the sovereign debt panic and the disastrous austerity policies forced upon them by the Troika. Even after 2013, their growth has been weaker than that of the richer member states.

When poorer economies achieve faster growth than the richer ones, one speaks of beta convergence. A more ambitious goal is sigma convergence, which requires a decline of the standard deviation (whose mathematical symbol is the Greek letter sigma). The standard deviation is a measure of absolute disparities. The EU did not accomplish their reduction, which is hardly surprising given the original large income disparities in 2000 and the hard logic of growth arithmetic as the following example shows: When the GDP per capita of (rich) country A is five times that of (poor) country B and country B grows by five percent p. a. while the richer country A achieves but two percent p. a. (that is beta convergence), it takes 24 years until absolute disparities start to decline and 56 years until their GDP per capita is equal.

## EU-WIDE INEQUALITY

In order to determine the »true« EU-wide inequality between all people (rather than states) one has to combine both dimensions, within- and between-country inequality. This can be done by a big number-crunching exercise of all household income data collected by EU-SILC (approximately 130,000 households with 270,000 persons). The first of these big studies has been made by Bönke and Schröder (2015) followed by several other studies (Vacas-Soriano 2017, Benczur 2017, Filauro 2018). All studies show that the EU-wide inequality (at exchange rates) is higher than national inequality (contrary to the official Eurostat figures). As to be expected, its value is higher at exchange rates than at PPP. Most studies calculate

Table 1
**Income quintile share ratios (S80/S20) 2005–2018**

| Region/Country | 2005 | 2010 | 2018 |
|---|---|---|---|
| **European Union – 28** | 5.03 | 4.94 | 5.17 |
| **Euro area** | 4.65 | 4.9 | 5.07 |
| **Belgium** | 4.04 | 3.92 | 3.78 |
| **Bulgaria** | : | 5.86 | 7.66 |
| **Czechia** | 3.67 | 3.47 | 3.32 |
| **Denmark** | 3.5 | 4.41 | 4.11 |
| **Germany** | 3.79 | 4.49 | 5.07 |
| **Estonia** | 5.93 | 5.01 | 5.07 |
| **Ireland** | 5.01 | 4.7 | 4.23 |
| **Greece** | 5.79 | 5.61 | 5.51 |
| **Spain** | 5.55 | 6.16 | 6.03 |
| **France** | 4.02 | 4.43 | 4.23 |
| **Croatia** | : | 5.54 | 5 |
| **Italy** | 5.57 | 5.38 | 6.09 |
| **Cyprus** | 4.34 | 4.54 | 4.29 |
| **Latvia** | 6.69 | 6.84 | 6.78 |
| **Lithuania** | 6.95 | 7.35 | 7.09 |
| **Luxembourg** | 3.87 | 4.1 | 5.72 |
| **Hungary** | 4.04 | 3.41 | 4.35 |
| **Malta** | 3.95 | 4.33 | 4.28 |
| **Netherlands** | 3.99 | 3.65 | 4.05 |
| **Austria** | 3.81 | 4.34 | 4.04 |
| **Poland** | 6.64 | 4.98 | 4.25 |
| **Portugal** | 6.96 | 5.56 | 5.22 |
| **Romania** | : | 6.11 | 7.21 |
| **Slovenia** | 3.43 | 3.42 | 3.38 |
| **Slovakia** | 3.92 | 3.8 | 3.03 |
| **Finland** | 3.64 | 3.61 | 3.65 |
| **Sweden** | 3.33 | 3.85 | 4.13 |
| **United Kingdom** | 5.87 | 5.35 | 5.95 |

Source: Eurostat (tessi180).

Gini indices and give values of approx. 0.35 at PPP and 0.43 otherwise. EU-wide income disparities jumped with the Eastern enlargements of 2004 and 2007.

These findings have been anticipated and confirmed by a series of studies by Dauderstädt and Keltek[2] using a much less demanding approach, which estimates EU-wide inequality based on national quintiles (of which there are 5 x 28 = 140). Taking these quintiles one can construct European quintiles which comprise each a fifth of the EU population (= approx. 100 million people). Starting with the poorest national quintiles from below (respectively with the richest from above) and adding as many national quintiles as necessary to reach 100 million people, one can get the poorest and the richest EU quintile. The corresponding accumulated income of these national quintiles adds up to the total income of the respective EU quintile. The ratio of the income of the richest to the poorest EU quintile is the S80/S20 ratio of the EU-wide inequality.

Table 2
**Nominal growth (in percent) between 2000 and 2017**

| Period | 2000–2008 | 2008–2017 | 2008–2013 | 2013–2017 |
|---|---|---|---|---|
| Centre | 25.8 | 22.0 | 7.6 | 13.4 |
| Periphery East | 129.8 | 23.6 | 2.5 | 20.6 |
| Periphery South | 47.1 | 3.2 | –5.9 | 9.6 |
| GPS | 67.5 | 0.3 | –10.4 | 12.0 |

Remarks: Centre = old EU-9+EFTA; Periphery East = New Member States; Periphery South = Italy + GPS + Cyprus + Malta; GPS = Greece + Portugal + Spain.

Figure 1 below shows the development of this quintile ratio from 2005 until 2018 (latest Eurostat/EU-SILC data available). The different curves represent the inequality measured at exchange rates and PPP for the EU as it has been enlarging from 25 to 28 member states. The lowest curve shows the wrongly constructed official value, which is the population-weighted average of the national values. It (wrongly) assumes that the poorest EU quintile consists of the poorest quintile of each of the 28 member states (and the richest in a corresponding way). Obviously neither do the poorest quintiles of rich member states like Luxemburg or Denmark belong to the poorest EU quintile nor do the richest quintiles of Balkan or Baltic countries belong to the richest EU quintile. With some additional calculation, one can use this quintile method to estimate the EU-wide Gini index delivering a value of 0.35.

The level of EU-wide inequality is at a similar level as the inequality of very unequal member states when measured at PPP and substantially higher at exchange rates. It declined between 2005 and 2007, but jumps with the EU enlargement by Romania and Bulgaria (two large poor countries) substantially. Afterwards it continued to decrease until 2009 when the crisis affected the global economy. After a short revival, the EU-wide inequality remains almost constant and resumes its decline only in 2017. In 2018 it eventually succeeds to regain its level of 2009. Meanwhile, a decade has been lost without reducing the EU-wide inequality. Catching-up growth had continued too weakly to compensate for the concurrent rise of within-country inequality (compare the last two columns in table 1).

How much do within-country and between-country inequality respectively contribute to EU-wide inequality? To answer that question, one needs an indicator of inequality that is decomposable. Such an indicator is the Theil index (the quintile ratio and the Gini cannot be decomposed). Several studies (most recently: Filauro 2018; Blanchet et al. 2019) provide estimates that show that between-country inequality is responsible for about 20 percent of the total EU-wide inequality. That share declined between 2005 (from then approx. 25 percent) and 2010, and stagnated afterwards. To sum up: While within-country is much more important (80 percent) for the level of EU-wide inequality, it is the change of between-country inequality that has been more relevant for its development.

In a similar way, one can use the quintile method to calculate an EU-wide poverty rate. Poverty (or risk of poverty) is usually defined as having an income lower than 60 percent of the median income. The poverty rate is the percentage of people with such a low income. Eurostat provides again an erroneous figure of approx. 17 percent, which neglects the income disparities between countries and calculates the EU poverty rate as the weighted average of national poverty rates. Determining the EU-wide median income with the quintile method gives a value of approx. 16,600 € resulting in a poverty threshold of approx. 10,000 €. The percentage of EU citizens with an income below that value (i. e. the poverty rate) is approx. 28 percent or 23 percent with the lower value being based on PPP.

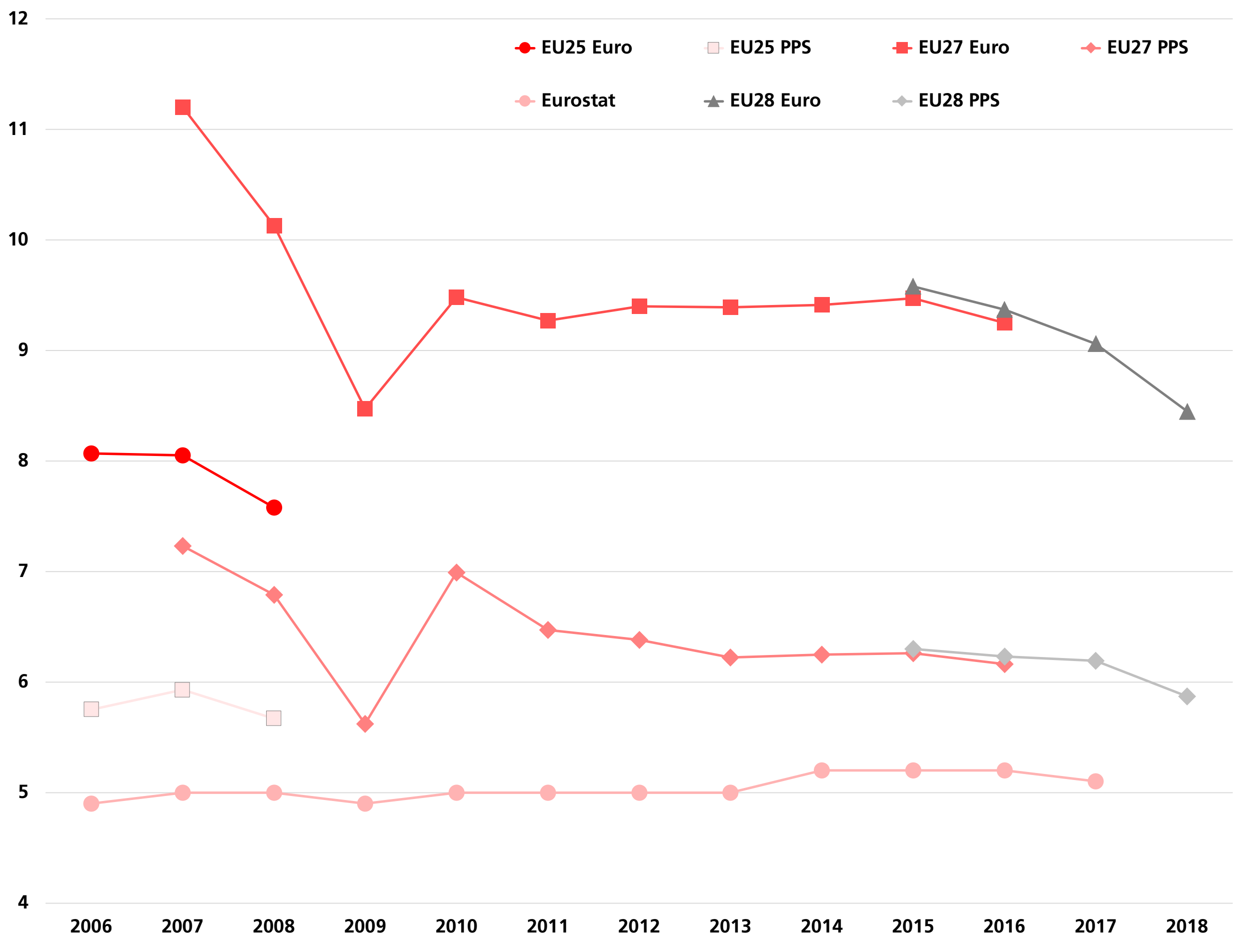
## REDUCING EUROPEAN INEQUALITY

For each of the three dimensions of the EU's income distribution one can identify and suggest policies to reduce the respective inequality.

Although lowering within-state inequality is not the focus of this paper, some measures to do so should be briefly discussed. The large variation of inequality among member states shows that its level is not fixed by global conditions but depends on national policies and institutions. Countries with high levels of inequality should look at those with low levels and try to emulate their approaches if possible and appropriate. Mostly, those policies include a well-managed welfare state and labor market regulations that reduce the number of precarious jobs. The egalitarian countries of CEE (Czech Republic, Slovakia, Slovenia) spend relatively little on social protection but achieve low inequality because most of their people are employed in decent work. Others member states (e.g. Scandinavian countries, France, Germany) rely more on redistribution. For an exhaustive overview of possible policies see Atkinson 2015.

Reducing between-country inequality has been the goal of the EU's cohesion policies (as already described above). The above EU-average growth (beta convergence), which could be observed in many poorer member states (see Table 2), is a good start and a necessary condition for achieving cohesion. Policies should aim at accelerating that growth and extending it to all countries. Unfortunately, this might imply measures that are making it more difficult to reduce within-country inequality. More migration from poor to rich member states and relocation of production steps in the other direction could undermine welfare states and social cohesion in richer countries. They might also increase inequality in countries that are catching up. For instance, Ireland experienced a strong decline of

Figure 1
**The development of EU-wide inequality 2005–2018 (S80/S20 ratio)**




Source: Eurostat and calculations by the authorour own calculations.

the labor share of income during its spectacular catching-up growth as the »Celtic tiger«.

The EU could contribute to stronger growth, too. The EU' s and, above all, the Eurozone's economic policies have long been biased in favor of stability, low debt and competitiveness. They promoted internal devaluation and export orientation rather than domestic demand. That bias has been particularly prominent and harmful in Southern Europe after 2008 (see Table 2). In order to avoid future catastrophic declines, the Eurozone needs completing its institutional set-up (similar to the United States) to achieve a sustainable and effective monetary union (Schelkle 2017). While the ECB eventually (though much too late) adopted some appropriate policies after the Draghi speech of 2012, fiscal policies are still too restrictive and are not compensating for the lack of private investment relative to private savings in the Eurozone and the EU. Towards poorer member states that have not yet adopted the Euro, the EU should ease its conditions for joining the Euro regarding inflation and exchange rate stability, which, if interpreted narrowly, would prevent catching-up growth.

Reducing EU-wide inequality directly (rather than via lower national inequality and/or catch-up growth) is neither a widely accepted goal nor the subject of EU policies. Actually, while equality of opportunity is a recognized goal within nations aiming at equalizing the life chances of people from rich and poor backgrounds, this is not the case for people from different member states.[3] The EU regulates the rights of EU citizens living in different member states outside their home countries vis-à-vis the social security systems of their host countries. But there are few rules regulating income entitlements within the EU regardless of location and citizenship. The discussion of EU-wide minimum wage rules or social protection floors almost always defines the respective incomes in relation to the national average wage or income or GDP per capita. There are a few exceptions, which might set a precedent. For instance, daily allowances of MEPs are not related to their home countries' average wages or GDP per person. Agricultural subsidies (payments to farmers) are based on the amount of arable land used by the farmer and have no relation to the GDP/capita of their home countries.

More generally, the EU could and should nudge member states to adopt appropriate policies, via the open method of coordination, which, up to now, was rather used to promote supply-side policies. The EU could also contribute to lower competitive pressures on national tax systems. Different tax and banking regulations lure the savings of rich people and companies to low-tax locations and allow tax evasion through transfer pricing. The EU should prevent such policies within the EU and use its economic weight to fight it elsewhere.

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### NOTES

1 This analysis uses the latest available statistical data from Eurostat. The last year considered is 2018, when the UK was still a member state.

2 Dauderstädt 2008, Dauderstädt and Keltek 2011 plus eight annual up-dates (2012–2019) available at www.fes.de. The latest has been Dauderstädt 2019.

3 Milanovic (2019) has pointed this out regarding the global society. He refers to the pre-eminent thinker on social justice, John Rawls, who sees equal opportunity as the core principle of justice within a community (nation) but not so internationally.

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