

Inequality Trends in Europe

Theresa Neef
Alice Sodano

Abstract

This brief assesses broad trends in income inequality in Europe since 1980 based on the latest update made to the Distributional National Accounts series for Europe on the World Inequality Database. Average income levels in Eastern Europe continued to converge with those in Western Europe, owing to a core group of Eastern EU-member states catching up with regressing EU-member states in the Southern periphery. The necessary data to properly analyse distributional dynamics within countries during the Covid-19 pandemic are still scarce, so the continuation of the relative stability in income inequality since the Great Recession is up for question. Data production and availability in Europe still has much room to improve. Now more than ever, research based on high-quality and timely data is crucial to enable governments to adequately tackle the current and future economic challenges.

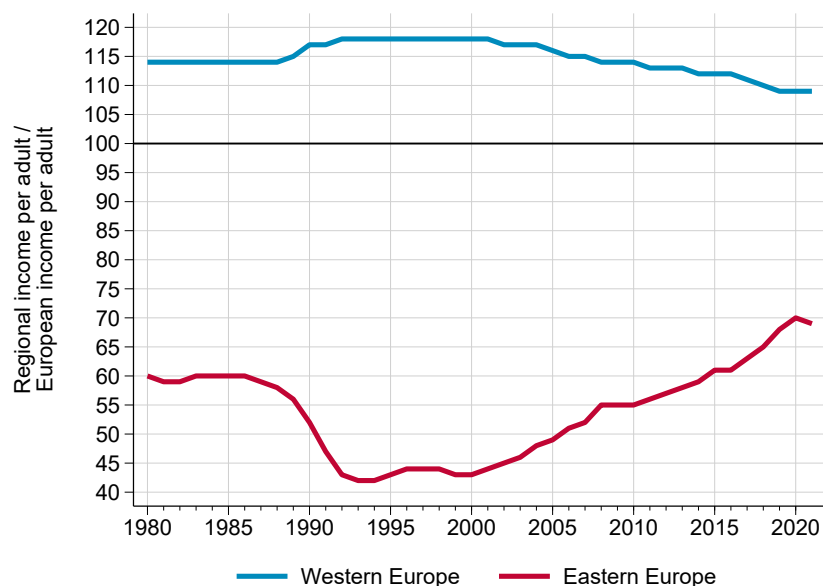
Media enquiries: press@wid.world.

The Macro Picture¹

Europe has gone through vast changes since 1980, including the disbandment of the former socialist states in the East and the solidification of the European Economic and Monetary Union across the continent. More recently, the Great Recession of 2008-2009 provided the greatest challenge to the European project until the Covid-19 pandemic of 2020-2021.

How has the relative convergence between Eastern and Western Europe evolved over this time period? In 2021, Eastern European residents earned 69% of the European average adult national income. This is a notable progression from the levels of the mid-1990s, but still only 10% higher than during the socialist era during the 1980s (see [Figure 1](#)).

Figure 1. Ratio of region-specific national income per adult relative to the European average



Note. Own elaboration based on Eurostat and wid.world data. Incomes are in Purchasing Power Parity (PPP).

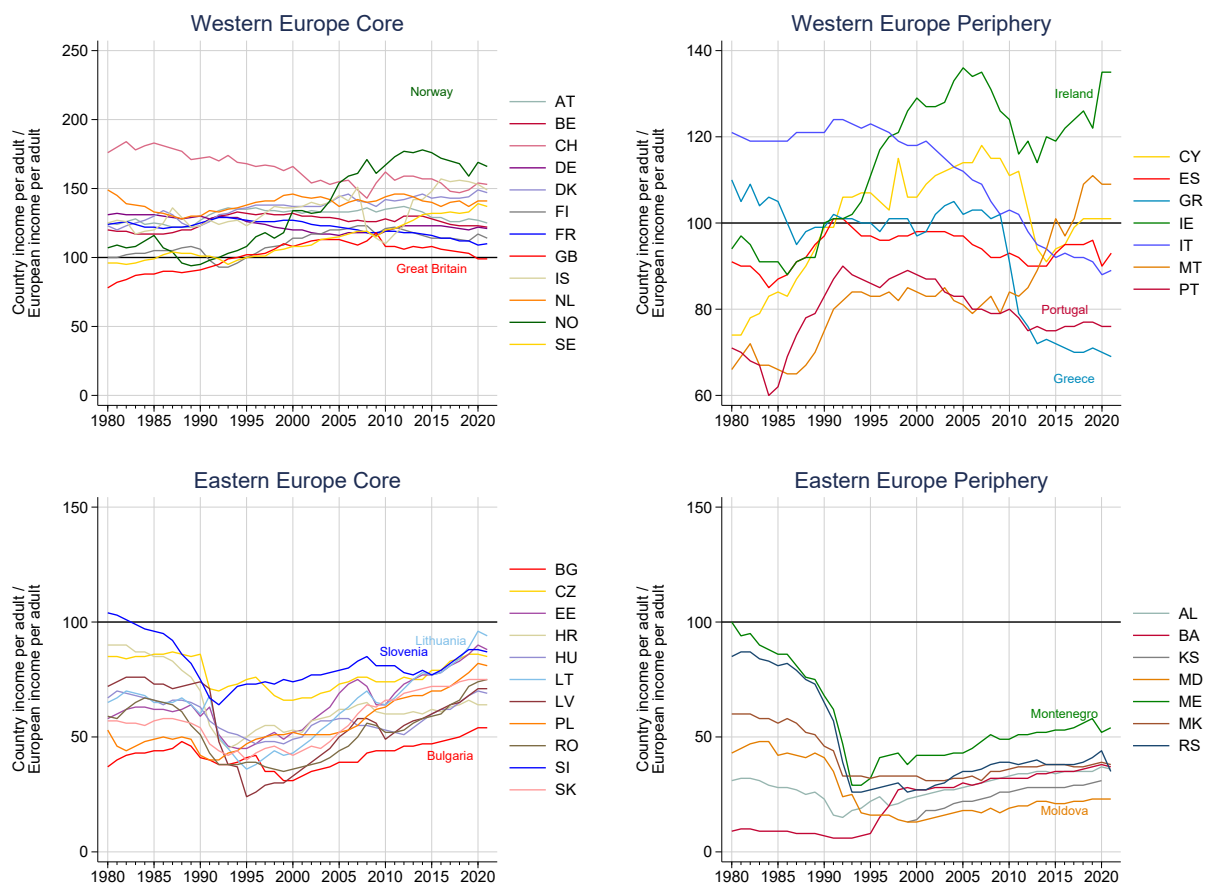
¹This issue brief draws on updates recently made to the Europe income inequality series on the World Inequality Database (<https://wid.world/>). A technical note on these updates is provided by Neef, Sodano, and Morgan (2022), which follows the methodology of Blanchet, Chancel, and Gethin (2022). For the purposes of our analysis we split Europe into Western Europe and Eastern Europe as follows.

Western Europe includes: Austria (AT), Belgium (BE), Cyprus (CY), Denmark (DK), Finland (FI), France (FR), Greece (GR), Germany (DE), Iceland (IS), Ireland (IE), Italy (IT), Luxembourg (LU), Malta (MT), Netherlands (NL), Norway (NO), Portugal (PT), Spain (ES), Sweden (SW), Switzerland (CH) and the United Kingdom (GB).

Eastern Europe includes: Albania (AL), Bosnia and Herzegovina (BA), Bulgaria (BG), Czech Republic (CZ), Estonia (EE), Croatia (HR), Hungary (HU), Kosovo (KS), Lithuania (LT), Latvia (LV), Moldova (MD), Montenegro (ME), North Macedonia (MK), Poland (PL), Romania (RO), Serbia (RS), Slovenia (SI), and Slovakia (SK).

Discrepancies are not only present between East and West. There are also large income disparities within these subregions. While Eastern European core countries (EU-member states) have an average adult national income of 77% of the European average in 2021, Eastern Europeans in the periphery (non-EU states) earn, on average, 34% of the European average (see [Figure 2](#)). This division is weaker among the richer Western European countries. Yet, notable differences between peripheral countries and core countries have advanced since the Great Recession of 2008-2009, such that the strongest convergence that can be observed is between Eastern EU-member states and Western EU-member states in the South.

Figure 2. Ratio of country-specific national income per adult relative to the European average



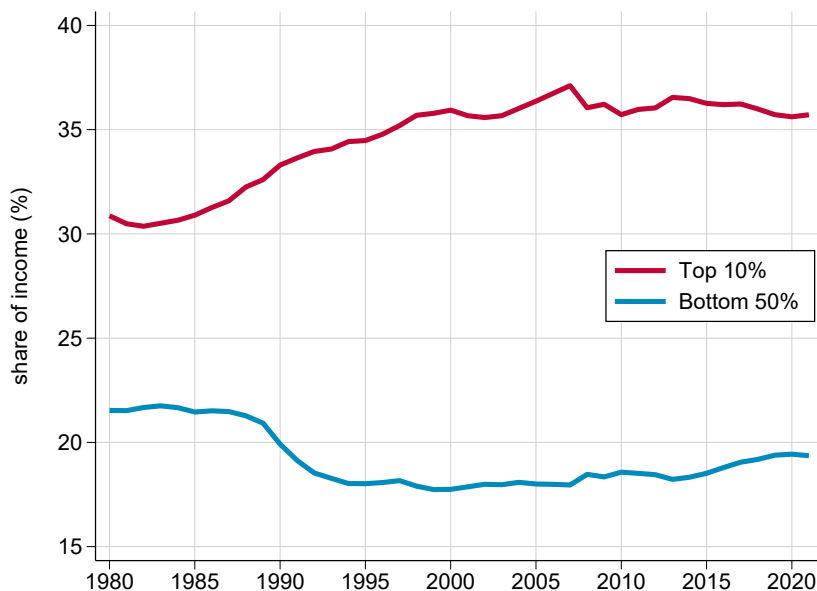
Note. Own elaboration based on Eurostat and wid.world data. Incomes are converted to PPP. Eastern Europe Core corresponds to EU member countries; Eastern Europe periphery corresponds to non-EU member countries.

Important income differences between Eastern Europe and Western Europe persist, but they are converging due to core Eastern EU-member states catching up and Western EU-member states in the periphery falling behind.

The Distributional Picture

How has income inequality evolved in Europe as a whole since 1980? After widening considerably over the 1990s, the disparity between the top and the bottom of the European distribution stabilised in the 2000s before slightly narrowing since the Great Recession. The top 10% income share has hovered close to 36% since the financial crisis, while the bottom 50% share has trended upward, but it has still to reach the levels of the 1980s, reaching 19% in 2021 (see [Figure 3](#)).

Figure 3. Top 10% and Bottom 50% income shares in Europe.

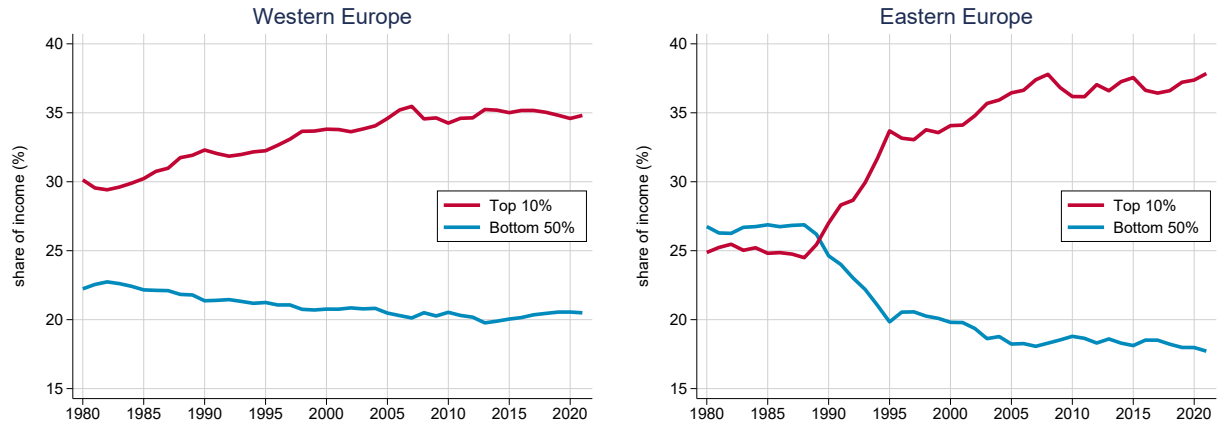


Note. Own elaboration based on survey data, national tax data and national accounts data. For detailed information on data sources see Neef, Sodano, and Morgan (2022) and Blanchet, Chancel, and Gethin (2022). Income is pre-tax national income, including social insurance (pensions, unemployment insurance, net of contributions).

The marked change between the 1980s and 1990s was mainly driven by dynamics in Eastern Europe after the dislocation of the Eastern Bloc. Up to 2021, there appears to be no clear sign of convergence between the top and bottom of the distribution, either within the East or the West (see [Figure 4](#)). From a distributional perspective, the Eastern Europe catch-up in national income in the last 10 years ([Figure 2](#)) can be seen in the higher average income growth for all percentiles in

the distribution compared to Western Europe since 2009 (Figure 5).

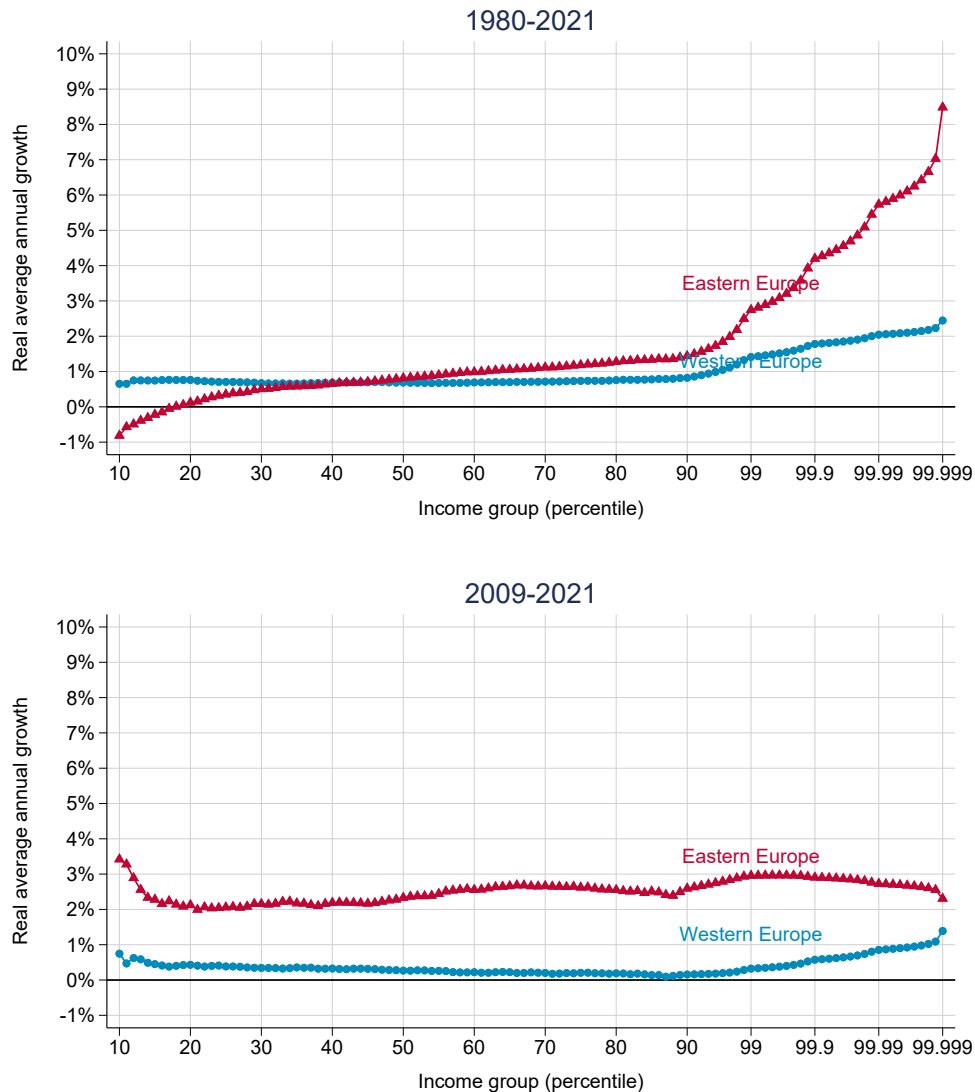
Figure 4. Top 10% and Bottom 50% income shares in Western and Eastern Europe.



Note. Own elaboration based on survey data, national tax data and national accounts data. For detailed information on data sources see Neef, Sodano, and Morgan (2022) and Blanchet, Chancel, and Gethin (2022). Income is pre-tax national income, including social insurance (pensions, unemployment insurance, net of contributions).

In Western Europe growth has disproportionately benefited the rich in the last 30 years. This pattern of pro-rich growth is much stronger for Eastern Europe in the past 30 years. However, in the last decade, growth has been more equitable. Due to the convergence in national income levels between countries and pro-rich income growth within countries, in 2021 income inequality in Europe is less determined by inequality between countries, compared to inequality within countries, (see Figure 6).

Figure 5. Growth incidence curves of pre-tax national income in Europe.

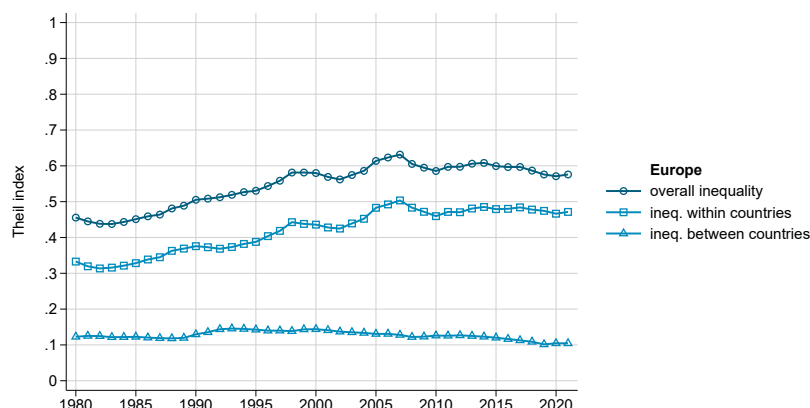


Note. Own elaboration based on survey data, national tax data and national accounts data. For detailed information on data sources see Neef, Sodano, and Morgan (2022) and Blanchet, Chancel, and Gethin (2022). Income is pre-tax national income, including social insurance (pensions, unemployment insurance, net of contributions).

After increasing for three decades, within-country inequalities seemed to be tapering off in most countries in the 2010s, as measured by the share of income received by the top 10%. However, they continue to be high across the board. Further, we see first (preliminary) evidence² that the

²Please note that our estimates cannot fully reflect the distributional impact of the pandemic yet. Macro data (national income and its decompositions) cover up to 2021, but micro data ends in 2019. Between 2019 and 2021 we keep the micro-level distribution of income (i.e. the survey + tax distribution) constant. Thus, all observed changes emerge from changing national accounts aggregates.

Figure 6. Theil index decomposition of pre-tax national income in Europe.

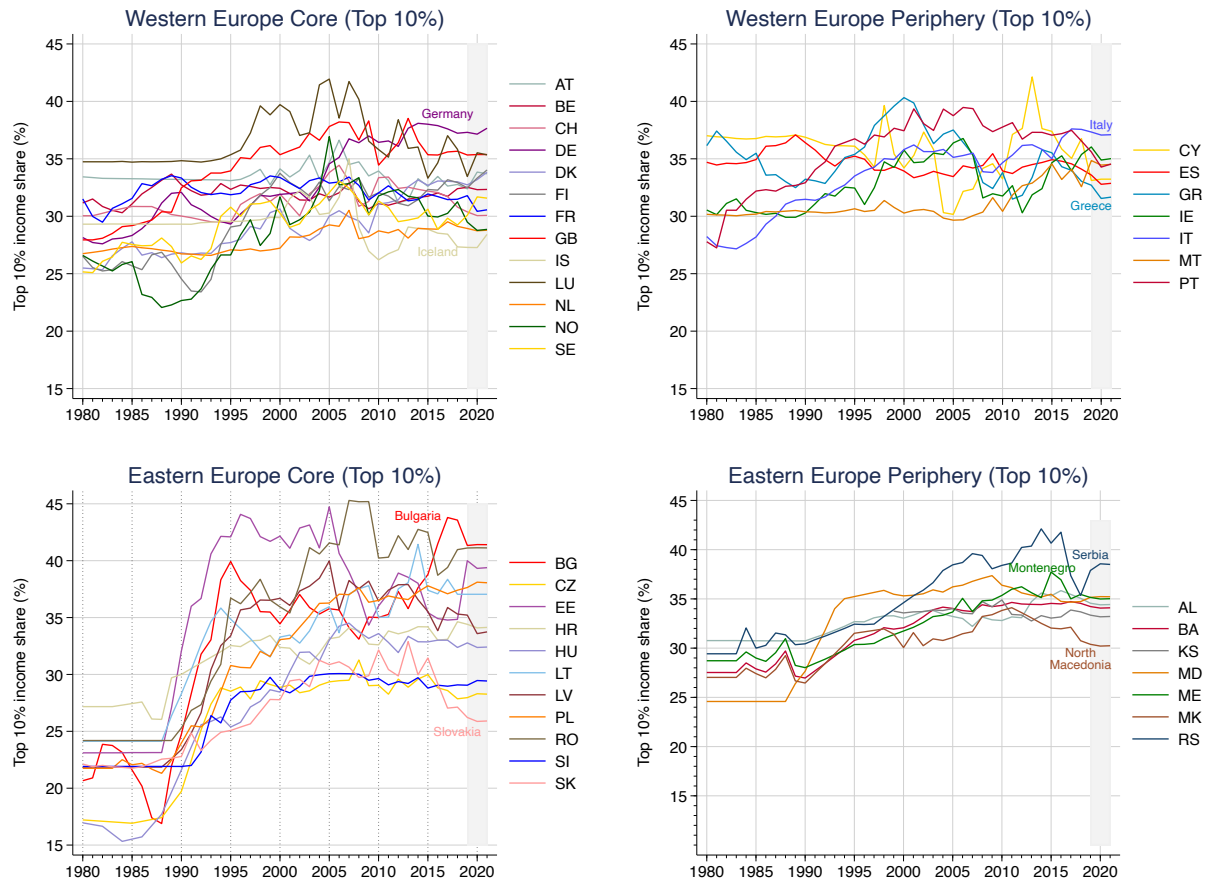


Note. Own elaboration based on survey data, national tax data and national accounts data. For detailed information on data sources see Neef, Sodano, and Morgan (2022) and Blanchet, Chancel, and Gethin (2022). Income is pre-tax national income, including social insurance (pensions, unemployment insurance, net of contributions).

Covid crisis might have increased income concentration in several countries (see [Figure 7](#)). Similarly, after falling sharply over three decades, bottom 50% income shares seem to have slowed their pace of decline in the 2010s with still not fully determined dynamics in the years affected by the Covid pandemic (see [Figure 8](#)). Heterogeneity in these shares is greater in Eastern Europe than in Western Europe.

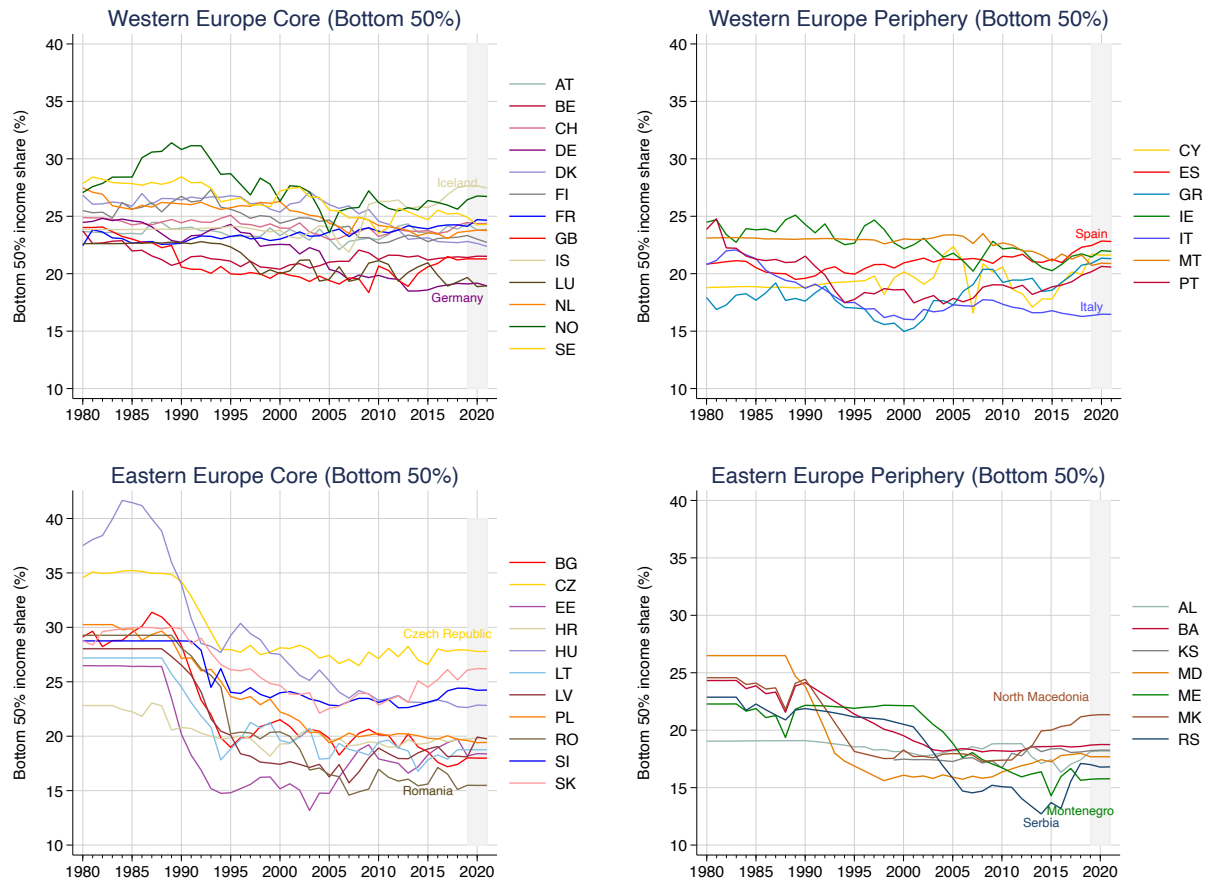
Income inequality in Europe has grown significantly since 1980, but less so since the Great Recession, with distinct trajectories across countries. Between-country inequality matters less in recent years than it has ever done since 1980. Gaps between rich and poor have widened in almost half of the countries in the last decade.

Figure 7. Top 10% income shares in European countries.



Note. Own elaboration based on survey data, national tax data and national accounts data. For detailed information on data sources see Neef, Sodano, and Morgan (2022) and Blanchet, Chancel, and Gethin (2022). Income is pre-tax national income, including social insurance (pensions, unemployment insurance, net of contributions). Income years 2020 and 2021 can only partially capture distributional changes due to the pandemic yet. Macro data (national income and its decompositions) cover up to 2021, but micro data ends in 2019. Between 2019 and 2021 we keep the micro-level distribution of income (i.e. the survey + tax distribution) constant. Thus, all observed changes emerge from changing national accounts aggregates.

Figure 8. Bottom 50% income shares in European countries.

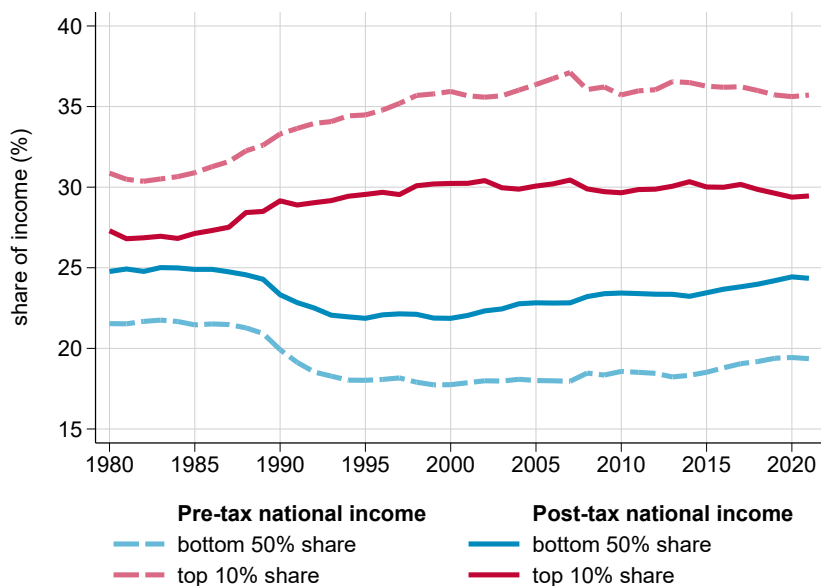


Note. Own elaboration based on survey data, national tax data and national accounts data. For detailed information on data sources see Neef, Sodano, and Morgan (2022) and Blanchet, Chancel, and Gethin (2022). Income is pre-tax national income, including social insurance (pensions, unemployment insurance, net of contributions). Income years 2020 and 2021 can only partially capture distributional changes due to the pandemic yet. Macro data (national income and its decompositions) cover up to 2021, but micro data ends in 2019. Between 2019 and 2021 we keep the micro-level distribution of income (i.e. the survey + tax distribution) constant. Thus, all observed changes emerge from changing national accounts aggregates.

Distribution vs Redistribution

In 2019, while the difference between the top 10% income share and the bottom 50% income share was around 15 percentage points in Europe as a whole, taxes, cash transfers and government in-kind expenditures reduced it to about 5 percentage points (see [Figure 9](#)). This gap has narrowed since the mid-1990s, but it is still far from the near parity observed during the 1980s. The lower inequality in the 1980s was mainly due to the low level of pre-tax inequality in the former socialist Eastern European states, but also lower inequality levels in Western European states.

Figure 9. Top 10% and Bottom 50% income shares of pre-tax and post-tax national income in Europe.



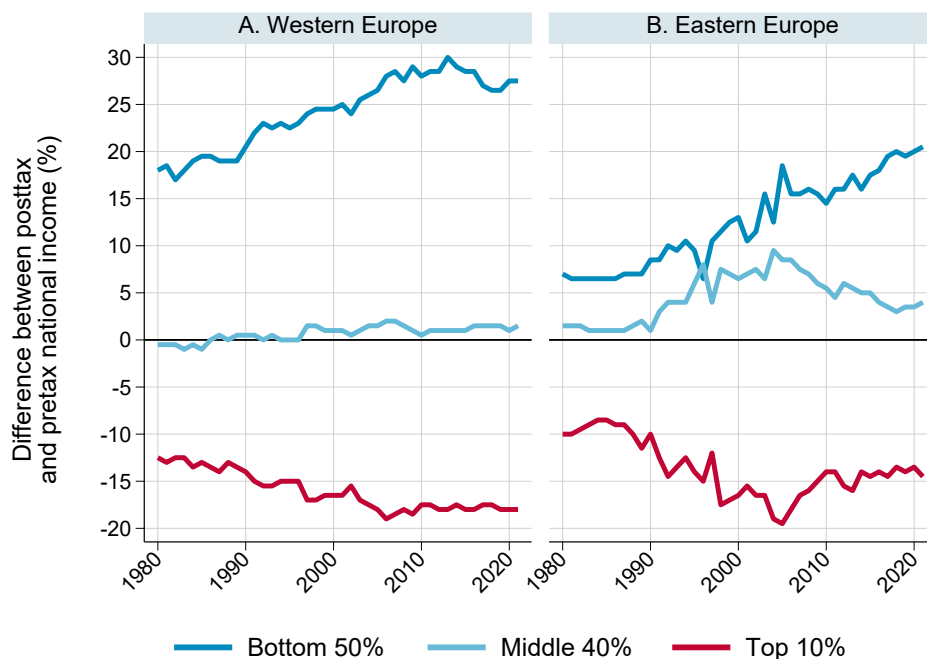
Note. Own elaboration based on survey data, national tax data and national accounts data. For detailed information on data sources see Neef, Sodano, and Morgan (2022) and Blanchet, Chancel, and Gethin (2022). Pre-tax national income is pre-tax market income including social insurance (pensions, unemployment insurance, net of contributions). Post-tax national income deducts taxes and adds social assistance benefits and government consumption expenditures in-kind.

How does East and West compare? By transferring more to the bottom half of the distribution and taxing more from the top decile, Western Europe contributes more to the reduction of income gaps observed in [Figure 9](#) for the continent as a whole (see [Figure 10](#)). This is despite the regressive tendency in Western countries over the last five years. In Eastern Europe, the bottom 90% gain from redistribution. However, the bottom 50% have gained less from redistribution than in the West, while the middle 40% have gained more. Between 2005 and 2010, these progressive tendencies reversed in favour of the top 10%. Since 2010, the gains made by the poorest half of the population

in Eastern Europe have been at the expense of the middle 40%, rather than the top decile.

While redistribution – measured by the difference in pretax and post-tax incomes (Figure 10)– has risen in both regions of Europe, this does not necessarily coincide with higher redistributive capacity. Dynamically rising pretax income inequality might be one reason for the apparent increase in redistribution in Eastern Europe during the 1990s. When pretax incomes of the bottom 50% are falling, the same amount of benefits seem more generous over time. Similarly, the more top incomes increase, the higher the share of national income flowing out of this group in taxes. This is a parallel result to what Blanchet, Chancel, and Gethin (2022) find when comparing higher inequality United States to lower inequality Western Europe.

Figure 10. Difference between post-tax and pre-tax national income in Eastern and Western Europe.

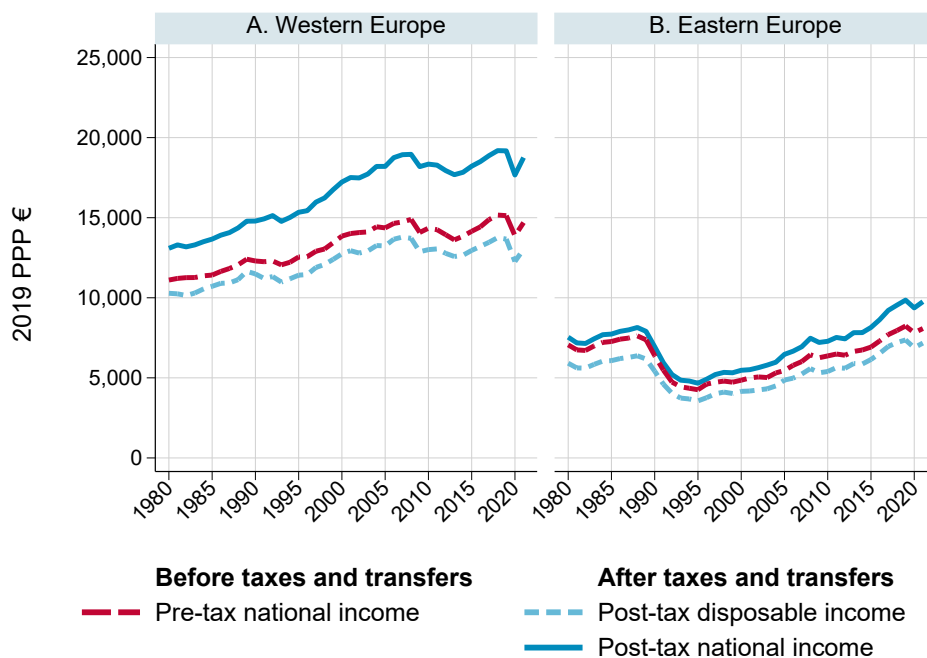


Note. Own elaboration based on survey data, national tax data and national accounts data. For detailed information on data sources see Neef, Sodano, and Morgan (2022) and Blanchet, Chancel, and Gethin (2022). Pre-tax national income is pre-tax market income including social insurance (pensions, unemployment insurance, net of contributions). Post-tax national income deducts taxes and adds social assistance benefits and government consumption expenditures in-kind.

If we focus on the bottom 50% in both subregions, the average income of this group in Western Europe has been greater in absolute terms and has grown more since 1980 (see Figure 11). However, while the combination of taxes and social welfare cash transfers (in post-tax disposable income) *decrease* the net income of the bottom 50%, in-kind government expenditures –especially related to healthcare (added on an equal per capita basis in post-tax national income)– more than make up for this loss. This reversal is stronger in Western Europe, given the higher levels of public health

expenditures devoted by governments.³ In 2019, an average person in the bottom 50% of the Western European distribution received almost double the post-tax national income of a person equally situated in the Eastern European distribution.

Figure 11. Evolution of bottom 50% average incomes in Eastern and Western Europe.



Note. Own elaboration based on survey data, national tax data and national accounts data. For detailed information on data sources see Neef, Sodano, and Morgan (2022) and Blanchet, Chancel, and Gethin (2022). Pre-tax national income is pre-tax market income including social insurance (pensions, unemployment insurance, net of contributions). Post-tax disposable income is after taxes and social assistance benefits. Post-tax national income adds all government consumption expenditures in-kind.

Western European countries redistribute more between the top 10% and the bottom 50% than Eastern European countries. But regressive tendencies have emerged in both subregions in the last 5-10 years.

Future Outlook

How does the future look? Two comments can be made, one regarding data quality and the other regarding distributional outcomes.

Europe is among the regions with the most abundant data on incomes and living standards in the world. Yet this data is still widely scattered across a variety of sources, with varying levels of quality.

³Social assistance cash transfers do increase the incomes of the bottom 50%, but their effect is outweighed by the negative impact of taxation. For more details on the income concepts treated here see Blanchet et al. (2021).

To reconcile these sources, all countries should progress to link the income respondents in surveys and administrative data, while maintaining confidentiality standards. This would improve the representativeness of income in surveys, making a significant difference to inequality measures, as found in Carranza, Morgan, and Nolan (2021). Data quality and transparency would be improved further if countries made their administrative data as comprehensive as possible, e.g. by including tax exempt personal incomes. If distributional information from dual tax systems on labour and capital incomes were unified into one single dataset, this would greatly help to improve the precision of inequality estimates going forward. More progress on integrating the latest framework of the system of national accounts and satellite health accounts in many Eastern European countries is also necessary, particularly to improve estimations of post-tax national income shares and thus evaluations of redistribution across countries. In this brief, we only present redistribution indicators at the aggregate level by subregion, and not a ranking of redistribution indicators across individual countries, due to the lack of high quality macro data on government social expenditures in-kind, particularly in Eastern European countries.

The Covid-19 pandemic highlighted another important aspect, the timeliness of data access. Micro survey and tax data are usually published at least two to three years after the observed income year, with higher time lags in many countries. However, to react appropriately to economic crisis, timely data is key. One important project in this regard is Blanchet, Saez, and Zucman (2022) who use high-frequency data to approximate inequality trends up to the current year.

Although the distributional series presented in this brief go up to 2021, they only partially account for the effects of the pandemic-induced economic crisis through the use of the latest macroeconomic data (GDP, national income and its decompositions). As noted in Neef, Sodano, and Morgan (2022), distributional information from annual household surveys or tax data is not yet available for 2020-2021. We reemphasise that these results are by no means able to reflect the full effects of the crisis on the distribution of income, nor on the role of government transfers in affecting this distribution during 2020-2021.

So while inequality has slowed down in recent years from the data we can assemble, revisions for 2020-2021 with new data will be needed to accurately attest the distributional repercussions of the Covid-19 pandemic. The evidence gathered to date from simulations, real-time surveys and digital banking transactions generally points towards a deterioration of inequalities within countries and between countries (Adams-Prassl et al., 2020; Almeida et al., 2020; Furceri et al., 2022), with few exceptions (see Clark, D'Ambrosio, and Lepinteur, 2022).

We are heading into an uncertain future with high inflation rates in European countries and global recession looming at the horizon. In this environment, governments have to take careful policy decisions based on timely and solid data.

References

- Adams-Prassl, Abi, Teodora Boneva, Marta Golin, and Christopher Rauh (2020). "Inequality in the impact of the coronavirus shock: Evidence from real time surveys". In: *Journal of Public Economics* 189, p. 104245. DOI: [10.1016/j.jpubeco.2020.104245](https://doi.org/10.1016/j.jpubeco.2020.104245).
- Almeida, Vanda, Salvador Barrios Cobos, Michael Christl, Silvia De Poli, Alberto Tumino, and Wouter Van Der Wielen (2020). "Households' income and the cushioning effect of fiscal policy measures during the Great Lockdown". In: *Joint Research Centre (JRC) Working Papers on Taxation and Structural Reforms* 127.
- Blanchet, Thomas, Lucas Chancel, Ignacio Flores, and Marc Morgan (2021). *Distributional National Accounts Guidelines. Methods and Concepts Used in the World Inequality Database*.
- Blanchet, Thomas, Lucas Chancel, and Amory Gethin (2022). "Why Is Europe More Equal Than the United States?" In: *American Economic Journal: Applied Economics* 14.4, pp. 480–518.
- Blanchet, Thomas, Emmanuel Saez, and Gabriel Zucman (2022). *Real-Time Inequality*. Tech. rep. DOI: [10.3386/w30229](https://doi.org/10.3386/w30229).
- Carranza, Rafael, Marc Morgan, and Brian Nolan (2021). "Top Income Adjustments and Inequality: An Investigation of the EU-SILC". In: *World Inequality Lab Working Paper* 2021/17.
- Clark, Andrew E., Conchita D'Ambrosio, and Anthony Lepinteur (2022). "Correction to: the Fall in Income Inequality during COVID-19 in Four European Countries". In: *The Journal of Economic Inequality* 20.2, pp. 503–507. DOI: [10.1007/s10888-021-09516-4](https://doi.org/10.1007/s10888-021-09516-4).
- Furceri, Davide, Prakash Loungani, Jonathan D. Ostry, and Pietro Pizzuto (2022). "Will COVID-19 Have Long-Lasting Effects on Inequality? Evidence from Past Pandemics". In: *The Journal of Economic Inequality*. DOI: [10.1007/s10888-022-09540-y](https://doi.org/10.1007/s10888-022-09540-y).
- Neef, Theresa, Alice Sodano, and Marc Morgan (2022). *Regional DINA Update for Europe*. Technical Note 2022/04. World Inequality Lab.

About the authors

Theresa Neef is a PhD candidate at Free University of Berlin, the Eastern Europe and Russia Coordinator at the World Inequality Lab and a researcher at the EU Tax Observatory (theresa.neef@psemail.eu).

Alice Sodano is a PhD student at the Paris School of Economics and the Western Europe Coordinator at the World Inequality Lab (alice.sodano@psemail.eu).

The authors gratefully acknowledge funding from the European Research Council (ERC Grant 856455) from the French National Research Agency (EUR Grant ANR-17-EURE-0001), as well as from the United Nations Development Program (Project 00093806).

The World Inequality Lab

The World Inequality Lab aims to promote research on global inequality dynamics. Its core mission is to maintain and expand the World Inequality Database. It also produces inequality reports and working papers addressing substantive and methodological issues. The Lab regroups about twenty research fellows, research assistants and project officers based at the Paris School of Economics. It is supervised by an executive committee composed of 5 co-directors. The World Inequality Lab works in close coordination with the large international network (over one hundred researchers covering nearly seventy countries) contributing to the database.

World Inequality Lab

48 bd Jourdan

75014 Paris

Contact: press@wid.world.

Website: <https://wid.world>.