

What's New About Income Inequality in Europe (1980-2019)?

Marc Morgan

Theresa Neef

Abstract

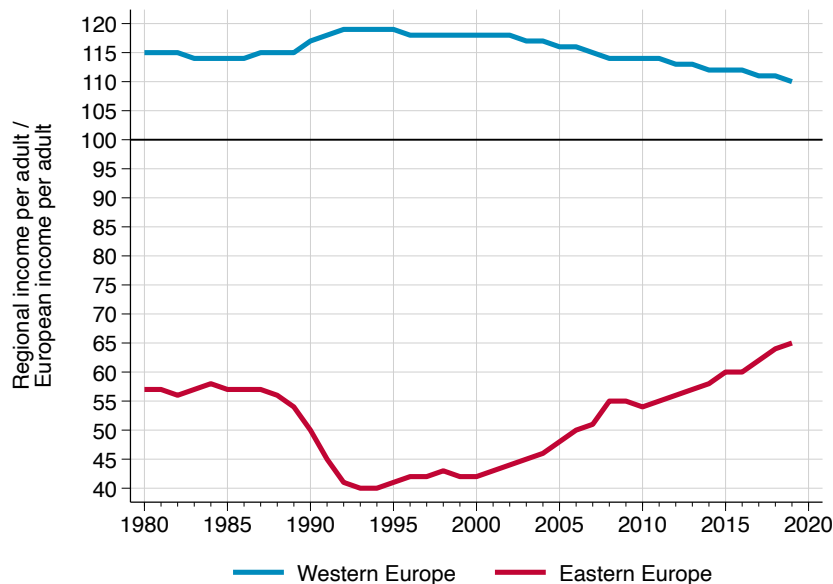
This brief looks at the evolution of income inequality in Europe from the perspective of the update to the Distributional National Accounts series for Europe (1980-2019) on the World Inequality Database. We highlight three main results. First, European countries were less unequal between themselves in 2019 than at any point since 1980, as measured by the average income differences between the richer West and the poorer East. This aggregate result conceals persistently large income differences across countries, but they are quickly converging due to core Eastern EU-member states catching up with regressing Western EU-member states in the Southern periphery. This convergence has become clearer since the Great Recession. Second, income inequality within countries has grown significantly since 1980, but less so since the Great Recession, with wide discrepancies between countries in levels and growth rates. Third, Western European countries continue to lead on redistributive outcomes due to greater redistribution between the top 10% and the bottom 50%. However, regressive tendencies have emerged in both East and West over the last 10 years. Administrative data production on income differences in Europe still has much room to improve, especially if we are to adequately account for the distributional changes of the years ahead.

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.

How has the relative convergence between Eastern and Western Europe evolved over this time period? In 2019, Eastern European residents earned 65% of the European average adult national income. This is a notable progression from the levels of the mid-1990s, but still only 8% higher than 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).

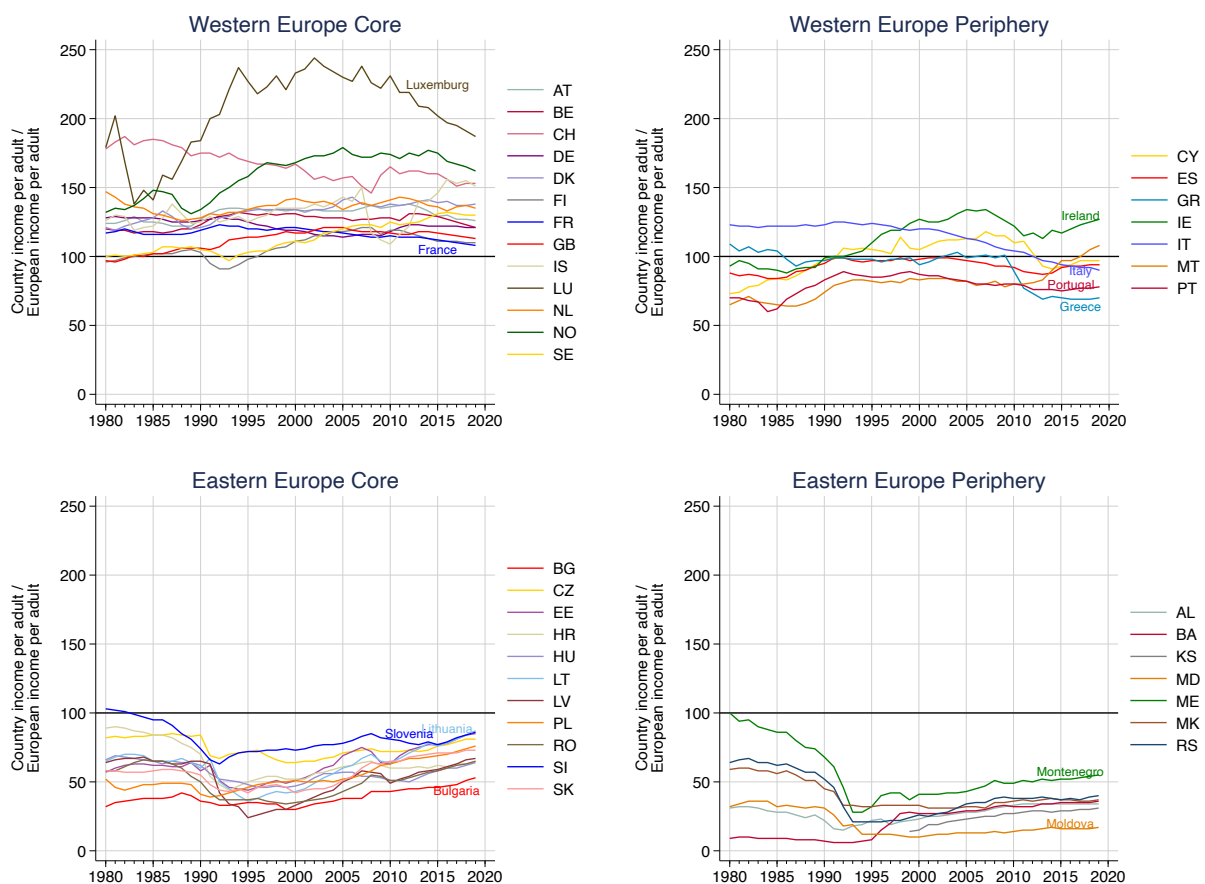
¹This issue brief draws on updates recently made to the Europe income inequality series on the World Inequality Database (<https://wid.world/>). A technical note on these updates is provided by Morgan and Neef (2020), which follows the methodology of Blanchet, Chancel, and Gethin (2020). For the purposes 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 71% of the European average, 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



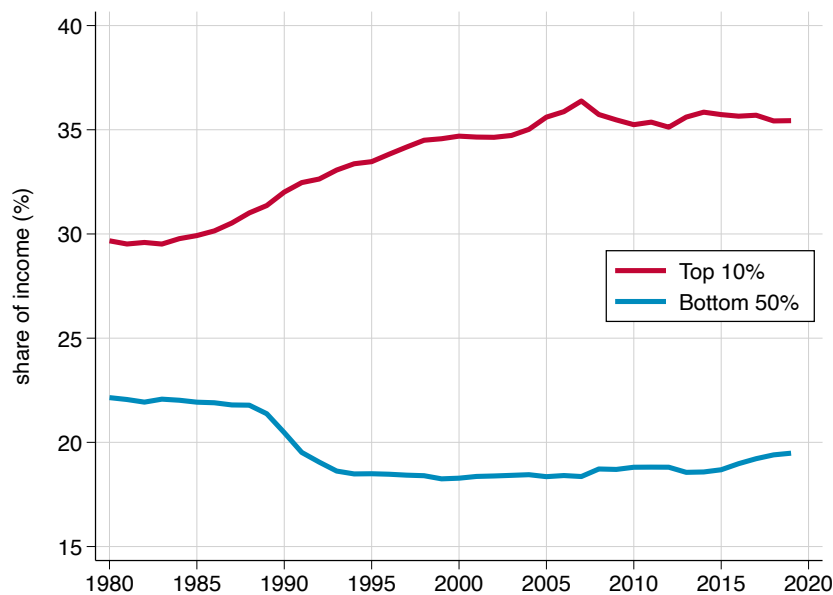
Note. Own elaboration based on Eurostat and wid.world data. Incomes are converted to PPP. Eastern Europe Core corresponds to EU member countries; Eastern Europe periphery corresponds to non-EU member countries.

Takeaway: important income differences between Eastern Europe and Western Europe persist, but they are quickly 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 35% since the crisis, while the bottom 50% share has trended upward, but it has still to reach the levels of the 1980s, barely reaching 19% in 2019 (see [Figure 3](#)).

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

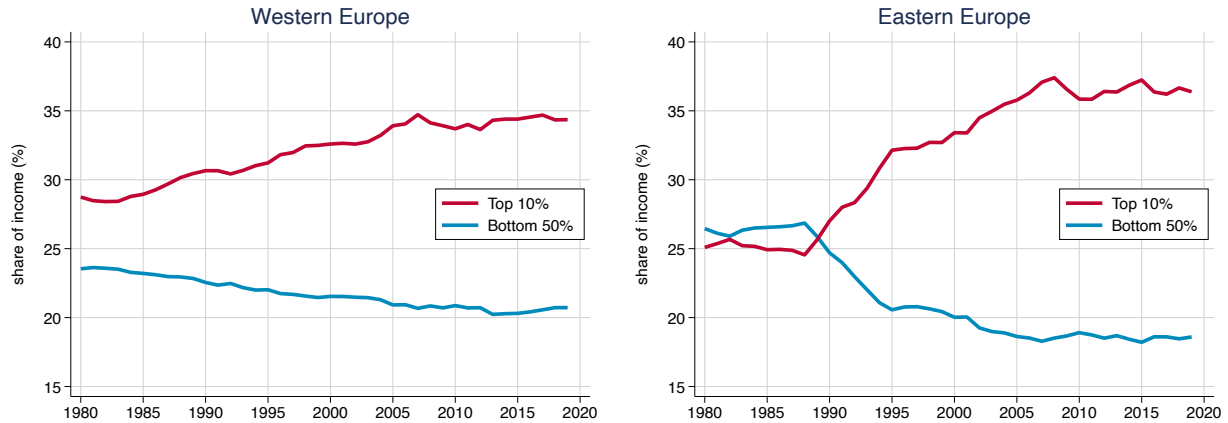


Note. Own elaboration based on survey data, national tax data and national accounts data. For detailed information on data sources see Morgan and Neef (2020) and Blanchet, Chancel, and Gethin (2020). Income is pre-tax national income, including social insurance (pensions, unemployment insurance, net 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 2019, 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).

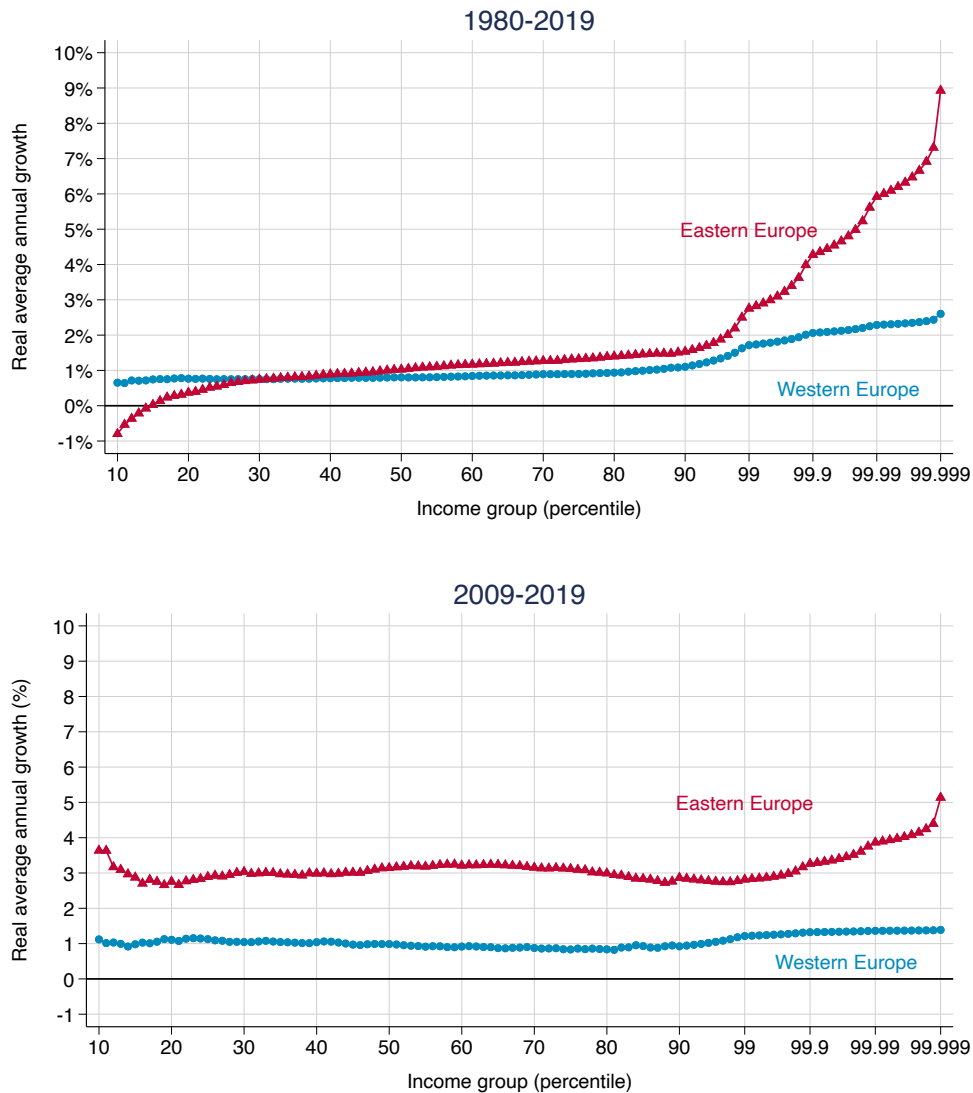
Figure 4. Top 10% and Bottom 50% income shares in Western and Eastern Europe.



Note. Own elaboration based on survey data, national tax data and national accounts data. For detailed information on data sources see Morgan and Neef (2020) and Blanchet, Chancel, and Gethin (2020). Income is pre-tax national income, including social insurance (pensions, unemployment insurance, net of contributions).

In both regions over the last decade, economic growth continues to disproportionately benefit the top of the distribution, but not as much as over the entire period since 1980. Consequently, in 2019 income inequality in Europe is less determined by inequality between countries, compared to inequality within countries, than at any other point over the last 40 years (see Figure 6).

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

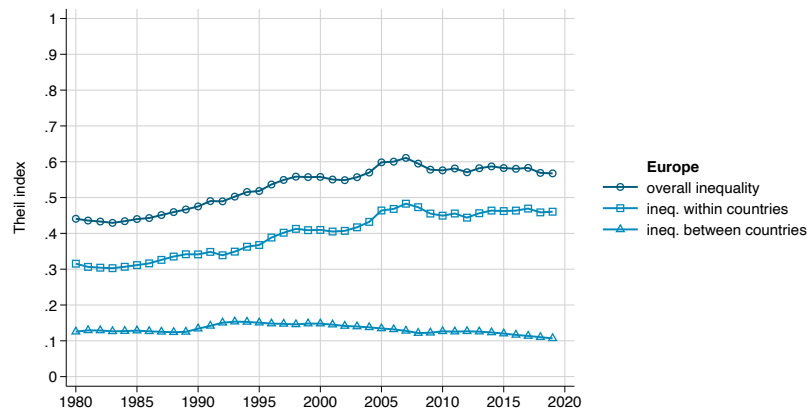


Note. Own elaboration based on survey data, national tax data and national accounts data. For detailed information on data sources see Morgan and Neef (2020) and Blanchet, Chancel, and Gethin (2020). Income is pre-tax national income, including social insurance (pensions, unemployment insurance, net of contributions).

After increasing for three decades, within-country inequalities seem to be tapering off in most countries, as measured by the share of income received by the top 10%, but they continue to be high across the board (see Figure 7). Similarly, after falling sharply over three decades, bottom 50% income shares seem to have slowed their pace of decline in the last five years (see Figure 8). Heterogeneity in these shares is greater in Eastern Europe than in Western Europe.

The ratio between the incomes of the richest 10% and the poorest 50% in 2017-2019 was largest in

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

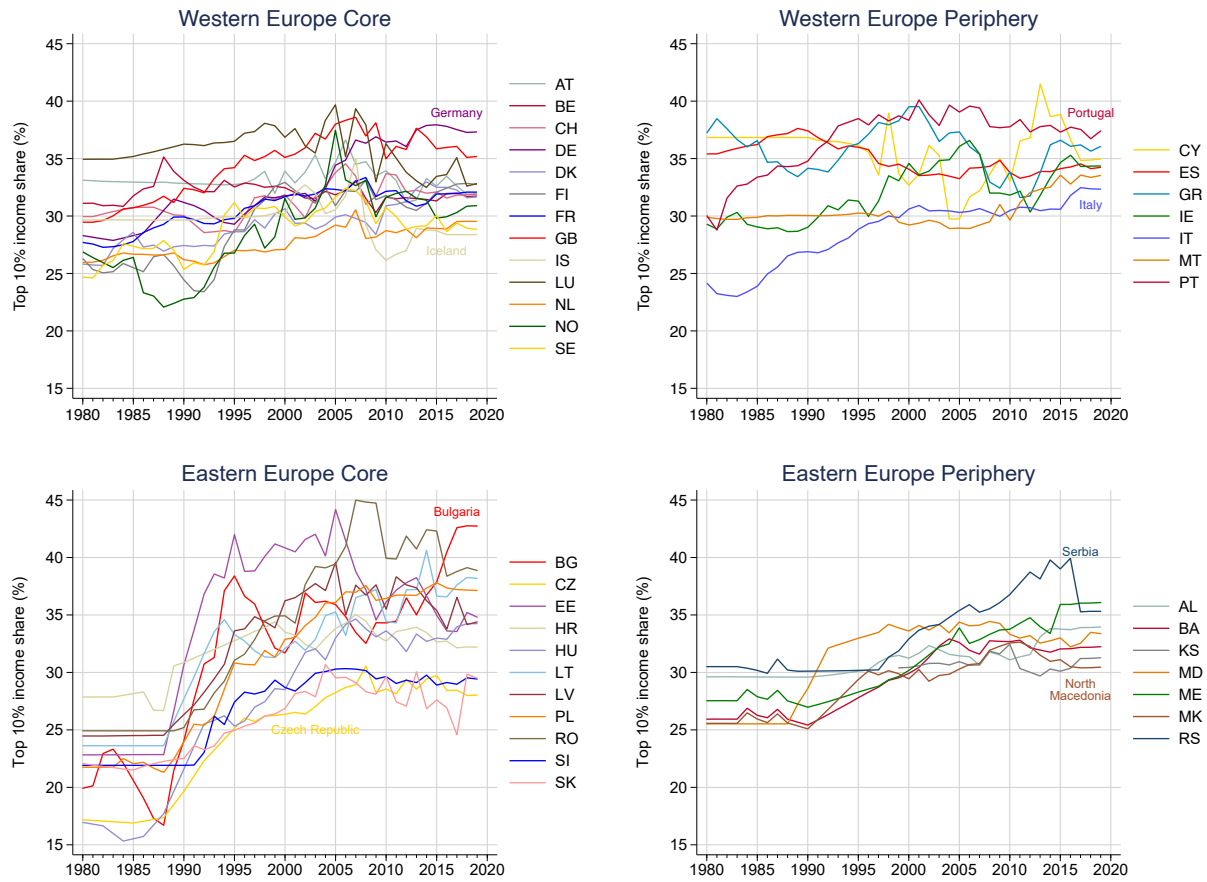


Note. Own elaboration based on survey data, national tax data and national accounts data. For detailed information on data sources see Morgan and Neef (2020) and Blanchet, Chancel, and Gethin (2020). Income is pre-tax national income, including social insurance (pensions, unemployment insurance, net of contributions).

Eastern Europe, where in five countries (Bulgaria, Romania, Montenegro, Serbia and Lithuania) the average income of the top decile was over ten times higher than that of the bottom 50% (see Figure 9). In Western Europe, Germany, Portugal and Greece were nearest to reaching this threshold. Differences were lowest among central and northern countries, both in the West (Scandinavia) and the East (Slovenia, Slovakia and the Czech Republic). Since the 2007-2009 crisis, the breach between the top and the bottom widened in 17 of the 38 European countries, and fell in 21 countries (see Figure 10).

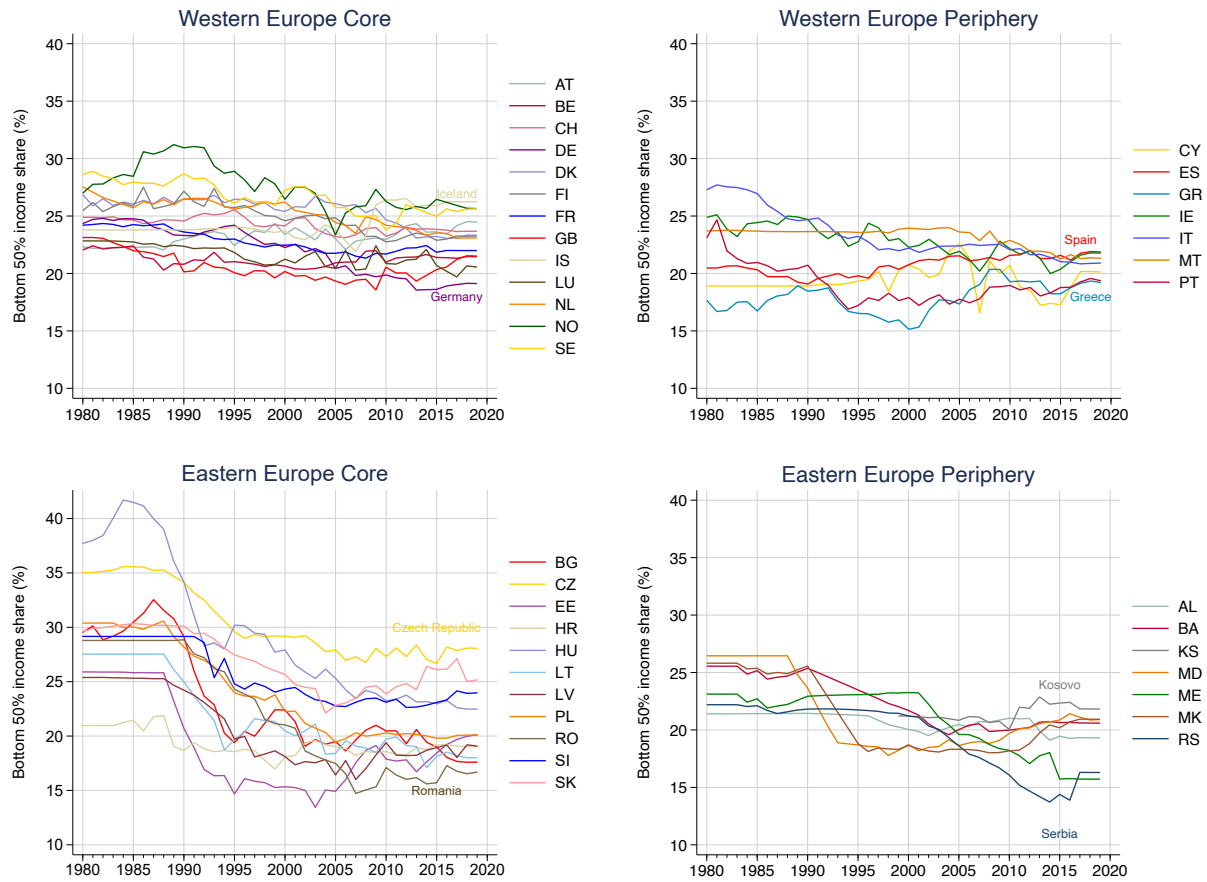
Takeaway: *income inequality in Europe has grown significantly since 1980, but less so since the Great Recession, with distinct trajectories across countries. Between-country inequality matters less in 2019 than it has ever done since 1980. Gaps between rich and poor have widened in almost half of the countries in the last decade.*

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



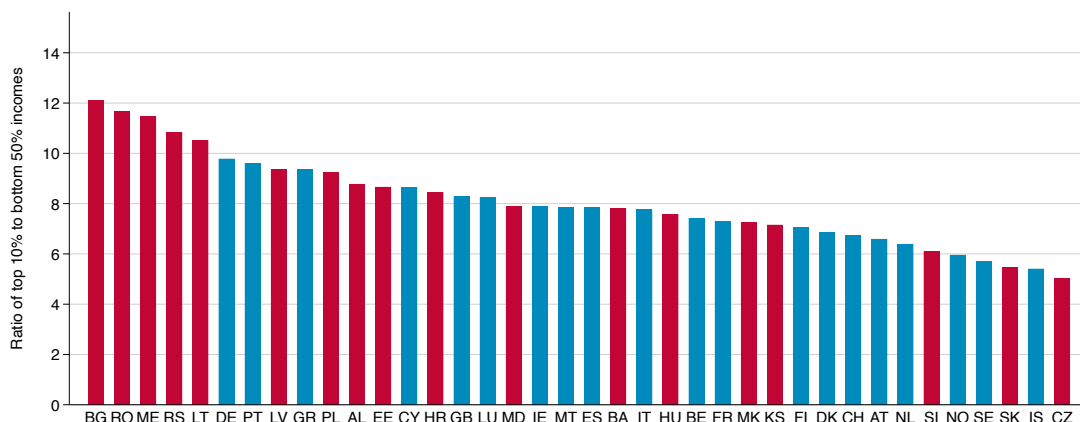
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Figure 8. Bottom 50% income shares in European countries.



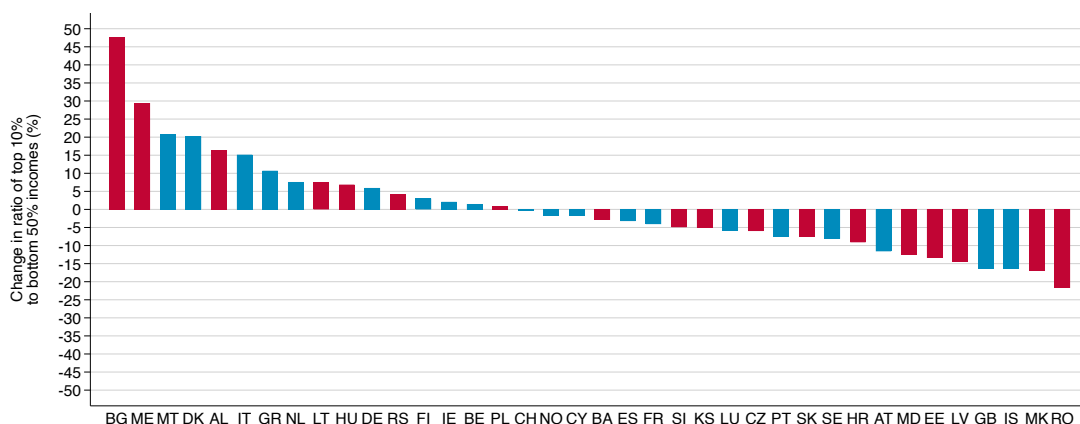
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Figure 9. Ratio of top 10% to bottom 50% income in European countries.



Note. Ratio of top 10% to bottom 50% pre-tax national income in Eastern European countries (red) and Western European countries (blue), 2017-2019 average. Own elaboration based on EU-SILC data, national tax data and Eurostat national accounts data. For detailed information on data sources see Morgan and Neef (2020) and Blanchet, Chancel, and Gethin (2020). Income is pre-tax national income, including social insurance (pensions, unemployment insurance, net of contributions).

Figure 10. Change in the ratio of top 10% to bottom 50% income in European countries.

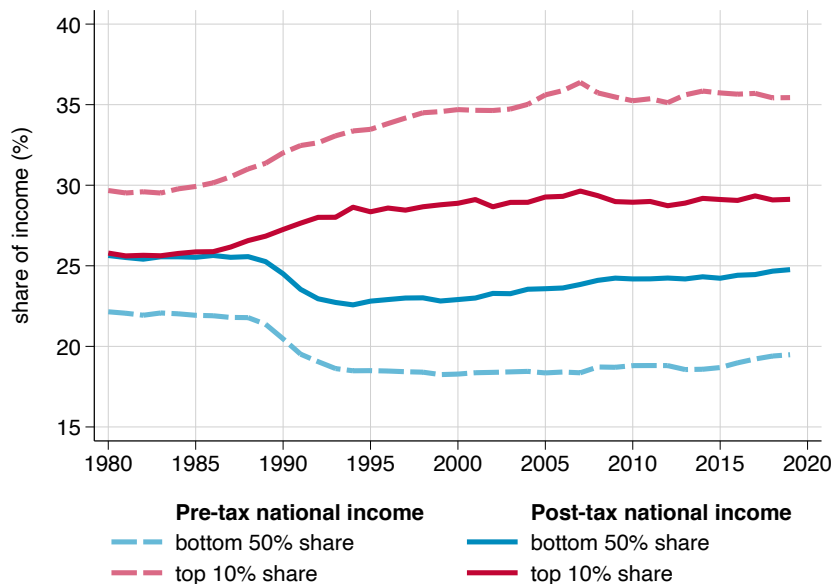


Note. Change in the ratio of top 10% to bottom 50% pretax national income in Eastern European countries (red) and Western European countries (blue) between 2007-2009 and 2017-2019. Own elaboration based on survey data, national tax data and national accounts data. For detailed information on data sources see Morgan and Neef (2020) and Blanchet, Chancel, and Gethin (2020). Income is pre-tax national income, including social insurance (pensions, unemployment insurance, net of contributions).

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 4 percentage points (see [Figure 11](#)). This gap has narrowed since the mid-1990s, but it is still far from the parity observed during the 1980s. This parity was mainly due to the low level of pre-tax inequality in the former socialist Eastern European states, and in Western European states.

Figure 11. Top 10% and Bottom 50% income shares of pre-tax and post-tax national income in Europe.



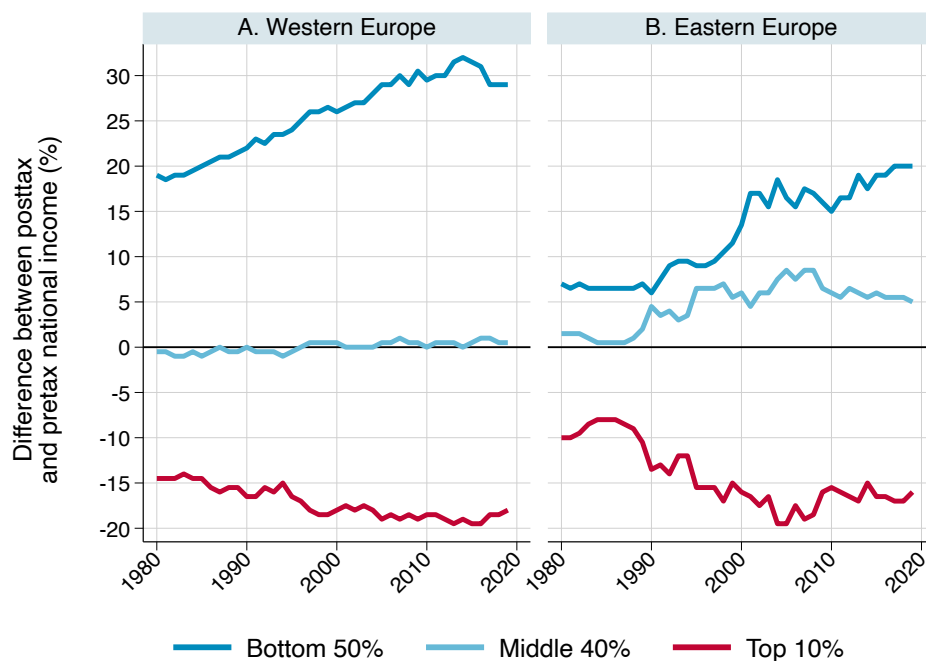
Note. Own elaboration based on survey data, national tax data and national accounts data. For detailed information on data sources see Morgan and Neef (2020) and Blanchet, Chancel, and Gethin (2020). Pre-tax national income is pre-tax market income including social insurance (pensions, unemployment insurance, 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 11](#) for the continent as a whole (see [Figure 12](#)). 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 12)– 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 (2020, p.33) find when comparing higher inequality USA to lower inequality Western Europe.

Figure 12. Difference between post-tax and pre-tax national income in Eastern and Western Europe.

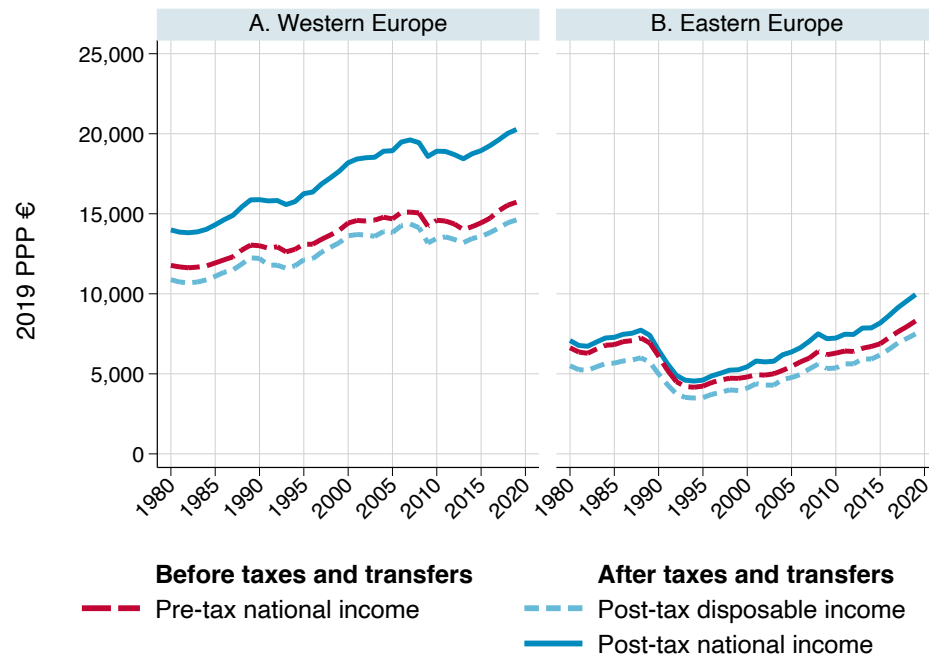


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If we focus on the bottom 50% in both subregions, the average income of this group in Western Europe has been greater in absolute terms and has grown more since 1980 (see Figure 13). However, while the combination of taxes and social welfare cash transfers (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.² In 2019, an average person in the bottom 50% of the Western European distribution received double the post-tax national income of a person equally situated in the Eastern European distribution.

Figure 13. 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 Morgan and Neef (2020) and Blanchet, Chancel, and Gethin (2020). 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.

Takeaway: *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

²Social 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 Alvaredo et al. (2020).

world. Yet this data is still widely scattered across a variety of sources, with varying levels of quality. To make the analysis of inequality more straightforward and instructive, as a first step all countries should link the income of survey respondents to that recorded in their tax declarations, while maintaining confidentiality standards. This would improve the representativeness of income in surveys. Over time, countries could follow the Swedish example of providing a sample of register data as their “new survey”. 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. Distributional information from dual tax systems on labour and capital incomes should be unified into one single dataset and be made public information for analytical purposes. 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 continued lack of macro data on government social expenditures in-kind, particularly in Eastern European countries.

While inequality has slowed down in recent years from the data we can assemble, the outlook for 2020 and beyond is bound to be affected by the economic repercussions of the Covid-19 pandemic. We will have to wait a few years to see what distributional outcomes can be drawn from the data. But the evidence to date points towards impacts that will exacerbate existing inequalities within countries and between countries (Adams-Prassl et al., 2020). The pre-existing structural economic divergences between countries were already putting pressure on European integration prior to the current crisis (Gräbner et al., 2020). Without adequate and enduring government fiscal interventions, accounting for both the magnitude of the macro shock and the distributional imbalances produced by the economic lockdown, the sluggish progress that has been made in the recent past could entirely evaporate and reverse in the immediate future, posing a greater threat to the “European project”.

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: *Forthcoming at the Journal of Public Economics*.
- Alvaredo, Facundo, Anthony B. Atkinson, Thomas Blanchet, Lucas Chancel, Luis Bauluz, Matthew Fisher-Post, Ignacio Flores, Bertrand Garbinti, Jonathan Goupille-Lebret, Martínez-Toledano Clara, Marc Morgan, Theresa Neef, Thomas Piketty, Anne-Sophie Robilliard, Emmanuel Saez, Li Yang,

and Gabriel Zucman (2020). “Distributional National Accounts Guidelines: Methods and Concepts Used in the World Inequality Database”. URL: <https://wid.world/document/distributional-national-accounts-guidelines-2020-concepts-and-methods-used-in-the-world-inequality-database/>.

Blanchet, Thomas, Lucas Chancel, and Amory Gethin (2020). “Why Is Europe More Equal Than the United States?” In: *WID.world Working Paper 2020/19*.

Gräbner, Claudius, Philipp Heimberger, Jakob Kapeller, and Bernhard Schütz (2020). “Is the Eurozone Disintegrating? Macroeconomic Divergence, Structural Polarisation, Trade and Fragility”. In: *Cambridge Journal of Economics* 44.3, pp. 647–69.

Morgan, Marc and Theresa Neef (2020). *2020 DINA Update for Europe*. Technical note 2020/04. World Inequality Lab.

About the authors

Marc Morgan is a senior research fellow at the World Inequality Lab in the Paris School of Economics and the coordinator for Western Europe (marc.morgan@psemail.eu).

Theresa Neef is a Phd candidate at Free University of Berlin and the Eastern Europe and Russia Coordinator at the World Inequality Lab (theresa.neef@psemail.eu).

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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>.