Has the European social model withstood the rise in inequalities?

Inequalities and redistribution in Europe, 1980–2017

Thomas Blanchet, Lucas Chancel, Amory Gethin

Summary

Europe is one of the continents which has been more successful than most in containing the rise in income inequality observed throughout the world since the beginning of the 1980s. Nevertheless, growth in Europe has also been unequal: between 1980 and 2017, the average income of the top 1% of the richest Europeans has grown twice as fast as that of the bottom 50%. This rise in inequality, visible in almost all the countries in Europe, has taken place in a context of growing fiscal competition between European states which has undermined the progressiveness of taxation.

To date, the European Union institutions have focused on the reduction of inequalities between Member States. However, the differences in average income only explain a small proportion of inequalities in Europe which are mainly the outcome of levels of inequality within countries. Consequently, European Union policies have difficulty in promoting more inclusive forms of growth. The rate of poverty in Europe which stands at 21% is the same today as it was in the mid-2000s.

While inequalities in Europe are significantly lower than in the United States, this is largely because the social and fiscal policies of the European States enable a more egalitarian distribution of income before taxation: in particular the educational and health systems are more egalitarian than in the United States. In future, if the European Union wishes to contain the rise in inequalities on the continent, it will have to create conditions for the long-term and equitable financing of the public services, in particular via more progressive taxation on individuals and firms at European level.

Study web page: WID.world/europe2019.
Media enquiries: olivia.ronsain@wid.world.
Introduction

While globalisation, technological change and the rise in inequalities are central to current political and economic developments, these differences in income in Europe and their evolution in the long-term are not easy to define clearly and precisely. The European Union institutions have recently pledged to monitor the evolution of inequalities within countries via the European Pillar of Social Rights, adopted in 2017, as well as by the observation of the Sustainable Development Goals adopted in 2015 under the aegis of the United Nations. However, at present the EU does not yet have the tools enabling the systematic measurement of the dynamics of incomes, coherently with official national income growth figures, and the comparison of national and regional trajectories.

For the first time, by means of the mobilisation of new data and harmonisation work combining national accounts (the sources used to calculate the growth of the gross domestic product) and household surveys (see Box p.10) it is now possible to systematically study the evolution of income inequality before and after tax within Europe since 1980, as well as between European countries. Discussions about the public debt, macroeconomic imbalances or growth can now be studied in the light of their effects on the distribution of incomes.

Who have been the winners and the losers in European growth over the past forty years? What is the role played by the catching up of the poorest countries in these developments? How do these dynamics compare with those observed in the United States?

In a new study “How Unequal is Europe? Evidence from Distributional National Accounts, 1980–2017”¹ we provide some possible answers to these questions. The associated database, published in free access on WID.world, also enables anyone to access information concerning the evolution of inequality in Europe, and to locate their position in the distribution of incomes in their country, in Europe and in the world.

Europe since 1980: a growth in income captured by the richest?

Convergence of average incomes: the findings are mixed

Inequalities in Europe result from the interaction of two factors: inequalities in average income between European countries and inequalities in income between individuals within the same country. As far as the macroeconomic convergence is concerned, which is the core of the economic integration policies promoted by the European Union, the growth trajectories in European countries since 1980 have a mixed track record. In 2017, in Bulgaria and Romania, the average national income per adult remained below €20,000 per annum, whereas it rose to well over €40,000 in the Northern Europe countries and reached €60,000 in Luxembourg. (Figure 1).

While the poorer countries in Eastern Europe witnessed a faster rise in the growth of their national incomes than those in the West since the beginning of the 2000s, this tendency has not yet succeeded in compensating for the recessions associated with the transition of the communist countries to capitalism at the beginning of the 1990s. In parallel, we witness a disconnection in the Southern European countries — Spain, Portugal, Greece and Italy — in comparison with the average income in Europe since the crisis. At the same time, the Scandinavian countries which were already prosperous at the beginning of the 1980s, have observed their per adult income grow significantly faster than the continental average.

A Europe of transfers: from the poorer countries to the richer ones?

Have the convergence policies pursued by the European Union enabled the poorer countries (particularly those in the East) to catch-up more quickly since 2000? A precise evaluation of these policies is beyond the scope of the present study but the data mobilised in our study take the dynamics of national income into consideration. This includes the net income flows coming from abroad

¹See WID.world/europe2019.
— contrary to the Gross Domestic Product (GDP) which ignores this type of transfer (see Box p.10).

Now, it appears that net transfers of income between countries in the EU are more favourable to the rich countries than to the poor ones; this is the case even when the net contributions of revenue from various States to the EU budget are taken into consideration.

In effect, the net income flows entering countries in the East as a result of the European budget (in particular, under the cohesion policies) are in the range of 1% to 2% of GDP, whereas the net outflows from these countries (mainly to the richer EU countries to pay the owners of capital invested in other European countries) are in the range of 2% to 5% of GDP per annum. While transfers from the West have had a positive impact on countries in the East, part of the gains in productivity have been collected in the form of profits by foreign investors. The real impact of these investments on salaries will therefore have to be studied.

We are therefore forced to admit that the tools of redistribution implemented within the European Union remain limited in relation to the volume and the direction of the net flows of income between rich and poor countries within the EU. As a comparison, West Germany had set aside up to 4% of the wealth produced each year to the catch up of the Länder in the East in the period following reunification.

Furthermore, while the European regional policy may have had moderate effects on growth in the poorest countries\(^2\), it in no way guarantees egalitarian growth capital would be even more unfavourable to the Eastern European countries.

Figure 2. Average share of national income captured by top 10% earners in Europe, 1980-2017

Source: authors’ computations on the basis of household surveys, fiscal data and national accounts. WID.world/europe2019. Interpretation: between 1980 and 2017, the share of total income captured by the top 10% in the Eastern European countries rose on average from 20% to over 30%. Country averages weighted by adult population.

within the beneficiary regions. Now, as we are going to see, it is the inequalities between individuals, and not between territories, which explain the greater share of differences in incomes and in rates of income growth between European citizens.

An overall rise in inequalities within countries since 1980

Let us begin by studying the evolution of income inequality within each European country. In the quasi-totality of countries for which data are available we observe a rise in the share of national income which accrued to the wealthiest 10% of citizens over recent decades. No European region has been spared by this rise in inequality which was most pronounced in the 1980s and 1990s (see Figure 2).

The increase in income gaps has been particularly strong in Eastern Europe where the privatisations associated with the transition from socialism to capitalism have benefited a small elite. This region was the least unequal in Europe in 1980. Today it has reached the level of inequality found in Western Europe and in the South. In the other hand, the rise in inequality has been much more moderate in Southern Europe which experienced a high level of inequality in this period, but one which was relatively more stable.

Inequalities also increased at the bottom of the income scale. Between 1980 and 2017, the quasi-totality of European countries failed to reach the aim of the Sustainable Development Goal 10.1 adopted by the United Nations in 2015 and therefore by all the European Union

\[4\]We should however note that the inequalities in Eastern Europe have increased rather less than in Russia where the rise has been extreme. See Novokmet, F., Piketty, T. et Zucman, G. (2018), “From Soviets to Oligarchs: Inequality and Property in Russia 1905-2017”; WID.world Working Paper 2017-09.
**Figure 3.** Distribution of European growth, 1980-2017: growth of average income by percentile

Source: authors’ computations on the basis of household surveys, fiscal data and national accounts. WID.world/europe2019. Interpretation: the average income of the top 0.001% of the richest Europeans rose by 200% between 1980 and 2017.

In almost all European countries we see a rise in the share of income captured by the top 10% since 1980.

In many countries, particularly in Southern and in Eastern Europe, relative poverty has spread to an increasing number of citizens. In extreme cases, like Greece, Italy or some of the countries in ex-Yugoslavia, the rise in inequality has been concomitant with low growth. In these instances, the rise in the incomes of the richest went hand in hand with a fall in the average income of the bottom 50% in real terms.

The effect of the 2008 economic crisis on inequality is ambiguous. In the countries in the South and East of Europe, the rise in unemployment and job insecurity has been associated with a rise in relative poverty, whereas in some of the countries in Western and Northern Europe, like Iceland or the United Kingdom, the impact has been greater on top incomes.5

Generally speaking, however, the crisis did not reverse the trend observed since 1980: in the majority of European countries, one tends to observe a stabilisation in income inequality since 2010 at a higher level than in 1980.

A rise in inequalities between European citizens

The rise in inequalities within countries, combined with the absence of a genuine convergence of incomes between countries in the course of recent decades has resulted in a rise in inequalities between European citizens since 1980. This rise is explained almost entirely by the evolution of inequalities within countries.

5In Iceland, this result was largely due to policies associated with exiting the crisis which called on holders of capital to contribute.
A simple calculation is convincing in this respect: by assuming perfect equality between individuals within the European countries and disparities in average incomes between countries equal to those observed in real life, one would obtain a practically constant level of inequality between European citizens since 1980. On the other hand, if we assume identical average incomes in all the European countries, this would only have a slight impact on the level of inequality between European citizens. Indeed, the share of total income captured by the 10% richest Europeans is today approximately 34% and this share would remain above 30% if the average incomes of European countries converged perfectly.

For the 80% at the bottom of the distribution of European earnings, the growth rate has been approximately 40% over thirty-seven years (see Figure 3). At the top end amongst the 0.001% of the richest Europeans, growth has been close to 200% — in other words, a rate five times higher than those at the bottom end. The richest 1% have seen their incomes increase twice as rapidly as the average and have captured a share of growth comparable to that captured by the 50% at the bottom end.

The poverty rate in Europe has not fallen since the crisis

While the more affluent citizens saw their incomes rising faster than the rest of the European population, poverty increased slightly between 1980 and the mid-2000s, then remained stable after the crisis (Figure 4). Between the end of the 1980s and the beginning of the 1990s, the share of the adult population living with less than 60% the European median income rose from 20% to 25% as a
Figure 5. Inequality and poverty in Europe, 2017

(a) Share of post-tax income captured by the top 10% (%)  
(b) Post-tax at-risk-of-poverty rate (%)

Source: authors’ computations on the basis of household surveys, fiscal data and national accounts. WID.world/europe2019. Interpretation: the share of pre-tax national income received by the top 10% is particularly high in Poland, in Germany and in Ireland. In contrast, the share of persons living below the poverty line (that is, less than 60% of the median income) is higher in Italy, Romania and in Serbia.

result of the combined effect of recessions and a rise in inequality in Eastern Europe.

After a decade of stagnation, the poverty rate fell once again in the early 2000s in a context of greater European integration and more inclusive growth. The crisis put an end to this brief respite in reduction of poverty in Europe: since 2008, between 21% and 22% of European citizens are living in poverty.

Poverty is slightly more sensitive to differences in average incomes between countries, but the fact remains that the convergence of average incomes would, once again, be grossly inadequate in eradicating poverty in the old continent. If all European countries converged in terms of income per adult, the present poverty rate would only fall from 21% to 17%. Moreover, given the progressive increase in poverty in numerous European countries, the equalisation of average incomes has become less and less effective in reducing poverty.

Redistribution: heterogeneous social systems

Poverty in the South and the East, affluence of top incomes in the West?

While income disparities have increased in a majority of European countries over the past forty years, the diversity of social models and economic structures play a fundamental role in explaining national differences in income inequality today. In particular, one may distinguish between inequalities at the top end of the distribution and poverty, two dimensions of inequality which are often associated but do not always completely overlap.

It is in the European countries with the lowest levels of development, in Southern Europe and in the Balkans that relative poverty is the most pronounced today (see Figure 5). In particular, these countries combine low levels of education and vocational training, a notable absence of workers’ protection, and a large informal economic sector. On the other side of the economic spectrum, it is in Northern Europe, Central Europe (the Czech Republic, Slovakia, Austria, Hungary) and in Western Europe
Figure 6. Pre-tax versus post-tax income inequality in Europe, 2017

SoUrce: authors’ computations on the basis of household surveys, fiscal data and national accounts. WID.world/europe2019. Interpretation: the system of taxation and social transfers reduces inequalities (the ratio between the average incomes of the most affluent 10% and those of the poorest 50%) in Eastern European countries by 15% on average.

(7)D.WORLD/EUROPE2019.

(France, Belgium, Luxembourg) that the lowest rates of poverty are found. These countries are usually characterised by relatively efficient redistributive policies, generous social transfer systems, along with enhanced social protection and wage regulation.

Regarding top income inequality, the regional groups are not as clear. In Poland, Germany, Ireland, the United Kingdom and in France, the share of pre-tax national income received by the most affluent 10% is higher, whereas this share is lower in the Scandinavian countries. Progressive taxation plays an important role here. In France, for example, the generosity of social transfers has enabled poverty to be maintained at a level which is one of the lowest in Europe. However, the extent of indirect taxes and the low rate of progressive taxation on income lead to a regressivity of taxation at the top end of the income distribution.6

Lower tax progressivity in the East

Pre-tax income inequality remains the main determinant of post-tax inequality, but the degree of progressiveness of tax systems does vary significantly across countries. The lowest income European citizens are over-represented in Eastern Europe, and this is particularly true where post-tax income is concerned. Indeed, redistribution is at its weakest in Eastern Europe: the gap in income between the most affluent 10% and the poorest 50% decreases on average by 15% when taxes and welfare benefits are taken into consideration. This same differential is 29% in Western Europe and 23% in Southern and Northern Europe. Thus the Western European countries end up on average with slightly lower levels of post-tax inequality than those in Eastern Europe despite a higher level of pre-tax inequality. One of the reasons for this is, specifically, the lower rate of progressiveness

in taxation in Eastern Europe, where several countries have adopted a flat tax rate (Estonia, Lithuania, Latvia, Slovakia, Romania) which does not enable a reduction of inequality at the top end of the income distribution.

Europe has been more successful than the United States in containing the rise in inequality

Stronger growth for low-income groups, lower growth at the top

While inequalities have increased in Europe, we should qualify these remarks as regards the evolution observed on the other side of the Atlantic. Since 1980, the average pre-tax income of the 50% lowest incomes in Europe has increased by 37% (Figure 7), whereas the average income of the bottom 50% in the United States stagnated in the same period. Conversely, at the top of the income distribution in the United States (among the top 0.01%), growth exceeded 300%, a figure twice as high as in Europe.

In comparison with the growth model of the United States, the European models have therefore been more successful in enabling a rise in the incomes of the working and middle classes despite lower average national income growth rates over the period under consideration. Today, despite higher disparities in income between countries in Europe than between States in the United States (these income gaps go from 1 to 3 in the first case and only 1 to 1.4 in the second),
Inequalities between individuals remain much lower in Europe (Figure 8). In the United States, the top 1% capture 20% of the pre-tax national income, whereas the bottom 50% only get 12.5%. In Europe, the reverse is true: the share of the bottom 50% amounts to 18% whereas the share of the upper percentile remains below 11%.

This divergence in trajectories deserves special attention for, to some extent, Europe has had to face the same technological revolutions as the United States, as well as similar changes in international trade, with, in particular, increased competition for unskilled jobs in the manufacturing sector. These two factors are regularly put forward to explain the rise of inequalities within developed countries. Yet, differences of this sort suggest that this explanation is far from adequate. The rise in inequality appears to be more the outcome of political choices and institutional arrangements (quality of the public system in matters of education and health, progressiveness of taxes, strength of trade unions, etc.) rather than the mechanical outcome of the liberalisation of flows of goods or the automation and digitalisation of their productive resources.

The gap between Europe and the United States is due to inequality in pre-tax incomes

The new findings obtained in the study allow a better understanding of the determinants of the differences between Europe and the United States. These differences are mainly due to a rise in pre-tax inequality which has been much more marked in the United States. In 1980, the average income of the top 10% was 8.5 times higher than that of the bottom 50% in the United States. This figure jumped to 20 in 2017. In Europe, on the other hand, the same indicator only rose from 8 to 10 over the same period.

Regarding post-tax inequality, the gap rose from 6 to 12 in the United States between 1980 and 2017 and from 7 to 8 in Europe. The national systems of taxation and social transfers have therefore not enabled the rise in inequalities to be contained either in the United States or in Europe, but the US tax system provides more opportunities for reducing the extreme levels of inequality in US society (with the exception of top incomes where taxation is more progressive in Europe).
Measuring income inequality in Europe

Pre-tax income and post-tax Income: What does this mean?

The study “How Unequal is Europe? Evidence from Distributional National Accounts, 1980-2017” co-authored by Thomas Blanchet, Lucas Chancel and Amory Gethin, analyses the dynamics of inequality before and after taxes and transfers in 38 European countries. The central concept of our analysis is national income. By this we mean the gross domestic product with the addition of the net incomes from abroad (when a Belgian citizen owns a company in France, the income from the capital of this company must be counted in Belgium) and from which is subtracted the amounts required to replace the productive apparatus (roads, machines, computers) which have become obsolete.

The pre-tax national income is defined as the total income received by an individual before the payment of direct taxes on the income and wealth of individuals, before the distribution of social welfare benefits, but after the operation of the social insurance system. It is therefore an income measured after the intervention of the systems of retirement pension and unemployment insurance, which represent the major share of monetary redistribution in Europe or in the United States. In most countries, the pre-tax income is therefore very close to the taxable income. However, it does include a number of incomes which are exempt from taxation, along with incomes which are part of growth as understood in national accounts without appearing directly on the bank accounts of individuals. In particular, this covers imputed rents, which correspond to the rent which owners of their accommodation implicitly pay themselves. It also includes the undistributed profits of corporations which constitute a source of indirect income for shareholders. These do not appear in either the household surveys or the tax declarations; nevertheless, this does constitute an income which accrues to the shareholders and which is taken into consideration in the calculation of economic growth.

Mobilising all the available data on income inequality in Europe

There are several sources of data available to measure income inequality in Europe. Household surveys traditionally used by the statistical offices — and in particular by Eurostat, the European office of Statistics — are valuable sources. However, they do not enable us to follow the top incomes in reliable fashion; these are regularly undervalued. The household surveys are also sometimes difficult to compare between countries and they do not take into account all the revenues generated in the economy.

Our study is made in line with the DINA (Distributional National Accounts), methodology in which all forms of government spending are allocated to individuals; this ensures that estimates of inequality are coherent with the figures for macroeconomic growth and are comparable between countries. To this end, the World Inequality Lab has first harmonised all the household income surveys available (in particular by using the data in the Luxembourg Income Study and the European Statistics on Income and Living Conditions, but also numerous other available sources). The study develops a new statistical approach to correct the household surveys data with the aid of fiscal data, with the aim to follow the evolution of top incomes in greater detail. We also use national accounts, which represent the standard tool in matters of comparison between countries. The combination of these different sources is based on a considerable amount of harmonisation work carried out in a totally transparent and systematic manner (all the computer codes are available online).
It is the combined operation of all the mechanisms ensuring a fairer distribution of pre-tax incomes which has enabled Europe to contain the rise of inequalities.

Social expenditures, which include public expenditures on education and health, retirement pensions and other social transfers remain markedly higher in Europe than in the United States; the amount is 25-28% of GDP from the South to the North in continental Europe as compared with 19% in the United States. Furthermore, access to health and education is usually more egalitarian in Europe than in the United States, in particular via the cost free or low cost of health care and vocational training in Europe, which contributes to a better distribution of pre-tax incomes.

Other important dynamics explaining higher income growth at the bottom of the scale in Europe. For example, the minimum wage went from 42% of average earnings to 24% between 1980 and today in the United States. In many European countries, the movement has been in the opposite direction, with the minimum wage being maintained at a high level (as in France, where it is approximately 50% of the average wage) or being introduced since 1980 (as was the case in the United Kingdom in the 1990s or, more recently, in Germany).

Regarding post-tax income inequality, Europe could do better.

Fiscal competition between member States has contributed to reducing the progressiveness of taxes in Europe over recent decades. Thus the top corporate tax rate has fallen from almost 50% at the beginning of the 1980s to 25% today. The top marginal income tax rate has also fallen in most European countries.

At the same time, VAT, which impacts disproportion-
ately on low incomes, has risen on average by more than three points since the beginning of the 1980s (Figure 9).

Evolutions of this sort limit the capacity of States to get the winners in European growth to contribute to financing the public services, with the result that they rely increasingly on the middle-income and low-income groups. The new database on which this article is based will enable in future to calculate accurately the loss of income for working and middle classes associated with the lack of fiscal harmonisation in Europe.

Conclusion

While Europe has been more successful than other regions in the world (in the first instance the United States) in containing the rise in inequalities since 1980, the disparities in pre-tax and post-tax income have nevertheless increased in a great majority of European countries.

This has led to a rise in income inequality between European citizens.

While European Union policies have to date been focused on the convergence of average levels of income between countries, or between European regions, the systematic study of income inequality in Europe shows that the level of inequality between European citizens is almost entirely determined by inequalities within countries.

Thus, if the European Union wishes to contain the rise in inequalities in the future, it will have to give more support to Member States in their policies reducing inequalities. This involves in particular the implementation of common fiscal policies in order to end the race to the lowest tax rates in which Member States have been engaged for the past three decades. The implementation of a common set of policies for the income tax, the wealth tax or the corporate tax would not only enable the level of fiscal progressiveness to be raised in Europe (on the whole these are lower than in the United States) but also to finance in a progressive manner the high levels of social expenditures in Europe, which play an essential role in the reduction of pre-tax inequalities.
Where are you in the income distribution?

The WID.world income comparator available online (https://wid.world/simulator) uses the data mobilised in our study and enables individuals to see where they rank on the income ladder within any European country, as well as within Europe or anywhere in the world.

For example, with a net monthly income of €2000 and no other source of income, an adult living alone is in the top 48% of earners in France. At European level this income corresponds to the 31% of richest adults in purchasing power parity terms, that is to say, taking into consideration differences between countries in costs of living. At world level, this individual belong to the top 15% in purchasing power parity terms. In France, one has to earn over €11,650 per month to be part of the top 1%, a threshold close to the €11,350 required to be part of the 1% of the wealthiest Europeans.

<table>
<thead>
<tr>
<th>Net monthly income per adult (€)</th>
<th>Position in the income distribution in France</th>
<th>Position in the income distribution in Europe</th>
<th>Position in the income distribution in the World</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>bottom 20%</td>
<td>bottom 33%</td>
<td>top 30%</td>
</tr>
<tr>
<td>2000</td>
<td>top 48%</td>
<td>top 31%</td>
<td>top 15%</td>
</tr>
<tr>
<td>3000</td>
<td>top 22%</td>
<td>top 14%</td>
<td>top 8%</td>
</tr>
<tr>
<td>5000</td>
<td>top 7%</td>
<td>top 6%</td>
<td>top 4%</td>
</tr>
<tr>
<td>10000</td>
<td>top 2%</td>
<td>top 2%</td>
<td>top 1%</td>
</tr>
</tbody>
</table>

Discover your position in the income distribution on http://wid.world/simulator.

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 (WIL) / Laboratoire sur les inégalités mondiales
48 bd Jourdan
75014 Paris

Website: http://wid.world.

Media enquiries: olivia.ronsain@wid.world — (+33) 7 63 91 81 68.