9

Mitigating the Inequality Crisis

Guillaume Allègre

The low growth performance in the European Union (EU) in the last decade has increased concerns regarding income inequality. Since the early 1980s, inequality has been on the rise in most countries and world regions. According to the World Wealth and Income Database, the top 10% pre-tax income share has grown in China from 27.2% in 1980 to 41.4% in 2016, in India from 31.5% to 55.5%, in Northern America from 34.2% to 46.7%, and in Europe from 32.6% to 37.1% (WID. world 2017). Inequality is therefore lower in Europe and has grown less rapidly than in other world regions. Most European countries have also seen a rise in inequality: in Germany, the top 10% pre-tax income share has grown from 31.9% in 1980 to 38.9% in 2011; in France from 31.3% to 35% (2014); in the United Kingdom from 36.9% (1990) to 40% (2014); in Poland from 21.8% (1983) to 39.5% (2015); and in Sweden from 22.8% to 30.6% (2013). The increase in inequality in each of these countries has different explanations. Obviously, Poland went from a planned/socialist economy to a market economy. Sweden, which

G. Allègre (✉)
OFCE, Sciences Po, Paris, France
e-mail: guillaume.allegre@sciencespo.fr

experienced one of the biggest increase in inequality amongst OECD countries, reformed its social-democratic model (through deregulation, privatization and tax cuts on capital and top marginal rates) after a deep economic crisis in the early 1990s; it is however still one of the most equal country in the world. In the United Kingdom, inequality increased greatly in the 1980s following Thatcher's social and economic policies (cut in income tax, deregulation, privatization, reduction of the power of trade unions). In Germany, the increase in inequality has been linked to Hartz reforms: earnings inequality increased following the creation of "mini jobs" in 2003 (Hartz II reforms); unemployment insurance is less generous since Hartz IV in 2005. France is one of the developed countries where the increase in inequality has been the lowest. The differences in the levels and trends in inequality amongst developed countries show that confronted with the same economic environment, different countries have taken different paths.

In the first section, we will discuss the social and economic cost of inequality. The second section concerns the factors explaining the rise of income inequality. In the third section, we show that there is large differences in inequality across EU countries and discuss the different factors explaining this heterogeneity. In the last section, we show that tax competition within the EU could reduce the progressivity of the tax system. In the conclusion, we discuss ways to maintain inequality low in the EU.

1   The Social and Economic Cost of Inequality

If economists rediscover the question of inequality today, it is because they had largely lost interest in it during the last half-century. With the long period of growth following the Second World War, material conditions quickly improved for all. Even with 2% per capita growth per year, 36 years is enough to double the average income of the population. In these conditions, it is not difficult to ensure that everyone has better material conditions than those of his parents, so that the question of inequality becomes less important. Today, most developed economies are

experiencing both relatively low growth and growing inequality. As a result, in many countries, middle-class income stagnates or falls. The trickle-down theory, according to which the enrichment of the better off is ultimately beneficial for the less well-off, becomes much less convincing. Conversely, as growth slows and inequality grows, arguments that inequality may even be harmful to growth tend to be more convincing.

For a long time, economists tended to believe in an equity-efficiency trade-off concerning inequality. This line of reasoning was developed by Okun in his 1975 book, *Equality and Efficiency: The Big Tradeoff*. The main argument concerned incentives: inequality increases incentives to work, to invest and to take risks, and thereby increases growth. There is however a growing literature that questions the impact of inequality on growth. There are different channels by which inequality can have a negative impact on growth. The political economy channel has been proposed by Meltzer and Richards (1981): according to the authors, with growing inequalities, voters (in a democratic context) will want more redistribution, and redistribution is supposed to decrease national income. However, empirical analysis tends to reject this channel (Perotti 1996). According to a second channel, inequality produces political instability that threatens property rights (Alesina and Perotti 1996). This threat reduces investment and growth. Also, unequal societies have more difficulties in implementing pro-growth reforms (Rodrick 1999). According to Putnam (2000), inequality reduces social cohesion and therefore reduces the financing of public goods. Anderson et al. (2008) show that it is not inequality per se that reduces the financing of public goods but perceived injustice. Another theoretical channel linking inequality and growth is underinvestment related to imperfections in the capital market. In the presence of imperfect capital markets, the poor invest less when inequalities increase, especially in their education and entrepreneurship but also in their health and that of their children (Galor and Zeira 1993). The fact that the poorest households cannot make profitable investments reduce growth and makes it even more inegalitarian. A last channel goes through savings and investment. Traditionally, it was thought that the better off saved more of their income, therefore higher inequality meant higher savings and higher investment (Kaldor 1957). However, in case of a savings glut, higher inequality could have a nega-

tive effect on growth. According to Summers (2014), the increase in inequality increases the risk of secular stagnation. Secular stagnation is defined by the fact that monetary policy is not able to attain the full-employment equilibria: the natural interest rate, at which the desire for savings and the desire for investment are equal at a level with full capacity of the factors of production (full employment, full use of equipment), is negative. Under these conditions, the real interest rate is higher than the natural rate and the consumption is too low to allow the full use of the factors of production. Growth is therefore weaker than its potential. In case of secular stagnation, there is excess savings and a decrease in inequality, if it results in a reduction of savings, then it has a positive impact on growth. Weak aggregate demand resulting from inequality has also been linked to the credit bubble and the financial crisis of 2008. In the United States, the reduction of income of the poorest households due to increasing inequality was offset by unsustainable private borrowing (Stiglitz 2012; Saraceno 2014).

Apart from its impact on growth, recent studies have found other adverse effects of inequality. Corak (2013) shows that countries with more inequality also experience less earnings mobility across generations. The curve showing the relationship between income inequality and intergenerational earnings elasticity in developed countries has been called *The Great Gatsby Curve*. It shows that mobility across generations is highest in Nordic countries (Finland, Norway, Denmark and to a lesser extent Sweden) where income inequality is low and lowest in Anglo-Saxon countries (United Kingdom, United States) where income inequality is relatively high. Fajnzylber et al. (2002) show that crime rates and inequality are positively correlated within and between countries and that the correlation reflects causation from inequality to crime rates, even after controlling for other crime determinants. In *The Price of Inequality,* Stiglitz (2012) devotes a chapter on how inequality harms the democratic process. There is of course an American bias: the impact of inequality surely depends on how political parties and elections are financed (publicly or privately). However, some of the conclusions might hold for Europe: Schäfer (2013) shows that in Europe, people are less satisfied with the way democracy works in countries with greater income inequality and that citizens in these countries trust politicians and parliaments less.

2   Why Did Income Inequality Rise in Developed Countries?

As we have seen in the introduction, rising inequality can be due to different factors depending on the country. However, it is not a coincidence if inequality rose in most developed countries: countries might have reacted differently policy wise—and hence inequality did not rise at the same rate in different countries—but they were confronted to the same forces. Two forces have been highlighted: technological change and globalization.

The impact of technological change is the more consensual: economic theory and empirical studies in the mid-decade of the 2000s have shown that technological change is skilled-biased (it favours skilled over unskilled labour) and thus increases inequality (everything else being equal). However, everything else is not equal: Goldin and Katz (2008) have shown that there is a race between education and technology: Education can raise the skill level of the workforce and therefore the supply of skilled labour. If the supply of skilled labour increases as fast as the demand, the skill premium does not increase. In the United States, until the 1980s, the supply of college graduates rose rapidly, but this rise stopped in the 1980s. Whereas the United States had an educational leadership over other developed economies (including Western European countries) until the 1980s, it has lost this leadership since then: the number of college graduates rose more rapidly in the rest of the developed countries, which might explain why inequalities rose more rapidly in the United States than in Western Europe. More recent empirical studies have shown that skilled-biased technological change has been replaced by routine-biased technological change: the tasks replaced by automation are the routine tasks that are currently performed by medium skill workers. This has led to wage and employment polarization: the share of intermediate jobs is declining sharply in favour of an increase in both low-skilled and high-skilled jobs. This polarization concerns European countries as well as the United States. The policy implications of polarization are not as straightforward as for skilled-biased technological change (for which the obvious implication was to increase the skill of the workforce): should we qualify the low-skilled if medium-skilled jobs are getting scarcer?

Does globalization increase wage inequality in developed countries? Theoretically, developed countries are supposed to specialize in skill-intensive goods and services and import goods and services produced by low-skilled workers, which should increase wage inequality. For a long time, economists have minimized the impact of trade on wage inequality in developed countries. In the 1990s, the consensus was that the impact of trade was modest. This is the conclusion of a 1995 Krugman article. The reason was that trade was mostly intra-trade where similar countries export and import similar products: in 1992, 64% of British imports and exports were with other European nations. In the United States, the effect of trade with developing countries on skilled-unskilled wage ratio was estimated at 3 percentage points. However, in 2007, Krugman reconsidered his position on the impact of trade. The US imports of manufactures from developing countries surpassed imports from developed countries, consequently, the average hourly wage of US trading partners dropped from 81% of US average in 1990 to 65% in 2005. The entry of China in the World Trade Organization had a big impact on the composition of trade. A more recent paper by Autor et al. (2013) analyses the effect of rising Chinese import on US labour market. It concludes that Chinese import competition alone explains 33% of the US manufacturing employment reduced US manufacturing employment by 548,000 workers between 1990 and 2000 and 982,000 workers between 2000 and 2007. It therefore explains 16% of the US manufacturing employment decline between 1990 and 2000 and 26% of the decline between 2000 and 2007. A similar study has been conducted in France. The estimation is that 13% of manufacturing employment decline in France from 2001 to 2007 is due to Chinese imports (Malgouyres 2018): over this period, 90,000 manufacturing jobs and 190,000 jobs in total have been destroyed by Chinese import competition.

Other factors have been put forward to explain the rise of inequality in advanced economies, notably the decline of trade union membership and the weakening of employment protection. The OECD (2011) calculated the contribution of globalization, technological advancement and changes in polices and institutions (trade union density, employment protection, tax wedge and unemployment benefits) to the overall

rise in inequality between the early 1980s and the late 2000s. During this period, the D9/D1 ratio of wage dispersion grew on average by 0.47% annually. According to OECD estimations, technology's contribution was 0.32%, institutions 0.42, education 0.50 (according to this study, education has therefore won the race against technology) and the impact of trade globalization was not significant (like the IMF, the OECD still minimizes the role of globalization). However, such decomposition has many limits, notably it does not take into account the fact that the different factors are interrelated. Globalization and technology have negatively impacted the employment in the manufacturing sector which explains partly why trade union membership has declined. Likewise, institutions might have reacted to the trade and technology environment.

3   Unequal Inequalities in the EU

3.1   Within-Country Inequality in the EU

Figure 9.1 shows within-countries inequality as measured by the Gini of equivalent disposable income (after-transfers) and the Gini of equivalent before social transfers income (mostly household wage and pensions). Social transfers include unemployment benefits, family allowances, housing allowances and social exclusion benefits. An equivalence scale is used to take into account economies of scale in the household and lesser needs of children.[1]

The figure shows that three Central European countries (Slovakia, Slovenia and Czech Republic) have very low income inequality. What is striking is that other former communist countries have very high income inequality, notably Bulgaria and Romania. The difference does not come from transfers but from before transfers income: in Slovakia and the Czech Republic, wage inequality has been kept relatively low (although obviously higher than during communism), while wage inequality is high in Bulgaria and Romania. The divergence in wage inequality of Eastern European countries is not well explained by the literature. In a cross-country
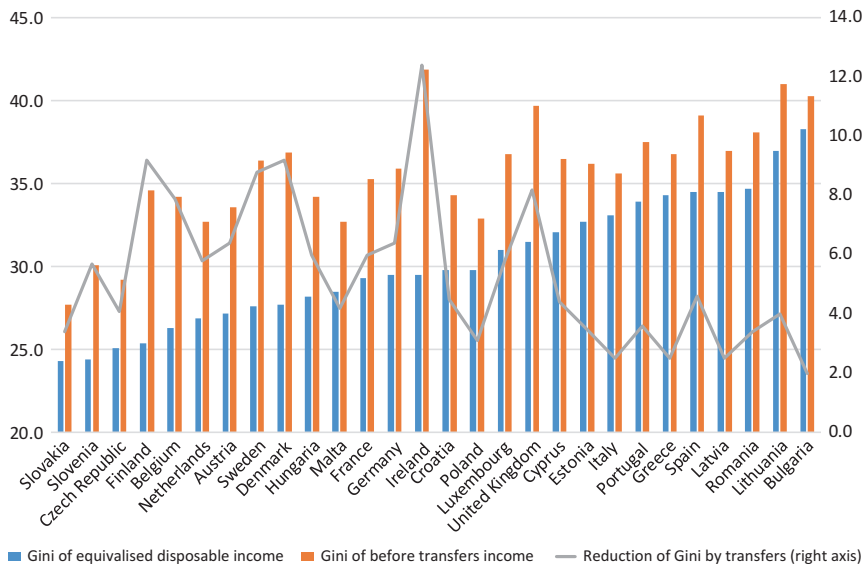
Fig. 9.1 Gini of disposable income and of before transfers income, 2016. (Source: Eurostat)

perspective, Milanovic and Ersado (2012) show that large-scale privatization and infrastructure reforms were significantly pro-inequality, whereas small-scale privatization and democracy are pro-poor.

Following the liberal welfare regime (Esping-Andersen 1990), Anglo-Saxon countries (United Kingdom, Ireland) have very high wages inequality but reduce inequality by targeted transfers. Ireland is the European country that has the largest before social-transfers income inequality, but it is also the country that reduces inequality with social transfers the most.

Nordic social-democratic countries (Finland, Sweden and Denmark) also enjoy low levels of inequality. This is due in large part to high levels of redistribution: as the figure shows, transfers reduce inequality by a large amount in these three countries.

In Southern countries (Italy, Portugal, Greece and Spain), before transfers inequality is not much higher than in Nordic countries, but the reduction of inequality by social transfers is very weak. Consequently, disposable income inequality is relatively high.

Continental countries (Belgium, Netherlands, France and Germany) have low to moderate levels of inequality: in these countries, wages inequality tends to be lower than average and transfers tend to reduce inequality more than average.

How can we explain differences in before-transfer inequality? Jaumotte and Buitron (2015) investigate the link between inequality and labour market institutions in advanced economies. In line with prior literature (e.g. Card et al. 2004), the authors find that the weakening of unions contributed to the rise of inequality. They also find a strong cross-country link among OECD countries between union density and top earners' income shares. Financial deregulation and the growth of the financial sector is also found to be a contributor to the rise of inequality, also in line with prior literature (Philippon and Reshef 2013). The authors also find that reductions in the minimum wage relative to the median wage are related to significant increases in inequality. This point is more controversial, since minimum wages theoretically have an ambiguous effect on inequality: on one hand, minimum wages compress wages at the bottom of the distribution; but on the other hand, a higher minimum wage might raise unemployment. Dreger et al. (2015) review the link between wage dispersion and labour market institutions in a cross-country perspective in the EU. They also find that higher levels of inequality are present in countries with less unionization and lower minimum wages relative to median wages. Moreover, government intervention in wage bargaining and coordination of wage setting are linked to lower inequalities. A number of studies have indeed found that the distribution of wages is more compressed in countries with more centralized wage-bargaining systems (Blau and Kahn 1996; OECD 1997). Centralization seems to facilitate the reduction of interfirm and intersectoral wage differentials, since more firms are included in the process (Rueda and Pontusson 2000).

Table 9.1 shows the calculation of a "full-time equivalent non-employment rate". This indicator was proposed by Duval (2017) as an alternative to unemployment rates. The indicator is a better representation of the inclusiveness of the labour market. Unlike the unemployment rate, it takes into account inactivity (and especially women's inactivity), part-time employment (and especially women's part-time employment)

Table 9.1 Full-time equivalent non-employment rate, 25–59-year-olds

	Non-employment (A)	Female non-employment	Part-time (% employment) (B)	Female Part-time	Length of part-time / full-time* (C)	Full-time equivalent non-employment (D**)
Czech Republic	15%	22%	5%	9%	50%	17%
Lithuania	18%	18%	6%	8%	52%	21%
Hungary	19%	25%	4%	6%	54%	21%
Estonia	19%	23%	8%	11%	51%	22%
Slovenia	20%	23%	7%	10%	50%	23%
Slovakia	21%	27%	5%	7%	46%	23%
Sweden	14%	17%	20%	31%	58%	24%
Denmark	18%	22%	18%	28%	46%	24%
Poland	22%	28%	5%	8%	51%	25%
Latvia	22%	23%	7%	10%	51%	25%
Finland	21%	23%	11%	15%	47%	25%
Portugal	22%	25%	8%	11%	41%	25%
Bulgaria	25%	28%	2%	2%	48%	25%
United Kingdom	18%	24%	22%	39%	45%	27%
Germany	17%	21%	26%	48%	46%	27%
Romania	25%	34%	6%	6%	58%	28%
Luxembourg	21%	27%	18%	35%	54%	28%
Malta	24%	40%	12%	26%	54%	29%
France	22%	26%	17%	29%	56%	29%
Cyprus	25%	30%	12%	14%	45%	29%
European Union	**23%**	**29%**	**18%**	**31%**	**49%**	**29%**
Austria	19%	22%	28%	49%	48%	30%
Euro area	**24%**	**30%**	**20%**	**35%**	**49%**	**31%**
Ireland	26%	32%	19%	30%	48%	33%
Croatia	31%	36%	5%	6%	48%	33%
Belgium	23%	28%	24%	42%	58%	34%
Spain	30%	36%	14%	23%	46%	35%
Netherlands	19%	24%	44%	74%	49%	36%
Italy	32%	43%	18%	33%	53%	39%
Greece	37%	47%	9%	13%	46%	39%

Source: Eurostat
*All ages
**D = A + (1 − A)* B* (1 − C)

and the length of part-time employment. The indicator is calculated on the 25–59-year-olds because youth and senior non-employment can be due to respectively longer education and earlier retirement. Table 9.1 shows that Eastern European and Nordic countries tend to have low levels of full-time equivalent non-employment rates due to high level of female employment and low levels of female part-time employment. On the other hand, southern European countries (Spain, Italy and Greece) have high levels of non-employment. This indicator is correlated (also not perfectly) to the Gini of before transfers disposable income: high inclusiveness on the labour market tends to reduce inequality of before transfers (household) income.

3.2   Between-Country Inequality in the European Union: Convergence Limited to the Lowest-Income Countries

We have discussed so far within-country inequality. However, inequality between countries is also relevant. Figure 9.2 shows the growth of real GDP per capita between 2001 and 2017 according to initial GDP per capita (2001) across EU members. The figure shows that real convergence has taken place among the 28 EU members: countries with low initial GDP have grown more rapidly than countries with higher initial GDP. Lithuania, Latvia, Romania and Bulgaria have recorded the highest degree of convergence. In fact, convergence is mainly limited to Eastern European countries with the lowest GDP per capita in 2001. For high-income countries (above 15,000 euros of per capita GDP), there is no convergence: on the contrary, there is even a form of divergence. Portugal and Greece, for example have had lower growth than higher income economies like Germany or the Netherlands. Consequently, no convergence has taken place for the 12 countries that had adopted the euro in 2001. This
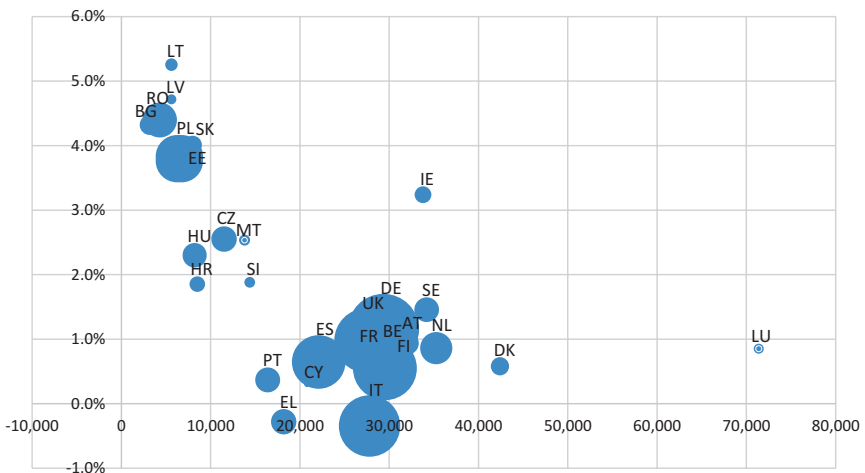

Fig. 9.2 Growth of GDP (2001–2017) according to initial GDP (2001) in the EU. (Source: Eurostat)

is contrary to the expectation that deeper monetary and financial integration would trigger faster real convergence. Diaz del Hoyo et al. (2017) explain that several countries in the euro area (including Spain, Portugal and Greece) experienced temporary GDP convergence until the global economic crisis in 2008 when accumulated external and domestic imbalances led to a painful economic adjustment. This was the case according to the authors because the large capital inflows prior to the crisis did not set in motion a process of sustainable convergence: capital inflows consisted mainly of investment in debt instrument (including government debt), which, contrary to foreign direct investment, was not conducive to supporting productivity growth but contributed to a credit-driven domestic demand boom. This led to an overestimation of growth potential and pro-cyclical fiscal policy. Also, unit labour costs increased relatively to the core Euro countries which led to large current account deficits. With the economic crisis of 2008, fiscal revenues dropped, which led to an increase of public debt and later a public debt crisis. Competitiveness was to be restored through deflation which caused a double-dip recession.

3.3   Global Inequality in the EU

Every year Eurostat measures inequality in each EU member state and on average amongst the 28 states. In 2016, the average Gini of disposable income in the EU was at 30.8. It ranged from 24.3 in Slovakia to 38.3 in Bulgaria (see Fig. 9.1). Measured on average, it lies well below the Gini of disposable income in the United States (39.0). However, the presentation of an average Gini index in the EU may be misleading. Indeed, it takes into account only inequalities within the European countries and not inequalities between countries. There are significant inequalities between European countries. In the national accounts, household income based on EU consumer purchasing power ranges from 37% of the European average (Bulgaria) to 138% (Germany), that is a ratio of 1–4. At the European level, Eurostat calculates an average of national inequalities, as well as the international inequalities. On the other hand, Eurostat does not calculate inequalities between European citizens: what would inequality be if national barriers were eliminated and European inequality was calculated at the European level in the same way that one calculates

inequality within each nation? It might seem legitimate to calculate inequality between European citizens like this insofar as the EU constitutes a political community with its own institutions (Parliament, executive, etc.). In the preamble to the treaty establishing the European Economic Community, the Heads of State and Government declare that they are "resolved to ensure the economic and social progress of their countries by common action to eliminate the barriers which divide Europe". Calculating inequality amongst European citizens is a way to eliminate these barriers.

The EU-SILC database, which provides the equivalent disposable income (in purchasing power parity) of a representative sample of households in each European country makes such a calculation possible. The result is that the overall level of inequality in 2014 in the EU is the same as that in the United States (39.0). What conclusion should be drawn? If we look at the glass as half-empty, we could emphasize that European inequality is at the same level as in the world's most unequal developed country. If we look at the glass as half-full, we could emphasize that the EU does not constitute a nation with social and fiscal transfers, that it has recently expanded to include much poorer countries and that, nevertheless, inequality is no greater than in the United States.

4   The Future of Inequality in the EU: Towards Less Progressive Taxation?

As we have seen in Fig. 9.1, the tax-benefit system contributes to reducing within-country inequality in the EU. However, there is a trend towards less progressivity in taxation. Figure 9.3 shows the average standard VAT rate, and average, minimum and maximum corporate income tax (CIT) statutory rates and personal income tax (PIT) top marginal rate in the EU. There is a clear trend of decreasing tax rates for both the corporate and the PIT, while the standard VAT rate is increasing. Mobile tax bases (corporate income and top personal income) are therefore taxed less while immobile tax bases are taxed more.

Several studies have shown that part of the tax base of the CIT is mobile: multinationals have several income-shifting strategies in order to
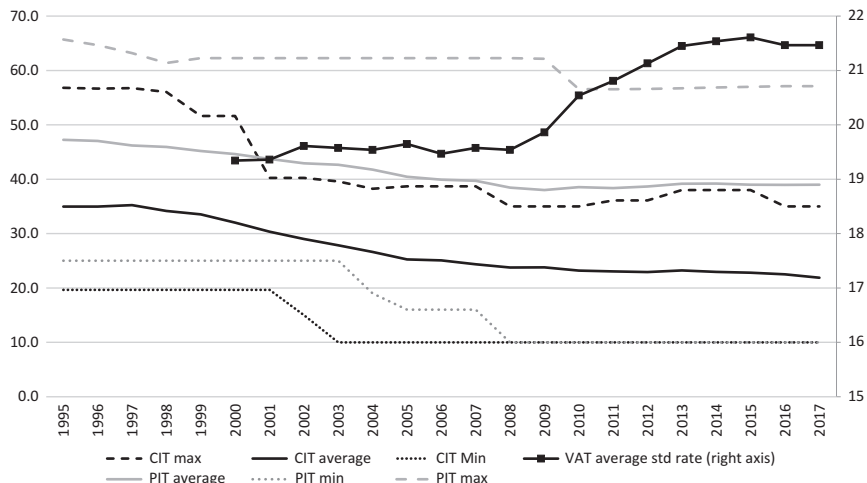
Fig. 9.3 VAT average standard rate, CIT statutory rate and PIT average, minimum and top marginal rate in EU (28 members as of 2017), 1995–2017. (Source: European Commission)

decrease the tax base of their subsidiary in high-tax-rate countries and increase the tax base in low-tax-rate countries. They can use transfer pricing, leverage, mismatches in tax jurisdiction in bi-lateral treaties in order to attain double non-taxation. However, the decrease in statutory rates has not translated into a decrease in corporate income taxation in percentage of GDP. According to Piotrowska and Vanborren (2008), the driving factor for these diverging trends is corporatization: as CIT rates declined, the size of the corporate sector increased. There has been a shifting in income from the non-corporate form to the corporate form, and therefore from personal to CIT, due to the decrease in CIT rates. This should decrease the progressivity of the tax system.

The decrease in the PIT top marginal rate is not as pronounced as the decrease in the CIT rate. The decrease happened in the pre-crisis period: since 2008, average rates slightly increased. Tax competition is less fierce over the PIT, since individuals are less mobile than corporate income.

In response to the debt crisis, many countries have raised their standard VAT rates: while the average standard rate across the EU was 19.5% in 2008, it increased to 21.5% in 2017.

Overall, these trends lead to less progressive taxation. If the EU wants to keep its level of inequality low, it therefore needs to respond to this development. Tax sovereignty should not lead to a situation where nation-states are led to tax only the immobile tax bases.

5   Conclusion: Keeping Inequalities Low in the EU

The EU is the region in the world with the lowest economic inequalities, despite some heterogeneity. Member countries with the lowest inequalities achieve it with different strategies: high tax and benefit redistribution or low wage inequality through high minimum wages, collective bargaining and/or investment in education.

If inequalities are to be kept low in the EU, through redistribution and investment in education, countries need to be able to raise taxes. Therefore, there needs to be some form of tax harmonization on the most mobile bases, notably corporate tax. Through its current common corporate tax base proposal, the European Commission is proposing a set of common rules for determining the tax base of companies. However, this is insufficient, as it would not stop tax competition within the EU: a minimum rate must be put in place in order to stop the race to the bottom.

Competition within the EU is not limited to taxation: some countries are pursuing uncooperative low wage growth strategies, either by choice, or in order to reduce macroimbalances. This leads to increased inequality (and deflation pressures in the euro area). This can be answered through a coordination of national wage policies or a generalization of minimum wages in all countries (e.g. at 50% of median wage).

Note

1. The equivalised household size is defined as HS = 1 + 0.5* (HM14plus ⁻ 1) + 0.3* HM013 where HM14plus is the number of household members aged 14 and over and HM013 is the number of members aged 13 or less. Total disposable income is divided by the equivalised household size to compute equivalent disposable income.

References

Alesina, Alberto, and Roberto Perotti. 1996. Income Distribution, Political Instability, and Investment. *European Economic Review* 40 (6): 1203–1228.

Anderson, Lisa, Jennifer Mellor, and Jeffrey Milyo. 2008. Inequality and Public Good Provision: An Experimental Analysis. *The Journal of Socio-Economics* 37 (3): 1010–1028.

Autor, David, David Dorn, and Gordon Hanson. 2013. The China Syndrome: Local Labor Market Effects of Import Competition in the United States. *American Economic Review* 103 (6): 2121–2168.

Blau, Francine, and Lawrence Kahn. 1996. International Difference in Male Wage Inequality. *Journal of Political Economy* 104 (4): 791–837.

Card, David, Thomas Lemieux, and Craig Riddell. 2004. Unions and Wage Inequality. *Journal of Labor Research* 25 (4): 519–559.

Corak, Miles. 2013. Income Inequality, Equality of Opportunity, and Intergenerational Mobility. *Journal of Economic Perspectives* 27 (3): 79–102.

Diaz del Hoyo, Juan-Luis, Ettore Dorrucci, Frigyes Ferdinand Heinz, and Sona Muzikarova. 2017. *Real Convergence in the Euro Area: A Long-Term Perspective*. European Central Bank Occasional Paper Series, No. 203.

Dreger, Christian., Enrique López-Bazo, Raul Ramos, Vicente Royuela, Jordi Suriñach. 2015. Wage and Income Inequality in the European Union. Policy Department Working Paper 282015.

Duval, Guillaume. 2017. Alternatives Economiques lance son contre-indicateur du chômage. *Alternatives économiques*, Septembre.

Esping-Andersen, Gosta. 1990. *The Three Worlds of Welfare Capitalism*. Princeton: Princeton University Press.

Fajnzylber, Pablo, Daniel Lederman, and Norman Loayza. 2002. What Causes Violent Crime? *European Economic Review* 46: 1323–1357.

Galor, Oded, and Joseph Zeira. 1993. Income Distribution and Macroeconomics. *Review of Economic Studies* 60 (1): 35–52.

Goldin, Claudia, and Lawrence F. Katz. 2008. *The Race Between Education and Technology*. Cambridge, MA: Harvard University Press.

Jaumotte, Florence, and Carolina Osorio Buitron. 2015. *Inequality and Labor Market Institutions*. IMF Staff Discussion Note 15/14. Washington, DC: IMF.

Kaldor, Nicholas. 1957. A Model of Economic Growth. *The Economic Journal* 67 (268): 591.

Malgouyres, Clément. 2018. The Impact of Chinese Import Competition on the Local Structure of Employment and Wages in France. *Rue de la Banque* 57. Paris: Banque de France.

Meltzer, Allan H., and Scott F. Richard. 1981. A Rational Theory of the Size of Government. *Journal of Political Economy* 89 (5): 914–927.

Milanovic, Branko, and Lire Ersado. 2012. Reform and Inequality During the Transition: An Analysis Using Panel Household Survey Data, 1990–2005. In *Economies in Transition, The Long-Run View*, ed. Gerard Roland, Studies in Development Economics and Policy. Basingstoke: Palgrave Macmillan.

OECD. 1997. Economic Performance and the Structure of Collective Bargaining. *Employment Outlook*, July. Paris: OECD Publishing.

———. 2011. *Divided We Stand: Why Inequality Keeps Rising*. Paris: OECD Publishing.

Okun, Arthur. 1975. *Equality and Efficiency: The Big Tradeoff*. Washington, DC: Brookings Institution Press.

Perotti, Roberto. 1996. Growth, Income Distribution, and Democracy: What the Data Say. *Journal of Economic Growth* 1 (2): 149–187.

Philippon, Thomas, and Ariell Reshef. 2013. An International Look at the Growth of Modern Finance. *The Journal of Economic Perspectives* 27 (2): 73–96.

Piotrowska, Joanna, and Werner Vanborren. 2008. The Corporate Income Tax Rate-Revenue Paradox: Evidence in the EU. *Taxation Papers*, Working Paper No. 12, European Commission.

Putnam, Robert. 2000. *Bowling Alone: The Collapse and Renewal of American Community*. New York: Simon and Schuster.

Rodrick, Dani. 1999. Where Did All the Growth Go? External Shocks, Social Conflict, and Growth Collapses. *Journal of Economic Growth* 4: 385–412.

Rueda, David, and Jonas Pontusson. 2000. Wage Inequality and Varieties of Capitalism. *World Politics* 52: 350–383.

Saraceno, Francesco. 2014. L'impact économique des fortes inégalités : problèmes et solutions. *Revue de l'OFCE* 134: 187–200.

Schäfer, Armin. 2013. Affluence, Inequality and Satisfaction with Democracy. In *Society and Democracy in Europe*, ed. Silke I. Keil and Oscar W. Gabriel. London: Routledge.

Stiglitz, Joseph E. 2012. *The Price of Inequality: How Today's Divided Society Endangers Our Future*. New York: W. W. Norton & Company.

Summers, Larry. 2014. U.S. Economic Prospects: Secular Stagnation, Hysteresis, and the Zero Lower Bound. *Business Economics* 49 (2): 65–73.

WID.world. 2017. *World Inequality Database*. http://wid.world/.