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Editorial

In this issue of showCASE, our Senior Economist Mehmet Burak Turgut evaluates the impact of the COVID-19 crisis on income inequality levels in the EU and Poland. While the estimation results suggest that the aggravated effects of the COVID-19 can be dramatic in the EU, the effective fiscal response and redistribution strategies are crucial to mitigate the negative impulse.

Contents

CASE Analysis

The Adverse Impact of COVID-19 Pandemic on Inequality Levels in the EU and What Can Be Done to Mitigate It

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The income inequality, defined as a disparity of income distribution in which a small percentage of a population earns a larger percentage of income, has risen throughout the world in recent decades. The empirical evidence increasingly suggests that income inequality can hamper economic growth, decrease labour market prospects, and cause social unrest. These recent trends and evidence put income inequality in the policy frontier. For example, reducing inequality within and between countries is one of the Sustainable Development Goals of the United Nations. Similarly, the European Social Pillar proclaimed in 2017 contains twenty key principles such as equal opportunities and access to the labour market and fair working conditions for equal society and equal distribution of income.

Unfortunately, the unprecedented impact of the COVID-19 pandemic on the world economies is expected to deepen the income inequality. The containment measures introduced by the governments to limit the spread of the virus disrupted economic activity and left millions of workers and self-employed vulnerable to the layoffs and income losses in the hardest-hit sectors. ILO estimates the global workforce loss to be around 200 million workers and the majority of the loss to happen in retail trade, accommodation and food services, as well as manufacturing sectors. Moreover, the risk of losing a job and income is higher for the low-skilled and informal workers. Indeed, the Initiative on Global Markets panel shows that almost three-fourth of the respondents expect the COVID-19 crisis will worsen the income inequality, and the low-income workers will suffer a relatively bigger hit to their incomes.

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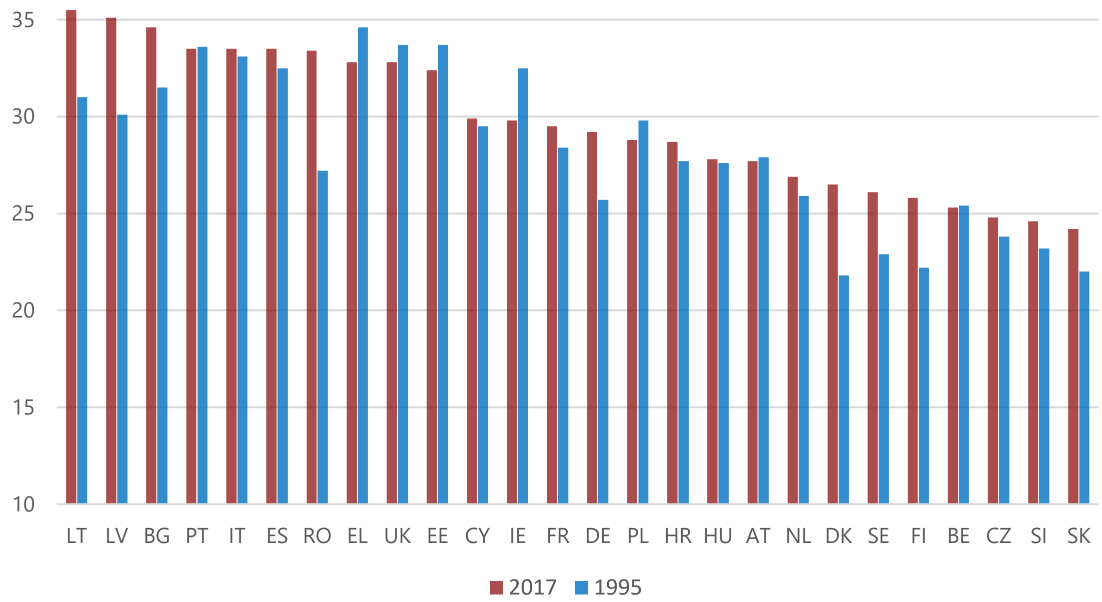
The governments announced huge fiscal packages mostly in the form of liquidity provisions for businesses to stay afloat, income supports to households, and subsidies to preserve jobs and deal with the COVID-19 crisis. The IMF estimates that these supports amounted to about USD 9 trillion in April 2020. In addition to their stabilisation effects, these policies can help to avoid the unequal impacts of the crisis if they target the most vulnerable groups such as low-income households.

The European Union Perspective

While income inequality remains low in the European Union (EU) relative to some other parts of the world (e.g. the USA), it varies among the Member States.

Figure 1. Gini Coefficients in the EU, 1995-2017



Source: World Income Inequality Database (WIID)

Figure 1 depicts the Gini coefficient, the most widespread inequality index, based on the disposable income in the EU countries for the years 1995 and 2017.[1][2] The lower the Gini coefficient, the lower the income inequality (more equal distribution of disposable income) in the society. As can be seen in Figure 1, over the period under observation, the Gini coefficient – or inequality – rose in 19 and decreased in 9 states. The highest and lowest levels of inequality in 2017 were observed in Lithuania and Slovakia, respectively, whereas Romania and Ireland experienced the largest increase and decrease in inequality, respectively.

The COVID-19 pandemic has severely affected economic activity in the EU and is expected, as predicted by the Spring 2020 Economic Forecast by the European Commission, to contract the output by 7.4% and move the unemployment rate up to 9% in 2020. But how will the COVID-19 pandemic affect inequality in the EU countries? We look at the past data to deduce the relation between key macroeconomic conditions and inequality and combine our findings with the European Commission forecasts to answer this question. We run the following regression for the countries given in Figure 1 between 1996 and 2017:

$$\boldsymbol{inequality_{it} = \alpha + \alpha_i + \alpha_t + \beta_u unemp_{it} + \beta_t transfers_{it} + \beta_x X_{it} + \varepsilon_{it}}$$

[1] Our definition of the EU includes United Kingdom, member until 2020, and excludes Luxembourg and Malta due to their small size.

[2] Gini coefficient is available for most of the EU countries since 1980s. However, the macro data from Eurostat we use in our empirical analysis starts from 1995 for most of the EU countries, hence we only consider Gini coefficients starting from year 1995.

where $inequality_{it}$ is the Gini coefficient based on disposable income, after taxes and transfers, $unemp_{it}$ is the unemployment rate, $transfers_{it}$ is the social benefits and transfers by the government over GDP, X_{it} denotes variables including GDP growth, debt-to-GDP ratio, inflation, and euro dummy, α_i is the country fixed effects that control for country characteristics that do not change over time such as geography, and α_t symbolises the aggregate time effects to take into account global trends or shocks affecting all the EU countries.

2020 by a minimum of 0.06 units in Germany and a maximum of 0.54 units in Spain.

» If the data of the last 25 year serves us as a guide, the unemployment and other global recessionary effects of the COVID-19 can be expected to increase the inequality between 0.6 to 1 in the EU countries.

Table 1. Regression Results

Inequality	Coefficient	Standard Error
Unemployment	0.096**	0.040
Benefits and Transfers	-0.294***	0.063
GDP	0.896	2.534
Debt-to-GDP	-0.001	0.008
Inflation	0.032	0.025
Euro Dummy	-0.339	0.228

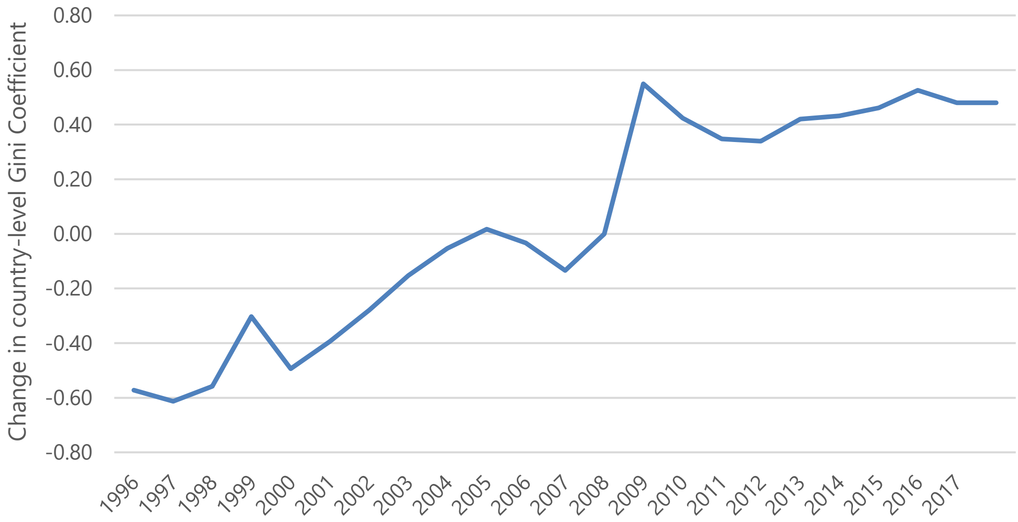
Note: The residuals are clustered at country-level. The asterisks ***, ** show significance at 1% and 5% levels, respectively.

Table 1 shows the regression results. Only the "unemployment" and "social benefits and transfers" have significant effects on the inequality, while the remaining variables do not have significant explanatory power on the inequality. The results from Table 1 indicate that, on average, all else being constant, if unemployment increases by 1% in a given country, the Gini index – or the income inequality – increases by 0.096 units in the same country.

The revised European Commission unemployment forecasts for 2020 predicts the smallest change for Germany (from 3.4% up to 4.0%) and the largest for Spain (from 13.3% up to 18.9%). Hence, due to its anticipated effect only on unemployment, the COVID-19 can be expected to increase the inequality in the EU in

Figure 2 shows the annual effects of the global trends and shocks that affect all the countries in the EU in a similar way on the Gini coefficient of each EU member, relative to the year 2008. These global trends increasingly deepen the inequality on an annual basis, possibly due to the accelerated pace of globalisation and "financialisation" of the economies (although the spike in the Gini coefficient in 2009 is most likely attributable to the EU-wide effects of the Great Recession). If we assume similar economic conditions in 2008 and 2019 and that the EU-wide effects of the COVID-19 are similar to those of the Great Recession, we can expect the COVID-19 to increase the income inequality (Gini coefficient) in each country by additional 0.55 units due to the global effects that affect all the countries in a similar way.

Figure 2. The Global Trends on Inequality in the EU by years



Source: author's calculation

If the data of the last 25 years serves us as a guide, the unemployment and other global recessionary effects of the COVID-19 can be expected to increase the inequality between 0.6 to 1 in the EU countries. Considering the standard deviation of 0.97 of Gini coefficient within the countries, the deepening effect of COVID-19 on income inequality can be dramatic in the EU.

> However, our results show that an increase in the social benefits and transfers between 2% to 3% of GDP in 2020 can play an important role in diminishing the negative consequences of the COVID-19 on the income inequality in the EU.

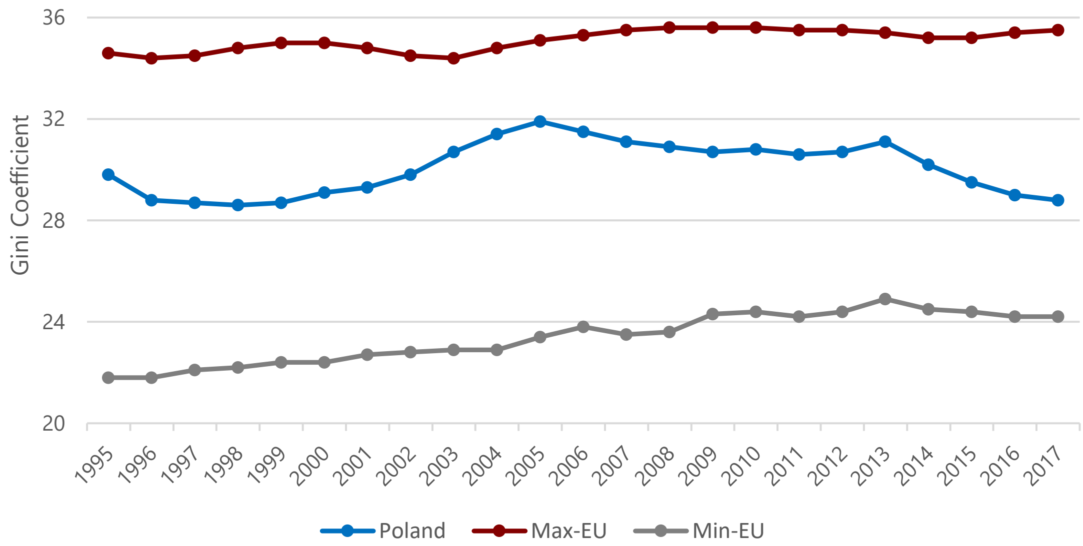
Fortunately, the estimation results also show that social benefits and transfers have a significant impact on reducing the gap of the disposable income among different income groups; on average, all else being constant, a 1% increase in benefits and transfers over GDP in a given EU country decreases the Gini coefficients in the same country by 0.294 units. Our results demonstrate that total government benefits and transfers to the households in the EU are effective redistribution tools in reducing the income inequality confirming the findings of previous works.

The fiscal response of the EU to the COVID-19 has already reached EUR 3.2 billion. Part of this response is fiscal packages announced individually by the Member States, generally in a form of easier access to welfare and direct transfers, deferrals in tax obligations and social security contributions, as well as grants and guarantees to the businesses. It is challenging to forecast the number of social benefits since these packages are subject to update depending on the speed of the recovery. However, our results show that an increase in the social benefits and transfers between 2% to 3% of GDP in 2020 can play an important role in diminishing the negative consequences of COVID-19 on the income inequality in the EU.

Poland in a Spotlight

When it comes to inequality, Poland falls in the middle range of the EU Member States, with a

Figure 3. Gini Coefficient in Poland



Source: World Income Inequality Database (WIID)

decreasing trend since 2005, as shown in Figure 3. Over the same period, the unemployment rate in the country fell from 17% to 5%, and the social benefits and transfers over GDP remained almost the same. The decrease in wage dispersion and reforms of the tax-benefit system (introduction of the child tax credits) and family allowance system is also credited as important factors behind the decrease in income inequality in Poland.

» We expect COVID-19 to raise the income inequality in Poland by 0.92 units in 2020.

The COVID-19 pandemic hit Poland as it has the other EU countries. Indeed, the European Commission revised down its unemployment forecasts for the country from 3.6% to 7.5% in 2020 and from 3.5% to 5.3% in 2021 due to the crisis. Using our estimates, we predict that COVID-19 will increase inequality in Poland by 0.37 units in 2020 and 0.17 units in 2021 because of its negative impact on unemployment. Combining this with the predicted global effects, we expect COVID-19 to raise the income inequality in Poland by 0.92 units in 2020.

The Polish government legislated budgetary measures with an estimated amount of PLN 102.5 billion (EUR 23.2 billion) and part of this money will go as wage subsidies for employees of the affected business and the self-employed. The government also approved a total of PLN 75 billion (EUR 16.9 billion) credit guarantees and microloans for entrepreneurs. Moreover, the Polish Development Fund will finance liquidity program for businesses that amounts to PLN 100 billion (EUR 22.6). These packages make up 13.3% of the country's last year's GDP. If social benefits and transfers included in these packages amount to 3% of GDP and target the most vulnerable segments of the population, our findings suggest that the fiscal actions taken by the Polish government would play an important role in mitigating the increase of the income inequality in the country.

Conclusions

The COVID-19 pandemic has a devastating impact on the economies and societies all over the world. The deep recession and surge in unemployment due to the crisis will also negatively impact the countries in the EU and deepen the income gap between the poor and the rich – unless the authorities take adequate actions. Indeed, if the fiscal packages announced by the majority of the EU governments are well-targeted, they will not only help to stabilise the economy but also to circumvent the negative consequences of COVID-19 on income inequality. Assistance for economic recovery should, therefore, strengthen social safety nets, ensure access to healthcare and unemployment support, as well as expand child and elderly care capacities.

At the same time, the design of the EU-wide response should account for the intra-EU imbalances and persistent inequalities among the Member States. Hence, effective policy actions would not only contribute to the post-COVID-19 recovery but would eventually target to address structural inequalities within the individual Member States and the EU as a whole.

Highlights

Trade, Innovation, and Productivity

On June 17th, the European Commission (EC) adopted a White Paper on the distortions caused by foreign subsidies in the Single Market. Building-up on the New Industrial Strategy for Europe, presented in early March 2020, the White Paper aims to address unfair trading, competition, and procurement practices. As stated by Margrethe Vestager (Executive Vice-President of the EC), current EU state aid regulations do not capture foreign subsidies and investment, which, while feeding into jobs and growth creation, could lead to abusive practices and distort the market, procurement, and pricing operations to the detriment of the non-subsidised EU companies. Therefore, while acknowledging that not every extra-EU subsidy is harmful per se, the White Paper stresses the need to develop an appropriate legislative and regulatory framework to tackle the unfair practices and establish a level playing field for both public and private companies in the EU. To this end, the paper put forward for discussion three Modules, which focus on addressing the harmful effects of foreign subsidies in the (1) Single Market as such, (2) acquisition of EU targets, and (3) EU public procurement. The public consultations launched by the White Paper are set to run till late September 2020 and will feed into an eventual legislative proposal as regards the regulations of foreign subsidies in the Single Market to be introduced in 2021.

Labour Market and Environment

According to data from the Polish coal companies, since the beginning of the pandemic, 6,118 miners from several different mines have been reported as COVID-19 carriers. Miners account for over half of the approx. 11.5 thousand people infected in the Silesian Voivodeship and almost 20% of over 31 thousand infected in Poland overall (as of June 19, 2020). In response, the government has closed 12 mines until the end of June despite numerous protests from coal mining trade unions. This happened right after the warning of the Commissioner in charge of the Green Deal – Frans Timmermans – that the budget allocation from the Just Transition Fund from which Silesia was supposed to benefit, might be subject to certain criteria, such as the commitment to the Green Deal 2030 and 2050 targets as well as rule of law – issues considered problematic for the Warsaw-Brussels axis. What is more, by the end of June Poland was supposed to update the European Commission on its climate pledges and today the agreement seems to be suspended as well. According to government sources "d*ue to the Covid-19 pandemic, discussions on climate issues have been postponed - but Poland continues to act to reach its climate objectives and modernise its energy system*".

Macro and Fiscal

As a part of a EUR 130 billion stimulus package, the German government plans additional measures in the form of temporary VAT cuts. The proposition is to reduce the basic rate from the current 19% to 16% and the reduced rate from 7% to 5% until the end of 2020, in order to boost consumer spending. The overall cost of this measure for Germany will account to about EUR 20 billion. The success of these plans depends heavily on how much of this reduction will translate into lower prices for final consumers – some critics warn that the temporary nature of this measure will limit its effectiveness due to menu costs and some incentive to use lowered tax to offset losses incurred by producers and retailers. The VAT-related measures were introduced in other EU countries as well – for example, Italy delayed certain VAT liabilities until September while Belgium changed the rate for catering services from 12% to 6%. In an interview, the Minister of Finance Tadeusz Kościński stated that similar measures are not currently considered by the Polish government.

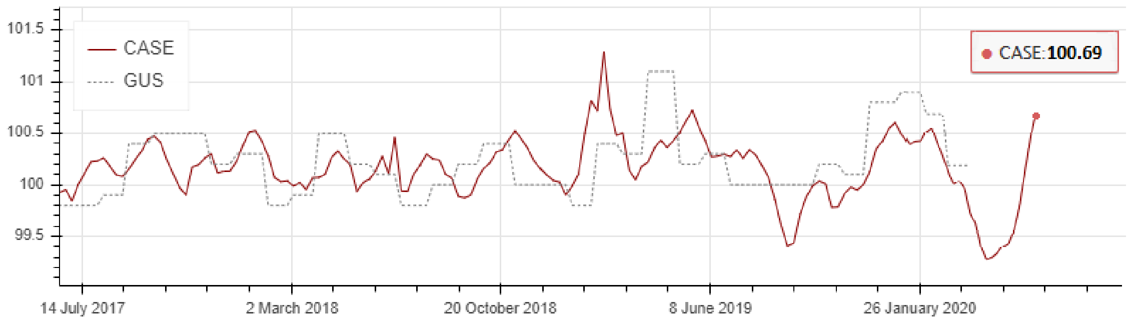
Other CASE Products

The Weekly Online CASE CPI

The online CASE CPI is an innovative measurement of price dynamics in the Polish economy, which is entirely based on online data. The index is constructed by averaging prices of commodities from the last four weeks and comparing them to average prices of the same commodities from four weeks prior. The index is updated weekly. For more information on our weekly online CASE CPI, please visit: http://case-research.eu/en/online-case-cpi.

The June read-out of Online CASE CPI shows that after a period of price declines (most notably of fuel prices) the inflation returns to growth again with a significant 0.7% increase in average prices since May. The "Transportation" category of the consumer basket registered the highest rise – fuel prices are slowly returning to the level from before the lockdown. It seems that prices of food were also influenced by the pandemic (increase by 0.8% since May), especially in the case of fruits, which in June were on average 13% more expensive compared to the previous month. At the same time prices in "Housing", "Health", and "Recreation and Culture" categories went down slightly.

Our Weekly Online CASE CPI



Monthly CASE Forecast for the Polish Economy

Every month, CASE experts estimate a range of variables for the Polish economy, including future growth, private consumption, investments, industrial production, growth of nominal wages, and the CPI.

CASE economic forecasts for the Polish economy
(average % change on previous calendar year, unless otherwise indicated)

	GDP	Private consumption	Gross fixed investment	Industrial production	Consumer prices	Nominal monthly wages
2020	-3.2	-3.8	-7.0	-3.0	2.9	2.5
2021	2.0	2.2	3.4	2.3	2.8	3.2

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