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Economic and social prosperity in time of crisis in time of COVID-19 crisis in the European Union

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Abstract

In recent decades, the Member States of the European Union have witnessed two international crises: the economic-financial crisis that began in 2008 and the COVID-19 crisis in 2019. Consequently, both poverty and income inequality have increased. Regarding public policies to help overcome these crises, macroeconomic policies of a different cut are observed. Even though the Europe 2020 Strategy had recognized the European Union as a social market economy, to overcome the economic crisis of 2008 it was decided to consolidate public finances to control the public deficit and debt. However, in the COVID-19 crisis, the European Union has opted for an expansionary economic policy to reduce the intensity and duration of the crisis. This study analyses the most remarkable changes introduced in the European Union since the 2000s, as well as the evolution of poverty, extreme poverty, and income inequality. Likewise, two composite indexes were built in 2019 for each Member State: one of human development according to the socio-economic context of the European Union, and another index of governance reflecting the degree of compliance with the European values of freedom, political stability, and Rule of Law. The main objectives are, firstly, to analyse the connection between poverty and income inequality with the economic cycle and the public policies carried out; and secondly, to study the position of the 27 Member States in 2019 to deal with the negative effects of COVID-19. The results allow the Member States to be classified into four typologies, as well as discussing which are better prepared for the next challenges.

Keywords: economic crisis, fiscal policy, poverty, income inequality, human development, European values, quality of governance, European Union.

1. Introduction

The main pillars of the welfare state are to alleviate income inequality and reduce poverty, protect the population from the insecurity that may arise from adverse situations such as unemployment or illness, and facilitate the population's access to preferred or merit goods (i.e. education, health, and housing). In the specific case of the European Union (EU), since its constitution in 1957, the European values of freedom, democracy, equality and the Rule of Law have made possible European integration as well as improving peoples' prosperity and well-being (European Commission, 2020; Stiglitz, 2020). All the Member States studied in this chapter[1] fall into the group of countries in the world with very high human development. Furthermore, since the accession of the Eastern and Central European countries to the EU in 2004, these countries have registered higher increases in their Human Development Index (HDI) than the rest of the Member States (United Nations, 2020a).

Regarding the budgetary effort in public policies and taking as a reference the information of the International Monetary Fund (Government Finance Statistics), it is worth noting that over the period 2000-2019, the average public expenditure in the EU28 is 47% of Gross Domestic Product (GDP) versus 33.71% in Australia, and 35.56% in the United States. For 2020, the forecast is increments between seven and 10 percentage points in all of these territories. Government social expenditure is obtained by adding spending on preferred goods and social protection, and it represents the public programmes that are most effective in reducing economic and social inequalities (Coady et al., 2021; Furceri et al., 2021). Government social expenditure has also registered in this period a greater weight in the EU28 (33.8%) than in other territories, such as 23.11% in Australia and 23.61% in the United States.

Despite these figures, the economic-financial crisis that began in 2008 exposed some weaknesses of the EU countries. Income inequalities and poverty rates have reached very high levels. The main explanations would be the greater reduction of the income of the population with lower incomes, due to the increase in the loss of relative weight of wages in the national income that had already been recorded since the 1980s, and also as a consequence of the policies of sustainability of public finances carried out in the EU since 2011 (Agnello & Sousa, 2014; Piketty & Sáez, 2013; Sánchez & Pérez-Corral, 2018). Subsequently, the COVID-19 pandemic has put the achievement of the Sustainable Development Goals (SDG) of the United Nations at risk; among them, SDG 1 focused on eradicating poverty in all its forms everywhere. Loss of income is expected to affect the vulnerable segments of society more so that income inequality and poverty will increase around the world, and in the EU (European Commission, 2020; Fetting, 2020; United Nations, 2020b). Specifically, the *indicator of people at risk of poverty or social exclusion,* which is the official measure of poverty in the EU, has gone from 21.4% of the population in 2019 to 22% in 2020 (EUROSTAT, Income and living conditions). The information available for some Member States in EUROSTAT on indicators of income inequality would also confirm the forecast of an increase. For example, in Germany the Gini index would go from 29.7 in 2019 to 34.4 in 2020 (EUROSTAT, Income and living conditions).

The increase in income inequalities has aroused great interest in the study of its consequences in different areas of well-being. Studies show that societies with less inequality in the income distribution enjoy larger life expectancy, as well as fewer rates of mortality, school dropout, mental illness, and drug abuse (Lewer et al., 2020; Wilkinson & Pickett, 2009). More importantly, the persistence of income inequality represents a threat to the sustainability of social welfare because it prevents the social promotion of minors

[1] Considering that the United Kingdom left the EU in 2020 after the Brexit process, this study analyses both a European Union of 27 Member States (EU27) and a European Union of 28 (EU28) that includes the United Kingdom. In retrospective analyses and whenever the information is available, EU28 is chosen. For 2020, EUROSTAT does not provide information on poverty and income inequality in the United Kingdom.

from those families with lower incomes (Esping-Andersen, 2016). Furthermore, empirical works for European and OECD countries state a negative relationship between income inequality and economic growth (Cingano, 2014; Dabla-Norris et al., 2015; Sánchez & Pérez-Corral, 2018). In any case, inequality in the distribution of income could foster political instability and undermine the social consensus required to adjust to large shocks and, therefore, reduce the pace and durability of economic growth (Berg et al., 2012; OECD, 2015).

In this setting, the reduction of income inequalities is one of the priorities of the political agendas of many countries to curb social resentment, the outcrop of populism, and protectionist sentiments that could lead to political instability (OECD, 2015). It could be said that the EU has learned from its past mistakes. To confront the negative effects of COVID-19 shock, then, the Union has chosen "expansive economic politics", such as the rise of government expenditure and the approval of the Next Generation EU funds to foster the recovery after the pandemic (European Commission, 2021a).

This chapter has two objectives. The first is to analyse the connection between poverty, income inequality, and human development with the economic cycle and the public policies carried out in the EU over the last two decades. The second objective is to study in what position the 27 Member States are in 2019 to cope with the social and economic effects of COVID-19 or any other shock.

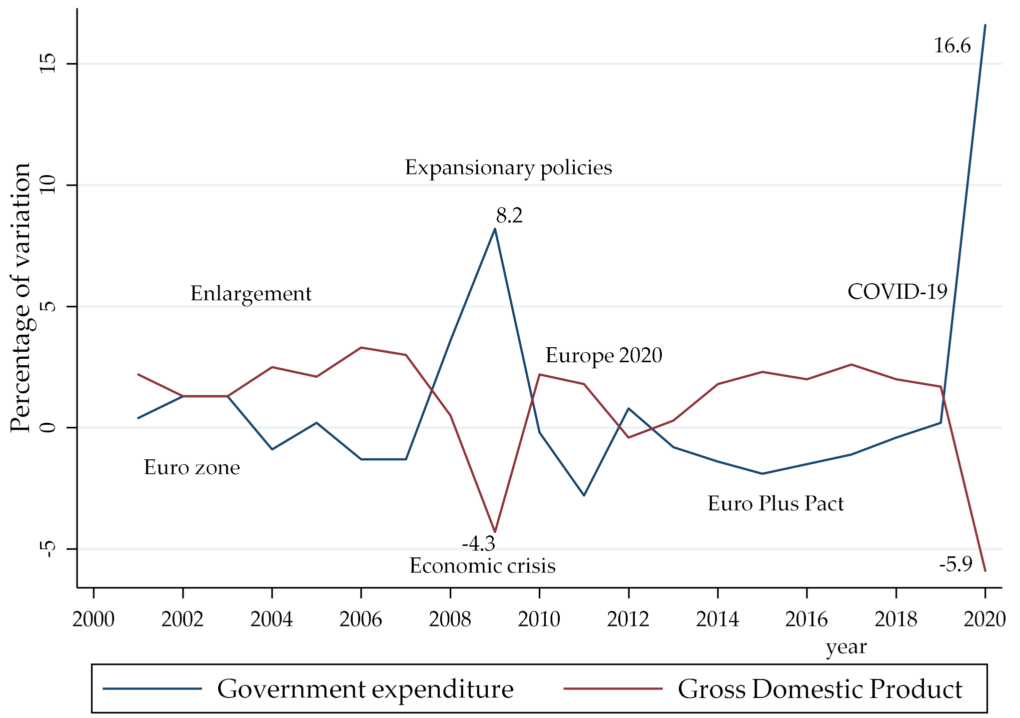
To this end, Section 2 presents an overview of the EU in the last two decades. In Section 3, and following the United Nations methodology, a composite human development index is constructed according to the socio-economic context of the EU. More specifically, indicators of enhanced capabilities are selected instead of basic capabilities indicators. In addition, in Section 4, a composite index of governance is built on the ground on the self-reported assessment of the socio and economic agents (citizens, experts, and enterprises) regarding the degree of compliance with the European values of freedom, political stability, and Rule of Law. The combination of information on human development and perception of compliance with European values that determine the prosperity of citizens allows the 27 Member States in 2019 to be classified into four typologies, as well as discussing which Member States are better prepared for the next challenges. Finally, Section 5 summarizes the main conclusions.

2. An overview of the European Union in the last two decades

In economics, it is of interest to study changes or temporal variations in variables because they reflect the behavioural patterns of the agents analysed and enrich the analysis. Figure 1 shows the evolution over the last two decades of economic growth (annual variation rate of GDP) in the EU, as well as the annual variation rate of government expenditure. The main social-economic changes in the EU are also stressed. These facts are reviewed in several sections below.

Figure 1

Annual variation rate of Gross Domestic Product and government expenditure in the European Union of 28 Member States, 2001-2020[a] (%)



Note. [a]The United Kingdom is not included in 2020. Gross domestic product at market prices; chain-linked volumes, percentage change on the previous period. Adapted from EUROSTAT, National accounts [nama_10_gdp]. Government expenditure is measured as the percentage of GDP. Adapted from EUROSTAT, General government expenditure by function (COFOG) [gov_10a_exp].

2.1. Stability and Growth Pact and enlargement of the European Union

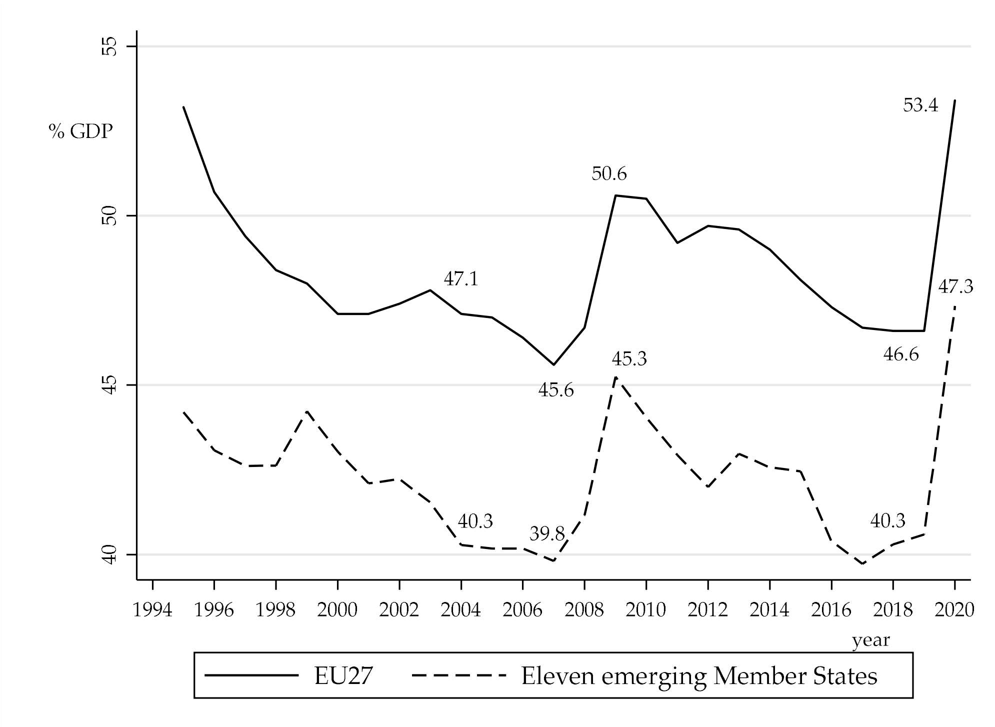
In 1990, the steps towards the Economic and Monetary Union were initiated. In January 2002, the euro was introduced as the single currency. In an area where there is a single currency, a single monetary policy, and an exchange rate policy controlled by the European Central Bank, the fact that fiscal policy is designed in a discretionary manner by national governments can make it easier for countries to run deficits, as their cost is distributed among all members of the euro area (spill-over effects). The Member States therefore decided that coordination of their fiscal policies was necessary and signed the Stability and Growth Pact (SGP) in 1997. The SGP established as rules to be respected by the Member States, among others: a limit of 3% of GDP for the government deficit and 60% of GDP for government debt. In accordance with the European Semester framework by which public finances are approved and monitored (government spending, taxes, deficits, and public debts), every Member State presents its budgetary commitments. The European Commission is responsible for reviewing the programmes. If the criteria are not met, the European Council launches an excessive deficit procedure based on the Commission's recommendations, which may lead to the payment of sanctions.

In parallel, in May 2004, 10 countries joined the EU: Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia. In 2007, Bulgaria and Romania joined and, finally, Croatia in 2009. Thus, from 2009 we speak about the European Union of 28 Member States (EU28) until 2020, when the United Kingdom ceased to be a member of the EU. From that moment, there are 27 Member States (EU27).

In short, the euro area or Euro Zone is currently constituted by 19 Member States. Denmark chose to keep its national currency. The remaining seven countries have not yet adopted the single currency but will join the euro area when they meet the necessary conditions: Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, and Sweden. Most of these are the Member States that joined the Union from 2004 onwards.

The 11 countries of the former Soviet Union are denominated as emerging economies as in the years before the transition process they shared the same kind of social and economic policies (Bastagli et al., 2012; Roaf et al., 2014). Focusing on the weight of the public sector in the economy in emerging countries, several aspects are noteworthy. Firstly, this group of countries makes a smaller budgetary effort than the EU as a whole. Government expenditure is lower, and they have maintained their gap of around six percentage points since joining the EU until the last year studied (Figure 2).

Figure 2
Government expenditure in the European Union of 27 Member States and the emerging Member States, 1995-2020 (% GDP)



Note. The emerging countries are Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia. Adapted from EUROSTAT, Government revenue, expenditure, and main aggregates [gov_10a_main].

Secondly, the comparison between the 11 emerging countries and the remaining 17 countries reveals statistically significant differences in terms of tax structure or the relationship between direct and indirect taxes- and social government expenditure. In emerging Member States, the tax structure is less progressive than in the rest of the Member States, and they perform a smaller budgetary effort in social government expenditure (see Sánchez & López-Corral, 2018).

2.2. Economic crisis, Europe 2020 Strategy and Euro Plus Pact

The negative effects of the collapse of the housing bubble in the United States that were transmitted to the rest of the world reached the EU from 2008 onwards. As Figure 1 shows, in the economic crisis, the annual economic growth rate of the EU28 slowed sharply from 2008 onwards, registering negative values in 2009 (-4.3%) and 2012 (-0.4%). In fact, the EU28 as a whole technically entered economic recession in the second quarter of 2008 and could be considered to have emerged from recession in the second quarter of 2013 (see EUROSTAT, Quarterly national accounts). To respond to the adverse effects of the crisis, expansionary counter-cyclical fiscal policies were initially chosen, as reflected by the increase in government expenditure in 2009 (from 46.4 % of GDP in 2008 to 50.2 % in 2009).

In June 2010, the European Council approved the Europe 2020 Strategy to coordinate all of the Member States' efforts to collectively exit stronger from the crisis and turn the EU into a smart, sustainable, and inclusive economy that delivers high levels of employment, productivity, and social cohesion (European Commission, 2010, preface). Probably one of the most remarkable aspects of the Europe 2020 Strategy is that it constituted a new vision of Europe's social market economy for the 21st century. The construction of a Social Europe, which has been a primary objective since the creation of the European Economic Commission in 1957, is reinforced by the definition of the social market economy (in the Europe 2020 Strategy) as an integrated social, economic, and political order, characterised by an economic market policy and at the same time a social policy that regulates the former (European Commission, 2010, p. 3). The latter is its main difference from economic neoliberalism.

To accomplish these priorities of a smart, sustainable, and inclusive economy, the Member States had undertaken to achieve eight targets by 2020 in the areas of employment, research and development, education, environmental protection, and poverty. The introduction of targets to promote a more environmentally sound economy and social targets for education and the fight against poverty represented a step forward. Nevertheless, the major drawbacks of the Europe 2020 Strategy are likely to be, firstly, the assumption that social cohesions would follow from economic growth (see Sánchez & Ruiz-Martos, 2018) and, secondly, its coincidence in timing with the economic crisis. The Europe 2020 Strategy was approved before the true extent of the 2008 economic crisis was known. The reforms that were intended to be carried out in the Europe 2020 Strategy went in the complete opposite direction to the budgetary adjustment and austerity measures that were implemented by the Member States to deal with the financial crisis. Indeed, the worsening of macroeconomic indicators, especially public deficit above 3% of GDP in most Member States, as well as the risk of bankruptcy in some of them, led all States to prioritise the sustainability of public finances, signing in 2011 the Euro Plus Pact (European Council, 2011).

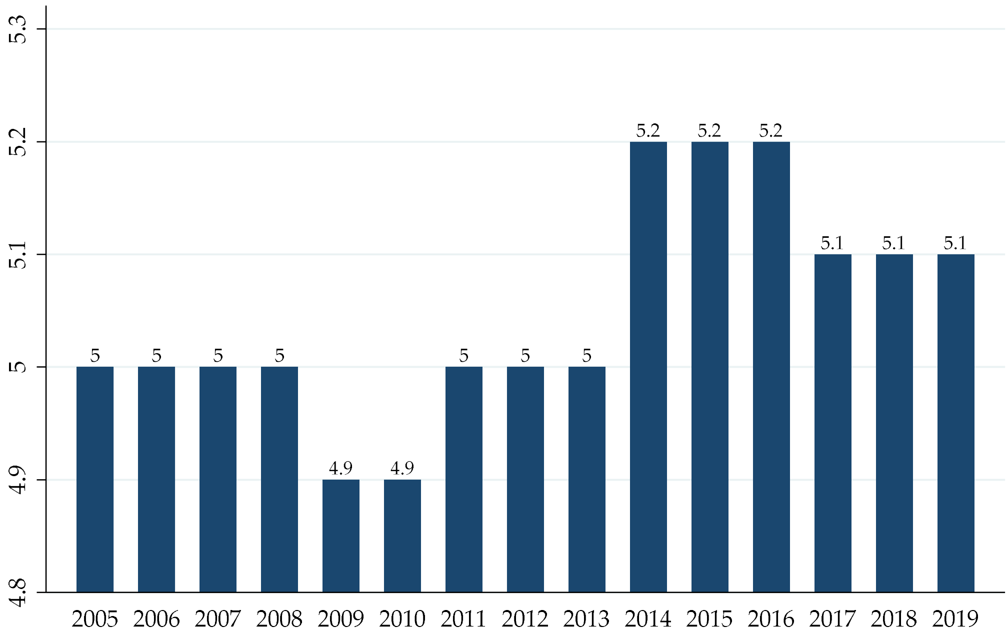
The measures approved in the Euro Plus Pact, inspired by the proposals of Reinhart and Rogoff (2009), focused specially on controlling public spending to contain the public deficit and, subsequently, reducing debt to boost economic growth. The main conclusion of

Reinhart and Rogoff (2009) for the Eurozone was that if government debt rose above 90% of GDP, it would negatively affect economic growth. The effectiveness in containing government spending is shown in Figure 1, which since 2010 has recorded negative changes until 2019. Government deficits were reduced in virtually all Member States to below 3% of GDP and economic growth rates recovered. However, the fiscal consolidation measures exerted great pressure on EU economic, social, and territorial cohesion, which have been core EU objectives since its foundation.

The ratio of total disposable income received by 20% of the population with the highest income to that received by 20% of the families with the lowest income (S80/S20) indicates that in 2019 in the EU28, the richest families earned 5.1 times more than the poorest ones (Figure 3). More importantly, the evolution shows that in the 15 years for which information is available, income inequality has not been reduced and even increased in 2014 and 2015 as a consequence of the government expenditure containment policy carried out.

Figure 3

Income inequality in the European Union of 28 Member States, 2005-2019



Note. The income quintile share ratio S80/S20 for disposable income is calculated as the ratio of the sum of the income received by the 20% of the richest population over the sum of the income received by the 20% of the population most poor. Adapted from EUROSTAT, Income and living conditions [ilc_di11].

Regarding poverty, the Europe 2020 Strategy aimed, among its objectives, to reduce the number of people at risk of poverty or social exclusion by 20 million. For that, a new multidimensional poverty index was developed for being used by all the Member States: *people at risk of poverty or social exclusion* (AROPE). The AROPE index incorporates three dimensions: monetary poverty, severely materially deprived people, and households with low work intensity. For its construction, the head-counting methodology is followed with the union criterion. More specifically, it calculates the percentage of the population that in one or more of the three dimensions registers values below the established thresholds (60% of the country's median income, inability to enjoy four or more items out of nine from a list of deprivations items[2], and households where members worked less than 20% of their potential). AROPE is also calculated for the population under 18 years of age and provides an approximation of multidimensional child poverty.

Table 1 shows the pace of poverty in the EU by breaking down into gender, child poverty and severely materially deprived people. This last indicator is a measure of extreme poverty in the context of the EU (see Bradshaw & Movshuk, 2019).

Table 1

Percentage of people at risk of poverty or social exclusion in the European Union

Year	AROPE total	AROPE males	AROPE females	AROPE less than 18 years	Extreme poverty[a]
2008	23.7	22.3	25.1	26.5	8.5
2009	23.3	22.0	24.5	26.5	8.2
2010	23.8	22.7	24.8	27.6	8.4
2011	24.3	23.2	25.4	27.3	8.8
2012	24.8	23.8	25.8	28.1	9.9
2013	24.6	23.7	25.5	27.9	9.6
2014	24.4	23.6	25.3	27.8	8.9
2015	23.8	23.1	24.5	27.1	8.1
2016	23.5	22.6	24.4	26.4	7.5
2017	22.4	21.5	23.3	24.9	6.6
2018	21.8	20.8	22.8	24.2	5.9
2019	21.4	20.4	22.3	23.4	5.5
2020[b]	22.0	21.1	22.8	23.7	6.3

Note. [a]Measured by severely materially deprived people. [b]The United Kingdom is not included. Adapted from EUROSTAT, Statistics on Income and Living Conditions [ilc_peps01].

All the concepts of poverty worsened from 2009 onwards as a result of the economic crisis and the fiscal measures taken; likewise, all the rates worsened again in 2020. Starting with the AROPE for all the population, Sánchez and Ruiz-Martos (2018) estimated that in order to meet the poverty target of the Europe 2020 Strategy, the AROPE should reach the value of 18.7% in 2020. As it is shown in Table 1, the rate for 2020 (22%) is far from that target. Inequalities in the EU are also reflected in the fact that in all the years analysed, women have higher poverty rates than men and poverty also affects households with children more. That is, children are the most vulnerable group in the EU. This fact is especially serious since child poverty represents a threat to the sustainability of societal well-being in terms of both economic development and social stability (Esping-Andersen, 2016; Sánchez & Navarro, 2021). The extreme poverty rates are lower than the at-risk-of-poverty rates in all the years; but the reality is that there are extremely poor households in all the years and also in all the EU countries.

[2] Severely materially deprived people experience at least 4 out of 9 following deprivations items: cannot afford i) to pay rent or utility bills, ii) keep home adequately warm, iii) face unexpected expenses, iv) eat meat, fish or a protein equivalent every second day, v) a week holiday away from home, vi) a car, vii) a washing machine, viii) a colour TV, or ix) a telephone.

All in all, the economic crisis and the policy measures to combat its effects pushed the EU away from the scope of an inclusive growth strategy able to foster improvement of living standards and shared prosperity across all social groups.

2.3 The shock of COVID-19

The severity and depth of the social and economic crisis caused by the COVID-19 pandemic lead to expect an increase in inequalities and poverty in the EU, representing a serious threat to the achievement of the UN's Sustainable Development Goals (European Commission, 2020; Fetting, 2020). Women, young people, migrants, people with temporary employment and people with a lower level of education are suffering more seriously from the increase in levels of income inequality and poverty (Fasani & Mazza, 2020; Furceri et al., 2020). The EU's response to this situation has been different from the previous economic crisis. The EU has approved the Next Generation EU (Euro 750 billion) to build a more resilient, sustainable, and fair Europe through large-scale financial support for investment and reforms. In 2020 the Member States have increased their government expenditure by 7-10% over the previous year and the financial stability budget targets have been temporarily put on hold. As Figure 1 illustrates, in 2020 EU GDP fell by 5.9 percentage points from the previous year and government expenditure grew by 16.6 percentage points from 45.8% of GDP in 2019 in the EU28 to 53.4% of GDP in 2020.

More importantly, in March 2021, the European Commission put forward the European Pillar of Social Rights Action Plan to enhance social rights and strengthen the European social dimension across all policies of the Union. The main lines of action that should guide policy decisions in the Member States are equal opportunities, fair working conditions, and social protection and inclusion (European Commission, 2021b). Consistent with the UN Sustainable Development Goals, three targets by 2030 have been proposed: at least 78% of the population aged 20 to 64 should be in employment, at least 60% of all adults should be participating in training every year, and there should be a reduction in the number of people at risk of poverty or social exclusion by 15 million, including at least 5 million children.

3. The human development in the European Union at the pre-COVID stage

Having reviewed the contextual framework of the EU as a whole and the main economic changes that have occurred over the last two decades, in this section the study focuses on the level of the Member State. More specifically, and following the UN methodology, a composite human development index is constructed according to the socio-economic context of the EU (the EU-HDI). The 27 Member States are compared in 2019 based on the EU-HDI, so that conclusions can be drawn regarding the position of the Member States to face the social and economic effects of the COVID-19 shock.

3.1. Materials and methods for building the European Union-Human Development Index (EU-HDI)

The composite index EU-HDI proposed in this study is a summary measure of achievements in four key dimensions of human development: a long and healthy life, equal opportunities in life, inclusion, and a decent standard of living (Table 2). Accordingly, the HDI of the UN, the EU-HDI is the geometric mean of normalized indicators for each of the four dimensions. It is worth highlighting two aspects of this methodology that affect the selection of the single indicators. Firstly, if any single indicator were equal to zero, the composite index would be undetermined. Secondly, the relationship between single indicators and the human development index must be direct or positive (positive polarity). That is, an increase in any single indicator could also lead to an increase in the human development index, and vice versa.

Table 2 shows the chosen single indicators in each dimension, as well as their minimum and maximum values considered in order to transform the indicators expressed in different units into a range between 0 and 1.

Table 2
Single indicators of European Union-Human Development Index in 2019

Dimension	Single indicator	Minimum	Maximum
Health	Healthy life years at birth (no. years)	51.4	73.3
Equal opportunities	Young people in employment or in education and training (% of 15-29 years)	71.5	94.3
Inclusion	Population unaffected by severe material and social deprivation (%)	63.2	98.6
Standard of living	Gross National Income per capita (2017 PPP$)	15,424	72,712

In comparison with the HDI of UN, the main difference in the selection of single indicators is that, on the ground on the different socio-economic context of EU, basic capabilities have been replaced with enhanced capabilities. More specifically, instead of *life expectancy at birth, healthy life years at birth* is considered because people are living longer and what matters is the number of years that a person at birth is expected to live without any severe or moderate health problems. This indicator also monitors health as a productive or economic factor since increases in *healthy life years at birth* not only improve the situation of individuals but also result in lower levels of public health care expenditure.

As education indicators, NU considers *expected years of schooling* and *mean years of schooling*. In the EU, two opposite phenomena coexist in terms of human capital. On the one hand, schooling is compulsory and funded by the public sector at least until the age of 16 or having completed upper secondary education (level 3 in the International Standard Classification of Education, UNESCO). But on the other hand, some Member States have very high dropout rates. In other words, there is a certain polarity in human capital so that in the same country there are high rates of population with tertiary education and high rates of school dropout (e.g. Spain). Thus, the two indicators of UN would not reflect reality on the ground. The chosen indicator is the percentage of the young population between 15 and 29 who have a job or are involved in education or training. Indeed, this indicator is obtained by subtracting the value of the indicator *young people neither in employment nor in education and training* from 100, which is considered a headline indicator in the Social Scoreboard for the European Pillar of Social Rights Action Plan to foster equal opportunities (European Commission, 2021b).

Poverty and social exclusion harm individual lives and limit the opportunities for people to achieve their full potential by affecting their health and well-being and lowering educational outcomes (Esping-Andersen & Cimentada, 2018; Richardson et al., 2020). Within the EU setting, that is developed countries, there are vulnerable households that suffer both material and social deprivation in a severe way. In such cases, the risk of poverty is passed on from one generation to the next increases, reducing the opportunities to lead a successful life. This causes poverty to persist and hence creates more inequality, which can lead to long-term loss of economic productivity from whole groups of society and hamper inclusive and sustainable economic growth. All these ideas justify the consideration of the dimension inclusion into the EU-HDI. Specifically, to account for the capability of economic and social inclusion, the percentage of people not affected by severe material and social deprivation is calculated by subtracting the *severe material and social deprivation rate*[3] from 100. This is a headline indicator in the Social Scoreboard for the European Pillar of Social Rights Action Plan to foster social protection and inclusion (European Commission, 2021b).

Finally, as indicator of standard of living we adopt the same indicator as HDI of UN (United Nations Statistics Division): Gross National Income (GNI) per capita converted to international dollars in purchasing power parity of 2017. GNI is the aggregate income of an economy generated by its production and its ownership of factors of production, less the incomes paid for the use of factors of production owned by the rest of the world, converted to international dollars using PPP rates, divided by midyear population. More specifically, the natural logarithm of GNI per capita is used to account for the fact that each additional dollar of income has a smaller effect on expanding capabilities (Anand & Sen, 2000).

The idea would be that those Member States of the EU that have a higher level of human development because their inhabitants have a greater expectation of healthy life, the vulnerable young population (without employment or training) has a lower weight among their young people, they are less affected by severe material and social deprivation and enjoy higher incomes; they will be in a better position to cope with the negative socio-economic effects of the COVID-19 shock.

Table 3 presents the descriptive statistics of the four indicators selected as a proxy of the human development dimensions for the 27 Member States in 2019.

[3] The *severe material and social deprivation rate* is defined as the proportion of the population experiencing an enforced lack of at least 7 out of 13 deprivation items (1-6 related to the individual and 7-13 related to the household): (1) Having internet connection, (2) replacing worn-out clothes by some new ones, (3) having two pairs of properly fitting shoes, (4) spending a small amount of money each week on him/herself, (5) having regular leisure activities, (6) getting together with friends/family for a drink/meal at least once a month, (7) capacity to face unexpected expenses, (8) capacity to afford paying for one week annual holiday away from home, (9) capacity to being confronted with payment arrears, (10) capacity to afford a meal with meat, chicken, fish or vegetarian equivalent every second day, (11) ability to keep home adequately, (12) have access to a car/van for personal use, and (13) replacing worn-out furniture.

Table 3

Descriptive statistics of single indicators for building the European Union-Human Development Index in 2019 (n=27)

Country	Healthy life years at birth (no. years)	Young people in employment or in education and training (% of 15-29 years)	Population not affected by severe material and social deprivation (%)	Gross National Income per capita (2017 PPP$)
Austria	57.3	91.7	97.3	56,197
Belgium	62.4	88.2	93.7	52,085
Bulgaria	66.3	83.3	77.5	23,325
Croatia	57.4	85.8	95.4	28,070
Cyprus	62.5	85.9	96.8	38,207
Czechia	62.0	90.2	97.9	38,109
Denmark	58.9	90.4	96.2	58,662
Estonia	55.8	90.2	97.3	36,019
Finland	56.4	90.5	98.1	48,511
France	64.1	87.0	92.7	47,173
Germany	66.3	92.4	97.0	55,314
Greece	66.0	82.3	84.2	30,155
Hungary	61.7	86.8	89.1	31,329
Ireland	69.6	88.6	92.8	68,371
Italy	68.3	77.8	93.6	42,776
Latvia	53.1	89.7	92.4	30,282
Lithuania	57.5	89.1	90.3	35,799
Luxembourg	62.6	93.5	98.6	72,712
Malta	73.2	92.1	95.0	39,555
Netherlands	61.0	94.3	97.2	57,707
Poland	62.5	88.0	96.5	31,623
Portugal	59.2	90.8	94.4	33,967
Romania	60.2	83.2	75.2	29,497
Slovakia	56.2	85.5	94.1	32,113
Slovenia	60.9	91.2	97.8	38,080
Spain	69.9	85.1	92.3	40,975
Sweden	73.3	93.7	98.5	54,508
Mean	62.4	88.4	93.4	42,634.1
Maximum	73.3	94.3	98.6	72,712.0
Minimum	53.1	77.8	75.2	23,325.0
CV	8.53	4.44	6.33	30.32

Note. CV is the Pearson's coefficient of variation. Adapted from EUROSTAT, Healthy life years by sex [hlth_hlye]; EUROSTAT, Educational attainment level and transition from education to work [EDAT_LFSE_35__custom_1020966]; EUROSTAT, Income and living conditions [ILC_MDSD11]; United Nations Statistics Division [http://hdr.undp.org/en/indicators/195706#].

The values of Pearson's coefficient of variation indicate that the largest territorial differences arose in GNI per capita. The Member States that joined the EU from 2004 registered the lowest values. The cases of Luxembourg and Ireland stand out with the highest values, equivalent to three times the GNI per capita of Bulgaria. The second indicator with big disparities is healthy life years at birth. People enjoy a healthy and large life in Sweden (73.3 years) and Malta (73.2 years), and the shortest in Latvia (53.1 years). There is a difference of more than 20 years. Overall, it might be deduced that southern countries, in addition to Sweden and Ireland, enjoy more years of healthy life at birth. In the equal opportunities dimension, Italy and Greece reached the worst performances with around 20% of its young people without work and without being involved in education or training. By far Romania and Bulgaria registered the worst figures in severe poverty: 25% of the population experienced severe material and social deprivation.

In order to transform the single indicators (x) expressed in different units into a range between 0 and 1, the re-scaling method is applied. The normalisation formula is:

$$I_{ij} = \frac{x_{ij} - minimum(x_j)}{maximum(x_j) - minimum(x_j)}$$

where I_{ij} is the normalised indicator j on the Member State i.

As maximum values, we take the maximum value of indicator across Member States in 2019. In order to prevent that the numerator becomes zero, as minimum value we take the minimum value of indicator across Member States over the period in which the information is available: 2010-2019 for *Healthy life years at birth*, 2010-2019 for *Young people in employment or in education and training*, 2015-2019 for *Population not affected by severe material and social deprivation* and 2000-2019 for *GNI per capita*.

The EU-HDI in a Member State i is the geometric mean of the four normalised indicators:

$$EU - HDI_i = (I_{i1} * I_{i2} * I_{i3} * I_{i4})^{\frac{1}{4}}$$

This method is partially compensatory, and the four single indicators have the same weight.

3.2. Results of the European Union-Human Development Index (EU-HDI)

Table 4 displays the results of EU-HDI and HDI of 27 Member States in 2019, as well as the ranking of countries according to them, and the variation in the ranking of countries from HDI to EU-HDI. At first glance, the association between both indexes is quite high (the Pearson's coefficient of correlation is 0.81, $p<.01$; and the Spearman's rank correlation is 0.85, $p<.01$). Nevertheless, there are some remarkable findings. The countries that exhibit major changes in the rankings are: Malta, Portugal, Poland and Hungary, which rose five or more positions; and Finland, Latvia, Denmark and Estonia down from five to 10ten places. Focusing on the top, the six best positions in HDI (first quartile) are reached by Ireland, Germany, Sweden, Netherlands, Denmark and Finland. However, the six best positions in EU-HDI that account for enhanced capabilities are reached by Sweden, Ireland, Luxembourg, Malta, Germany and Netherlands. Malta improves 10 positions because, after Sweden, it has the highest number of healthy life years at birth and because only 8% of its young people are unemployed or do not follow an education or training programme. On the contrary, Finland and Denmark are penalised in the EU-HDI since their number of healthy life years at birth (56.4 and 58.9, respectively) are very low in comparison with the rest of the Member States. At the bottom, it is worth noting the best position that Portugal and Hungary occupy in the EU-HDI. The main strength of Portugal is that only 9% of its young people are unemployed or do not follow an education or training programme. Hungary has in its favour a higher number of healthy life years at birth than the countries placed at the bottom.

Another remarkable aspect is that inequalities, measured by the Pearson's coefficient of variation, are much higher in EU-HDI than in HDI. This finding is explained because inequality is typically higher across enhanced capabilities (see United Nations, 2019). In other words, it is easier to achieve convergence in basic capabilities, but when a minimum level of well-being or development is reached and improvement is sought, disparities increase.

Table 4

Comparisons of the European Union-Human Development Index and the Human Development Index of United Nations in 2019 (27 Member States)

Country	EU-HDI	Rank EU-HDI (1)	HDI	Rank HDI (2)	Variation (2)-(1)
Austria	0.662	13	0.922	9	-4
Belgium	0.706	8	0.931	7	-1
Bulgaria	0.441	25	0.816	27	2
Croatia	0.496	23	0.851	25	2
Cyprus	0.649	14	0.887	18	4
Czechia	0.690	11	0.900	13	2
Denmark	0.691	10	0.940	5	-5
Estonia	0.543	21	0.892	16	-5
Finland	0.610	16	0.938	6	-10
France	0.698	9	0.901	12	3
Germany	0.837	5	0.947	2	-3
Greece	0.533	22	0.888	17	-5
Hungary	0.570	19	0.854	24	5
Ireland	0.841	2	0.955	1	-1
Italy	0.589	18	0.892	15	-3
Latvia	0.386	27	0.866	21	-6
Lithuania	0.547	20	0.882	19	-1
Luxembourg	0.838	3	0.926	8	5
Malta	0.837	4	0.895	14	10
Netherlands	0.774	6	0.944	4	-2
Poland	0.632	15	0.880	20	5
Portugal	0.606	17	0.864	22	5
Romania	0.413	26	0.828	26	0
Slovakia	0.485	24	0.860	23	-1
Slovenia	0.680	12	0.917	10	-2
Spain	0.715	7	0.904	11	4
Sweden	0.943	1	0.945	3	2
CV	22.05		4.17		

Note. CV is the Pearson's coefficient of variation (n=27). HDI values adapted from United Nations (2020a). *Human Development Report 2020. The next frontier: Human development and the Anthropocene*.

4. Human development in the European Union and European values

The EU-HDI provides a picture of where Member States stand in dealing with the negative socio-economic effects of the COVID-19 shock. The diagnosis or ranking of the Member States based on the objective indicators synthesised in the EU-HDI shows how far each Member State has come in the EU27 group, largely thanks to the benefits of the European Welfare State. However, especially in times of crisis, it is worth remembering the European values of freedom, democracy, equality, and the Rule of Law that have inspired the EU since its constitution and which should be respected by all Member States that want to enjoy the economic benefits of the EU. These values determine the future and prosperity of citizens as they directly affect social welfare and the evolution of the economy.

To this end, we incorporate in the study the assessment of citizens, experts, and enterprises regarding the degree of compliance with these values. Specifically, we consider the subjective or self-reported information on five indicators of quality of governance provided by the project The Worldwide Governance Indicators of the World Bank (www.govindicators.org). The five indicators of governance studied are defined as follows.

(1) *Voice and Accountability* reflects the perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.

(2) *Political Stability and Absence of Violence* measures the perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism.

(3) *Government Effectiveness* reflects the perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.

(4) *Regulatory Quality* reflects the perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.

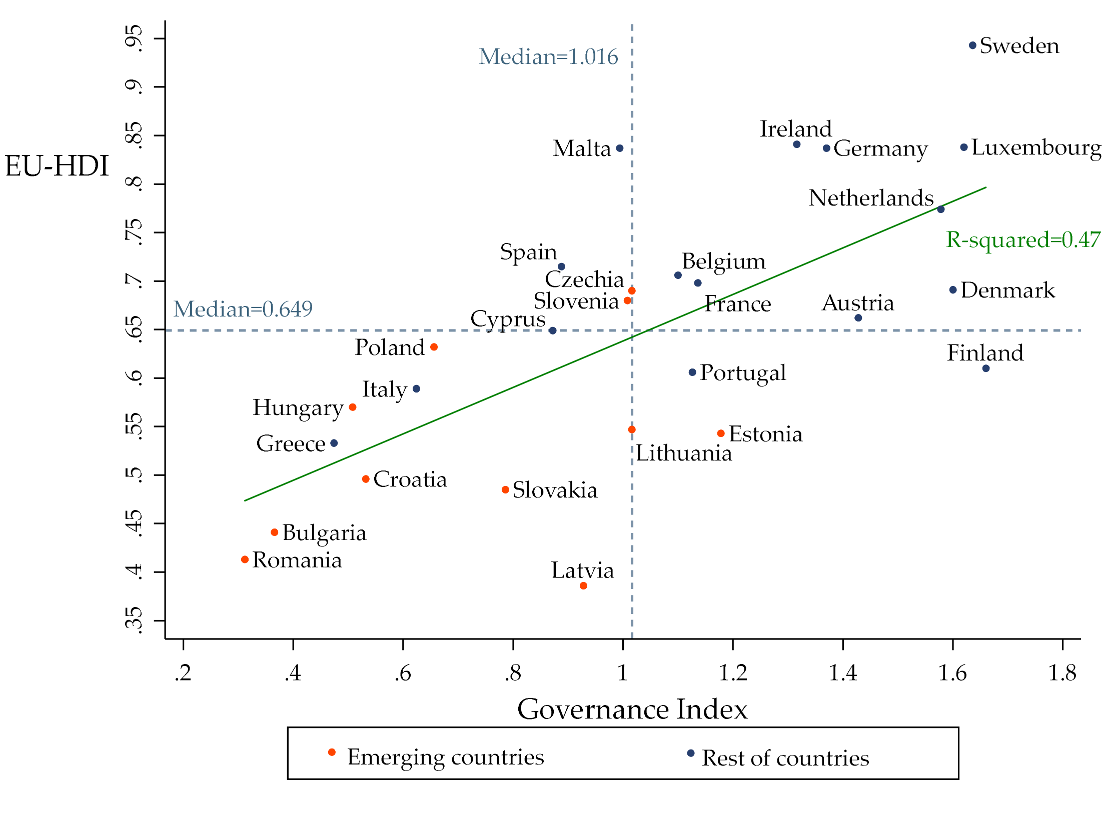
Finally, (5) *Rule of Law* reflects the perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.

All of them are measured on the same scale and are transformed in such a way that higher values would indicate a better situation. Specifically, in our sample of 27 Member States the indicators range from 0 (weak) to 2.5 (strong) governance performance. From these five single indicators, a Governance Index has been obtained by calculating the arithmetic mean, thus assuming the possibility of compensating.

Figure 4 displays the results of combining the results of the EU-HDI and the Governance Index in 2019. It has differentiated between the group of 11 Emerging Member States and the rest. Overall, there is a positive relationship between both indices, so that higher levels of human development are linked to a better perception of the quality of governance or compliance with the European values of freedom, democracy, Rule of Law, political stability, quality of public services, etc. The incorporation of the median lines of both indexes allows establishing a classification of the Member States into four groups.

Figure 4

Association between the European Union-Human Development Index and the Governance Index in the European Union of 27 Member States in 2019



The countries located in the upper right quadrant are in the best position in 2019 in both human development and governance to face the negative effects of the COVID-9 shock. In this group of 10 countries, Czechia is the only country in the emerging group because it reaches just the median in the Governance Index. In human development, its strengths are the human capital of its young population and the low incidence of severe material and social deprivation. In addition to Czechia, the group is made up of five of the six founding countries of the EU in 1957 (Belgium, France, Germany, Luxembourg, and Netherlands), two Scandinavian countries (Sweden and Denmark) and Austria, all of them with a Welfare State very developed. Finally, the case of Ireland would be just the opposite of the case of Czechia. Ireland's greatest weaknesses are in the human capital of its young population and in the incidence of severe material and social deprivation. Despite these weaknesses, Ireland scores high on the EU-HDI due to its income. Ireland is the EU country that has recorded the highest economic growth rates since 2014 with an average GDP growth rate of 9.2% in the 2014-2020 period. In fact, in 2020 all Member States registered negative growth except Ireland, which registered an increase of 5.9% compared to 2019. From a social welfare point of view, the key question would be whether all groups or parts of Irish society benefit from the income generated.

On the contrary, nine countries make up the group with the worst performance in both indexes (lower left quadrant). All of them are emerging countries except Italy and Greece. Italy registers the worst value in the indicator young people who are unemployed or do not follow an education or training programme and receives a very low rating in compliance with the Rule of Law and Political Stability. Greece, despite having been in the EU since

1981, registers very similar values to the rest of the emerging countries of this group in the indicators of human development (low GNI per capita, high rate of youth people unemployed and not involved in education or training programme, and high severe deprivation). Greece also shares with the emerging countries of this quadrant a very low assessment in all the indicators of governance.

Finally, with regard to the remaining two quadrants where a smaller number of Member States are located, all of them are very close to the Member States that have a better situation, although improvements in governance would be necessary in Spain and Cyprus. The exceptions are likely to be Lithuania and Estonia with a lower human development explained by their low-income levels and low numbers of healthy life years at birth.

5. Conclusions

Since its constitution in 1957, the European values of freedom, democracy, equality, and the Rule of Law, in addition with the economic integration, have made possible to improve the peoples' prosperity and well-being in the EU. Throughout these decades, the EU has been exposed to remarkable changes, some of which have been reviewed in this chapter. Firstly, the creation of the Economic and Monetary Union -with the implementation of the single monetary policy and the pact to advance in the coordination of fiscal policy- has meant that countries lost part of their autonomy in the design of public policies and that the objectives established in the same terms for all Member States must be respected. At the same time, the incorporation of 11 new countries from Eastern Europe, with different economic and social principles, represented a great challenge for the EU.

Secondly, the Europe 2020 Strategy, which was intended to be a new boost to the social market economy, was largely counteracted by the context of the economic crisis from 2008. Precisely to try to get out of the public debt crisis, the EU opted for fiscal consolidation measures, approved in the Euro Plus Pact 2011, which managed to reduce public deficits but, probably, at a cost to the prosperity and well-being of Europeans.

Finally, faced with the threat that the COVID-19 pandemic poses to economic and social welfare in terms of poverty and inequality, which would distance it from the Sustainable Development Goals, the EU's response has been very different. On the budgetary front, there has been a strong push for expansionary policies with the Next Generation EU, that is an additional funds equivalent to the 66.6 % of the total EU budget for the period 2021-2027 to foster the recovery after the pandemic. In the sphere of values or institutions, the European Pillar of Social Rights Action Plan, approved in March 2021, aims at enhancing social rights and to strengthen the European social dimension across all policies of the Union. Most importantly, the access to Next Generation funds will be conditional on compliance with the European Pillar of Social Rights.

Based on the results of the EU-HDI and the Governance Index, the position of the 27 Member States in 2019 in terms of prosperity and dealing with the negative effects of COVID-19 could be summarized as follows.

The three Scandinavian countries together with Luxembourg are the best valued in quality of their institutions and European values, whereas the worst evaluated are Romania, Bulgaria, Greece, and Hungary. However, Denmark and Finland do not rank in the first position in human development because they are penalized in human development for their low values in healthy years of life.

Despite being in the EU for more than 15 years, emerging countries and Greece register the lowest values in human development and governance. Traditionally, these countries register GNI per capita below the EU27 average, but they have not known or have not wanted to take advantage of the opportunity to integrate and participate in the economic and social benefits that the EU represents.

Within the emerging countries, it is worth noting four cases that show different behaviors. Czechia and Slovenia are supported by the human capital of their young population and with a very low incidence of severe deprivation, as well as compliance with the European values of freedom, democracy, equality, stability, and the Rule of Law are very close to the group with more developed Welfare States and, therefore, with a greater capacity to bounce forward in the case of a shock, such as COVID-19. Estonia and Lithuania are two other exceptions to the general behavior of emerging Member States. Both countries are highly valued for respecting and promoting European values that, in turn, determine the quality of their governance. However, in addition to low income, the low healthy life years at birth slow down their human development.

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