



*Research article*

## **Healthcare access as an important element for the EU's socioeconomic development: Greece's residents' opinions during the COVID-19 pandemic**

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**Abstract:** The coronavirus disease 2019 (COVID-19) pandemic has had a severe impact on global socio-economic development and healthcare access. Considering the link between the two, the objective of this study was to investigate to what extent Greece's residents consider that access to healthcare is an important element for the European's Union (EU) socioeconomic development. The study used data from the Eurobarometer 94.2. Interviews were conducted online. Respondents were recruited by telephone via a dual-frame random digit dialing (RDD) sample design. The sample was supplemented with a non-probabilistic sample randomly drawn from Kantar's LifePoints panel. The sample size was  $n = 1002$ . A logistic model was fitted using the respondents' opinions regarding the direction the EU is heading in as a dependent variable. As potential predictors, we used respondents' opinions regarding the importance of access to healthcare for the EU's socioeconomic development, the extent to which more (or less) decision-making should take place at the European level for dealing with health issues, the index of political interest and several sociodemographic characteristics. According to the analysis, those that mentioned healthcare access as an important element for the EU's socioeconomic development were more likely to consider that the EU is heading in the wrong direction. The results of this study may indicate feelings of discomfort regarding the decline of society in the European Union due to disruptions to healthcare access and the contraction of national economies caused by the COVID-19 pandemic.

**Keywords:** COVID-19; socioeconomic development; EU direction; disruption to healthcare access; economic knowledge

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**1. Introduction**

The term “socioeconomic development” refers to the process of social and economic development in society (Palliyaguru et al., 2013). Economic development refers to efforts aimed at improving the economic well-being and quality of life of a community by creating and/or retaining jobs and increasing incomes (Yonk et al., 2017). From a macro-perspective, social development can be considered as policies aimed at improving the livelihood of the individual through poverty reduction and empowerment (Hasmath and Hsu, 2007).

That is, on an individual level, improvements in socioeconomic status, measured by factors such as income, wealth, education, and occupation, may reflect socioeconomic development, while quality of life, standards of living, and general health constitute additional factors (Roztocki and Weistroffer, 2016).

Socioeconomic development depends on several factors such as investments from the private and public sectors in education, health, safety, infrastructure, science and technological innovation, and private companies (Cai et al., 2019; Botelho and Pfister, 2011).

Human capital formation and aggregation constitute the most important determinants of socioeconomic development; they complement the adoption of new technologies, foster innovation, and facilitate industrialization (Chen et al., 2021). Indeed, there is a high degree of consensus amongst development economists that investments in human capital, namely education and health, are crucial for the social and economic development of nations (Ajakaiye and Kimenyi, 2011).

Education is an important driver of socioeconomic development since it influences adults’ physical, mental, and emotional health, which in turn, influences labor force supply, productivity, and innovation (Smith et al., 2016).

Health also substantially contributes to socioeconomic development (Kluge et al., 2018) via productivity. The size, age, sex structure, labor force components, and productivity levels of the population are determined to a large extent by morbidity, mortality, and fertility, each of which is directly impacted by improved health. In addition, better personal healthcare results in higher productivity of the individual and collectively raises the national income (Christian et al., 1977). Furthermore, individuals of better health, who live longer, have greater incentives to invest in developing their skills, because they expect to reap the benefits of such investments over longer periods. Moreover, increased schooling contributes to higher productivity, and in turn, higher income, while good health contributes to school attendance (Bloom and Canning, 2000). Additionally, the population’s health impacts the rate of accumulation of physical capital and its marginal productivity. A vicious circle linking low income, low savings, and a low rate of income growth may be formed due to poor health (Chapter, 1973). Thus, given that health is a powerful force for individual and national economic development, it is not surprising that it is characterized as an “economic engine” (Mirvis et al., 2008); in this sense, poverty can be considered as a consequence of poor health (Feachem, 2000).

In addition, due to the link between healthcare access and health (Gu et al., 2009), access to healthcare is considered a major element fostering socioeconomic development (Balén et al., 2013). That is, limited access to healthcare represents a major barrier to social and economic development across the globe (Madanian et al., 2019).

However, when studying to what the extent healthcare access may be considered an important element of socioeconomic development, the prevailing circumstances should not be neglected. Thus, one should first highlight that the coronavirus disease 2019 (COVID-19) pandemic has had a tremendous impact on global socio-economic development (Liu et al., 2021) and tested many sectors such as health, education, transport, trade, and finance (Seghier, 2020). The COVID-19 pandemic started as a health crisis but swiftly turned into an economic crisis (Jan et al., 2021). Government's responses to the COVID-19 pandemic involved the adoption of a "mix" of tools in several policy areas such as health, medicine, social fields, and economics, rather than just a single tool (Capano et al., 2020). The main purposes of these responses were to ensure social distancing between people to limit the virus spread on the one hand, while minimizing adverse economic impacts on the other hand (Ashraf, 2020).

Although the restrictions introduced in each country are different and depend on each country's situation, the national measures can generally be classified into three major categories: travel restrictions, shutdown of facilities, and social distancing. Travel restriction measures including travel bans from other countries aim to limit the virus spread across countries' borders, while domestic travel restrictions aim to limit the virus spread among a country's citizens. The facility shutdown measures aim to further limit domestic outbreaks by reducing crowds in non-essential places such as bars, restaurants, and festivals, as well as prioritizing the safety of children by closing schools. At the highest level, namely the social distancing measures, stay-at-home orders come into effect for specific regions or a whole country (Thu et al., 2020).

The measures so far implemented to limit the virus spread has had a tremendous impact on the global economy. Although a number of major epidemics/pandemics have hit in the last 40 years, none have led to consequences for the world economy as severe as those of the COVID-19 pandemic (Gössling et al., 2021). The effects of the COVID-19 pandemic on the economy can be felt through four main channels: (a) supply, (b) demand, (c) uncertainty, and (d) international financial markets (Petrakis and Kostis, 2020). On the one hand, the COVID-19 crisis unquestionably constitutes a negative demand shock, which for fixed prices and incomes, has reduced household spending, and on the other hand, it also unquestionably constitutes a negative supply shock that has reduced firms' ability to maintain production at pre-pandemic costs and quantities (Baqae and Farhi, 2021). In addition, ongoing uncertainty leads to reduced or delayed consumption of goods and services, as well as to delayed or foregone investments (Boone et al., 2020); the COVID-19 pandemic has increased economic uncertainty and is among the biggest threats to the global economy (Yfantopoulos, 2021). Furthermore, the pandemic has severely affected global financial markets (Pak et al., 2020). Developed countries' financial markets are mainly affected through supply reduction, demand reduction, and economic instability, while developing nations are mainly affected through confidence and expectations, changes in consumption patterns, and the bandwagon effect (Zhao et al., 2022).

A second, related point to consider is the influence of the COVID-19 pandemic on the healthcare sector, specifically the disruptions to health services worldwide (García-Azorín et al., 2021). The restrictions came into effect to limit the virus spread in several countries, such as temporarily closing or limiting access to healthcare facilities and services, reallocating healthcare resources, and interrupting screening programs, have disrupted the delivery of care (Boulton, 2020). Disruption to healthcare access, i.e., inability to receive appropriate medical care (Ballesio et al., 2021), has been brought about due to the pandemic (Whaley et al., 2021).

In Greece, the first COVID-19 case was diagnosed on 26 February 2020, and the first death was reported on 12 March 2020. From an epidemiologic perspective, as of mid-September 2020, Greece was not defined as a country with a trend of concern according to the European Centre for Disease Prevention and Control (ECDC) criteria, but had observed a strong increasing trend in intensive care units (ICU) admissions, and the ECDC model also highlighted Greece as having the potential for a large resurgence (European Centre for Disease Prevention and Control, 2020). At the onset of COVID-19, strict containment measures came into effect, including closures of schools, universities, non-essential shops, cafés, restaurants, and public spaces, as well as movement restrictions including a ban on gatherings and travel, during the first wave (March 2020). New measures then came into effect during the second wave (November 2020) in a period (reference period of this study) when the epidemiologic picture was worse. Early concerns regarding the influence of the pandemic on the Greek economy focused on the high levels of uncertainty (Adrikopoulou, 2020) and the reduction of exports, travel receipts, shipping receipts, consumer and business confidence, international oil prices, production, and employment as a result of measures implemented to limit the spread of the coronavirus (Petrakis and Kostis, 2020).

According to Sen (1999), development is an integrated process of expansion of substantive freedoms, such as access to healthcare. However, Acemoglu and Johnson (2007) argue that there is no evidence that improvements in health outcomes, such as life expectancy, can lead to faster growth of income per capita or output per worker. Given the abovementioned debate, and because, on the one hand, healthcare access constitutes one of the major challenges facing health systems worldwide during the COVID-19 pandemic (Androutsou et al., 2021), while on the other hand, the pandemic has posed a severe threat to socioeconomic development (Shi et al., 2021), this study aimed to investigate to what extent healthcare access may be considered important to the European Union (EU) socioeconomic development, from Greece's residents' perspectives.

## 2. Materials and Methods

For this study, we used data from the Eurobarometer 94.2 (European Commission and European Parliament, 2021). The survey covered populations resident in each of the 27 EU member states. Fieldwork was conducted between 20 November and 21 December 2020 among 27,213 individuals aged 15 years and over.

In Greece, interviews were conducted online. The respondents were recruited by telephone via a dual-frame random digit dialing (RDD) sample design; telephone numbers were drawn from the national telephone numbering plans. However, the response rate was not sufficiently large to achieve the target sample size in the fieldwork period, so the sample was supplemented with a non-probabilistic sample randomly drawn from Kantar's LifePoints panel. The sample size was  $n = 1002$ . Fieldwork was conducted between 3 December and 21 December 2020 (European Parliament, 2020).

To study whether the respondents considered healthcare access as an important element of the EU's social and economic development, we fitted a logistic model using as the dependent variable the question. At present, would you say that, in general, things are going in the right or wrong direction in the EU?

The dependent variable fits the definition of societal pessimism, i.e., the sentiment that one's society is in decline (Steenvoorden, 2015). Because societal pessimism is caused by political instability and/or economic recession (Smith, 2017) it constitutes a reflection of the economic and political context. Economic growth is included in the factors that explain societal pessimism. The association

between economic growth and societal pessimism is negative, namely, rising economic growth reduces societal pessimism (Steenvoorden and van der Meer, 2017). At this point, we should note that economic growth can occur without development, but development without growth is unlikely. Economic growth here refers to an increase in national or per capita income and gross national product (GNP) (Nnadozie and Jerome, 2019). In addition, we should also note that a person answering the question under study, i.e., a country's direction, will have to vector in many aspects that are important for the future of his country, i.e., the state of the economy, national security, social cohesion, good governance, the environment. Individuals may also be concerned about employment, healthcare, working conditions, the social climate, and the inequalities, etc. (Van Houwelingen, 2016).

The respondents were also asked, "In your opinion, which elements are the most important for the EU's economic and social development? Firstly? And then (maximum 3 answers)?" Access to quality healthcare was included among the potential answers. At this point it should be mentioned that "quality healthcare means doing the right thing, at the right time, in the right way, for the right person—and having the best possible results (Agency for Healthcare Research and Quality, 2000)".

As potential predictors in the analysis, the following variables were used: (a) geographic region, (b) access to quality healthcare as an important element for the EU's social and economic development, (c) age, (d) gender, (e) social class; the respondents were asked to what social class belong, e.g., working class, lower middle class, middle class, upper middle class, or upper class. The abovementioned question refers to the subjective class identification, namely to the individual's perception of his own position in the status hierarchy (Franzini et al., 2006). The sociodemographic characteristics were used as potential predictors mainly due to their impact on economic knowledge; this point is of considerable importance because economic knowledge has a direct and significant effect on public opinion about many economic issues (Walstad, 1997). The extent to which more (or less) decision-making should take place at the European level for dealing with health issues and the index of political interest were included as additional potential predictors in the analysis. Only two respondents declared that "no change is needed" regarding the extent to which more (or less) decision-making should take place at the European level for dealing with health issues; hence, these respondents were excluded from the analysis. The index of political interest constitutes a synthesis of three questions: "When you get together with friends or relatives, would you say that you frequently, occasionally, or never discuss: 1) national political matters, 2) European political matters, or 3) local political matters?"

The Helmert contrast was applied to the "social class" and the "index of political interest" variables, which compares each category of an ordinal variable (except the last) with the mean of the subsequent levels. An indicator contrast, meanwhile, was applied to the "region" variable, which compares the reference category of a nominal variable with the remaining categories. The binary variables "access to quality healthcare", "gender" and "extent to which more (or less) decision-making should take place at the European level for dealing with health issues" were treated as such.

The model's goodness of fit was tested using the Hosmer and Lemeshow test, the calibration of the model using the calibration belt test, and its specification error using the link test; if  $y = f(\mathbf{x}\beta)$  is the model, where  $\mathbf{x}$  are the predictors and  $\hat{\beta}$  the parameter estimates, the link test calculates the variables  $h = \mathbf{x}\hat{\beta}$  and  $h_2 = h^2$ . The model is then refitted with these two variables. If the model is specified correctly, the  $h_2$  would be non-significant.

Eurobarometer post-stratification weighting was used for the descriptive statistics; the weight used reproduces the real number of cases for the country (European Commission and European Parliament, 2021).

The STATA 17 statistical software package was used for the analysis. Specifically, the commands *desmat* (Hendrickx, 1999) *logistic*, *link test*, and *calibrationbelt* (Nattino et al., 2017) were used.

### 3. Results

Regarding gender, approximately 52 percent (51.91%) of the respondents were female and 48 percent (48.09%) were male. The mean age of the respondents was 46.18 years ( $\pm 14.41$ ).

The regional distribution of the sample is presented in Table 1.

**Table 1.** Regional distribution of the sample.

Geographic region	% ( <i>n</i> )
Attica	37.52 (470)
Create	6.23 (84)
Eastern Macedonia-Thrace	6.05 (47)
Central Macedonia	18.83 (171)
Western Macedonia	2.71 (24)
Epirus	3.4 (15)
Thessaly	7.25 (41)
Western Greece	6.59 (57)
Central Greece	5.61 (45)
Peloponnese	5.81 (48)

The sample distribution related to social class is presented in Table 2, which shows that most respondents defined themselves as being in the middle class.

**Table 2.** Sample distribution related to social class.

Social class	% ( <i>n</i> )
Working class	18.10 (189)
Lower middle class	27.41 (265)
Middle class	47.29 (495)
Upper middle class	6.08 (45)
Higher class	1.12 (6)

Approximately 56 percent (55.82%) of the respondents declared that, in general, things in the EU are going in the wrong direction, while approximately 44 percent (44.12%) of the respondents declared that, in general, they are going in the right direction. Only 0.05% of the respondents chose “neither” (since only one respondent answered this option, it was excluded from the analysis).

Table 3 presents the percentages of those who declared that more (or less) decision-making should take place at the European level for dealing with health issues.

According to Table 3, most respondents declared that more decision-making should take place at the European level for dealing with health issues.

The sample distribution related to the index of political interest is presented in Table 4.

**Table 3.** Extent to which more (or less) decision-making should take place at the European level for dealing with health issues.

Extent to which more (or less) decision-making should take place at the European level for dealing with health issues	% (n)
More decision-making	80.72 (811)
Less decision-making	19.14 (188)
No change is needed	0.14 (2)

**Table 4.** Index of political interest.

Index of political interest	% (n)
Not at all interested in politics	3.46 (38)
Slightly interested in politics	12.65 (145)
Moderately interested in politics	47.91 (520)
Strongly interested in politics	35.98 (299)

According to Table 4, the majority of respondents were moderately interested in politics.

Approximately 48 percent (47.57%) of the respondents considered that access to quality healthcare is an important element of the EU's economic and social development (Table 5).

**Table 5.** Important elements for the EU's economic and social development.<sup>1</sup>

Element	Firstly % (n)	And then % (n)	Total % (n)	Rank
Equal opportunities and access to the labor market	28.07 (259)	34.38 (329)	62.45 (588)	1
Fair working conditions	9.26 (111)	31.03 (330)	40.29 (441)	4
Social protection and inclusion	4.76 (54)	22.27 (209)	27.04 (263)	5
Access to quality healthcare	7.22 (77)	40.35 (368)	47.57 (445)	3
Freedom of movement of workers and learners	5.65 (48)	14.41 (138)	20.06 (186)	8
The standard of living of people in the EU	31.41 (298)	24.62 (273)	56.03 (571)	2
The quality of infrastructure in the EU	2.54 (43)	18.05 (174)	20.59 (217)	7
The EU's capacity for research and innovation	4.04 (43)	11.99 (117)	16.03 (160)	9
The skills and talents of people in the EU	1.44 (20)	12.88 (118)	14.32 (138)	10
Environmental responsibility and climate action	3.97 (31)	19.55(190)	23.52 (221)	6
Rights of minorities and protection against discrimination	1.64 (18)	8.02 (95)	9.65 (113)	11

According to Table 5, access to quality healthcare was ranked third highest in Greece (47.57%). Portugal ranked it as most important (69.25%), while Sweden ranked it with the lowest importance

<sup>1</sup> The data are available by GESIS-Leibniz Institute for the Social Sciences, <https://doi.org/10.4232/1.13722>

(26.65%). Overall, approximately 40 percent (40.38%) of EU residents considered that access to healthcare is an important element of the EU's socio-economic development, which places Greece's residents above average in terms of their prioritization of this factor.

According to the logistic regression model (Table 6), working-class respondents considered that, in general, things in the EU are going in the wrong direction (odds ratio (OR)=0.43, 95% confidence interval (CI): 0.25–0.74) when compared to respondents of higher social classes. The same holds for lower middle class respondents when compared to respondents of higher classes (OR = 0.41, 95% CI: 0.21–0.79). In the same vein, respondents who answered that access to quality healthcare is an important element of the EU's social and economic development considered that, in general, things in the EU are going in the wrong direction (OR = 0.70, 95% CI: 0.54–0.91). However, those who declared that more decision-making for dealing with health issues should take place at the European level believed that things in the EU are generally going in the right direction (OR=2.37, 95% CI: 1.67-3.37).

Geographic region ( $p=0.702$ ), gender ( $p=0.931$ ), age ( $p=0.360$ ), and the index of political interest ( $p=0.389$ ) were not statistically significant, meaning that these variables do not influence the respondents' opinions regarding the direction in which the EU is heading.

The Hosmer and Lemeshow test indicated a good fit ( $p = 0.603$ ) and the calibration belt test indicated good calibration ( $p = 0.462$ ), while according to the link test (Table 7), the model did not suffer from specification error.

**Table 6.** Logistic regression model.

Variable	OR	p	95% CI	
Social class		<0.001		
Working class of society vs. subsequent levels	0.43	0.003	0.25	0.74
Lower middle class of society vs. subsequent levels	0.41	0.008	0.21	0.79
Middle class of society vs. subsequent levels	0.44	0.086	0.17	1.12
Upper middle class of society vs. higher class of society	1.45	0.688	0.23	9.04
Access to quality healthcare	0.70	0.008	0.54	0.91
Extent to which more (or less) decision-making should take place at the European level for dealing with health issues	2.37	<0.001	1.67	3.37
Constant	0.63	0.062	0.38	1.02

**Table 7.** Link test.

Variable	Coefficient	p	95% CI	
$h$	0.95	<0.001	0.65	1.25
$h_2$	-0.13	0.460	-0.46	0.21
Constant	0.02	0.771	-0.13	0.17

#### 4. Conclusions

In the descriptive analysis, the majority of the respondents declared that, in general, things in the EU are going in the wrong direction. A probable reason may be the challenges facing the EU, i.e., inequalities, poverty, unemployment, or social and economic disparities (Dumitrescu, 2020); the available evidence indicates that the COVID-19 pandemic has tended to exacerbate previously



existing social and economic disparities rather than create novel inequities (Flor et al., 2022). As mentioned in the introduction, socioeconomic development was influenced by the pandemic (Zhang et al., 2021) through (a) supply, i.e., through significant disruptions in the global supply chain, factory closures, or cutbacks in many service sector activities, (b) demand, i.e., through a decline in business travel and tourism, declines in education services, or declines in entertainment and leisure services, and (c) uncertainty, i.e., uncertainty leading to reduced or delayed consumption of goods and services, and delayed or foregone investment (Boone, 2020). Consequently, the pandemic affected the economies of all EU member states, albeit to a different degree (Dauderstädt, 2022). At the time of data collection, most countries around the globe were projected to face significant GDP contractions in 2020 (Mohapatra, 2021), and early baseline forecasts of the World Bank envisioned a 5.2 percent contraction in global GDP in 2020—the deepest global recession in eight decades (World Bank, 2020). A second probable reason may be that during the second wave of COVID-19 transmission in the European Region, the all-cause mortality increased to a consistent and substantial level (Nørgaard et al., 2021). A third reason may be the negative influence of the pandemic on the Greek economy. In Greece, the business and workplace suspensions implemented during the first and second waves of the pandemic severely impacted the Greek economy. Specifically, the country's economy contracted by 8.2% in 2020 due to the impact of pandemic and the containment measures that came into effect to curb infections, especially during the second and fourth quarters of 2020. The economic impact of the pandemic on Greece has been substantial, particularly due to the importance of the tourism sector and the small size of the majority of enterprises. Yet, a timely increase in public investments and strong construction activity, which continued to operate with limited restrictions during the lockdown periods, have resulted in a relatively small impact on total investment. The unemployment rate has remained at 16.3% as employment support measures have prevented large-scale dismissals (European Commission, Directorate General for Economic and Financial Affairs, 2021).

With respect to the descriptive results regarding healthcare access, since in economic terms it increases productivity and life expectancy, thereby allowing individuals to earn more for a longer period (Pal, 2009), it is not surprising that it was included among the most important elements of the EU's social and economic development. In other words, human capital is a direct input into the production process; a high incidence of morbidity lowers labor productivity and reduces the number of days worked. Thus, programs which result in improved health are likely to positively impact the level of output (Griffin, 1999). After all, socioeconomic development is generally viewed as improvements in the living standards of individuals and communities, which healthcare access can clearly be seen to support (Palvia et al., 2018). So, though there is still debate among economists over whether expansion of healthcare access is a significant factor in boosting economic development (Subramanian, 2020), the public has no such doubt.

On the basis of the model's results, geographic region, gender, age, and the index of political interest were not statistically significant. These findings confirm the literature; according to de Vries and Hoffmann (2020) there is little difference between the age groups regarding societal pessimism, while the abovementioned difference is slight between women and men.

The influence of social class may reflect differences in the economic knowledge held by different groups of the population (Walstad, 1997). This point is of great importance for this study since the dependent variable of our analysis refers to the EU as a whole and not to Greece. In addition, it may reflect a vague sense of discomfort with current societal developments, a feeling that is growing in many European states and particularly affecting lower social classes of society (Aschauer, 2014).

The extent to which more (or less) decision-making should take place at the European level for dealing with health issues is positively associated with the outcome variable, because health outcomes in the European Union are good by international standards. This reflects the alignment of the objectives of improving health and well-being with the overall socioeconomic objective of prosperity and suggests that a radical overhaul of EU health policy is not needed. However, the high COVID-19 mortality, the postponement of non-COVID-19 care and the increase in mental distress have led to deterioration in overall health performance (Bucher, 2022).

The negative influence of difficulty in accessing quality healthcare on the direction that the EU is heading in, which represents a limit on socioeconomic development, may relate to the current healthcare access disruption in several countries around the globe. As mentioned in the Introduction, disruption to healthcare access has emerged as a global consequence of the pandemic (Brislane et al., 2021). It is evident that inability to access healthcare is included among the effects of the lockdown policies implemented worldwide (Nshimyiryo et al., 2021; Moynihan et al., 2021). Healthcare access disruption, on the one hand, is linked to demand side factors, such as patients' inability to access healthcare services due to transport restrictions during the lockdowns, reduced healthcare-seeking behavior due to fear or to preserve health system capacity, and deepening poverty that may limit the ability of households to cover out-of-pocket costs. On the other hand, meanwhile, it is linked with supply side factors such as supply chain interruptions of essential medicines and other health products, diversion of health resources from other services to the COVID-19 response, and paused provision of certain services to curb the spread of the virus (Krubiner et al., 2020).

With regard to the demand side factors, the pandemic and related measures that came into effect to limit the virus spread resulted in a substantial increase in unemployment (Settersten et al., 2020), which in turn, has translated into an immediate decrease in household incomes (Sarkar et al., 2021) and loss of health insurance coverage (Rivera et al., 2020). With regard to the supply side factors, meanwhile, the COVID-19 crisis is considered a direct threat to global health systems, especially for nations with small and weaker health systems (Nteka, 2021).

Evidence from the EU-Statistic on Income and Living Conditions (EU-SILC) 2020, conducted in Greece, indicates that approximately 37 percent (36.9%) of the respondents (individuals aged 16 and over) stated that they had a health problem, during the last 12 months, they really required medical examination or treatment, but they did not seek either due to the COVID-19 pandemic (Hellenic Statistical Authority, 2021). Thus, though the unmet healthcare need is a subjective measure of access to healthcare (Fjær et al., 2017), one may argue that the pandemic further impacted access to healthcare in Greece, beyond any reported impact.

Evidence that the COVID-19 pandemic negatively influenced incomes in Greece (Zavras, 2021) partly explains pandemic-related disruption to healthcare via the economic impact of COVID-19 in Greece. To avoid being overwhelmed by the sudden increase in the demand for healthcare, Greece's public healthcare system, being ill-prepared and poorly resourced, responded to the COVID-19 pandemic by ceasing most of its regular activities and redirecting available resources to COVID-19 treatment (Kondilis et al., 2021). That is to say, clinics have been closed and wards evacuated. Some of these have been reassigned to the care of COVID-19 patients, while others have been converted into COVID-19 ICU wards. Scheduled surgical operations and outpatient specialist hospital appointments have been canceled, and only emergencies continue to be seen (Giannopoulou and Tsobanoglou, 2020). Greece was a country that to a large extent was unprepared during the first wave of the pandemic. In addition, during the second pandemic wave, hospitals were under immense pressure (Farsalinos et al., 2021).

The previous points are consistent with the two core policy instruments of socioeconomic development. These include the “equity-oriented approach” and the “basic needs” approach. Based on the former, redistribution of income (or consumption) to the poverty groups through the fiscal system or through the direct allocation of consumer goods is required. Based on the latter, meeting needs such as food, nutrition, health, education, and shelter may be achieved by various combinations of growth, redistribution of assets and income, and restructuring of production (Khan, 1991).

Although, the model gives a static result, we may argue that “sustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs” (World Commission on Environment and Development, 1987).

The main limitation of the study is the limited number of independent variables used in the model. However, information regarding additional potential predictors was not available. Due to this limitation, the study provides evidence regarding the healthcare dimension of socioeconomic development rather than evidence regarding multiple dimensions. Nevertheless, because human capital formation and aggregation constitute the most important determinants of socioeconomic development, we may argue that the results of the model justify healthcare access as an important element of the EU’s socioeconomic development.

Summarizing the findings of this research, public opinion regarding the direction that society is heading in reflects feelings of uneasiness, anxiety, or uncertainty when people think about the future development of their society (European Foundation for the Improvement of Living and Working Conditions, 2021). The respondents recognize access to quality healthcare as a major driver of socioeconomic development. Accordingly, the results of this study may indicate feelings of discomfort regarding the decline of society in the European Union due to disruptions to healthcare access and contraction of national economies caused by the COVID-19 pandemic. Because macroeconomic conditions influence the development of economic perceptions (Anderson, 2020), the results of the study mirror the economic and healthcare disruption caused by the pandemic and confirm the literature.

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## Conflict of interest

All author declares no conflicts of interest in this paper.

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