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Income inequality and poverty in Greece during the recent economic, fiscal and Covid-19 crises

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Εισοδηματικές ανισότητες και φτώχεια στην Ελλάδα κατά τη διάρκεια της πρόσφατης οικονομικής, δημοσιονομικής και επιδημιολογικής (Covid-19) κρίσης

Χαρά Βαβούρα, *Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών*
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ABSTRACT

The issues of income distribution and poverty are among the most important socio-economic problems and the approach to their solution reveals to some extent a country's level of economic and social development. Greece's performance on these topics is still bellow the corresponding averages of the Eurozone, although in recent decades there has been a tendency to converge, albeit with fluctuations. The main purpose of this paper is to investigate whether the economic and fiscal crisis of the period 2010-2016 and the Covid-19 pandemic have affected the distribution of income and the level of poverty in Greece.

KEY WORDS: Income Inequality, Poverty, Social Exclusion, Economic Crisis, Coronavirus Pandemic.

ΠΕΡΙΛΗΨΗ

Τα ζητήματα της διανομής του εισοδήματος και της φτώχειας είναι από τα περισσότερο σημαντικά κοινωνικοοικονομικά προβλήματα και η αντιμετώπισή τους αποκαλύπτει ως ένα βαθμό το επίπεδο της οικονομικής και κοινωνικής ανάπτυξης των χωρών. Οι επιδόσεις της Ελλάδας στα θέματα αυτά εξακολουθούν να είναι χαμηλότερες από τα μέσα επίπεδα της Ευρωζώνης, μολονότι κατά τις τελευταίες δεκαετίες παρουσιαζόταν κάποια τάση σύγκλισης προς αυτά. Σκοπός της παρούσας εργασίας είναι να διερευνήσει εάν η οικονομική και δημοσιονομική κρίση της περιόδου 2010-2016 και η πανδημία του Covid-19 επηρέασαν τη διανομή του εισοδήματος και το επίπεδο της φτώχειας στην Ελλάδα.

ΛΕΞΕΙΣ-ΚΛΕΙΔΙΑ: Εισοδηματική Ανισότητα, Φτώχεια, Κοινωνικός Αποκλεισμός, Οικονομική Κρίση, Πανδημία του Κορονοϊού.

1. Introduction

After 2007 Greece faced a large economic crisis that evolved to fiscal crisis. During the period 2007-2013, Greece's total real GDP shrunk by 26.6% and the unemployment rate jumped from 8.4% to 27.5%. The question that arises is whether the specific economic and fiscal crisis as well as the economic consequences of the Covid-19 pandemic affected the distribution of

income in Greece and to what extent. This is the main issue that this paper seeks to explore. However, it should be noted from the beginning that the limitations regarding the existing data and mainly the small number of observations (yearly data) referring to the two crises, the second of which has not yet completed its effects at the time of writing this paper, do not allow for any rigorous empirical analysis on the effects of these crises on income distribution and poverty[1].

Income inequality is a multidimensional phenomenon which has critical economic, social and political implications. It mainly reflects the directions and the effectiveness of the social welfare system and the extent of the distributive role of the state. Generally, it also reveals the level of socioeconomic development of the country. However, apart from being a crucial economic policy objective, it is also of increased theoretical concern. According to economists such as Adam Smith, David Ricardo, John Stuart Mill and Karl Marx, the distribution of income and more specifically the specification of the rules regulating this distribution is the most important issue in economics.

A key concern that has preoccupied both relevant economic theory and empirical research is the relationship between income distribution and economic growth[2]. We must stress however that income inequality might affect growth through many channels so that the end result or the final effect might be positive or negative, depending on many factors and primarily on the existing and past market conditions and the progressivity or the extent of the re-distributive state measures, if any. Moreover, this relationship is not static but evolves with time and with the level of economic development of countries (Bubbico and Freytag, 2018)[3]. Empirical research referring to EU member states concludes that income inequality is positively related to economic growth in the case of developed EU countries, while in the case of developing ones it is negatively related to growth and in fact detrimental to economic growth (Jianu et al., 2021)[4].

It is known that the income of each individual, within the context of the market mechanism, is equal to the product of the quantities of the production factors it rents/sells within the production process and the price of each factor, which is determined in the corresponding market. This distribution of income, which depends on the distribution of personal abilities and wealth among individuals, may not be considered socially fair for various reasons, namely:

1. For *ethical reasons*. It may be considered morally unfair to have people in a society who are too rich or too poor.
2. Because of the *social costs of poverty*. If the income of working employees is too low, it will have a negative impact on their health, education and specialization, and therefore on their productivity, with negative effects and on the financial well-being of entrepreneurs. In addition, it is possible to create problems of social exclusion and in general loss of social cohesion that may lead to social unrest.
3. For *economic reasons*. The marginal utility of an income unit for the rich can be argued to be much lower than for the poor. Thus, a transfer of some income from rich to poor people is associated with a net positive impact on overall social well-being or welfare, as the increasing the well-being of the poor is considered by society as a whole to offset the decline in the well-being of the rich.

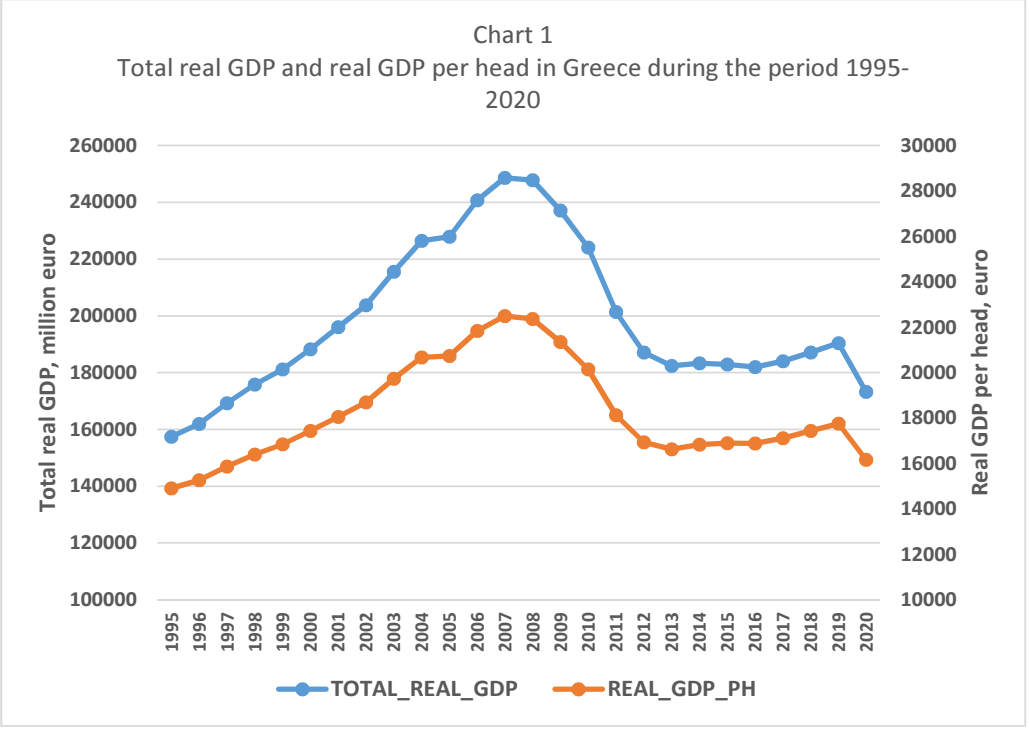
We must stress that the content of the socially equitable distribution of income is to a large extent a moral issue. It is largely based on value judgments and varies by country and reference period. Therefore, a generally accepted definition of the concept of socially equitable distribution of income cannot be provided.

Assessing the degree of income inequality (both the extent of the relative income inequality and the number of people living in absolute poverty, whatever they may be) is the first in a series of steps to address the problem of poverty in a society. Perhaps the most difficult issue associated with the distribution of income is the definition of "socially equitable" distribution, so that it becomes a quantitatively defined objective of economic policy, that government, applying various means of tax policy (such as progressive taxation combined with negative income taxes), income policy (such as the introduction of minimum wages and salaries), as well as public spending policy instruments (such as current transfers to households, spending on improving education and rent subsidies) to contribute to the advancement of this objective.

It should be noted here that the concept of "socially equitable" income distribution is difficult to define even theoretically without resorting to value judgments. This difficulty is also reflected in the choice of principles (or criteria) on the basis of which income should be distributed. Thus, unlike other economic policy problems (inflation, unemployment, government deficits, balance of payments deficits, low economic growth, etc.), for which governments often specify their objectives, the issue of income distribution is generally limited in some vague declarations, which do not constitute political commitments. It is no coincidence, then, that the redistributive role of the state is rather limited in most countries.

2. Income inequality

It is obvious that during periods of economic recessions or even economic slowdowns total real income as well as per capita real income are reduced. This is an expected outcome. As we can see from Chart 1, during the period 2007-2013 total real GDP in Greece was reduced from 248.6 bn euro to 182.4 bn euro. A reduction amounting to 26.6%. Equally, read GDP per head during the same period was reduced from 22,500 euro to 16,630 euro. A reduction amounting to 26.1%. Moreover, during the coronavirus pandemic and namely during the period 2019-2020, total real GDP in Greece was reduced from 190.5 bn euro to 173.3 bn euro. A reduction amounting to 9%. Equally, real GDP per head during the same period was reduced from 17,760 euro to 16,170 euro. A reduction amounting also to 9%.



Source: Eurostat, Data codes: NAMA_10_GDP and NAMA_10_PC.
Note: TOTAL_REAL_GDP = Total real GDP =Total Gross Domestic Product at market prices in chain linked volumes (2010) in million euro (measured in primary vertical axis). REAL_GDP_PH = Real GDP per head = Gross Domestic Product at market prices in chain linked volumes (2010) in euro per capita (measured in secondary vertical axis).

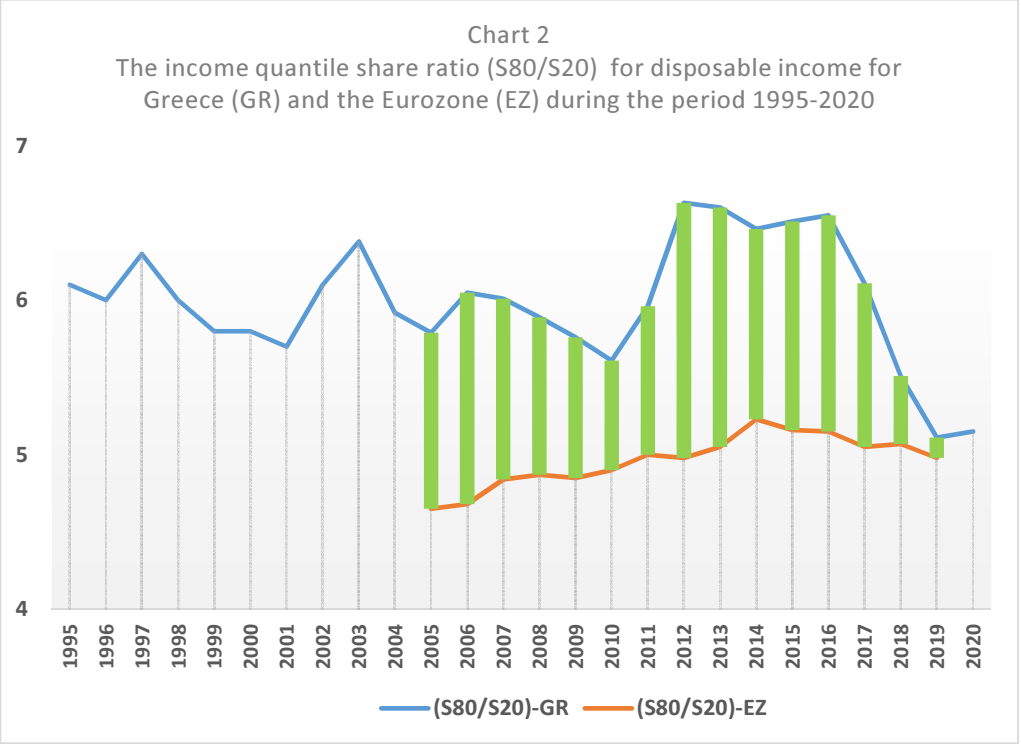
However, the issue under investigation in this paper is whether the reduction or decline of total or per capita real income (GDP) during the recent Greek economic slowdowns is associated with any distributional impacts or it has affected in a balanced way the whole spectrum of the Greek society. To put it more explicitly, whether the recent economic slowdowns had symmetrical or asymmetric effects on income distribution and what specific patterns they followed.

When considering the issue of income distribution, what matters is personal income distribution. Personal income distribution refers to the way income is distributed among members of society, regardless of its origin. That is, it refers to the discrepancies between higher and lower incomes in society. The criteria for measuring inequality in income distribution are divided into two broad categories, that is those based on "relative" income and those based on "absolute" income. Criteria based on "relative" income compare the income of one person or group of people with the income of another person or another group of people. These criteria are useful in investigating the distribution of income inequalities. These include, the "percentage distributions" and the "Gini coefficient".

In percentage distributions a certain percentage of individuals is compared to other or others. For example, the average per capita net income of the lowest 20% is compared to the average net per capita income of the highest 20%. From this analysis, useful conclusions can be drawn regarding the distinction of the population of a country into five equal groups (quintiles): the lowest 20%, the second 20%, the middle 20%, the fourth 20% and the top 20%. Moreover, corresponding international comparisons can be made.

It is obvious that if net incomes were distributed exactly equally among the individuals, then each quintile of the population would receive 1/5 or 20% of the total net income and therefore there would be no discrepancies in the net average income between the five quintiles. But this is not really the case. It is thus found that the average net per capita income of the top 20% is many times higher than that of the bottom 20%.

Particularly useful in investigating income distribution are the data in Chart 2, which shows the evolution of the value of the income distribution in quintiles (S80/S20). Namely it depicts the income quantile share ratio for disposable income in Greece and the Eurozone during the period 1995-2020. The income quantile share ratio refers to the share of the disposable income of the "richest" 20% of the population to the corresponding income of the "poorest" 20% of the population. The index therefore compares the share of income of the richest 20% of the population with the corresponding share of the poorest 20%.



Source: Eurostat, EU-SILC survey, data code: ILC_DI11, update 02/10/2021 (for the period 2003-2020. For the period 2000-2002, ELSTAT. For the period 1995-1999, former Eurostat estimates.
Note: S80/S20 = the ratio of total income received by the 20% of the population with the highest income (top quintile) to that received by the 20% of the population with the lowest income (lowest quintile). Income is the equivalized disposable income.

We must note that income in Chart 2 is the "equivalized disposable income". More specifically, for the estimation of the total equivalized disposable income of households, their total net income is taken into account, i.e., the income that comes after the deduction of taxes and social security contributions, which is received by all members of the household. This includes income from work, income from property, social benefits and pensions, remittances from other households, as well as imputed income from the use of the business car. That is, the total net income from all sources of income is included, after deducting any benefits to other households. Equivalized disposable income is defined as the total disposable income of the household after its division by the equivalent household size (weighting 1 for the first adult, 0.5 for the second adult and members aged 14 and over and 0.3 for children).

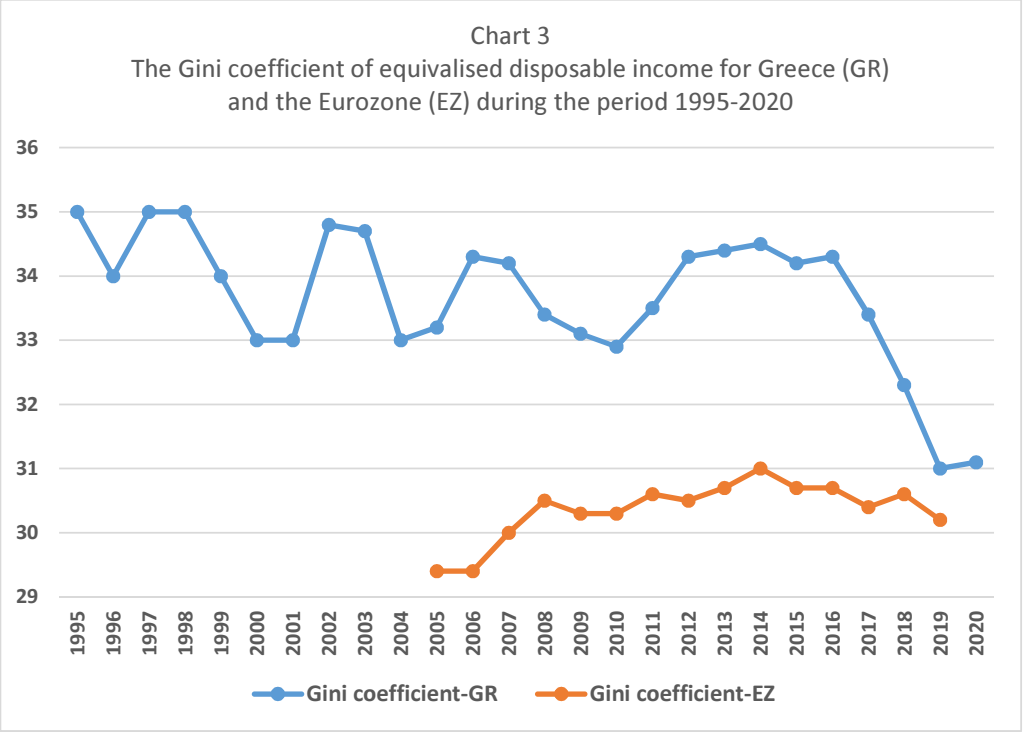
Based on this definition, each member of the specific household is considered to have the same income that corresponds to the equivalized disposable income, which means that each member of the household is supposed to enjoy the same standard of living. Consequently, the

income thus attributed to each member of the household represents a standard of living and not a monetary gain. We must note however, that the income quintile share ratio (S80/S20) is affected by the extreme values of the quintile income distribution of the population. Together with the unequal income distribution index (Gini coefficient) they are the most important indicators of economic inequality.

As shown in Chart 2, in Greece the share of income of the richest 20% of the population relative to that of the poorest 20% is higher than the Eurozone average, although in the post 2016 period it shows a remarkable tendency to converge with it. Based on this indicator, we find that in Greece the income inequality in terms of income quantile shares is permanently higher than the corresponding average of the Eurozone. The second point made is that in the early years of the two recent crises economic and Covid-19 pandemic (mainly during 2010-2012 and 2020) income inequalities initially increased and then stabilized but at high levels (2013-2016). Between 2010 and 2012 the ratio S80/S20 increased from 5.61 to 6.63, while between 2019 and 2020 increased slightly from 5.11 to 5.15[5]. By considering Chart 2 we conclude that during the period 2010-2016 the value of the ratio S80/S20 in Greece increased from 5.61 to 6.55, that is by 17% approximately. That is, during the period of economic and fiscal crisis of the country the disparities between the richest 20% and the poorest 20% of the population increased significantly. This finding reinforces the hypothesis that economic and financial crises also function as mechanisms for income (and wealth) redistribution. We also observe from Chart 2 that during the period 2005-2015 the value of the ratio S80/S20 in the Eurozone increased from 4.65 to 5.16. That is during this period inequality increased in the Eurozone.

Additional information regarding the deterioration of income distribution is given by the evolution of the index of participation of the top 1% of the population in total income. According to the estimates provided by the World Inequality Database (WID) of the World Bank (https://wid.world), the top 1% share of population in pre-tax national income in Greece during the period 2011-2014 increased significantly from 7.3% to 12.5%, while during the period 2019-2020 it increased slightly from 10.7% to 10.8%.

The index most often used to express or measure the extent of inequalities in income distribution across a population is the "Gini index" or "Gini coefficient" developed by the Italian statistician Corrado Gini in 1912. The value of the Gini coefficient is between 0 and 1, where 0 means absolute equality (or zero inequality) in terms of income distribution and 1 means absolute inequality (if all national income was concentrated in one household or one individual). If the Gini coefficient is expressed as a percentage (so it is multiplied by 100), then it takes values ranging from 0 (absolute equality in income distribution) to 100 (absolute inequality in income distribution). This is usually the form in which it is used. As the income distribution ratio in pentagrams (S80 / S20) is affected, as already noted, by the extreme values of income distribution, the Gini coefficient is a more satisfactory measure of income inequality, since it is not affected by the extreme values of income distribution.



Source: Eurostat, EU-SILC survey, data code: ILC_DI12, update 02/10/2021. For the year 2002, ELSTAT.

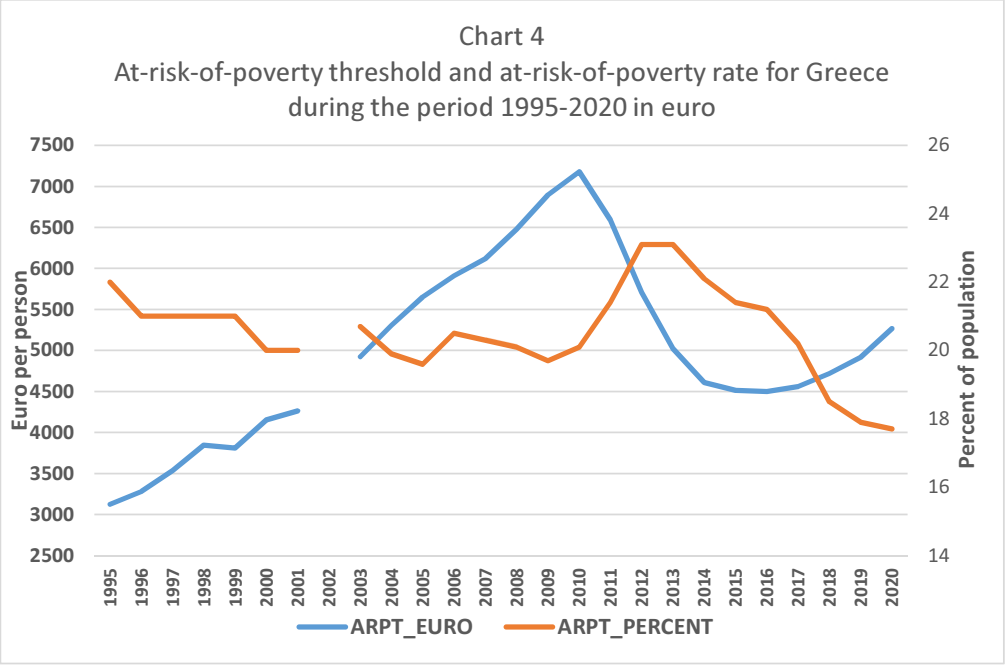
The evolution of the Gini coefficient of equivalized disposable income for Greece during the period 1995-2020 and for the Eurozone during the period 2005-2020 is presented in Chart 3. As it has been already clarified the equivalized disposable income is used in order to take into account differences in the size and composition of households. Based on this indicator, we find that in Greece income inequality, as measured by the Gini coefficient, is consistently higher than the corresponding average of the Eurozone, although in the post 2016 period it shows a remarkable tendency to converge with it, as it happened with the indicator S80/S20. That is income inequality in Greece is higher than the Eurozone average. The second point made is that in the early years of the two recent crises economic and Covid-19 pandemic (2010-2014 and 2020) income inequalities initially increased and then stabilized but at high levels (2014-2016). Between 2010 and 2014 the value of the Gini coefficient increased from 32.9 to 34.5, while between 2019 and 2020 it increased slightly from 31.0 to 31.1[6]. We conclude therefore that during the period 2010-2016 the value of the Gini coefficient in Greece increased from 32.9 to 34.3, that is by 4.3%. That is, during the period of economic and fiscal crisis of the country income inequalities as measured by the Gini coefficient had increased. Therefore, and in terms of the Gini coefficient, we conclude that economic and financial crises function as mechanisms for income redistribution. A fact that reinforces our previous findings in terms of the income quantile share ratio index.

Comparing the values of the two income inequality indicators for Greece, that is the income quantile share ratio S80/S20 and the Gini coefficient, we come to the conclusion that the inequalities were greater in terms of the S80/S20. That is, during the recent economic and fiscal crisis in Greece, the gap between the richest 20% of the population relative to the poorest 20% widened much more than the average inequality as measured by the Gini coefficient.

3. Poverty

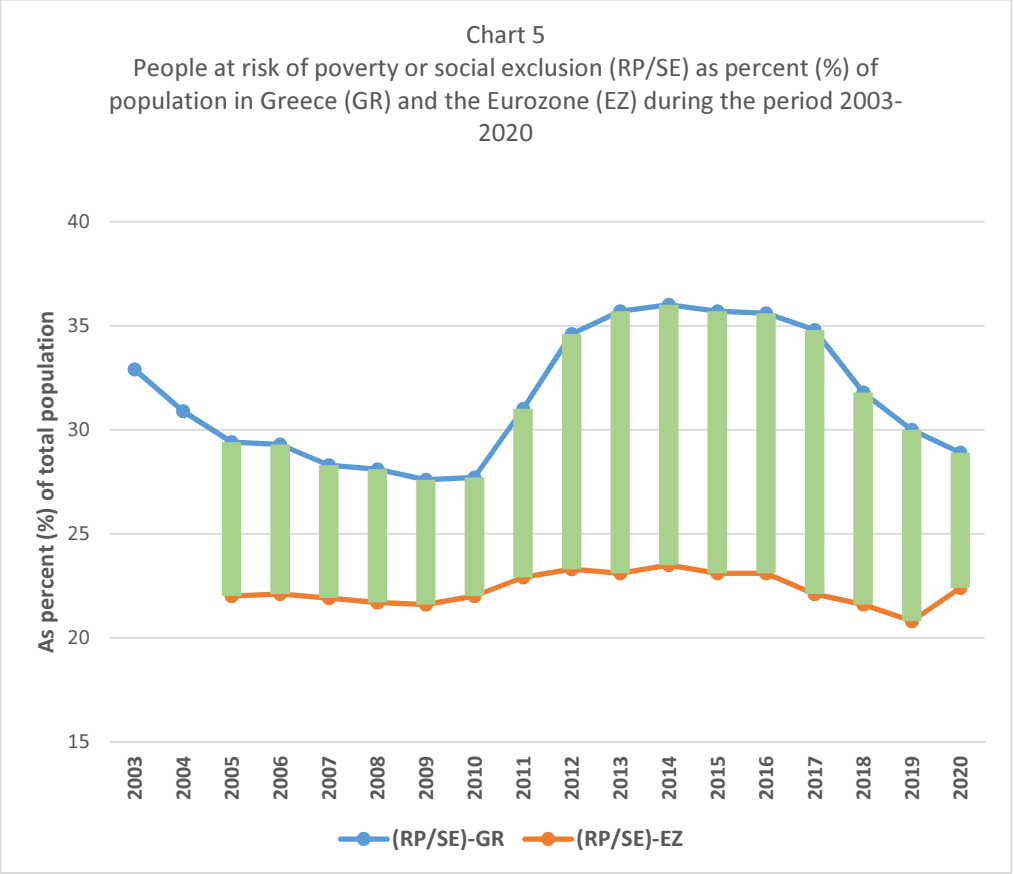
Exploring the extent of poverty in a society is an important issue. Poverty generally refers to the situation in which individuals or households lack sufficient resources or capabilities to be able to meet their needs. Historically, poverty has been linked to income, which even today is at the core of the concept. Poverty can have: First, an absolute content: The poor are deprived of basic means of subsistence, which usually include housing, food, clothing and health and education services. Absolute poverty implies that there are some minimum socially tolerable living standards below which it is not acceptable to live as a member society, since the limits of human dignity are violated. Second, a relative content: Poor compared to other members of society. In this case, those who lack a socially acceptable level of income or resources compared to other members of society are considered as poor. Relative poverty is therefore not determined on the basis of some objective criteria, such as absolute poverty, but by the existing social context. This context is characterized by intertemporal changes and transnational divergencies. Relative poverty is essentially an indicator of income inequality rather than poverty, as it depends on the overall distribution of income in the particular society or country and refers to individuals or households whose income is much lower than average or median income. Relative poverty implies that as the level of economic development increases, so do the socially acceptable living standards, in the sense that it may not be "socially tolerable" to have individuals or households with significantly lower incomes.

Eurostat assesses only relative poverty. In particular, it estimates "at-risk-of-poverty thresholds" and the "at-risk-of-poverty rates" for European Union countries. The first indicator is measured in euro while the second as percent of population. The at risk of poverty cut-off point usually used is the 60% of median equivalized income after social transfers. Chart 4 shows the evolution of the above "at-risk-of-poverty threshold" in euro for a single person and the "at-risk-of-poverty rate" as percentage of population for Greece during the period 1995-2020. Considering the "at-risk-of-poverty threshold" during the period of economic crisis 2010-2016, as it was expected, it decreased significantly from 7178 to 4500 euro. That is, it had been reduced by 37.3%. Considering the "at-risk-of-poverty rate" we see that during the period 2010-2012 it increased remarkably from 20.1 to 23.1 % of population, and then started to fall. Till 2016 it had been reduced to 21.2%, still higher than the 2009 corresponding rate (19.7%) by 1.5 percentage units. However, during the Covid-19 pandemic (2019-2020), on the one hand the "at-risk-of-poverty threshold" actually increased (from 4917 to 5266 euro) and on the other hand the "at-risk-of-poverty rate" was actually slightly increased (from 17.9% to 17.7%)[7]. It seems therefore that the Covid-19 pandemic, not only did not worsen the extent of poverty in Greece, as it is measured by the above indicators, but on the contrary, it improved it.



Source: Eurostat, EU-SILC and ECHP surveys, data code: ILC_LI01, update: 28/10/2021.
Note: ARPT_EURO = At-risk-of-poverty threshold in euro for a single person (measured in primary vertical axis). ARPT_PERCENT = At-risk-of-poverty rate in percent of population (measured in secondary vertical axis).

More information on the extent of poverty is provided by the indicator "people at risk of poverty or social exclusion", which shows the percentage of the population at risk of poverty or social exclusion. We must note that this indicator is the main indicator to monitor the EU 2030 target on poverty and social exclusion and was the headline indicator to monitor the EU 2020 Strategy poverty target[8]. The indicator corresponds to the sum of persons in each country that: a) Are at risk of poverty (people with an equivalized disposable income after social transfers that is below the risk-of-poverty threshold of 60% of the national median equivalized disposable income). b) Are severely materially deprived (they experience at least 4 out of 9 following deprivations: cannot afford 1) to pay rent or utility bills, 2) keep home adequately warm, 3) face unexpected expenses, 4) eat meat, fish or a protein equivalent every second day, 5) a week holiday away from home, 6) a car, 7) a washing machine, 8) a color television, 9) a telephone. c) They live in households with very low work intensity (people aged 0-59 years living in households where the adults, aged 18-59, work 20% or less of their total work potential during the past year)[9].



Source: Eurostat, EU-SILC survey, data code: ILC_PEPS01, update 28/10/2021.
Note: The indicator RP/SE corresponds to the sum of persons who are at risk of poverty or severely materially deprived or living in households with very low work intensity expressed as percent (%) of total population.

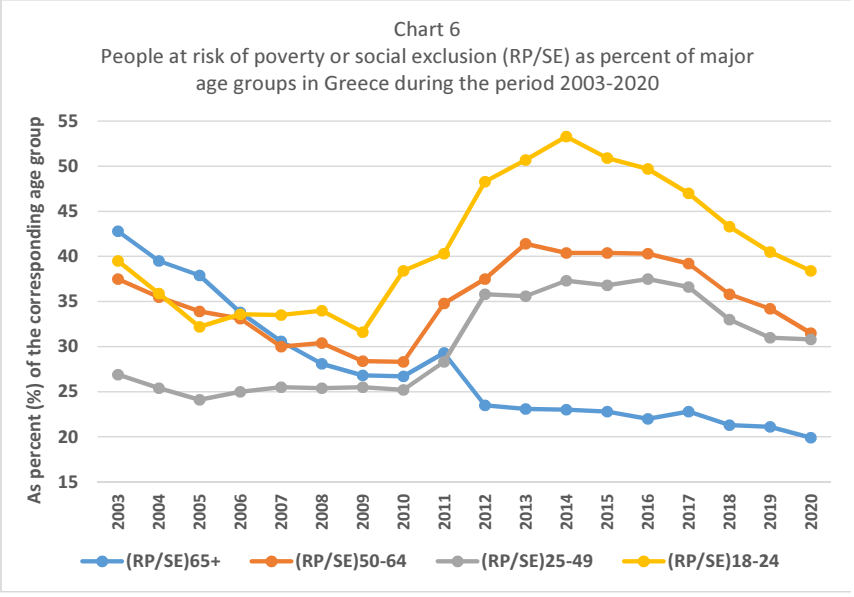
Chart 5 shows the people at risk of poverty or social exclusion as percent of population in Greece and the Eurozone during the period 2003-2020. We realize that in Greece during the period of economic and fiscal crisis 2010-2016 the percentage of people at risk of poverty or social exclusion increased from 27.7% to 35.6%. That is, it increased significantly by 7.9 percentage units. This ratio corresponds to approximately 758 thousand people (3,789 thousand in 2016 compared to 3,031 thousand in 2010) (ELSTAT, 2021). That is, the population of the country at risk of poverty or social exclusion increased during the period of economic and fiscal crisis (2010-2016) by about this large number. On the contrary, we see that during the Covid-19 pandemic (2019-2020) the percentage of people at risk of poverty or social exclusion in Greece was actually reduced from 30% to 28.9%, at least during the first year of the pandemic. This ratio corresponds to 118 thousand (3,044 thousand in 2020 compared to 3,162 thousand in 2019). That is, the population of the country at risk of poverty or social exclusion actually decreased in between 2019 and 2020 by about this num-

ber. However, we must take into account the fact that the income reporting period in EU Statistics on Income and Living Conditions (EU-SILC surveys) refers to the previous year of the survey[10], and therefore the year 2020 does not adequately incorporate the effects of the coronavirus pandemic.

Moreover, we realize from Chart 5 that the percentage of people at risk of poverty or social exclusion in Greece is consistently much higher than the corresponding average of the Eurozone. This should be of particular concern to the country's economic policy makers.

A major consequence of the economic and fiscal crisis was that it affected asymmetrically the risk of poverty or social exclusion (RP/SE) rates of the various age groups, as we can see from Chart 6. Actually, the people over the age of 65 years improved their relative position on average, since their corresponding RP/SE rates declined during the period 2010-2016 from 26.7% to 22%. This improvement continued and between the years 2019 and 2020 (from 21.1% to 19.9%). All the other age groups worsened significantly their relative positions during the period 2010-2016 (the age group 50-64 from 28.3% to 40.3%, the age group 25-49 from 25.2% to 37.5% and the age group 18-49 from 38.4% to 49.7%). It is noteworthy that in the age group of 18-24 years the share of people at RP/SE in 2014 reached the 53.3%. As we see from Chart 6, more than 50% of the young people in Greece were at risk of poverty or social exclusion during the period 2013-2015.

From Chart 6 we derive the conclusion that, although the incomes of those over 65, who are mainly retired, decreased significantly during the years of economic and fiscal crisis, these reductions were proportionally lower than those of the other age groups that had been more severely affected by rising unemployment and wage and income cuts. This improvement of the relative position of pensioners helped curb an even greater increase in aggregate poverty (Andriopoulou, Karakitsios and Tsakloglou, 2017).



Source: Eurostat, EU-SILC survey, data code: ILC_PEPS01, update 28/10/2021.
Notes: (RP/SE) = People at risk of poverty or social exclusion. 65+ = age 65+, 50-64 = age 50-64, 25-49 = age 25-49 and 18-24 = age 18-24.

4. Comments and conclusions

It has been established by empirical research that the redistributive role of the Greek state is considered as limited in comparison to other EU countries, while relative poverty in Greece is consistently found to be higher than the EU average (Andriopoulou, Karakitsios and Tsakloglou, 2017). Comparing the evolution of income inequality and poverty indicators for Greece during the periods of economic and fiscal crisis on the one hand and the Covid-19 pandemic on the other, we conclude that during the period of economic and fiscal crisis income inequality and poverty increased significantly in Greece, while during the Covid-19 crisis income inequalities slightly increased but poverty was slightly improved. This outcome motivates us to further investigate the causes of these discrepancies between the two crises in terms of their redistributive effects.

The issue therefore is, how did one crisis differ from the other in the case of Greece regarding the strategies adopted to address them? In the case of economic and fiscal crisis, the European Institutions, considering that the Greek economic problem was non-symmetric, i.e., did not concern all EU countries but was limited to Greece only, insisted on the strict application of the fiscal rules of the Stability and Growth Pact (SGP), imposing austerity programs ("memorandums of understanding" associated with "austerity packages"[11]) on the country in order to reduce its budget deficits. The economic policy adopted had a rather "punitive" orientation and from the outcome of the above analysis it seems that it had affected more severely people living on lower incomes, since although the value of the Gini coefficient during the period 2010-2016 had increased by 4.3% (inequality increased), the disposable income quantile share ratio (S80/S20) during the same period had increased by 17% (the gap between the richest 20% and the lowest 20% widened disproportionately). Moreover, the policy adopted affected more the incomes of younger people than those of the retirees.

In the case the Covid-19 pandemic, the European Institutions, considering that the economic impact of the measures adopted by national governments to address the pandemic was symmetrical, i.e., it concerned the whole EU although the extent of economic implications of Covid-19 varied from country to country, the SGP was suspended by the same Institutions, with the activation of the "general escape clause" (GEC) of the SGP in March 2020 (European Commission, 2020a). The outcome of the activation of GEC was the temporary freezing the fiscal adjustment process in the EU countries. The GEC allowed member states to take budgetary measures bypassing the SGP conditions of fiscal consolidation in order to deal with the economic and social consequences of the coronavirus pandemic[12]. We must note that historically, the economic interventions to limit the effects of the coronavirus pandemic were of an unprecedented scale.

Moreover, at the EU level the Recovery and Resilience Facility or, as it is usually called, the Recovery and Resilience Fund (RRF) had been established to support countries and sectors of the economy that been hit hardest, by providing loans and grants for the first years of the recovery period. RRF is the key recovery instrument at the heart of the more general "Next Generation EU Recovery Plan" (Next Generation EU) that aims to address the damage caused by the coronavirus pandemic. The Next Generation EU is expected to help the EU to emerge stronger and more resilient from the pandemic (European Commission, 2020b)[13].

In other words, the deviations concerning the distributional impacts of the two strategies adopted focus on the differences of the policy mix applied in the two cases. Very briefly, in the case of the Greek economic and fiscal crisis a restrictive fiscal policy was applied, while in

the case of the coronavirus pandemic an expansionary fiscal policy was pursued. Based on this finding, we could argue that the coronavirus pandemic created a tendency to restore the interventionist economic role of the state, and especially its protective function, by shifting back the balance from the market to the state (Bergsen, 2020) or at least by bolstering public authority over private agency (DeWit et al., 2020).

The choice of the economic policy mix to address economic problems or economic fluctuations is therefore not without distributional implications. This conclusion must be borne in mind by both the governments of the EU member states and in particular of the Eurozone as well as by European Institutions (ECB, European Commission, etc.) when formulating or proposing economic stabilization policies in the future. They must also be taken into account in the process of reforming the current EU fiscal framework that has begun recently (European Commission, 2021).

Notes

1. It should be noted that several studies have been published investigating the issues of income inequality and poverty in Greece, such as Andriopoulou, Karakitsios and Tsakloglou (2017), Kaplanoglou and Rapanos (2016), Matsaganis and Leventi (2014), Mitrakos (2014), Koutsampelas and Tsakloglou (2013), Mitrakos and Tsakloglou (2012), Tsakloglou and Mitrakos (2006), Tsakloglou and Panopoulou (1998), Papatheodorou (1998), Tsakloglou (1993) and Tsakloglou (1990).
2. See among others Jianu et al. (2021), Mdingi and Ho (2021), Aiyar and Ebeke (2020), Petersen and Schoof (2015), Shin (2012), Voitchovsky (2005), Robinson (1976), Okun (1975) and Kuznets (1955).
3. Some research studies conclude that income inequality exerts positive influence on aggregate economic activity and growth while some others find a negative impact of inequality on economic activity and growth. For an analysis of the issue and an overview of some of the most relevant studies, see, among others, in Bubbico and Freytag (2018).
4. In the study of Jianu et al. (2021), Greece is included in the developing EU member states.
5. It should be noted that the income reporting period refers to the previous year of the survey. So, in terms of 2020 it does not fully incorporate the effects of the coronavirus pandemic.
6. As we have already clarified, the income reporting period refers to the previous year of the survey. So, in terms of 2020 it does not fully incorporate the effects of the coronavirus pandemic.
7. We must note that in Greece the "at-risk-of-poverty rate" is in principle higher in female population (17.8% in 2020 compared to 17.5% for male population) and for young population (in 2020 it was estimated as follows: 20.9% for the age group 0-17 years, 18.4% for the age group 18-64 years and 13.0% for the age group 65+). See Hellenic Statistical Authority (2021).
8. See Eurostat, Income and living conditions (ilc), Reference Metadata in Euro SDMX Metadata Structure (ESMS).
9. Eurostat, Data Browser, People at risk of poverty or social exclusion, data code: T2020_50, update: 28/10/2021, Explanatory texts.

10. The income reference period is the calendar year preceding the survey.
11. Austerity packages included measures such as wage and bonus cuts, minimum wage cuts, pension cuts, social benefits cuts, increases of direct and indirect taxes as well as excise duties, etc.
12. The GEC was first established in 2011 but it was activated in 2020. According to the GEC, in times of severe economic downturn in the Euro area or in the Union as a whole, member states are allowed to temporarily deviate from the adjustment path to meet the medium-term budgetary objective (European Commission, 2020a).
13. For an analysis, see Vavoura and Vavouras (2021).

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