



Policy Note

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A RACE TO THE BOTTOM: MEASURING INCOME LOSS AND POVERTY IN GREECE

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Introduction

Since the outbreak of the 2009 economic crisis in Greece, the living conditions for a great part of the population have been profoundly affected. Substantial cuts in social transfers and labor income were brought together with the introduction of greater flexibility in the labor market and a large-scale program of privatizations. The imposed policy mix for overcoming the crisis relied excessively on internal devaluation, whose painful repercussions were undeniable, even by the International Monetary Fund (IMF). In their 2012 report on the second program of economic adjustment (PEA), the IMF suggests that for internal devaluation to work, the most important precondition is that the country has a high degree of factor mobility and wage flexibility. Furthermore, it acknowledges that “even if many of these conditions are in place, internal devaluation is bound to be a *painful* process” (IMF 2012, 49: our emphasis).

In what follows, we focus on the following issues. First, we explain the difference between the macroeconomic measures of GDP and household disposable income (HDI) in estimating adjustments, which offers valuable insights for a more accurate and socially sensitive appreciation of the burden falling on the Greek population. Second, we underline the importance of substituting the previous “southern-European model” of social protection with a *safety net* model. The main feature of the new system is a passive welfare regime that embraces the ideas of internal devaluation

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and fiscal consolidation. Third, we suggest a better measure of poverty, for the case of Greece specifically and in general for developed economies in which front-loaded neoliberal policies are imposed. Fourth, we comment on the sacrifice that would be required if fiscal discipline were to return in the aftermath of the COVID-19 pandemic lockdowns.

A Macroeconomic Overview

During the years of the most severe economic recession since Greece was established as a parliamentary republic, the living standards of the most vulnerable part of the population deteriorated to a degree never before documented among the post-war developed economies. Acknowledging the overall downfall caused by the economic crisis of 2008, most policy analysts often refer to the considerable reduction of the country's GDP (by almost 27 percent) that occurred between 2009 and 2016. However, a less straightforward macro measure that improves our insights concerning the intensity that Greece's prolonged recession had on people's income is indicated by HDI, i.e., the amount available to consume or save after direct taxes have been excerpted.

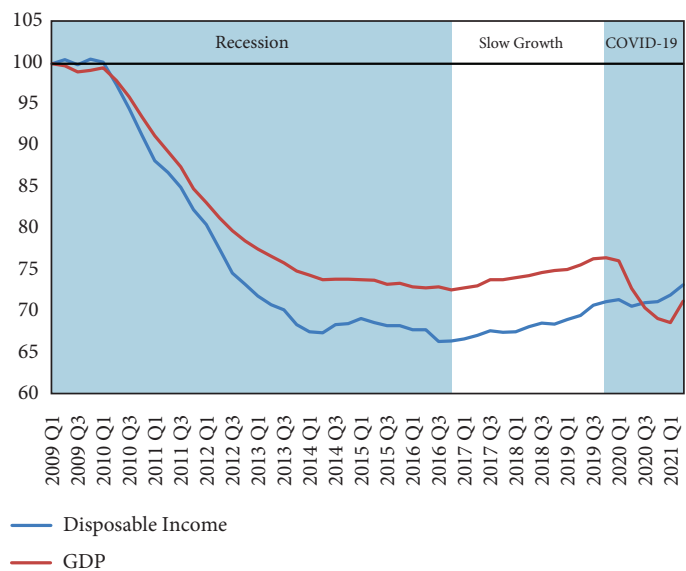
Appeal to this measure stems from the fact that *taxes* are a constituent part of GDP itself and thus the magnitude of the overall macroeconomic performance requires further clarification. It can be maintained that tax-aggressive policies are statistically contained within GDP measurement so that the overall effects are lessened in the case of GDP contraction and augmented in the case of growth. From this perspective, by referring to the GDP approach, the core argument driving the set of policies the IMF, the European Commission (EC), and the European Central Bank (ECB) imposed on the Greek economy can be restated. It can be suggested that one of the main aims of the economic adjustment programs (EAPs) that were implemented in Greece was that the value of production would fall, whereas the level of tax revenues would have to be maintained as high as possible for debt obligations to be serviced uninterruptedly.

In regard to Figure 1, it is shown that between 2009Q1 and 2016Q4, the Greek GDP had receded by 27.2 percent, while HDI had diminished by 33.5 percent. In addition, during the period of excessively slow growth that followed, the distance between the two trends was further expanded, indicating the nonredistributive nature of policy recommendations and the neoliberal

character of the newly institutionalized social protection system that was gradually introduced beginning 2012. Lastly, since the onset of the COVID-19 pandemic, the two trends seem to have been utterly reversed as a result of the urgent need for public spending based on horizontal social transfers channeled toward a wider part of the population who were affected by the abrupt economic lockdown in mid-March 2020.

Unless GDP growth surpasses the rate of newly created debt, the increased government deficits from the COVID-19 period will eventually slow down the HDI's temporary upward trend. As the macroeconomic repercussions of the lockdowns gradually retreat and economic activity gets back to the ordinary business of life, the Greek economy is expected to operate within the neoliberal framework to increase inequality. Returning to fiscal discipline on the one hand and continuing the liberalization of the product market—such as that of the energy sector (Lychnaras, Rodousakis, Soklis 2021)—on the other would unleash free market dynamics at the expense of the HDI's purchasing power.¹ In addition, the low level of social transfers provided by the new residual system of social protection will, by definition, allocate the burdens of the economic adjustment disproportionately. As a consequence, the difference between the two measures, as they are depicted in the COVID-19 phase of Figure 1, will be restored.

Figure 1 Gross Domestic Product and Household Gross Disposable Income, Greece, 2009Q1–2021Q2 (compared to 2009Q1 [100])



Source: Hellenic Statistical Authority and authors' own calculations

In what follows, a related aspect of household income erosion is further analyzed: that of inequality. The question now shifts to how such a sizable income adjustment has been allocated among the different income ranks of the population and what were the measures taken to confront its severity. It is argued that the most commonly used index of inequality, i.e., the poverty rate, cannot capture the extent of social degradation that occurred during the years of recession. An alternative measure is proposed as a means of gaining better insight into the repercussions of austerity measures on people's standards of living.

The Introduction of a Safety Net

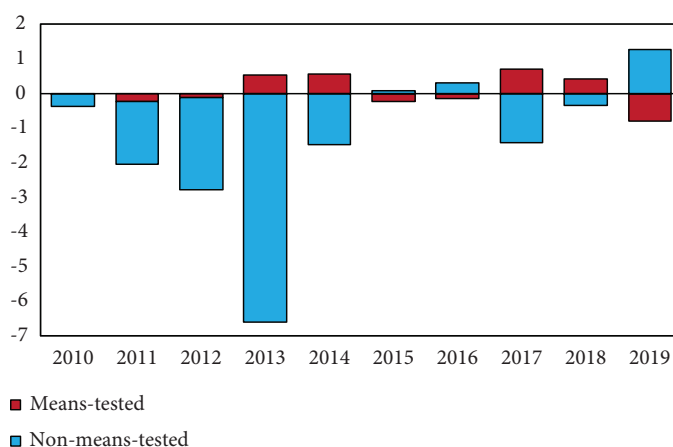
The system of social protection that has been gradually instituted since 2012 in Greece is subject to rules of fiscal discipline (Missos 2021). Its residual character is manifested in applying the idea of means-tested benefits to enhance the efficiency of public expenditures, especially in times of economic hardship and high public debt. In this respect, Furceri, Jalles, and Loungani (2015) have maintained that cutting down social expenditures would eventually improve the public sector's credibility in the eyes of the financial markets, whose reward would be materialized in accepting lower interest rates for refinancing its debt. Government initiatives and reforms concerning the advancements in "targeting and efficiency of the public programs" (Furceri, Jalles, and Loungani 2015, 142) are of utmost importance for the alleviation of extreme poverty cases generated by the implementation of austerity measures.

Accordingly, the system of social protection is almost entirely substituted by the logic of a *safety net*, which is a necessary condition for fiscal consolidation to succeed (Ardagna 2009). Conforming to the principle of maximizing the utilization of limited fiscal resources, a safety net is based on complex schemes of micro-benefits through the introduction of income-based criteria: households whose income falls within the devaluated levels announced by the state become entitled to various (cash or in-kind) benefits, but the range of beneficiaries is confined according to their means. By keeping the household income and wealth criteria checked at low levels, a significant part of the population is excluded from the state's transfers and the benefits are almost exclusively targeted to the very low end of the income distribution. In the same spirit, according to a World Bank (2016, 7) report, the Greek government should

"develop recommendations on how to strengthen the social welfare system in Greece by streamlining benefits in order to [...] channel resources into *targeted* programs and thereby more *effectively* protect the poorest citizens in Greece" (our emphasis). Social welfare policy becomes passive and is inextricably linked with providing benefits in extreme cases of poverty. At the same time, any potential factors that may positively contribute toward growth (Morel, Palier, and Palme 2012) fall completely out of scope.

To assess the extent to which the safety net has displaced the previous "southern-European model" of social protection in Greece,² we analyze the annual changes between means-tested and non-means-tested social expenditures. Figure 2 offers an indication of the annual changes in the balance of total social expenditures, distinguishing them between means-tested and non-means-tested. The data shown on the vertical axis are in market prices in billions of euros. Within a ten-year period (2010–19) the social budget has gone through some significant changes in character and in size, while the overall adjustment can be seen as a front-loaded process, since it mainly occurred between 2010 and 2014. Indicatively, the most drastic switch took place in 2013, when the size of non-means-tested social benefits were shrunk by €6.6 billion, while the means-tested fraction was only marginally increased by €0.5 billion. In total, throughout the whole period covered by Figure 2, the non-means-tested social expenditures have decreased by a total of

Figure 2 Annual Changes in Means-tested and Non-means-tested Total Social Expenditures, Greece, 2010–19 (€ billion, market prices)



Source: Eurostat and authors' calculations

€13.1 billion, whereas the means-tested have increased by €0.65 billion. As is obvious, the implemented income and wealth criteria operate in such a way that social expenditures contracted significantly and efficiency was attained at the expense of a lower level of HDI.

During the prolonged period of recession, the imposed fiscal targets were reached (and in fact surpassed) by actions taken on both the public expenditures as well as the revenues side. However, by following IMF policy recommendations, when the first PEA was enacted (May 2010), the adjustment disproportionately fell on the former: “Since adoption of the euro [2002], Greece has increased its noninterest expenditures by 8 percentage points of GDP, including with public wages, consumption, and social transfers imposing an overly large burden on the state. This needs to be reversed” (IMF 2010, 51). A decade later, the overall value (in current prices) of public wages diminished by 29.5 percent and that of social expenditures by 21.5 percent.³

According to the main rationale upon which the new regime of social protection is being based, any action toward preventing the income trends from decreasing is immediately disapproved beforehand. The role of social protection is downgraded to only providing low-value benefits to extremely poor individuals so that they are not motivated to abandon active job searching efforts. However, a noninterventionistic welfare state is always the consequence of changes in general macroeconomic performance. By holding the income and wealth entitlement criteria low, the state becomes unable to step up in cases of need, especially when economic recession breaks out. The lower the thresholds, the greater the number of households excluded from the state’s provisions, diminishing the possibility of avoiding poverty unless the income criterion is suppressed to such a degree that it can even change the benchmarks for what a society considers to be a modest but decent living standard.

A Different Approach to Measuring Poverty

In what follows, Eurostat’s official poverty terminology is adopted and original calculations based on microdata from the Surveys on Income and Living Conditions (SILC) for Greece are employed. The conventional definition of the poverty threshold in Europe is 60 percent of the country’s median “equivalized” disposable income,⁴ which means that anyone falling below that level is designated as “poor,” whereas those whose disposable income is even lower than 30 percent of the median are

considered “extremely poor” (EC 2017, 80). In addition, the standard statistical methodology is applied. All calculations are based on the modified OECD scale of equivalence used for comparisons between individual income and that of different types of households. The analysis below relies on a series of annual SILC databases stretching from 2010 to 2020, each one referring to incomes earned during the previous year—hence the income data concern the period from 2009 to 2019. The last survey available during the time this note was prepared was for 2020 (referring to incomes for 2019).

The mainstream approach to poverty—followed by the EC, IMF, or World Bank—adheres to a relative viewpoint. Whatever the economic conditions are, their view suggests that it would always be possible to calculate a “threshold” to separate a whole into two groups: in this case, between those living in poverty and those living out of it. Excessive reliance on such relativism, however, can completely invalidate the idea of material conditions of social reproduction to an extent that—under particular circumstances—it becomes quite irritating.⁵ This mainly happens when the level of disposable income (i.e., the means for preserving one’s standard of living) is diminished to such a degree that making ends meet requires a continuous effort of cutting down daily expenses and restraining the consumption of the necessities and conveniences of life. Subsequently, in cases of deep economic recessions, the idea of a relative poverty line develops into a meaningless statistic. But if approached from a different angle, it becomes apparent that the generated results are not politically neutral. The recessionary trends are incorporated within the mainstream definition itself in a way that the devalued effects of austerity are contained within the outcome of relative poverty. Hence, the concept of relative poverty becomes compatible with austerity policies and, at times, operates as a means for approving them. A different way of presenting the data is shown below.

As the surveys reveal, from 2009 to 2015, median disposable income in Greece contracted substantially, by more than 37 percent in nominal terms (10 percentage points more than that of the GDP), while, since 2019, median income did not increase more than 17 percentage points. Figure 3 presents the relative rate of poverty, as calculated by following the dominant approach of taking the percentage of the population earning less than 60 percent of the decreasing median. In this way, the rate of poverty can be shown as only marginally rising or even as falling, depending on the prevailing distribution and on whether

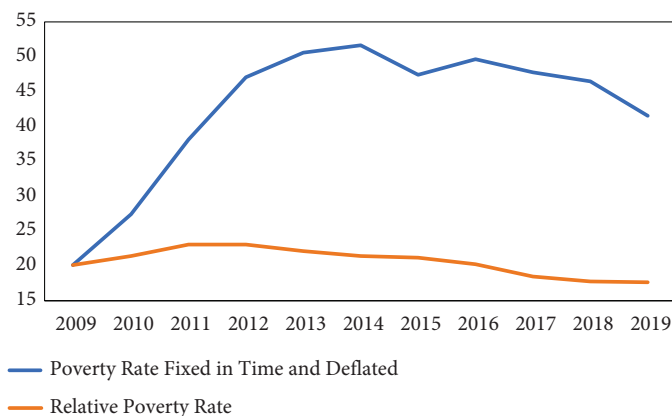
some income brackets are highly populated or not. From 20.1 percent in 2009, the poverty rate increased to 23.1 percent in 2011, where it remained stable during the next year (2012), before it started declining and gradually falling even below the 2009 level. Hence, in 2019, the risk of poverty was estimated at 17.9 percent. Such a low rate of poverty by no means realistically represents the level of income depreciation.

Alternatively, a complex measure of the poverty rate that holds the poverty line fixed and that further takes the consumer price index (CPI) into account has been proposed as the most reliable for Greece’s situation. This approach can provide new insights and a better understanding of the impact fiscal consolidation policies actually had on the Greek population. This point of view is not completely new. It has also been recommended by other studies (Papatheodorou and Papanastasiou 2018; Missos 2019) using the diversified poverty rate published by Eurostat, which keeps the 2007 poverty threshold fixed in time. However, the modified version presented here is differentiated from these studies in at least two respects. To begin with, the modified version is based on microdata calculations fixing the 2009 poverty line in time. This simple difference is crucial since, according to all SILC surveys available, in 2009 the median income in Greece reached its peak. As a consequence, indicating the percentage of the population whose income lies below that threshold—instead of any other—yields a more conclusive grasp of the real social cost of economic adjustment. What is more, the distance to full recovery is also better appreciated, since 2009 typically marks the beginning of the long-lasting period of recession.

In addition, the modified version is expressed in real terms; all incomes have been recalculated using the annual CPI.⁶ Hence, the poverty threshold is not kept *nominally* fixed, but it is rather expressed in terms of *deflated prices*. The new poverty line employed here is 60 percent of the median individual disposable income of 2009 in fixed prices. For convenience, the differentiated poverty rate generated from this process could be referred to as “fixed in time.” A better, more-reliable measure of disposable income adjustment is thus provided, one which stands in critical contrast to the mainstream policy recommendations that were implemented to combat the crisis. Indeed, according to the estimates contained in Figure 3, Greece has been caught within a trap of long-term poverty.

When deflated prices are taken into account, it is estimated that between 2009 and 2014, the poverty line was severely reduced by 41.5 percent. This figure alone reflects one of the

Figure 3 Relative Poverty Rate (percent) and Poverty Rate (percent) Fixed in Time and Deflated (2009=100), Greece, 2009–19



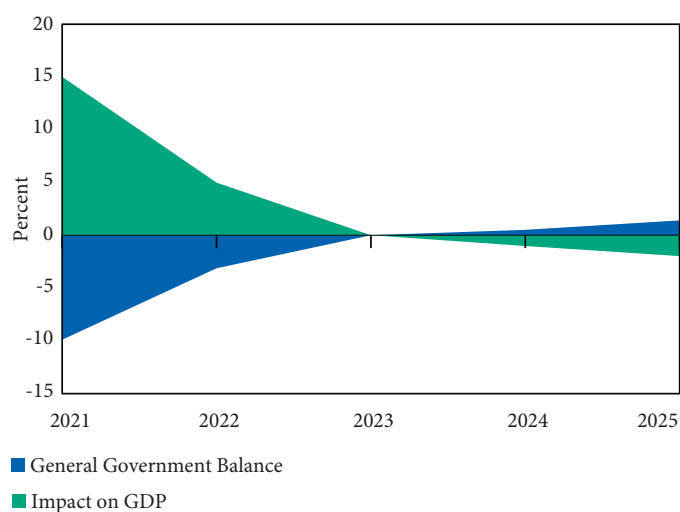
Source: Hellenic Statistical Authority and authors’ own calculations

most important consequences of the economic policy mix followed during the years of economic contraction that the relative approach to poverty cannot capture. What is more, the *fixed in time* poverty rate deviates substantially from the relative measure. This rate depicts the percentage of the population whose annual disposable income was less than the 2009 threshold. For example, in 2014, 51.6 percent of the overall population was earning less than that amount. By the 2009 standards, *more than half of the population could be considered poor*. Accordingly, even in 2019, the fixed rate of poverty was still quite high, at 41.5 percent, which means that ten years after the onset of the crisis, the standards of living in Greece had deteriorated substantially

Return to Fiscal Discipline Is Expected to Be “Painful”

According to the provisional data on the implementation of the state budget for the period January–November 2021, the general government deficit was estimated at €12.26 billion, i.e., €6 billion less than what was documented for the corresponding period of 2020.⁷ Moreover, the annual deficit targets published in Greece’s medium-term fiscal strategy framework (MTFSF) for 2022–25 (Ministry of Finance 2021) are close to €17.0 billion, or 9.9 percent of GDP. By taking the MTFSF’s GDP projection for 2021 and the estimates of the general government balance (9.9 percent) into account, the calculated fiscal multiplier would lead to a 15 percent annual (direct and indirect)

Figure 4 Projected Impacts of General Government Balance on GDP, 2021–25



Source: Ministry of Finance and authors' own calculations

GDP increase.⁸ Accordingly, based on the same estimates for the period 2021–25, Figure 4 shows the *projected cumulative impact* that government expenditures are expected to have on GDP growth.⁹

What this exercise actually implies is that if the general macroeconomic conditions assumed by the MTFSF hold, the gradual reduction of the budget deficit and its conversion into a surplus should be expected to exert downward pressure on GDP. As a consequence, going back to the rules of fiscal discipline is expected to be a painful process.¹⁰ Since the level of HDI closely depends on the uninterrupted provision of social transfers and the level of direct and indirect taxation, a further restriction in public spending is anticipated to further suppress a great part of the population's standards of living. In that respect, Greece seems to have entered into a phase of prolonged adjustment and unceasing impoverishment that cannot be resolved within the current context of policy rules.

Conclusions

This note dealt with the measurement of income loss and poverty after the outbreak of the 2009 economic crisis in Greece. A significant difference is found to exist between the macroeconomic measures of GDP and that of HDI, e.g., between 2009Q1 and 2016Q4, the Greek GDP had receded by 27.2 percent while the HDI had diminished by 33.5 percent. We have

highlighted the ways in which adopting a safety net model of social protection becomes necessary when economic policy is organized around internal devaluation and fiscal consolidation. Additionally, measuring the poverty rate by taking price changes into account reveals that *nearly half of the population could be considered poor*. Lastly, going back to the rules of fiscal discipline is anticipated to be painful for a large part of the population.

To sum up, more than a decade after the 2009 crisis, the standards of living of the Greek population are still contracting and the prospects are gloomy. The level of HDI has diminished by more than one-third, while the implemented economic policy mix has set the scene for the population to adjust to a less commodious way of life. Apart from the social repercussions, an important issue of measuring the impact has to be raised. The widely used GDP approach seems to underestimate the effects of policy recommendations, while the established poverty measurement obscures the austere character of neoliberal sanctions. Hence, a new, more accurate, and socially sensitive approach is urgently needed for estimating the painful adjustment lying ahead.

Notes

1. Focusing on the two major sectors for the sustainable and resilient future of both the EU and the Greek economy, i.e., the health sector and the energy sector, on the one hand, Greece is characterized by weaknesses in public spending on health, health infrastructure, and universal health care coverage, and furthermore by the high rate of households' out-of-pocket payments, representing 35.2 percent of the total current health expenditure (see Greek NPB 2021, 65–78). On the other hand, electricity and gas prices for the country's households, expressed in purchasing power standard (PPS), are among the EU's highest and the share of energy poverty remains much higher than the EU average, which makes the national economy more exposed to the recent increase in energy products' prices (see Greek NPB 2021, 79–95).
2. Implementing the logic of means-tested schemes alone is capable of transforming the character of the “southern-European” regime; see the classic work of Esping-Andersen (1990, 29).

3. See Eurostat's website, <https://ec.europa.eu/eurostat/data/browse-statistics-by-theme>. The compensation of employees is retrieved from "Government revenue, expenditure and main aggregates [GOV_10A_MAIN_custom_1835108]" and the social transfers from "Expenditure: main results [SPR_EXP_SUM_custom_1835118]."
4. For simplicity, it would be referred as "median disposable income." Eurostat's conventional poverty line is defined as 60 percent of the median disposable income of the total population. See Eurostat's website explaining the at-risk-of-poverty rate at https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:At-risk-of-poverty_rate
5. In that excessively relativist way, the idea of a "poverty threshold" loses its connection with the realities of life and the "poor" population is no longer a problem since it is only "relatively" poor.
6. For simplicity, 2009 has also been chosen as the base year for CPI adjustments.
7. For an overview of fiscal expenditures in Greece, see Nikiforos (2021).
8. For the estimation of the fiscal multiplier effects, see Greek NPB (2020, 32–50). This multiplier is an extension of Kurz's (1985) framework in the cases of open economy (Metcalf and Steedman 1981) and pure joint production (Mariolis 2008).
9. Only the annual changes in GDP due to the changes in government expenditures made in that year are estimated.
10. For the current developments in the Greek economy and GDP projections, see Papadimitriou et al. (2020, 2021). For the significance of tourism revenues for the 2021 GDP recovery and the role of tourism in widening the profit-wage gap, see Missos, Rodousakis, and Soklis (2021)

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