

The Impact of Economic Size of Government on Income Distribution: Evidence from OECD Countries ¹

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Abstract

In this study, the relationship between taxes and public expenditures, that show the government's economic size and income distribution, is analyzed. In the study covering the period 2000-2017 for 24 OECD countries, the Two-Step System Generalized Method of Moments and the bootstrap version of Dumitrescu-Hurlin (2012) panel causality test were used. According to the results of the Two-Step System Generalized Method of Moments, the expansion in the government's economic size increases the inequality. Findings of the panel causality test show unidirectional causality from taxes and expenditures to Gini.

Keywords: *Economic Size of the Government, Income Distribution, OECD Countries, Panel Causality, System Generalized Method of Moments*

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Devletin Ekonomik Büyüklüğünün Gelir Dağılımı Üzerindeki Etkisi: OECD Ülkelerinden Kanıtlar

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Öz

Bu çalışmada, devletin ekonomik büyüklüğünü gösteren vergi gelirleri ve kamu harcamaları değişkenleri ile gelir dağılımı ilişkisi incelenmiştir. 24 OECD ülkesi için 2000-2017 dönemini kapsayan çalışmada İki Aşamalı Sistem Genelleştirilmiş Momentler Yöntemi ve Dumitrescu-Hurlin (2012) panel nedensellik testinin bootstrap versiyonu kullanılmıştır. İki Aşamalı Sistem Genelleştirilmiş Momentler Yöntemi'nin sonuçlarına göre, devletin ekonomik büyüklüğündeki genişleme gelir eşitsizliğini artırmaktadır. Panel nedensellik testinin bulguları ise, vergi ve harcamalardan Gini Katsayısına doğru tek yönlü bir nedenselliğin olduğunu göstermektedir.

Anahtar Kelimeler: Devletin Ekonomik Büyüklüğü, Gelir Dağılımı, OECD Ülkeleri, Panel Nedensellik, Sistem Genelleştirilmiş Momentler Yöntemi

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Introduction

The public sector can take active roles in meeting social needs, achieving economic development, preventing instabilities in the economy, ensuring fair income distribution during both contraction and expansion periods of conjuncture. The adoption and widespread acceptance of the conception of the social welfare state increase public sector intervention in economic and social life (Kanca & Bayrak, 2014, p. 30). A public authority can affect income distribution in society directly or indirectly by using some policy tools. So much so that these interventions play a role in increasing public welfare and improving income distribution.

The economic performance of a country is related to increase in production and sharing of output obtained as a result of the production. The sharing mentioned here includes both primary income distribution created by the use of production factors in the market and the distribution of disposable income generated due to the implemented policies among social segments, that is, the redistribution of income (İlgün, 2015, p. 494). In order to regulate income distribution in the society, the government takes decisions on issues such as the determination of the amount and composition of tax rates and public expenditures, price floor and agricultural support policies, regulation adhibitions, and fixing the minimum wage. Among these, taxes and public expenditures, including short and long-term effects, are the most used tools in the intervention of income distribution. The size of the public sector in the economy has a decisive influence on price stability, full employment, economic growth and development, income and wealth distribution in a country. Accordingly, the public authority intervenes in the economy through public revenues and public expenditures. In a sense, the income and wealth differences that arise between income groups due to the natural functioning of the economy are tried to be reduced by redistribution. In other words, the government intervenes in the income distribution with policy tools such as taxes, expenditures, social assistance, and tries to positively affect the income of low-income segments through all income transfers (Ürper, 2018, p. 26-40).

This article explores the impact of the size of government in the economy on income distribution. In line with the analyses made within this framework, it is tried to determine to what extent public expenditures and taxes, which are two important fiscal instruments, effectively reduce income inequality in OECD countries. As an essentialness of social state and welfare understanding, the government's attempts to regulate social and economic life and undertake certain financial duties can provide income distribution efficiency. Accordingly, there is an expectation that the increase in government's economic size will improve the income balances in OECD countries.

The hypothesis of the study is that the expansion in the economic size of the government will reduce the income disparities, thus creating a more equitable income distribution. Within this scope, this study aims to determine whether the increase in the economic size of the government improves income distribution. In the study, firstly, the relationship between the government's economic size and distribution of income is examined in a theoretical context. Second, to test the hypothesis of the study, information is given about the literature on the relationship between the economic size of government and income distribution, and the relationship between variables is analyzed empirically for OECD countries. Finally, the study has been completed with the conclusion section, which includes the main determinations and policy recommendations regarding the economic size of government and income distribution.

Theoretical Framework of the Relation of Government's Economic Size and Income Distribution

The income distribution produced within the country in a given period among production factors is called the primary income distribution. Production factors take a share from the national output at various levels without the need for government intervention due to this distribution which occurs spontaneously within the framework of market dynamics. Suppose the income generated at the end of the production process is not fairly distributed among the factors involved in production. In that case, the public sector steps in and tries to ensure equity in income distribution (Yumuşak & Bilen, 2000, p. 77-79). At this point, the government is obliged to enable fair distribution of real income and wealth among individuals and increase the country's welfare.

It should be considered that fiscal policy will support a state where the FED and central banks are effective (Koç & Gürsoy, 2020, p. 432). The basic criterion in determining the size of government in the economy is public expenditures and taxes. The usage, areas of use of these variables, fiscal policy tools and their shares in GDP, affect the income distribution and the size of social expenditures in the country. For example, high-income inequality in society may prompt the government to use the progressive tax system more or to increase public spending or social transfers further. Also, certain financial instruments like the progressive (regressive) tax system and the transfer system (e.g., budgetary benefits and minimum income programs) can automatically increase or decrease public revenues and expenditures when the degree of inequality changes. Ensuring justice in income distribution depends on the conscious and effective use of these policy tools. Otherwise, especially for developing countries, it is not possible to obtain success in income distribution in an economy where the ratio of public expenditures and taxes to GDP is low, poor tax management and widespread tax evasion prevail, indirect taxes predominate, wealth and capital gains taxes are limited, official cash transfers and social protection policies are not sufficient (Young Chu, Davoodi & Gupta, 2000, p. 3; Callan, Doorley & Savage, 2018, p. 2-13).

It is important to ensure tax equity in establishing justice in income distribution which happens by collecting more taxes from those with more wealth and income. To achieve this, progressive taxes such as income tax and wealth taxes are put into practice, thereby trying to reduce the disposable income of high-income individuals. Progressive tax tariffs partially prevent unfairness in wealth and income distribution and provide sufficient funds for redistribution of income (Teyyare & Sayaner, 2018, p. 313). While the progressive income tax applications which are widely used in developed countries today contribute to the elimination of the unfair distribution of the income to some extent; tax policies aren't very effective in developing countries in improving the income distribution since taxes are collected more indirectly or on expenses (Karataş, 2019, p. 57).

When viewed from the perspective of expenditures, public spending made through cash payments or direct supports to increase the incomes and spending power of the poor has a significant effect on income distribution. The indirect effects of public expenditures on income distribution are mainly increasing productivity and creating employment opportunities for those with the poor financial situations. (Afonso et al., 2008, p. 11). Besides, sectoral supports provided by the government such as education, health, obligatory retirement, agriculture, merchants, and higher education, some social services such as council housing policies and practices, and poverty alleviation programs play an important role in improving income distribution (Kaya, 2014, p. 144; Karataş, 2019, p. 58). Despite the neo-liberal policies that create pressure on public sector activities (Demir & Geyik, 2019, p. 59), these developments are critical in expanding the government's economic size and reducing income inequality.

The weight and size of public expenditures on different income groups also determine the degree of the income distribution. Public expenditures improve income distribution when it benefits groups with worse income status; but deteriorate the income distribution if it benefits the relatively well-off people (Ersezer, 2006, p. 261). In this sense, public expenditures, including transfer expenses such as social insurance payments, retirement salaries, widows and orphans pensions, disability, and unemployment insurance, effectively improve individual income distribution in favor of low-income groups (Ürper, 2018, p. 32).

The efficient use of transfer expenditures and their use for increasing the total output, employment, production capacity and earnings of low-income individuals create the decreasing effects of income distribution inequality (Aktan & Vural, 2002, p. 20). But if the expenditures are financed by tax burdens on relatively low-income groups, the income distribution may deteriorate further (Ersezer, 2006, p. 261).

In terms of the relationship between the economic size of government and income distribution, we would like to mention the studies conducted within the scope of Public Choice Theory. In this regard, the studies of Meltzer & Richard (1981) and Milanovic (2000) are very valuable to us. In the median voter theory, in which Meltzer & Richard (1981) discuss the income inequality and redistribution of income with the voting model, the difference between the average income and the median voters' income is very large in societies with poor income distribution. Thus the median voters in these societies would be able to exert political pressure on the government to redistribute income. This is because the benefit of government transfers to the median voter is greater than the cost of taxes used to finance income redistribution. In this model, the median voters' preferences are determined in a political system where taxation is progressive and the principle of decision-making by majority vote prevails. An increase in the average income according to the voter's income, who determines the power, increases the size of the government in the economy. As a result, government size is defined as the share of national income redistributed through fiscal policy increases in direct proportion to median income. Eventually, there is a positive relationship between income inequality and government size in majoritarian democracies (Dotti, 2020, p. 3). In contrast with, in limited democracies, there is a negative relationship between the income distribution and the government's economic size.

When factor (or market) revenues rank individuals in societies or economies where income is unfairly distributed, the median voter (individual with median income level) will become relatively poor. The income of the relevant voter group will be lower than the average income. Suppose net transfers (government cash transfers – direct taxes) are progressive. In that case, income will be distributed even more unevenly, in which case the median voter would have to benefit more from the combination of taxes and transfers. Hence, this group of voters' probability voting for higher taxes and transfers will be quite high. Based on the median voter as the determinant factor, societies in which income is unequally distributed will find redistribution of income appropriate (Milanovic, 2000, p. 368-369).

In modern and democratic societies where polity is elected, a high income inequality level is not widely accepted or tolerated. As a result, policy makers are under pressure to implement plans and policies aimed at achieving equality of consumption and income distribution (Afonso et al., 2008, p. 8). Today, a similar situation can arise even in countries not governed by democracy, and political actors undertake tasks in redistributing income due to the collective pressure of people (Anderson, d'Orey, Duvendack & Esposito, 2018, p. 3). This process is the main reason for the expansion of the economic size of the government.

Literature Review

In the literature, the relationship between the economic size of the government and income distribution has been tested in many studies. However, in this study, the relation of the government's economic size and income distribution has been analyzed using two variables such as public expenditures and tax revenues, which direct the income redistribution policies and determine the size of public intervention. As it is known, fiscal instruments such as public expenditures and tax revenues can create different effects on income distribution while determining the share and size of the government in the economy. Namely, while expenditures are seen as an important intervention tool in reducing income inequality or distortion, on the other hand, taxes are thought to have less effect in reducing income inequality stemming from the tax system. At this point, the contribution of the study to the literature is the determination of the relationship between the income distribution and different variables such as expenditure and tax that shows the economic size of the government for the same country group, and the determination of which variable is decisive in the process of reducing income inequality.

In the literature, Meltzer-Richard test the relationship between the size of the government and distribution of income in time series analysis based on the 1937-1977 period for the USA in 1983, based upon their work named "Rational Theory of Government Size" written in 1981. In the study, they observe that the increase in expenditures, in other words, the increase in the government's economic size, has positive results on the redistribution policy of income. In other words, they find that less spending causes more income inequality. In another similar study, Lindert (1996) examines the relationship between the expenditure variable and income inequality of 14 OECD countries for 1962-1981. According to the results of panel data analysis, higher income inequality was associated with lower expenditure. Milanovic (2000), on the other hand, in a study based on the 1967-1997 period for a sample group of 24 countries, most of which are OECD nations, concludes that in countries with high-income inequality, the poor are more distributed and the median income groups earn more or lost less through redistribution.

In the study conducted by Afonso et al. (2008), the effectiveness of public expenditures on income redistribution in developed economies is analyzed. In the research, evidence has been obtained that socially and indirectly high-quality education / human capital expenditures significantly affect income distribution. The research findings conducted by Kahanec & Zimmermann (2008) for a sample of 16 OECD countries show a negative relationship between income inequality and public expenditure. In another similar study, Roine, Vlachos & Waldenström (2009) analyze the period 1900-2000 in five-year periods using a sample of 16 nations, Argentina, and 15 OECD countries. In the study investigating the determinants of income inequality, it is concluded that public expenditures do not affect the highest income groups. In contrast, the income share of the upper- middle class negatively, and positively affects the income share of the low-income segment.

Doerrenberg & Peichl (2014), in their analysis for the 1981-2005 period and 30 OECD countries, find that spending policies have a positive effect on the redistribution process of income. Therefore, social expenditure policies are important in reducing income inequality. Besides, the authors state in the study that spending policies are stronger than progressive taxation policies in reducing income inequality. In another study, Martinez-Vazquez, Dodson & Vulovic (2012) analyze the relationship between tax revenues and public expenditures with income distribution using a large data set consisting of 150 countries for 1970-2006. The research findings show that consumption taxes distort the income distribution whereas the progressive income tax and corporate tax reduce income inequality. In the analysis made in terms of expenditures in the same study, it is determined that public expenditures like education, health, social services and housing expenditures affect the income distribution positively.

Among recent empirical studies, Luo, Pickering & Monterio (2017) examine the relationship between inequality and the government's size using data from the 1960-2007 period for OECD countries. The results of the study conducted by the authors have shown that the size of the government in the economy is negatively correlated with the capital-income inequality. If capital-income inequality is controlled, labor-income inequality will be positively affected. In a study by Guzi & Kahanec (2018) examining the relationship between the economic size of the government and income inequality for 30 EU member countries based on the period of 2004-2015, evidence is obtained that public expenditures are negatively related to income inequality and that the increase in public expenditures reduces income inequality. Examining the relationship between income inequality and the government's size, Dotti (2020) concludes that higher income inequality implies a more progressive tax system.

Empirical results show that income inequality or income distribution can be shaped at different levels around different distribution policies. With a specific approach, lower income inequality is associated with higher public spending and it is concluded that within the scope of redistribution policies, spending policies are stronger than taxation policies. When we review the results in general, it is seen that public expenditures positively affect the income distribution. This is stronger than the tax variable, and the results of the studies in the literature are generally in this direction.

This study can be further strengthened by studies that can give results both country-based and panel-wide for the same country group regarding expenditure and tax types. Studies that will be carried out by considering tax and expenditure types will allow more specific results to be obtained. These researches will also show how the economic size of the government should be.

Econometric Method

In this section, the Arellano & Bover (1995) and Blundell & Bond (1998) system generalized method of moments, Im, Lee & Tieslau (2010) panel LM unit root test and Dumitrescu-Hurlin (2012) panel causality test used in the study are explained.

System Generalized Method of Moments

In dynamic panel data models where the autoregressive parameter is moderately large and the number of time series observations is moderately small, the widely used Arellano-Bond's (1991) linear generalized method of moments (GMM) estimator is found to have a large finite sample deviation and to be weak (Alonso- Borrego & Arellano, 1996). This causes the instrument variables used for the first difference of the series's lagged levels to remain weak (Blundell & Bond, 1998). When the instrument variables are weak, the GMM estimator tends to deviate downward as the Within-Groups Estimator (Blundell & Bond, 2000). Also, as a result of the first difference, a loss of observation occurs in the data of variables Δy_{it} and Δy_{it-1} . Thus, Arellano & Bover (1995) propose using the orthogonal deviations method instead of the first difference transformation. For all these reasons, it is more logical to use the System GMM (SGMM) estimator proposed by Arellano & Bover (1995) and Blundell & Bond (1998) instead of GMM for panel data. The basic foundation here is that in finite samples, the SGMM estimator produces more efficient estimates and its prediction power is better (Arellano & Bover, 1995; Blundell & Bond, 1998).

SGMM consists of the optimal solution of two equations; the first difference equation and the level equation. In SGMM, the lagged level values of the dependent variable are used as the instrument variable in the first difference equation. In contrast, in level equations, the lagged first differences of the dependent variable are

used as the instrument variable. The reliability of SGMM depends on various tests. The Wu-Hausman test (Wu (1974), Hausman (1978)) can be used for the test of endogeneity of explanatory variables, while the Sargan test (Sargan (1958, 1988)) can be applied to determine the validity of the excessive restrictions. The autocorrelation test of Arellano & Bond (1991) is used to test autocorrelation.

Blundell & Bond (1998) propose an extra moment condition in which it is possible to use an additional set of moment conditions. These additional moment conditions aim to increase the prediction performance of Arellano & Bond's (1991) GMM estimator in small samples.

In this study, we follow Blundell & Bond (1998) and estimate the following dynamic panel equation:

$$GINI_{it} = \alpha_1 GINI_{it-1} + \alpha_2 EXPENDITURE_{it} + \alpha_3 TAX_{it} + \eta_i + v_{it}, |\alpha_1| < 1 \quad (1)$$

Where dependent variable $GINI_{it}$ is income distribution in country i at time period t , $GINI_{it-1}$ is the lagged of the dependent variable, $EXPENDITURE_{it}$ is public expenditure and TAX_{it} is tax revenues. η_i denotes country fixed effect, v_{it} is the error term. $EXPENDITURE_{it}$ and TAX_{it} are strictly exogenous and uncorrelated with the individual effects. It is accepted in Equation (1) provides the following assumptions:

$$E(\eta_i) = 0, E(v_{it}) = 0 \text{ and } E(\eta_i v_{it}) = 0 \quad (2)$$

$$E(GINI_{i1} v_{it}) = 0, \text{ for } t \geq 2 \quad (3)$$

and that v_{it} error terms are assumed serially uncorrelated:

$$E(v_{it} v_{it-s}) = 0, \text{ for } s \neq 0 \quad (4)$$

To illustrate Arellano & Bond's (1991) difference GMM, we re-write Eq. (1) as a first difference form:

$$\Delta GINI_{it} = \alpha_1 \Delta GINI_{it-1} + \alpha_2 \Delta EXPENDITURE_{it} + \alpha_3 \Delta TAX_{it} + \Delta v_{it} \quad (5)$$

Under assumptions (2) to (4), we can write the moment conditions for difference GMM in Eq. (5):

$$E(GINI_{it-s} \Delta v_{it}) = 0, \text{ if } t = 3, 4, \dots, T \text{ and } s \geq 2 \quad (6)$$

Blundell & Bond (1998) specifically suggest the following extra moment condition:

$$E(\Delta GINI_{it-1} (\eta_i + v_{it})) = 0, \text{ for } t = 3, 4, \dots, T \quad (7)$$

Im et al. (2010) Panel LM Unit Root Test

In their study conducted in 2010, Im et al. developed a new panel LM unit root test based on the Lagrange Multiplier (LM) that allows up to two structural breaks in the series's level and slope. LM based unit root tests are less sensitive to problematic parameter troubles than Dickey-Fuller's (1979) based unit root tests. Im et al. (2010) follow the study of Lee & Strazicich (2009) to eliminate the dependence on the mentioned problematic parameter. The dependence of the panel LM test statistic on the problematic parameter is eliminated using the following transformation:

$$\tilde{S}_t^* = \begin{cases} \frac{T}{T_{B_1}} \tilde{S}_t, & \text{for } t \leq T_{B_1} \\ \frac{T}{T_{B_2} - T_{B_1}} \tilde{S}_t, & \text{for } T_{B_1} < t \leq T_{B_2} \\ \vdots & \vdots \\ \frac{T}{T - T_{B_R}} \tilde{S}_t, & \text{for } T_{B_R} < t \leq T \end{cases}$$

R denotes the number of breakpoints in the \tilde{S}_t^* transform presented above.

Im et al. (2010) develop the transformed panel LM unit root test for the constant and trend model within the framework of Pesaran's (2007) CADF method. This panel unit root test corrects the cross-sectional dependency (CD) that may exist between units. Also, up to two structural breaks in level and slope change are allowed in the estimation model. Im et al. (2010) use the following panel regression model to calculate the statistics of the test they propose:

$$\Delta y_{i,t} = \delta' \Delta Z_{i,t} + \Phi_i \tilde{S}_{i,t-1}^* + g \bar{S}_{t-1}^* + h \Delta \bar{S}_t^* + \sum_{j=1}^p g_{ij} \Delta \bar{S}_{t-j}^* + \sum_{j=1}^p d_{ij} \Delta \tilde{S}_{i,t-j}^* + u_{i,t} \tag{8}$$

Where $\bar{S}_{t-1}^* = \frac{1}{N} \sum_{i=1}^N S_{i,t-1}^*$ and $\Delta \bar{S}_t^* = \frac{1}{N} \sum_{i=1}^N \Delta S_{i,t}^* = \bar{S}_t^* - \bar{S}_{t-1}^*$, when $i = 1, 2, \dots, N$ is the unit size and $t = 1, 2, \dots, T$ is the time dimension. In calculating the test statistics for the panel in general, the t -statistics ($\tilde{\tau}_i^{**}$) estimated over Φ_i in Equation (8) are used in the formula of the average \bar{t} statistic. The statistic of \bar{t} is calculated as follows:

$$\bar{t}_{N,T} = \sum_{i=1}^N \tilde{\tau}_{i,T}^{**} \tag{9}$$

The statistic of $\tilde{\tau}_i^{**}$ is hypothesized as follows:

$$\begin{cases} H_0: \Phi_i = 0, & \text{for } \forall i, \\ H_1: \Phi_i < 0, & \text{for } \exists i. \end{cases}$$

In the hypotheses given above, the null hypothesis H_0 , in which all units in the panel are unit rooted and the alternative hypothesis H_1 , where at least one of the units across the panel is assumed to be stationary is tested. Im et al.'s (2010) panel LM unit root test statistic is calculated using the following formula:

$$LM_{\tilde{\tau}_i^{**}} = \frac{\sqrt{N}(\bar{t}_{N,T} - \bar{E}(\bar{t}_{N,T}))}{\sqrt{\bar{V}(\bar{t}_{N,T})}} \tag{10}$$

Where $\bar{E}(\bar{\epsilon}_{N,T})$ and $\bar{V}(\bar{\epsilon}_{N,T})$ are the mean value of $\bar{\epsilon}$ and the average estimated values of variances, respectively. Averages are obtained for different combinations of N and T that make up the panel and different R breakpoints, while new critical values are obtained for variances (Im et al., 2010).

Dumitrescu and Hurlin (2012) Panel Causality Test

Dumitrescu & Hurlin (DH) (2012) emphasize that the heterogeneously causal relationships of the units constituting the panel should be considered. In this context, they extend Granger's causality approach to include constant-coefficient panel data models. To determine the causal relationship between the stable variables y_1 and y_2 in the DH test, the following model is estimated:

$$y_{2i,t} = \varphi_i + \sum_{k=1}^K \eta_i^k y_{2i,t-k} + \sum_{k=1}^K \delta_i^k y_{1i,t-k} + v_{i,t}, \text{ for } i = 1, 2, \dots, N; t = 1, 2, \dots, T \quad (11)$$

Where $K \in \mathbb{Z}^+$ shows the length of the lag, δ_i^k shows that slope parameters can vary between units, and φ_i shows the unit effects and does not change over time. The null hypothesis H_0 and alternative hypothesis H_1 of the DH test are defined as follows:

$$H_0: \delta_i = 0, \text{ for all } i = 1, 2, \dots, N, \quad (12)$$

$$H_1: \delta_i = 0, \text{ for all } i = 1, 2, \dots, N, \\ \delta_i \neq 0, \text{ for all } i = N_1 + 1, \dots, N. \quad (13)$$

The H_0 hypothesis, which claims that y_1 doesn't homogeneously cause y_2 , is tested under the $0 \leq N_1/N < 1$ condition.

To test the H_0 hypothesis in Equation (12) and the H_1 hypothesis in Equation (13), the arithmetic mean of the wald statistics of the cross-sections is taken. The $W_{N,T}^{HNC}$ test statistic obtained from this arithmetic mean is calculated as follows:

$$W_{N,T}^{HNC} = N^{-1} \sum_{i=1}^N W_{i,T} \quad (14)$$

DH suggests using the following test statistics to test the H_0 hypothesis when $N \rightarrow \infty$ and $T \rightarrow \infty$:

$$Z_{N,T}^{HNC} = \sqrt{\frac{N}{2K}} (W_{N,T}^{HNC} - K) \xrightarrow[T, N \rightarrow \infty]{d} N(0,1) \quad (15)$$

When $N \rightarrow \infty$ and T is fixed, \bar{Z}_N^{HNC} standardized test statistics are used to test the H_0 hypothesis is given in Equation (12) (Dumitrescu & Hurlin, 2012, p. 15). In the calculation of the test statistic given below, the average of the $W_{N,T}^{HNC}$ the wald statistic is taken into account:

$$\bar{Z}_N^{HNC} = \frac{\sqrt{N}(W_{N,T}^{HNC} - E(\bar{W}_{i,T}))}{\sqrt{var(\bar{W}_{i,T})}} \quad (16)$$

The H_0 hypothesis is rejected if the test statistics estimated in Equation (15) and Equation (16) are greater than the critical values at the specified significance level. In this case, the H_1 hypothesis cannot be rejected. Therefore, it is assumed that there is a causal relationship in at least one cross-section that makes up the panel.

Dataset and Application

In this study, which examines the relationship between the economic size of the government and income distribution, a panel dataset of 24 OECD countries for the period of 2000-2017 is used, provided that the data were accessible. 2SGMM estimator based on Arellano & Bover (1995) and Blundell & Bond (1998) system GMM is used for dynamic panel regression analysis, and the bootstrap procedure of Dumitrescu & Hurlin (2012) is used for testing panel causality. Data on expenditure and taxes are obtained from OECD statistics, and data regarding the Gini Coefficient on income distribution are acquired from the OECD and FredrickSolt databases. Why these data used? These variables are the most frequently used variables for this study field in the literature. Public expenditures/GDP and tax revenues/GDP variables are used to explain the government's economic size, and the Gini Coefficient variable are used to explain the income distribution.

Table 1

Variables Used in Analysis

Data	Abbreviation	Unit	Definition	Source
Public Expenditure	EXPENDITURE	General Government Expenditures/GDP (%)	General government spending indicates the size of government across countries. This indicator is measured in terms of thousand USD per capita and as a percentage of GDP.	OECD Statistics
Tax Revenue	TAX	Total Tax Revenues/GDP (%)	Total tax revenue as a percentage of GDP indicates the share of a country's output the government collects through taxes. It can be regarded as one measure of the degree to which the government controls the economy's resources. This indicator is measured in a million USD and percentage of GDP.	OECD Statistics
Gini Coefficient	GINI	Gini Coefficient (0-1); 0 = complete equality, 1 = complete inequality	The Gini coefficient shows justice in income distribution. The Gini coefficient is based on the comparison of cumulative proportions of the OECD population against cumulative proportions of income they receive, and it ranges between 0 in the case of perfect equality and 1 in the case of perfect inequality.	OECD Statistics and FredrickSolt
Countries				
Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Turkey, United Kingdom, United States,				

In 2SGMM, public expenditures/GDP (EXPENDITURE) and tax revenues/GDP (TAX) variables utilized to explain the economic size of the government are used as the independent variables, and the Gini Coefficient (GINI) that is utilized to explain the income distribution is used as the dependent variable. The results of 2SGMM are shown in Table 2.

Table 2
The Results of Two-Step System GMM

Dependent Variable: GINI	Coefficient	Prob.
$GINI_{it-1}$	0.8310963	0.0000*
EXPENDITURE	0.0004401	0.0000*
TAX	0.0006443	0.0030*
	Test Statistic	Prob.
Wald Test	9635.82	0.0000*
Sargan Test	20.13154	1.0000
AR1	-2.1902	0.0285
AR2	0.43252	0.6654

Note: * indicates statistical significance at a 1% significance level. 2SGMM estimator is estimated with the code `xtdpdsys`. AR1 refers to the first-order autocorrelation, AR2 to second-order autocorrelation, 2SGMM to Two-Step System GMM estimator.

2SGMM estimator is used determining whether the government's economic size affects income distribution. According to the results of the Sargan test, the instrument variables used are not internal. When the Wald test statistic is observed, it is determined that the variables of *EXPENDITURE* and *TAX* are significant in explaining *GINI* variable. According to the autocorrelation test of Arellano & Bond (1991) used in 2SGMM methods, it is determined that there is no second-order autocorrelation problem. The coefficients of $GINI_{it-1}$, *EXPENDITURE* and *TAX*, which are included as independent variables in the model, are found to be statistically significant and positively signed at the 1% significance level. Therefore, it is determined that the $GINI_{it-1}$, *EXPENDITURE* and *TAX* positively affect the *GINI*; in other words, there is a linear relationship between them. The signs of the obtained coefficients show that the *GINI* coefficient increases in parallel with the increase in the economic size of the government. Therefore, it is understood that the increase in the economic size of the government, that is to say, the increase in expenditures and taxes, affects the income distribution. However, as it is determined from the coefficients, this effect remains low. Nevertheless, when the coefficients are taken into account, it is observed that taxes have a stronger effect on increasing income inequality compared to expenditure.

In OECD countries with a standardized economic and democratic structure, under normal conditions, the government's economic size has the power to affect redistribution policies positively. The positive effect of the government's economic size on redistribution policies is based on the fact that governments and public institutions in OECD countries with institutionalized economic and democratic structures are not indifferent to the demands of the public in general and those in the middle- and lower-income groups in particular. However, in this study, the distorting effect of increases in public expenditures and tax revenues, which are indicators of the government's economic size in OECD countries, on income inequality are interpreted as the partial failure of tax and expenditure-based redistribution policies. In this sense, turning the negative effect of the government's economic size on income distribution into a positive direction requires various changes in the institutional background. Redetermining the sources from which these taxes are obtained, lowering high social cuts from income, not exempting capital income from progressive taxes, avoiding tax exemption for interest earnings and dividends, and consequently, transferring taxes obtained from high-income segments to low-income segments through expenditure channels can play an important role in reducing income inequality.

Whether the variables examined in econometric studies satisfy the stationary condition is of great importance. For this purpose, before deciding on selecting unit root tests, it should be examined whether there is CD in the panel. CD shows that the possible effects of the subunit(s) that make up the panel can be different due to an external shock or factor. In the case of CD in the panel data, loss of efficiency and unreliable test statistics usually occur in the estimation results obtained (Tuğcu, 2018). As the cross-section number of the panel dataset in the present study is greater than the time dimension, the deviation-corrected LM_{adj} (Pesaran, Ullah & Yamagata, 2008) test is used testing CD for variables. At the same time, this test can be used in cases where $N < T$ or $N > T$. The results of the CD test for the variables are shown in Table 3.

Table 3
The Results of CD Test for the Variables

Variable	LM_{adj} Test Statistic	Prob.
GINI	25.295	0.000*
EXPENDITURE	17.946	0.000*
TAX	30.761	0.000*

Note: * indicates that CD is present in the variable.

In the LM_{adj} test (Pesaran et al., 2008), the H_0 hypothesis is tested against the H_1 hypothesis. In other words, the hypothesis claiming that there is no CD among the cross-sections in the panel is tested against the hypothesis argues that CD is among the cross-sections. According to Table 3, it is determined that there is CD in the *GINI*, *EXPENDITURE* and *TAX* variables.

For unit root research in this study, Im et al.'s (2010) panel LM unit root test, which takes CD and the structural breaks into consideration, and Im, Pesaran & Shin's (2003) panel unit root test, which ignores CD into consideration, have been used. The results of panel unit root tests are given in Table 4.

Table 4
The Results of Panel Unit Root Test

Variables	Im et al. (2003)		Im et al. (2010) (Single Breakpoint)
	Constant	Constant and Trend	Breaking Trend
	W-Statistic	W-Statistic	Panel CA-LM Test Statistic
GINI	-3.24323 [1] (0.0006)*	-5.5282 [1] (0.0000)*	-3.978 (0.000)*
EXPENDITURE	-3.14492 [1] (0.0008)*	-0.5552 [1] (0.2894)	-4.744 (0.000)*
TAX	-0.76459 [1] (0.2223)	-0.5653 [1] (0.2859)	0.897 (0.815)
Δ TAX	-6.45904 [1] (0.0000)*	-3.8016 [1] (0.0001)*	-4.247 (0.000)*

Note: * indicates stationarity at 1% significance level. The values in The square brackets and the brackets indicate appropriate lag lengths determined according to the Schwarz information criteria and the probability values for testing panel unit root.

In Im et al. (2003) and Im et al. (2010) panel unit root tests, the null hypothesis that all cross-sections in the panel are unit-rooted is tested against the alternative hypothesis that at least one of the ones in the panel is assumed to be stationary. The asymptotic distribution of Im et al.'s (2010) panel unit root test is the normal distribution and is not affected by structural breaks. Im et al. (2003) test, a Fisher-type test, whose main limit is the assumption of not CD across units.

According to results of both the panel unit root tests presented in Table 4, it is determined that the *GINI* and *EXPENDITURE* variables are stationary in the level values, and the *TAX* variable is stationary in the first difference values. It is determined that a single structural break in the test is appropriate for the period examined here. Choosing a single breakpoint is an important advantage for global crises, policy changes, natural disasters, and economic structure changes.

It is of great importance to search the CD to select the causality test to be used in analyzing panel data. In this study, the deviation-corrected LM_{adj} (Pesaran et al., 2008) test is used testing CD for models. The results of the CD test for the models are shown in Table 5.

Table 5
The Results of CD Test for Models

Model	LM_{adj} Statistic	Prob.
GINI → EXPENDITURE	33.063	0.000*
EXPENDITURE → GINI	32.768	0.000*
GINI → TAX	41.840	0.000*
TAX → GINI	42.004	0.000*

Note: * indicates that there is CD in the model.

According to the results in Table 5, it is determined that there is CD in different models created with the *GINI*, *EXPENDITURE* and *TAX* variables . For this reason, the bootstrap procedure of the DH test, which takes CD into account for causality research, is used in the study. The results of the DH test are given in Table 6.

Table 6
The Results of DH Panel Causality Test

Causality Direction	W-Statistic	Z – bar Statistic	%5 Critical Value	ar Statistic	%5 Critical Value
EXPENDITUR → GINI	3.2723	7.8714 [1] (0.0070)*	5.2075	5.4834 [1] (0.0070)*	3.4808
GINI → EXPENDITURE	1.3894	1.3488 [1] (0.5695)	5.5992	0.5799 [1] (0.6910)	3.7752
→ GINI	2.2514	4.3349 [1] (0.0250)*	3.4744	2.7150 [1] (0.0250)*	2.0845
→ TAX	0.7726	-0.7879 [1] (0.5935)	3.8055	-1.0389 [1] (0.3385)	2.3271

Note: The values in the parentheses indicate the probability values, the values in the square brackets indicate appropriate delay lengths. * indicates panel causality at a 5% significance level. The probability values and critical values are calculated by simulating 2000 bootstrap. Suitable lag lengths are calculated with the help of Bayes Information Criteria (BIC). The null hypothesis is assumed that y_1 doesn't homogeneously cause y_2 .

According to the results presented in Table 6, for the panel data set consisting of 24 OECD countries, it is determined that there is a unidirectional panel causality relationship from *EXPENDITURE* and *TAX* to *GINI*. This result shows that the changes in the variables of public expenditures and tax revenues, which show the government's economic size, are the reasons for the changes in the GINI Coefficient, which represents the income distribution. The results obtained supported the idea that income distribution in OECD countries cannot be considered independent of the government's economic size.

Conclusion and Political Implications

In this study, the relationship between the variables that determine the government's economic size, namely tax revenues and public expenditures, with the income distribution is examined using the panel data set of 24 OECD countries from 2000 to 2017. For the panel data set analysis, the 2SGMM method and the bootstrap procedure of the Dumitrescu-Hurlin's (2012) panel causality test are used. According to the results of 2SGMM estimates, it is determined that the expansion in the economic size of the government negatively affects the income distribution. The DH panel causality test findings provide evidence that there is a unidirectional panel causality relationship from tax and expenditure, which show the government's economic size to the GINI Coefficient. Although the findings from the causality analysis are in line with the studies in the literature, it is observed that the findings obtained by the 2SGMM estimator are not in line with most of the literature in terms of the importance attributed to the role of the economic size of the government in reducing income inequality.

Social states are obliged to ensure justice, welfare, to protect weak people economically. For this reason, the government needs to establish equity in income distribution by intervening in social and economic life to achieve social justice. The government's intervention in the distribution of income in the context of observing the development in the social welfare of the people is an exigence of both statehood and economy. However, the problem has not yet been solved despite the government's direct interventions to improve income distribution. Although it is considered that public interventions and an increase in the economic share of government in the last century are partially effective in stabilizing the economy and establishing fiscal balances, it can be said that they don't succeed in fixing the income inequality. This circumstance can be attributed to the partial failure of tax and spending policies in OECD countries. It can be stated that public expenditures are not used effectively enough to benefit low-income people and therefore cannot increase the disposable income of individuals and thus aggregate output and national income. On the other hand, the weakness of tax management in some countries, improper and unsystematic taxation policies on different income groups in the society, high rates of social cutbacks from incomes, inadequacies in progressive tax implementations, and the pressure of neo-liberal policies on the public sector activities exacerbate income inequality.

The fact that the expansion in governments' economic size decreases the income inequality necessitates some changes in the traditional redistribution policies based on tax and expenditure. Reconsidering the tax, spending and social system and redetermining the sources from which these taxes are obtained, imposing high marginal tax rates on those in the top income group and lowering high social cuts from incomes should be a priority policy in reducing income inequality. Similarly, not exempting capital revenues from progressive taxes, precluding tax exemptions for interest earnings and dividends, and consequently, transferring taxes from high-income segments to low-income segments through spending channels could play an important role in reducing income inequality. Otherwise, the emergence of a structure in which indirect public expenditures are

financed mainly through low-income groups and benefit mostly high-income groups and the government's economic size negatively affects the income distribution will be the expected result.

Besides, the results obtained in this study point to the fact that it may be appropriate for governments in OECD countries with an institutionalized democracy and economic structure to have a regulatory and guiding role in developing market economy conditions rather than being interventionist to ensure equality in income distribution. In this context, the government's functions in the economic field and tax and public expenditure policies should be restructured in a way that will improve the balance of income distribution. Governments should determine their strategies by considering the general economic and fiscal conjuncture of the country, especially when making investments for social welfare and economic development, and cooperate effectively with markets and non-governmental organizations. In developed countries where social and economic problems in such a structure are at a low level, the public economy fulfilling its basic functions will also contribute to the functioning of the market economy and, positively affect the income distribution.

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Genişletilmiş Özet

Amaç

Gelir dağılımında adaletin tesis edilmesi, toplumun belli bir kesiminin yüksek düzeyde gelir elde edip daha fazla satın alma gücüne sahip olmasına imkân tanırken diğer bir kesimin toplumun asgari standardının çok altında gelir elde etmesine yol açmaktadır. Bu noktada devlet, ekonomik büyüme ve kalkınma sürecinde artan gelirin daha dengeli biçimde dağıtılması açısından vergi ve harcama temelli politikalarla devreye girmektedir. Devletin ekonomideki büyüklüğünü genişleten bu gelişme, yeniden dağıtım politikaları kapsamında gelir eşitsizliğini azaltabilmektedir. Bu bilgiler ışığında yapılan çalışma, devletin ekonomik büyüklüğündeki genişlemenin gelir eşitsizliklerini azaltacağı ve böylece daha adil bir gelir dağılımı yaratacağı yönünde oluşturulan kuramsal düşünceye dayanmaktadır. Ancak burada temel sorun, devletin ekonomik büyüklüğünün gelir dağılımı üzerindeki olumlu sonuçlarının genelleştirilip genelleştirilmeyeceğidir. Buradan hareketle, devletin ekonomik büyüklüğünü gösteren vergi gelirleri ve kamu harcamaları değişkenleri ile gelir dağılımı ilişkisi incelenmiş ve kamu harcamaları ile vergilerin gelir dağılımı üzerindeki olası etkisinin ölçüsü ve yönü tespit edilmeye çalışılmıştır.

Tasarım ve Yöntem

Devletin ekonomik büyüklüğündeki genişlemenin gelir eşitsizliklerini azaltacağı ve daha adil bir gelir dağılımı yaratacağı varsayımının ampirik olarak incelendiği bu çalışmada, Arellano ve Bover (1995)/Blundell ve Bond (1998) iki aşamalı sistem genelleştirilmiş momentler (2SGMM) yöntemi, Im vd. (2010) panel LM birim kök testi, Im vd. (2003) panel birim kök testi ve Dumitrescu-Hurlin (2012) (DH) panel nedensellik testi kullanılmıştır. Çalışmada, 24 OECD ülkesinin 2000-2017 dönemine ait panel veri seti kullanılmıştır. 2SGMM yönteminde, devletin ekonomideki payını açıklamada kullanılan kamu harcamaları/GSYH (*EXPENDITURE*) ile vergi gelirleri/GSYH (*TAX*) değişkenleri birer bağımsız değişken ve gelir dağılımını açıklamada kullanılan Gini Katsayısı (*GINI*) ise bağımlı değişken olarak kullanılmıştır. Harcama ile vergilere ilişkin veriler OECD istatistiklerinden, gelir dağılımına ilişkin Gini Katsayısı verileri ise OECD ve FredrickSolt veri tabanlarından alınmıştır.

Otoregresif parametrenin orta derecede büyük ve zaman serisi gözlem sayısının orta derecede küçük olduğu dinamik panel veri modellerinde, yaygın olarak kullanılan doğrusal Arellano-Bond'un (1991) genelleştirilmiş momentler (GMM) tahmincisinin büyük sonlu örneklem sapmasına sahip ve zayıf olduğu saptanmıştır (Alonso-Borrego ve Arellano, 1996). Bu durum, serinin gecikmeli seviyelerinin birinci fark dönüşümü için kullanılan araç değişkenlerin zayıf kalmasına yol açmaktadır (Blundell ve Bond, 1998). Ayrıca birinci fark dönüşümü sonucunda Δy_{it} ve Δy_{it-1} değişkenlerin verilerinde gözlem kaybı ortaya çıkmaktadır. Tüm bu sebeplerden dolayı Arellano ve Bover (1995) ile Blundell ve Bond'un (1998) panel veriler için GMM yerine önerdikleri Sistem GMM (SGMM) tahmincisini kullanmak daha mantıklı olmaktadır. Burada temel dayanak, sonlu örneklerde SGMM tahmincisinin daha etkin tahminler ürettiği ve tahmin gücünün daha iyi olduğudur (Arellano ve Bover, 1995; Blundell ve Bond, 1998).

Dumitrescu ve Hurlin (2012) panel nedensellik yönteminde, paneli oluşturan kesit birimlerin heterojen nedensellik ilişkileri göz önünde bulundurulmuştur. Panel nedensellik ilişkisi incelenen değişken ikilileri için oluşturulan panel veri modellerinde yatay kesit bağımlılığının olduğu tespit edilmiştir. Bu nedenle çalışmamızda panel nedensellik araştırması için Dumitrescu ve Hurlin (2012) testinin bootstrap versiyonu kullanılmıştır.

Bulgular

Çalışmada vergi gelirleri ve kamu harcamalarının gelir dağılımı üzerindeki olası etkisinin ne ölçüde olduğunu incelemek amacıyla 2SGMM yönteminden yararlanılmıştır. Bu yöntemden elde edilen sonuçlarda, Sargan testine bakıldığında kullanılan araç değişkenlerin içsel olmadığı gözlemlenmiştir. Kullanılan Arellano ve Bond'un (1991) otokorelasyon testine göre ikinci mertebeden otokorelasyon probleminin olmadığı saptanmıştır. Wald testi istatistiklerine bakıldığında, vergi gelirleri ve kamu harcamaları değişkenlerinin gelir dağılımı değişkenini açıklamada anlamlı olduğu görülmüştür. Modelde bağımsız değişken olarak yer alan vergi gelirleri ve kamu harcamaları değişkenlerine ilişkin katsayıların %1 anlamlılık düzeyinde istatistiksel olarak anlamlı ve pozitif işaretli olduğu tespit edilmiştir. Elde edilen katsayıların işaretleri, devletin ekonomideki payının artışına paralel olarak Gini Katsayısının yükseldiğini ve dolayısıyla devletin ekonomideki payında meydana gelen artışın, gelir dağılımını bozduğunu göstermiştir.

Çalışmada panel birim kök araştırması için kullanılan Im vd. (2010) panel LM ile Im vd. (2003) panel birim kök testleri sonuçlarına göre, kamu harcamaları ile gelir dağılımı değişkenlerinin düzey değerlerinde, vergi gelirleri değişkeninin ise birinci fark değerlerinde durağan olduğu tespit edilmiştir. DH panel nedensellik testi bulgularında ise vergi gelirleri ile kamu harcamalarından gelir dağılımına doğru tek yönlü bir panel nedensellik ilişkisinin olduğu saptanmıştır. Buradan vergi gelirleri ile kamu harcamalarındaki değişimlerin, gelir dağılımındaki değişimlerin nedeni olduğu ifade edilebilir.

Sınırlılıklar

Devletin ekonomideki payının gelir dağılımı üzerindeki etkisini inceleyen bu çalışmada bazı sınırlılıklar vardır. Sosyal ve ekonomik bir sorun olan gelir dağılımı sorunu, bir ülkede ekonomik, sosyal, siyasal ve mali yapı ekseninde şekillenmektedir. Literatürde devletin mali yapısı ve ekonomideki payının gelir dağılımı üzerindeki etkisinin ölçümünde ise vergi gelirleri, kamu harcamaları ve kamu borçlanması birer gösterge olarak kullanılmaktadır. Ancak kamu borçlanması, ülkelerin gelişmişlik seviyelerine ve sahip olmuş oldukları

sermaye piyasalarının yapısına göre önemli farklılıklar gösterdiğinden, çalışmada sadece vergi gelirleri ve kamu harcamaları gelir dağılımını açıklamada birer değişken olarak kullanılmıştır. Çalışmada ülke grubu olarak tüm OECD ülkeleri seçilmiş, ancak incelenen dönem için eksik gözlem sayısının varlığı ve verilerin ulaşılabilirliği koşulu altında analiz için 24 OECD ülkesinden oluşan bir veri seti kullanılmıştır.

Öneriler (Teorik, Uygulama ve Sosyal)

Bu çalışmadan elde ettiğimiz bulguların, literatürün çoğunda karşılaşılan ve gelir eşitsizliğinin azaltılmasında devletin ekonomik büyüklüğünün rolüne atfedilen önem ile aynı paralellikte olmadığını görüyoruz. Bu bulgular, devletin ekonomik büyüklüğünün gelir dağılımı üzerindeki olumlu sonuçlarının genelleştirilmeyeceği noktasında önemli kanıtlar sunmaktadır. Dolayısıyla devletin gelir dağılımının düzeltilmesine yönelik yaptığı doğrudan müdahalelere rağmen çözülmeyen gelir dağılımı sorunu önemini halen korumaktadır. Son bir asırda kamu kaynaklı müdahalelerin ve devletin ekonomik payındaki artışın, ekonomiyi istikrara kavuşturma ve mali dengeleri kurma noktasında kısmen etkili olduğu düşünülse de gelir dağılımı eşitsizliğini düzeltme konusunda başarılı olamadığı söylenebilir.

Devletin ekonomik büyüklüğündeki genişlemenin gelir eşitsizliğini azaltması, vergi ve harcama temelli geleneksel yeniden dağıtım politikalarında birtakım değişiklikleri zorunlu kılmaktadır. Vergi, harcama ve sosyal sistemin yeniden düşünülerek söz konusu vergilerin elde edildiği kaynakların yeniden tespit edilmesi, en üst gelir diliminde bulunanlar için yüksek marjinal vergi oranlarının belirlenmesi ve gelirlerden kesilen yüksek düzeyli sosyal kesintilerin düşürülmesi gelir eşitsizliğinin azaltılmasında öncelikli bir politika olmalıdır. Benzer şekilde sermaye gelirlerinin artan oranlı vergilerden muaf tutulmaması, faiz kazançları ile kâr paylarının vergi dışı bırakılma çabalarının önüne geçilmesi ve sonuç olarak yüksek gelirli kesimlerden elde edilen vergilerin harcama kanallarıyla düşük gelirli kesimlere aktarılması, gelir eşitsizliğinin azaltılmasında önemli bir rol alabilecektir. Aksi takdirde, dolaylı kamu harcamalarının daha çok yüksek gelir gruplarına yarar sağladığı ve ağırlıklı olarak düşük gelir grupları üzerinden finanse edildiği bir yapının ortaya çıkması durumunda, devletin ekonomik büyüklüğünün gelir dağılımını olumsuz yönde etkilemesi beklenen bir sonuç olacaktır.

Ayrıca elde ettiğimiz sonuçlar, kurumsallaşmış demokrasi ve ekonomik yapıya sahip OECD ülkelerinde gelir bölüşümünde eşitliğin sağlanabilmesi açısından devletlerin müdahaleci olmaktan ziyade piyasa ekonomisi şartlarında düzenleyici ve yönlendirici bir role sahip olmasının da uygun olabileceği konusunda önemli ipuçları vermektedir. Bu bağlamda devletin ekonomik sahadaki fonksiyonlarının, vergi ve kamu harcaması politikalarının gelir dağılımı dengesini düzelterek biçimde yeniden yapılandırılması gerekmektedir. Özellikle sosyal refah harcamaları ve ekonomik kalkınmaya yönelik yatırımlar gerçekleştirilirken hükümetler, ülkedeki genel iktisadi ve mali konjonktüre göre stratejilerini belirlemeli, piyasalarla ve sivil toplum kuruluşlarıyla etkin işbirlikleri yapabilmelidir. Böylesi bir yapıda sosyal ve ekonomik sorunların düşük düzeyde seyrettiği gelişmiş ülkelerde kamu ekonomisinin temel fonksiyonlarını yerine getirmesi, piyasa ekonomisinin işleyiş biçiminin de gelir dağılımını olumlu yönde etkilemesine katkı sağlayacaktır.

Özgün Değer

Kamu harcamaları ve vergi gelirleri gibi mali araçlar, devletin ekonomideki payını ve büyüklüğünü belirlemekle birlikte, gelir dağılımı üzerinde farklı etkiler yaratabilmektedir. Yani harcamalar gelir dağılımı eşitsizliğini veya çarpıklığını azaltmada önemli bir müdahale aracı olarak görülürken; diğer taraftan vergi sisteminden kaynaklı olarak vergilerin ise gelir eşitsizliğini azaltmada daha az etkiye sahip olduğu düşünülmektedir. Bu noktada aynı ülke grubu için harcama ve vergi gibi devletin ekonomik büyüklüğünü gösteren farklı değişkenlerin gelir dağılımı ile olan ilişkisinin belirlenmesi ve gelir eşitsizliğinin azaltılması sürecinde hangi değişkenin belirleyici olduğu da saptanmaya çalışılmıştır. Devletin ekonomideki payının artışı paralelinde gelir dağılımının bozulduğu, ancak harcama değişkeninin gelir dağılımını bozucu etkisinin daha düşük olduğu görülmüştür. Bu sonuçlar, politika yapıcı ve uygulayıcılara harcama ve vergi temelli politikalar arasında alternatif tercihler sunmakla birlikte gelir dağılımının iyileştirilmesi noktasında liberalleşme senaryoları üzerinde yoğunlaşmayı da gerekli kılmaktadır.

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