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RESEARCH ARTICLE / ARAŞTIRMA MAKALESİ

Nonprofit Sector's Impact on Employment and Unemployment in Developed Economies: Dynamic Panel Data Analysis*

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Abstract

In the last quarter of the last century, the reshaping of the state apparatus under the domination of liberal economics and globalization led to a rapid and radical transformation of the nonprofit sector. With growing incomes, expenditures, staff and volunteers, these organizations have become major economic actors in many countries today. Indeed, economic research and technical reports on the sector have started to attract attention in the last few decades. When we look at these studies, we can say that the sector has a very active presence in labor markets, especially in developed countries. However, these studies do not econometrically evaluate the direction and extent to which the sector actually affects employment in countries. Therefore, the subject of this study was to investigate the data set of the 16 developed countries for the period of 2008 to 2018 using the least squares dummy variable corrected estimator. It was observed that there is a positive relationship between the employment rate and the gross value added of nonprofit organizations, and there is no statistically significant relationship between the employment rate and the world giving index. In addition, a negative relationship was found between the unemployment rate and the gross value added of nonprofit organizations and the world giving index.

Keywords

Nonprofit sector, Employment, Unemployment, Panel data, Developed economies

* This study was produced from the doctoral thesis titled "The Impact of Non-profit Sector on Economic Growth in the New World Order: Dynamic Panel Data Analysis on Selected OECD Countries" which was prepared by the first author and completed at Istanbul University, Institute of Social Sciences, Department of Economics.

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Introduction

Along with the post-1980 welfare state approach entering into a process of disintegration, non-profit organizations, which have started to show their effective existence beyond the two-sector economic system, have increased their significance in social life, especially in Western countries. These organizations, which take on much more important functions in solving social problems that have become complicated with globalization, have become a growing but invisible economic force, as well as creating social value for several countries today. However, despite this rapid escalation, the contributions of this sector to national economies have often been neglected. In studies conducted with limited resources, the main findings obtained regarding the economic structure of the sector differ between countries, but they are directed at contribution to employment and gross domestic product. When we take a look at these studies in general, unlike countries where social, environmental, and economic problems are more rooted and widespread, non-profit organizations have a more active presence in developed countries. For instance, when we examine the sector's share in non-agricultural employment in *Figure 1*, we recognize that the economies of Western European countries and other developed countries are leaving behind the developing Central European countries and Latin American countries in terms of paid and voluntary workers or even when we do not include volunteer workers.

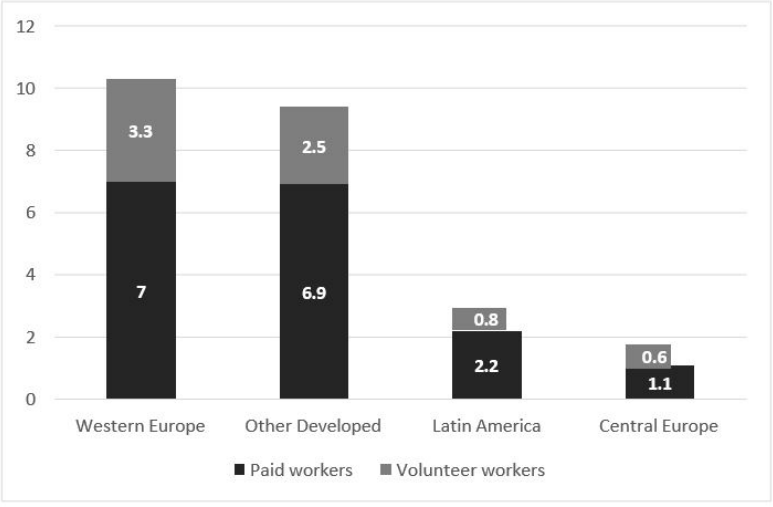

Figure 1. The Ratio of Non-Profit Sector (Paid and Volunteer) in Non-Agricultural Employment, 1995.
Kaynak: Salamon, Anheier, List, Toepler, Sokolowski and Associates, 1999, p.13.

Since 1991, the Johns Hopkins University Center for Civil Society Research has been leading international comparative analyses of the sector with its staff of researchers in many countries. Although these studies cover developing countries as well as developed countries, studies carried out by the center which gained momentum after the 2000s mainly concentrate on the economies of developed countries, where the sector grows rapidly and has an important place in the national economies. For example, we can see that the non-profit sector has reached a total of 29.1 million full-time employees in 29 countries, including 28 European Union countries and Norway, which is over 13% of the workforce in Europe, according to research carried out by the center for Europe in 2014 (Salamon and Sokolowski, 2018, p. 54). Moreover, as can be seen in the table below, covering several years between the years 1997-2013, employment growth in the non-profit sector in all European countries, except Denmark, left behind the total employment in these countries.

Table 1
Annual Change in Employment in European Countries

Country	**Period**	**Total Employment Growth (%)**	**Nonprofit Employment Growth (%)**
Spain	2008-2013	-3,5	6,6
Hungary	2003-2006	0,5	6,6
Italy	2001-2011	0,8	4,9
Czech Republic	2004-2012	0,7	4,1
Austria	2005-2010	1,4	3,6
Belgium	2004-2010	1,6	3,3
Sweden	2000-2013	1,3	2,6
Norway	2004-2013	2,3	2,6
Poland	1997-2012	0,2	2,4
Portugal	2002-2010	0,6	2,2
France	2002-2013	0,7	1,7
Denmark	2003-2013	0,6	-0,3

Source: Salamon and Sokolowski, 2018, p. 62.

We can see a similar picture when we look at the economies of other developed countries, beyond Europe. As a matter of fact, as can be seen in Table 2, when we examine the contributions of the non-profit sector to the economies of other countries, while Canada ranks first with an 8,1% ratio in the contribution to growth, Israel leads with a 12,7% ratio in the employment

potential. In addition, the non-profit sector accounts for 11,5% of the total paid workforce in Australia, 10,6% in New Zealand with volunteer workers, and 10,2% in America with the volunteer workforce (Salamon, Sokolowski, Haddock and Tice, 2013, p. 2).

Table 2
Contributions of the Sector to the Economies of Developed Countries

Country	Contribution of the Sector to GDP (%)	Contribution of the Sector to Total Workforce (%)	Base Year
USA	6,6	10,2	2009
Canada	8,1	-	2008
Australia	4,9	11,5	2007
France	4,7	8,9	2002
Israel	7,1	12,7	2007
Belgium	5,8	11,5	2008
Japan	5,2	10	2004
New Zeland	4,9	10,6	2004
Norway	4,6	8,2	2009
Portugal	2,0	4,4	2006

Note: Voluntary contributions and volunteer employees are included
Source: Salamon, Sokolowski, Haddock and Tice, 2013.

Finally, according to the latest 2017 data published in America, the sector has become the third-largest workforce in the country in terms of employment capacity after retail, accommodation, and catering services, by paying more than 670 billion dollars in total to 12.5 million employees (U.S. Bureau of Labor of Statistics, 2017). These organizations, which have left many sectors behind today, have become a sector that has twice as many employees as the financial and insurance sector and provide 81% more employment than the construction sector (Salamon and Newhouse, 2020, p. 4). The technical reports issued specifically for the states from time to time also have shown results similar to the general picture in the country. For example, according to a study published in 2011 in the state of Nevada, non-profit organizations in the state employed more than 43,000 paid workers in total. The sector, representing 4,5% of the total employment in the region, also employed more people than 13 key sectors such as manufacturing, finance, and real estate (Word, Lim, Servino and Lange, 2014, p. 22).

The researchers reached the series of results mentioned above from a number of official statistical data sources and surveys prepared for the sector. Structures

defined as "Non-profit Organizations Serving Households" or "Private Non-Profit Organizations" that take place in the official national accounts today and will also be included in this research provide regular and systematic data on the sector to the researchers. As a matter of fact, many of the empirical studies and even country analysis reports conducted in the literature in the field are based on the data from these organizations. The voluntary labor side of the sector, which cannot be taken into account in general, gives the sector an informal character (Salamon, 2010, p. 170). For this reason, the comprehensive basic economic data belonging to these organizations are often irregular and difficult to access in statistical systems. However, from another point of view, we can analyze the informal character of the sector from an economic point of view. For instance, by scoring the survey data collected from countries under the headings of "helping a stranger", "donating cash to charities/non-profit organizations" and "time spent on voluntary work" every year by the Charities Aid Foundation, the world giving index is calculated for each participating country. According to the 2018 report, while developed countries still rank first in individual cash donations, developing countries are ahead in helping a stranger. Voluntary support, on the other hand, is more common in developed countries, albeit by a small margin (CAF, 2018, p. 14). According to another study conducted in 24 countries, as can be seen from the figure below, even though economies such as India and Russia attract attention in terms of individual donations in the rankings, it should not be overlooked that developed economies such as the USA, New Zealand and England, which are also included in this research, are at the top. In addition, the rest of the list is made up of the economies of many developed countries that are included in this study.

Table 3
Individual Donations in Proportion to Gross Domestic Product

Country	**The ratio of donations to GDP (%)**	**Base Year**
USA	1,44	2014
New Zealand	0,79	2010/11
Canada	0,77	2013
UK	0,54	2014
South Korea	0,50	2012
India	0,37	2007
Russia	0,34	2014
Italy	0,30	2011
Netherlands	0,30	2013

Country	The ratio of donations to GDP (%)	Base Year
Australia	0,23	2011/12
Ireland	0,22	2013
Germany	0,17	2014
Sweden	0,16	2013
Austria	0,14	2015
Finland	0,13	2013
Japan	0,12	2014
France	0,11	2011
Norway	0,11	2012
Switzerland	0,09	2013
Spain	0,05	2014
Czech Republic	0,04	2012
Mexico	0,03	2010
China	0,03	2013

Source: CAF, 2016, p. 7.

As can be seen, especially since the 2000s, the non-profit sector has become one of the key sectors with the most rapid development in the economies of developed countries. Studies conducted in this field put forward that the sector affects the economies of the countries decisively. Perhaps the most important of these effects is the increase in the size of employment figures. Since 1980, the increasing global competitive environment and technological developments have given the unemployment problem a chronic and widespread characteristic that affects all societies, without being limited to developed, developing or underdeveloped countries. In this sense, there is a need to develop new employment policies aimed at the problem of unemployment, which is more than just an economic issue but also has social and even psychological consequences. Although many countries consider the private sector to be the key area for employment so far, neither governments nor private sector organizations are able to cope with this rooted problem on their own. Hence, today, we need to discuss whether or not the non- profit sector, which is not only a social but also an economic actor with its millions of paid employees, can play a key role in the problem of unemployment.

Consequently, non-profit organizations represent an economic force in many developed countries with both professional and volunteer teams and appear as a macroeconomic policy tool. The role of the sector in the economy is described

in the literature mainly as a third alternative way to meet the needs of households in situations where the government and market fails. The fact that these studies are theoretical studies shows that the impact of non- profit organizations on key economic indicators in the economic literature is not discussed much in the econometric models and new studies are needed. Starting from this point, the answer to the question "to what extent does the non-profit sector affect employment and unemployment in countries at a measurable level?" was researched in this study. In order to find an answer to this question, the subject of the study was investigated by taking advantage of panel analysis techniques using the national accounts of selected developed country economies of the sector, and with the data set created from international reports. In the following sections of the study, a literature review was made by referring to the available research on the subject, then the data set used in the study, the econometric method and the empirical findings were described. Finally, a general evaluation was made in the conclusion.

Literature Review

Almost until the end of the 20th century, non-profit organizations were making a name for themselves, both in the literature and in practice, with the principle of only serving society. In the last few decades, this sector, which has been discussed in macroeconomic studies despite limited sector data, has become an important part of the workforce in many countries in terms of the added value it provides to national economies. For this reason, the contribution of the sector to employment in countries appears as an area of increasing importance in the literature. However, the fact that most of the studies put forward so far are theoretical studies shows the need for empirical research. In fact, we have mentioned many of the studies presented with empirical findings in the literature in the introduction section. In particular, the "International Comparative Nonprofit Sector" project of Johns Hopkins University is one of the first attempts to reveal the value of the sector in national economies and especially, in the global employment dimension. The scope of the empirical studies was originally limited to 8 countries (Salamon, Anheier, Sokolowski and Associates, 1996), but was later expanded into a major project. Comprehensive studies published in two broad versions in 1999 and 2004, cover more than 40 countries from Western Europe, Central Europe, Asia, Latin America, and North America today (Salamon et al., 1999; Salamon, Sokolowski

and Associates, 2004). While both publications draw attention to the place and importance of the non-profit sector in national economies, taking into account any research year between 1995-2004 for the countries, comparisons are made to other countries within the scope of the research. The project, which uses a mixed methodology from official statistical data and survey studies, contains information on the sector's share in the financial dimension, and in particular, gross domestic product and employment. A similar study was conducted by Greffe (2003), revealing the employment structure of the third sector in European countries. In the study, information including the number of full-time equivalent paid employees in the sector as well as their share in total employment, of 15 countries is presented using data from 1999. Through these types of studies, the attention of the countries' policymakers was drawn and the creation of a systematic and regular data set on the non-profit organizations in the national economies was encouraged. As a result, these studies were the first to document the share of the sector in the total employment of the countries and paved the way for other studies in this field. As a matter of fact, another study which reveals the economic value of the non-profit sector in Albania (2014), Bosnia and Herzegovina (2014), Kosovo (2014), Macedonia (2014), Montenegro (2014) and Serbia (2013), as well as Turkey (2013), by taking a base year as a reference and in cooperation with the Balkan Civil Society Development Network and the Third Sector Foundation of Turkey drew attention to the share of associations and foundations in these countries in the total employment, again starting out from the official statistical data. For example, in the report, according to the 2013 data, the share of paid and voluntary labor force working in associations and foundations in Turkey was determined to be 0,2% of total employment (Velat, 2015).

Johns Hopkins University's "International Comparative Non-Profit Sector" project, which offers a joint approach in the creation of such reports for both the academic world and the policymakers, has focused its work on Europe and America, in recent years. As a matter of fact, a lot of the current data that we mentioned in the introduction section are also directed towards these studies. In these studies, which are put forward using the official statistical data and the data collected from survey studies, information is provided on the sector's share of total or nonagricultural employment (Salamon et al., 2013; Salamon et al., 2018; Salamon et al., 2020). Similarly, the center that published the Turkish study revealed in its study based on the official data from 2011 that

the non-profit sector constitutes 1,4% of the economically active population in Turkey, with more than 320.000 paid full-time employees and a volunteer workforce of more than 47.000 full-time equivalent employees (Özer, Sokolowski, Haddock and Salamon, 2016). Previously, in another study, which was put forward with the data obtained from the official statistics in 2006, the share of paid and voluntary employees working in associations in Turkey in the employment was found to be 0,25% (Şah, 2008).

As a result, all of these studies initiated under the leadership of Johns Hopkins University involve more than 40 countries and research teams from universities in these countries in the project and ensure the creation of a series of reports that reveal the economic value of the sector with its empirical dimensions. However, these reports do not reveal in what direction and to what extent the sector actually affects the labor markets in national economies by using econometric models and techniques. Therefore, the purpose of this study is to set forth a quantitative, measurable, tangible model between the sector and employment and unemployment, by using the official data, in order to determine the validity of the results obtained with such reports.

The Data Set

As we mentioned in the previous section, over the past few decades, non-profit organizations, especially in developed economies, have begun to draw attention in terms of their financial size and contribution to employment. However, even though these studies are comprehensive studies, they are not studies that determine the impact of the sector on employment and unemployment from an econometric point of view. In order to fill this gap, the subject of this study is the investigation by means of an original econometric model, benefiting from dynamic panel analysis techniques with a data set created from the national accounts of countries and international reports. In this direction, the 2008-2018 period of the 16 selected developed countries which can be seen in the table below was included in the scope.

Table 4
Countries Included in the Research

USA	Belgium	Netherlands	UK
Austria	Finland	Sweden	Norway
Italy	Spain	Denmark	Portugal
France	New Zealand	Switzerland	Israel

In this study, the gross value added data of the "Non-profit Organizations Serving Households", which is defined as a subset of the non-profit sector in national accounts, are included so as to obtain a systematic and regular data set for the non-profit sector. In addition, the "World Giving Index" published by the Charities Aid Foundation (CAF) every year has been evaluated within the scope of the research in order to take into account voluntary participation and real contributions, which are the most important unseen economic powers in the sector, especially in the employment dimension.

As a result, all the variables and data sources used in the econometric model are presented below. Of the variables presented in the table, only the gross value added of the non- profit organizations serving households is included in the model logarithmically. For this reason, analyses were carried out based on the semi-logarithmic model.

Table 5
Variables Used in the Econometric Model

Variable	Description	Type	Source
em	Employment rate	Dependent	**OECD** https://data.oecd.org/emp/employment-rate.htm#indicator-chart
u	Unemployment rate	Dependent	**OECD** https://data.oecd.org/unemp/unemploy-ment- rate.htm
lva*	The log of the Gross Value Added by Non-profit Organizations Serving Households	Independent	**UNSTATS** http://data.un.org/Data.aspx?q=Non- profit+Institutions+serving+Households&d=SNA&f=group_code%3a407
g**	World Giving Index	Independent	**Charity Aid Foundation** https://www.cafonline.org/

Note: Nonprofit Organizations Serving Households: Mostly, it covers non-profit organizations that are not controlled or funded by the government (United Nations Statistics Division, 1993).
*The Gross Value Added of Non-Profit Sector Serving Households was expressed by calculating the measurable value of the national currency in US dollars for the years covered by the research. The data used in the calculations were retrieved from https://data.oecd.org/conversion/exchange-rates.htm; **The world giving index data were available only for the period 2009-2018.

The Econometric Model

This study aims to investigate the impact of the non-profit sector on employment and unemployment in the economies of 16 developed countries according to data between the years 2008 and 2018 with the estimator of "Least Squares Dummy Variable Corrected" as one of the dynamic panel analysis methods. Nickell bias (Nickell 1981), which occurs due to the inconsistency

of the use of the least squares dummy variable estimator in autoregressive panel data models, while N is large and T is small, as in this study, is also called dynamic panel bias in the literature. For this bias that occurs, Kiviet (1995, 1999), Bun and Kiviet (2003) and Bruno (2005) proposed a correction. Monte Carlo experiments show that the "Least Squares Dummy Variable Corrected" method produces more consistent results than the estimators of the traditional Generalized Method of Moments (GMM) in unbalanced panels and small samples.

As a matter of fact, according to this method, the model is estimated by the least squares method with a dummy variable at the first stage. In the second stage, the parameters are corrected according to the Nickell O (1/T), Kiviet (1999) O (1/NT) and Bun & Kiviet (2003) O (1/NT^2) bias convergence rates to be selected, and estimations are made (Yerdelen Tatoğlu, 2020a, p. 121). At this stage, Bruno (2005) extended the bias approximation formulas of Bun & Kiviet (2003) to unbalanced panels.

In the light of all this information, considering the data set characteristics of this research, the consistent estimator of Blundell and Bond (1998) with different instruments, which is thought to perform better than the consistent estimators of Anderson and Hsiao (1982), Arellano and Bond (1991) specified in the equation below, was used as the initial value.

$$LSDVC_{i}^{j} = LSDV - \hat{B}_{i}^{j}, i = 1,2,3, j = ah, ab, \boldsymbol{bb}.$$

Findings

In this study, the following dynamic employment and unemployment models were used as the basis:

$$em_{it} = \alpha + \beta_1 em_{it-1} + \beta_2 lva_{it} + \beta_3 g_{it} + \mu_{it} \quad \text{(Model 1)}$$

$$u_{it} = \alpha + \beta_1 u_{it-1} + \beta_2 lva_{it} + \beta_3 g_{it} + \mu_{it} \quad \text{(Model 2)}$$

In Model 1 and Model 2, em_{it} shows the employment rate, em_{it-1} one period delayed value of the employment rate, u_{it} the unemployment rate, u_{it-1} one period delayed value of the unemployment rate, lva_{it} the logarithm of the gross value added of the non-profit organizations serving households, g_{it} the world

giving index, and μ_{it} the error term. Only the gross value added variable of the non-profit organizations serving households was included in the model logarithmically and therefore the semi-logarithmic model was used.

To make sure that the correct model is installed, we will need to look at a number of a priori indicators. First, we need to examine the relationship between the independent variables in the model. According to the correlation coefficients between the explanatory variables in the table below, there is a 36% positive correlation between lva and g variables. Since the correlations above 80% in the negative or positive direction were evaluated to be high (Yerdelen Tatoğlu, 2020b, p. 113), the presence of multiple linear connections between independent variables is not suspected in this model.

Table 6
Correlation matrix

	(1)	(2)
lva	1.0000	
g	0.3566 (0.0000)	1.0000

In addition, as is seen from the table below, the number of observations for all variables is not the same. The minimum number of observations in the world giving index variable is 157, while the maximum value belongs to the employment rate variable with a number of observations of 176. For this reason, the model was estimated with an unbalanced panel data set. The average value of the unemployment rate, which is a dependent variable, is 7.814195, the standard deviation is 4.138369, the minimum value is 2.73, and the maximum value is 26.12. The average value of the employment rate, which is another dependent variable, is 68.9867, the standard deviation is 6.387473, the minimum value is 54.83, and the maximum value is 80.1. The average value of the logarithm of the gross value added of the non-profit sector, which is an independent variable, is 22.98983. Its standard deviation is 1.430256, its minimum value is 21.5294, and its maximum value is 27.71089. Another independent variable, the average value of the world giving index is 42.81529, while the standard deviation is 10.18724. Its minimum value is 19, and the maximum value is 64.

Table 7
Descriptive Statistics

Variable	Obs.	Mean	Std. Dev.	Min.	Max.
em|	176	7.814195	4 .138369	2.73	26.12
u |	174	68.9867	6.387473	54.83	80.1
lva |	172	22.98983	1.430256	21.5294	27.71089
g |	157	42.81529	10.18724	19	64

According to the above a priori indicators, since there are no problems with the established model, the following table contains the results of the least squares dummy variable corrected (LSDVC) estimator, with Blundell and Bond initial values.

Table 8
Least Squares Dummy Variable Corrected (LSDVC) Estimator Results

$\boldsymbol{em_{it}}$	**LSDVC**
em_{it-1}	0.9470*** (0.000)
lva_{it}	2.8769*** (0.004)
g_{it}	0.0497* (0.101)
$\boldsymbol{u_{it}}$	**LSDVC**
u_{it-1}	0.869*** (0.000)
lva_{it}	-3.232*** (0.001)
g_{it}	-0.0422* (0.078)

Note: Bias correction initialized by Blundell and Bond estimator.
Bias approximation is accurate up to O(1/NT^2).
Bootstrapped standard errors (50 iterations) in parentheses.
* Significance at 10% ** Significance at 5% *** Significance at 1%

Table 8 shows the initial values of Blundell and Bond and the two results of the least squares dummy variable corrected (LSDVC) estimator. According to these results, the parameter of the one-term delayed value of the employment rate and the parameter of the gross value added of the non-profit organizations serving households is significant and positive, while the parameter of the world giving index (at the 5% significance level) is insignificant. In the estimation results where the unemployment rate was considered as the dependent variable, the parameter of the one period delayed value of the unemployment rate was significant and positive, while the parameters of the gross value added of the non-profit organizations serving households and the world giving index were significant and negative. According to the results obtained, an increase of 1% in the gross value added of the non-profit organizations serving households

increases the employment rate by 0,03%. The parameter of the world giving index turned out to be insignificant. Finally, according to the estimation results of the model in which the unemployment rate is used as a dependent variable, a 1% increase in the gross value added of the non-profit organizations serving households reduces the unemployment rate by 0,03%, and a 1% increase in the world giving index reduces the unemployment rate by 0,04%. In light of these results, in the model estimation outputs, in which both the employment rate and the unemployment rate are considered as dependent variables, it can be said that the non-profit sector has an impact on increasing the employment rate and reducing unemployment in the labor market.

Conclusion and Recommendations

Nowadays, rapid changes taking place in many fields such as technological, political, economic, cultural, and even environmental, have made social issues even more complicated. Climate crisis, air pollution, unemployment, income inequality, worsening poverty, cultural conflicts, and epidemic diseases such as Covid-19, which have taken place in recent years and have affected almost the whole world, are making our planet uninhabitable. On behalf of both people and all other living creatures, actors outside of the State are needed, to be able to deal with these big and complicated issues. As a matter of fact, after 1980, non-profit organizations started to undertake this task, which has become increasingly significant in society with the neoliberal policies and the globalization process. These organizations, which are gradually becoming more prominent and further developing their capacities, play an effective role in ensuring social welfare along with both governments and the business world. The numbers, incomes, expenditures, employees and volunteer staff of these organizations, whose fields of activity are expanding, are also increasing. In brief, today, these organizations have not only created a social value for the society they are in, but also have become a sector with economic value. Despite this fact, organizations of the sector have been confined to the social field in the literature for many years. In recent years, the interest of the academic world in the economics literature started to focus on the size of the sector. Empirical research in this field examines the financial dimension of sector organizations, while focusing on socioeconomic factors affecting the size of the sector at the same time. However, one fact that has become evident from these studies and the official statistical reports is that the share of the sector in gross domestic

product and employment in the national economies, especially in developed countries, is steadily increasing. Therefore, it is one of the issues that needs to be addressed to determine the validity of these results that have appeared in the current literature and to reveal how the sector affects the economies of the countries at a measurable level. Starting from this point, this study researched the effect of the non-profit sector on employment and unemployment in the economies of 16 developed countries according to data from between the years 2008 and 2018 with the estimator of "Least Squares Dummy Variable Corrected" as one of the dynamic panel analysis methods. In the study, both the employment rate and unemployment rate were considered as dependent variables, and a two separate econometric model was established in which the gross value added of the non-profit organizations serving households and the world giving index were considered as independent variables. According to the results obtained, an increase of 1% in the gross value added of non- profit organizations serving households increases the employment rate by 0,03%. The parameter of the world giving index turned out to be insignificant. In the model in which we

examined the impact of the non-profit sector on unemployment, the 1% increase in the gross value added of the non-profit organizations serving households reduces the unemployment rate by 0,03% and the 1% increase in the world giving index rate reduces the unemployment rate by 0,04%. In light of these results, in the model estimation outputs, in which both the employment rate and the unemployment rate are considered as dependent variables, it can be said that the non-profit sector has an impact on increasing the employment rate and reducing unemployment in the labor market. As seen here, the results obtained in this research support all the studies we have included in the literature review. In particular, the contribution of the sector to employment in many countries (Western Europe, Central Europe, Latin America, North America and Asian countries) revealed by the "Johns Hopkins University Center for Civil Society Research" project has been econometrically tested with this research. However, because the data set covered in the research belongs to a certain time period and a certain defined group of countries, a different period could be used with more comprehensive indicators related to the sector, and new country groups, in order to increase the representation performance of the results obtained.

At this point, this study will be enlightening for both non-profit organizations and policymakers in understanding the positive impact that the sector has had

on the labor markets. Today, constantly changing economic conditions have become a threat to the success of employment policies in developed countries. Naturally, unemployment, which can become one of the main problems not only for the underdeveloped or developing countries, but also for the developed economies, appears from time to time as an inevitable example of failure for almost all societies. In this direction, non-profit organizations play an important role in the continuity of social welfare, especially in developed countries, by contributing to the economy both with alternative solutions to social problems and with their financial size. Despite this fact, we know that its active role does not have a strong visibility in many developed countries today. Therefore, policymakers in developed countries need to give the sector the due importance and create policies that will ensure the development of the sector in the financial field. The impact of the sector in the labor market will also appear stronger, especially if the structural arrangements for increasing the incomes of these organizations and making them more independent are taken into account. Thereby, first of all, the development of policies (incentives, tax reductions, etc.) by the public sector in countries to increase the sector revenues may create significant employment-increasing effects in these countries. In fact, these policies may also guide the institutionalization of the sector in a democratic and financially strong structure in many developing or underdeveloped countries over time. In brief, this study can provide a basis for new empirical studies on the impact of the sector on the economy and increase the awareness of countries' government representatives.

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