



## Corporate Tax And Its Impact On Unemployment: Recent Study Of 15 Oced Countries

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**Abstract:** This research examine the impact of corporate taxation on unemployment developing a panel of 15 countries over 20 years. The purpose of this article is to find how corporate tax effect un-employment. This study is specifically finds that corporate taxation have an impact on unemployment or not. We took ‘corporate tax’ as an independent variable on the other side ‘unemployed force’ is dependent along with control variables. Consequently we used ordinary least square (OLS) to find the impact on unemployment. To find out data from the association for economic cooperation and development (OCED) on both variables is gathered for the time of 20 years starts from “2000 to 2019”. Results are surprising, linear regression analysis shows positive impact between corporate tax and unemployment.

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### 1. INTRODUCTION

The main agenda of this paper is to study the corporate-taxation and its impact on unemployment. According to the Organization Economic Cooperation and development (OECD) relation between corporate taxation and unemployment is positive, when taxes are increased the unemployment rate start decreasing. Most essentially, the paper analyzes whether or not taxes on labor influence un-employment rates.

There are several studies (Feldmann 2011; Aras Zirgulis, Tadas Sarapovas 2017; Siegloch 2014) whose main purpose is to investigate the corporate taxation impact on unemployment. The popular of other studies indirectly effect foreign direct investment (FDI) on unemployment or wages. We will be doing this through the OLS model of 26 OCED countries over a time period 2000 to 2019 in a panel. Considerate the impact corporate taxation on un-employment is dynamic for a country, in order to help facilitate answerable taxation policies considering it is assumed changes in corporate taxation can have a significant impact on unemployment.

Numerous studies shows, decline in the corporate taxation may decrease in unemployment, job creation, employment and economic performance in countries. The purpose of this research to find the impact of corporate taxation on un-employment. We have started with a literature review and look specifically and indirectly at the problem by examining

how change in corporate tax affect unemployment. Following this, we discuss methodology after studying many literatures and analyze our method for finding. After this we present variable and research data. Then we find the results of our regressions along with data analysis. Lastly, in the concluding between corporate tax and un-employment.

### 2. Literature Review

As previously stated, there are few studies in the past that find the corporate tax and its impact on unemployment. According to the survey, the effect of change in corporate taxes and its effect on unemployment produced conflicting results. There are direct and indirect effects shown between variables after review of previous research.

Poja Pohwani (2019) shows study of the labor taxation and its impact on unemployment in Pakistan. He said according to the Organization Economic Cooperation and development (OECD) relation between labor taxation and unemployment is positive impact, when taxes are increase the unemployment rate start decreasing. He used regression method for finding the issue and tests the assumption whether and how taxes on labor effect un-employment rates in Pakistan.

Separate researches which examine impact between tax and un-employment, tax prevalence have produced incompatible results due to opposing underlying expectations guiding model formation. An

early study by Aras Zirgulis and Tadas Sarapovas (2017) investigated the impact of corporate taxation on unemployment utilizing the panel of 41 countries over 11 years. He used a general method of moments (GMM) for find the problem statement. He finds that the increase in the effective average corporate tax rate ominously increase un-employment. He took incorporate data from OCED, World Bank and “oxford business taxation” center for finding the concerned issue.

Another study of corporate tax incidence, Cluasing (2011) finds there are rare evidence that the corporate taxes may decrease wages. He argued that the labor market depends on different aspects, which make modeling the condition extremely difficult. Eventually, there is no solid answer as to the direction of the effect of a tax on unemployment he said.

In the empirical study of Bassanini and Duval (2006) analysis 20 OCED pane countries. It is shown that there are some high and long lasting benefits and lower employment prospects specifically, he concluded that 10 percentage points reduction of tax wedge would decrease unemployment by 2.5 % points and increase a number of employment rates by 3.6 percentage points.

Another study examined labor taxation and its impact on employment and working hours by “Been Lon Chen and Chih Fang La” (2015). He said the result on ‘employment’ is about zero and negative impact on hours per worker in an organization. Past 30 years witnessed the major decline in “labor supply” in Europe as compared to the United States. High labor taxes are considered as the main reason for decreasing labor supply. He found that in the appliance when hours worked per worker are bargained by a matched job worker pair, a large number of labor-income tax would decrease employment and hours worked per labor.

Similar estimates of the impact of corporate tax on unemployment were obtained for example, Devereux (2006) specifically looks at who ultimately bears the burden of corporate income tax through a survey of the existing literature, and concludes that labor carries a greater burden than capital when the corporate income tax rate changes. Although the reasons behind this are debatable, several different studies have looked at the effects of FDI.

### 3. Methodology

This section begins by reviewing the method used in Kurt Meyer (2018) research on the topic of corporate tax impact on unemployment, as this one is a unique study which is used for international boards of OCED countries. The major issue of this relation or

change in corporate tax is endogeneity. The reason behind change in corporate tax are government policies and relief to local firms. Feldmann (2011) used a 2SLS model for find the effect of corporate tax on unemployment, instrumenting the corporate taxes variables and lagged differences. He never used GMM model in his research because the sample size are not in liner with the assumptions. However, Kurt Mayer (2018) used ordinary least square regression (OLS) method for find the impact as discussed above.

However, in order to find the solution of the problem and analyze the relation between corporate tax and its impact on unemployment. We will used (OLS) method with unemployment as a dependent variable, corporate tax being an independent variable and also used number of control variable which have indirectly effect unemployment. The model can be specified as follow:

$$Unemp_{i,t} = Unemp_{i,t-1} + \beta_1 Tax_{i,t} + \beta_2 X_{i,t} + y_i + \epsilon_{i,t} \quad (1)$$

$Unemp_{i,t}$  measure the unemployment, whereas country denote as  $i$ , time denote as  $t$ . On the other side  $Unemp_{i,t-1}$  measure as a unemployment lagged, Tax denote as a corporate tax, control variable ( $X$ ), Fixed effects measure as ( $y$ ) and error term denote as ( $\epsilon$ ) in order to find the result we have made several test.

The OLS model explains that increase in taxes will impact the unemployment rate of country, as the cost of goods produced will also increase. Due to this, producers will produce less products and there are less job openings, hence the unemployment rate will be affected. Both the variables of model are defined below.

### 4. Data and Empirical model .

This is secondary based data research of 15 OCED countries (Pakistan, Austria, Australia, Switzerland, Singapore, United States, United Kingdom, China, Canada, Greece, Finland, Denmark, Germany, Ireland and France) over the time period 2000 to 2019. The data collection sources from OCED officials, World Bank, business taxation and several economic forums. The major aspect is this study is far unique from previous studies as opposed to the unemployment. This was done purposefully to better focus on the macroeconomic and policy associations of the results, as any change in tax rates is best viewed at the above minimal level.

**Table 1. Descriptive Statistics**

	<b>Mean.</b>	<b>Std. Deviation.</b>	<b>N</b>
<b>Unemployment</b>	1.6743	1.49440	20
<b>Tax rate</b>	34.7000	4.28092	20
<b>Working pop</b>	98.3250	11.73555	20
<b>GDP</b>	183.9500	79.12317	20
<b>Urban pop</b>	64.7000	8.20205	20

#### 4.1. Descriptive analysis

Table 1:- shows that the mean, standard deviation and N of all variables used in this article. Unemployment mean shows 1.6743, on the other side Tax rate is 34.7000. We have run the OLS regression model in SPSS. Its shows significantly effect between corporate tax and unemployment.

**Table 2. Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.942 <sup>a</sup>	.887	.857	.56543	.887	29.429	4

#### 5. Result

Table 2:- Shows that the R square of unemployment and tax revenues is 0.887 on the other side the Adjusted R Square is 0.857 which is higher than 0.5 hence its shows there is a major significant effect between corporate tax and unemployment.

**Table 3. Result of all tests**

Tests	Results
Pearson Correlation	0.659
R Square	0.887
$\beta$ -Coefficient	0.859

Table 3:- Shows the different tests results. Pearson Correlation is 0.659 which is higher than 0.50 hence it shows that there is significant and positive relationship among unemployment and corporate tax. R- Square is 0.887 which is again higher than 0.50 hence it also shows that corporate tax significantly affect unemployment. In addition to this,  $\beta$ -Coefficient also displays that there is a significant and positive relationship between tax revenues and unemployment, as 0.859 is higher than 0.50.

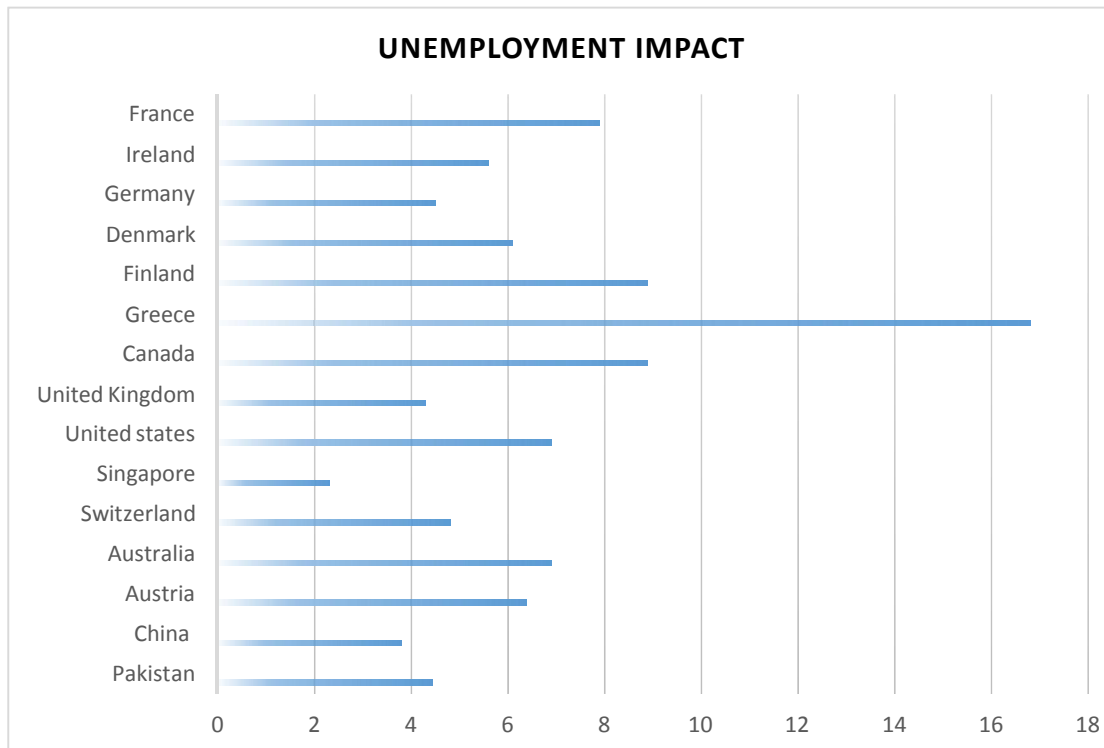


Fig.

1

Unemployment rates (%) in china and OCED countries. Source World Bank (2019). According to the survey the highest unemployment impact in Greece after financial crisis 2008. The effect of taxes on un-employment is also high in Greece.

## 6. CONCLUSION

This empirical research find out the impact of corporate taxes on unemployment of 15 OCED nations. Corporate taxes was independent variable, while unemployment was the dependent. For the purpose to find the solution data on both variable was collected from OCED official and rest of the data from economic survey for the period of 20 years starts from 2000 to 2019. OLS regression model was used to this empirical study. The result of Correlation, R-Square and  $\beta$  coefficient shows positive and significant effect between corporate tax and unemployment which coincide the finding of Kurt Meyer (2018). All results shows more than 0.50 significance level. Based on the results we conclude that if the corporate tax will rise on the other side unemployment rate also increase.

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