



## THE RELATIONSHIP BETWEEN DIRECT TAXES AND ECONOMIC GROWTH IN OECD COUNTRIES

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**Abstract:** The aim of the paper is to identify a potential linear correlation between direct taxes and economic growth. The subject of the paper includes estimating the level and intensity of correlation between direct taxes and economic growth in OECD countries for the period 1996-2016. The study analyses tax forms such as personal income tax, corporate income tax and tax on property, and their potential relationship with economic growth, measured by GDP growth rate. Also, tax revenues growth has been included to determine whether it directly affects the economic growth in observed countries. The results of the group correlation matrix have shown that there is a statistically significant relationship between tax revenues growth, personal income tax, corporate income tax and gross domestic product in OECD countries. However, it is important to note that tax on property and gross domestic product are not significantly correlated at the OECD level, which is logical given the low share of this tax in those countries.

**Keywords:** direct taxes, economic growth, correlation, OECD countries

**JEL classification:** E62, H20, H21

## 1. Introduction

Tax forms should take an important place in the economic policy of each country. The tax level and share have to be adequately defined so that tax forms would be in function of growth and enable optimum functioning of the economy. Any increase in taxes can potentially have a negative influence on main economic indicators. However, tax cuts can result in lower tax revenues which imply lower public revenues and resources needed to meet public expenditures and public needs. Durović-Todorović and Đorđević (2010) point out that taxes are main and fundamental sources of public revenues and one of the most complex institutions in public finance, with whose importance and existence are related many problems of political, economic and legal nature in society. Likewise, Chigbu et al. (2015) argue that importance of taxation to any government cannot be overemphasized. There are numerous tax forms that are related to income, profit, ownership and value of assets, turnover, consumption, as well as to imports and exports in course of performing economic activities. Boadway and Pestieau (2002) argue that income tax and consumption tax are classified as the main forms in tax systems around the world. When it comes to taxes in OECD countries, personal income tax, corporate income tax, social security contributions and taxes on goods and services are key sources of tax revenues in most of these countries.

However, in last three decades, there has been a declining trend in tax revenues on basis of personal income tax, while the share of corporate income tax and social security contributions are rising. On the other hand, the share of indirect taxes is changing significantly in direction of a higher share of taxes on goods and services, especially value added tax. Tax on property has a stable and constant trend and ranging at an average of 1.8%, while tax on capital and financial transactions are the least generous in an observed group of tax forms. Based on above, it can be noted that labour taxes are higher than capital tax which confirms a more privileged treatment of capital against labour and it is one of the fundamental characteristics of the neoliberal concept of the economy.

The research motive is reflected in the need to determine the potential relationship between direct taxes and economic growth in OECD countries. Personal income tax, corporate income tax and tax on property are significant tax forms in modern economies, whose level, structure and trend have direct or indirect reflection on the public finance in every country. The paper is structured in several segments. Literature review shows the overview of previous research that focuses on the relationship between taxes and economic growth. The next segment reflects the sample, variables, hypothesis and the research methodology regarding the used analyses and tests for the hypothesis testing. The part Empirical research and results show the results of group and individual correlation in OECD countries by tables and figures. The last segment, Conclusion, includes final remarks and suggestions about the relationship between direct taxes and economic growth in

OECD countries. Finally, the contribution of this paper is manifested in fact that identifying the character of potential nexus between direct taxes and economic growth can provide policymakers to better understand this relationship and make a right decision about tax level.

## **2. Literature review**

The level and structure of tax forms have a significant impact on economic growth in the modern economy. Adkisson and Mohammed (2012) noted that in last few decades, tax policy has been one of the key issues of public debate within public finance. Salami et al. (2015) argued that taxes have a great role in stimulating economic activity and economic growth. Taxation enables certain funds for covering public expenditures and meeting public needs. Taxes should be the asset of encouraging economic growth and potential negative effects will be reduced to an acceptable level.

There are many studies which have examined the impact of taxes on economic growth, where Shinohara (2014) argues that tax structure affects the economic growth in most of analysed countries. Results of research are different in terms of tax effects, as confirmed by Pjesky (2006) that states taxes can have a positive and negative impact on economy. However, most studies point out that tax cuts enhance economic growth, where lower tax level contributes to raising economic activity (Gale et al. 2015, p. 919). Gross domestic product is often the most essential economic indicator that reflects the tendency of economy movement. Myles (2000) defines economic growth as the basis for increasing prosperity where Kira (2013) classified gross domestic product as the main determinant of economic growth of each country. In a panel analysis of twenty-five OECD countries, Widmalm (2001) confirmed a strong correlation between personal income tax and economic growth. Tosun and Abizadeh (2005) determined positive impact of personal income tax, corporate income tax and property tax on economic growth for the period 1980-1989. Using annual data for the period 1965-2007, Furceri and Karras (2007) examined the impact of tax change on gross domestic product per capita in twenty six OECD countries. Results showed that an increase in tax forms has a negative influence on observed variable. More specifically, the increase of tax share by 1% in gross domestic product leads to a reduction in gross domestic product per capita by 0.5% to 1%. It has been confirmed that personal income tax, corporate income tax and tax on property have a negative effect on gross domestic product per capita, while the only tax on property does not have a significant influence on selected variable. Mutascu et al. (2007) researched the impact of direct and indirect taxes on gross domestic product per capita in the European Union for the period 1995-2005. Results of analysis show that increase in direct taxes by 1% enhances gross domestic product per capita for 1.61%. On the other hand, an increase in indirect taxes by 1% declines gross domestic product per

capita for 0.83%. It means that the government should focus on direct taxes because of their positive implications on gross domestic product per capita. Lee and Gordon (2005) determine that corporate tax rates are negatively correlated with economic growth, where the decrease of tax rates leads to annual growth by 1% to 2%.

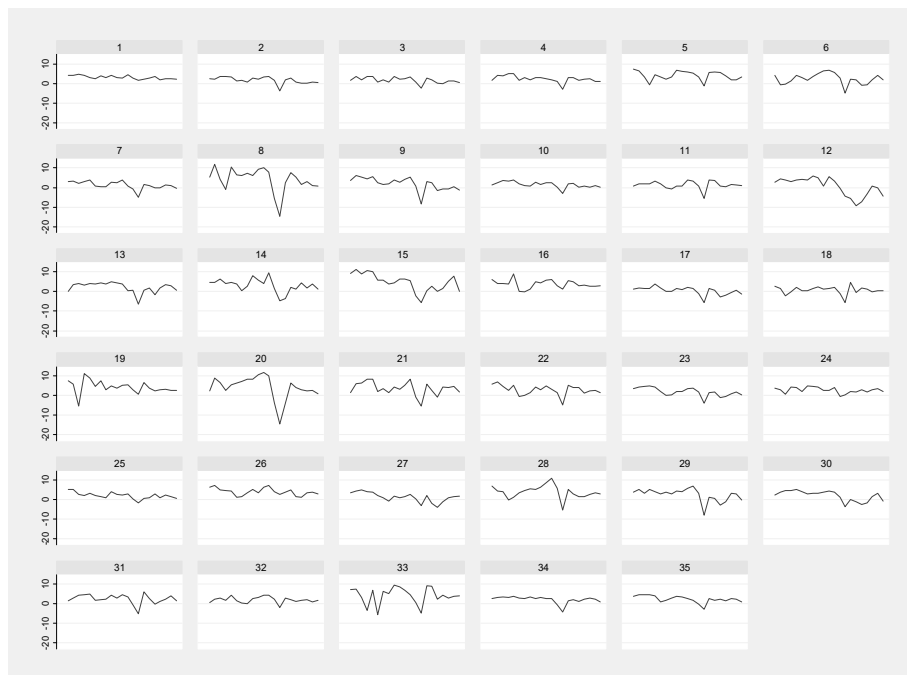
Through panel regression model, Arnold (2008) found that simultaneous increase of personal income tax and corporate income tax, as well as a reduction in tax on property and consumption tax, declines gross domestic product in the long run. Milenković and Kalaš (2017) confirmed the significant impact of tax revenues growth, personal income tax and social security contributions on gross domestic product in OECD countries for the period 2012-2016. Dackehag and Hansson (2012) analysed twenty-five OECD countries in the period 1976-2010 and their findings confirmed a strong correlation between corporate income tax and economic growth, including negative effects of personal income tax and corporate income tax. Similarly, Kotlán et al. (2011) noted the negative impact of personal income tax, social security contributions and excises on economic growth in OECD countries. In an empirical research of seventeen OECD countries for the period 1970-2014, Gemmell et al. (2011) have concluded that direct taxes are more damaging to economic growth with a particular focus on negative implications of personal income tax and corporate income tax on economic growth in the long run.

Similar results were also presented by Macek (2014) who analyses the impact of tax forms on economic growth in OECD countries from 2000 to 2011. Results of regression analysis showed that corporate income tax, personal income tax and social security contributions have the greatest damage to economic growth, as well as a tax on property does not have a significant influence on growth of these economies. Edame and Okoi (2014) examined the impact of personal income tax and corporate income tax on economic growth and investment in Nigeria for the period 1980-2010. Results of OLS model showed an inverse relationship between these determinants or that any increase in these taxes has negative impact on gross domestic product. Using multiple regression model, Ojong et al. (2016) showed a positive and significant correlation between tax forms and economic growth in Nigeria. Umoru and Anyiwe (2013) analysed the potential effect of direct and indirect taxes on economic growth and results showed a significant impact of direct taxes on gross domestic product in Nigeria. Kalaš et al. (2017) researched the impact of tax forms on economic growth in the United States for the period 1996-2016. Results of model reflects that tax revenues growth have a positive impact on gross domestic product, where 1% increase of tax revenues enhances the gross domestic product for 0.29%. Also, Ahmad and Sial (2016) confirmed significant and negative impact of tax revenues on economic growth, where an increase of tax revenues by 1% reduces economic growth for 1.25%.

### 3. Economic growth and tax structure in OECD countries

This research segment includes an analysis of economic growth measured by GDP growth rate and direct taxes such as personal income tax, corporate income tax and tax on property in OECD countries in the period 1996-2016. First, real and average GDP growth rates are presented in selected countries by panel graphs for each economy.

**Figure 1. The real GDP growth rate in OECD countries from 1996 to 2016**



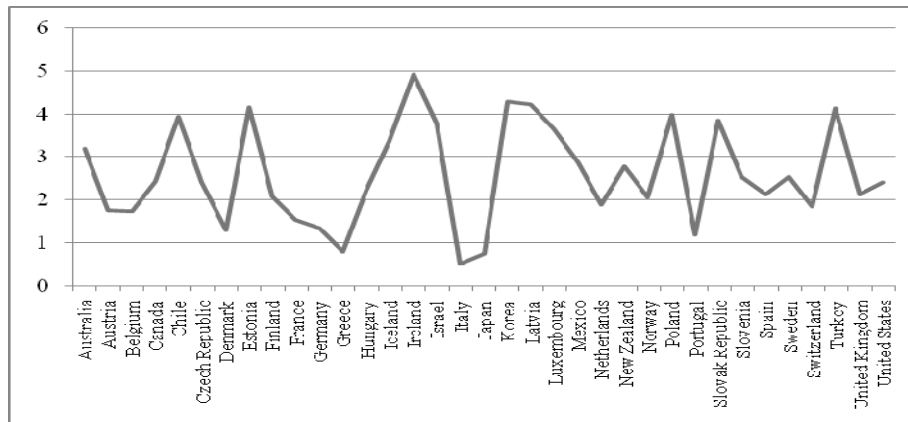
Notes: Australia, Austria, Belgium, Canada, Chile, Czech, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States

Source: Authors calculation

Figure 1 and 2 show annual and average GDP growth rate in OECD countries in the period 1996-2016. The average growth rate of the economy above 4% was recorded in Estonia, Ireland, South Korea, Latvia, Poland and Turkey. Next, Chile, Israel, Luxembourg and Slovakia achieved an average GDP growth rate over 3.5%, while other countries had a significantly slower economic growth in the analysed period. This is particularly related to Greece and Japan, where the average GDP

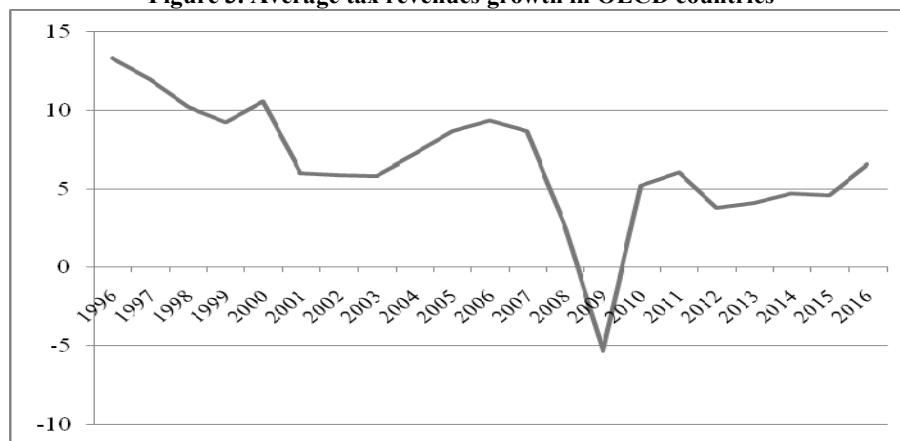
growth rate was 0.71%, including Italy that had the slowest economic growth of only 0.52% in the observed period.

**Figure 2. The average GDP growth rate in OECD countries from 1996 to 2016**



Source: Authors based on <https://stats.oecd.org/index.aspx?DataSetCode=REV>

**Figure 3. Average tax revenues growth in OECD countries**



Source: Authors based on <https://stats.oecd.org/index.aspx?DataSetCode=REV>

Figure 3 shows average tax revenues growth in OECD countries in the period 1996-2016. Analysing their trend per year, there is an intense growth of tax revenues in observed period. Double growth rates of tax revenues growth were recorded where the maximum level was 13.4% in 1996. From 2001 to 2007, the average tax revenues growth was 7.4% while their lowest growth was 2.5% in 2008. An unfavourable trend continued in 2009 when tax revenues declined by

5.4% which presents a negative cumulative effect of 7.9%. However, tax revenues are growing in the next years by 6.1% in 2011, which is approximate to their increase in 2016. This is an encouraging fact because the structure of public revenues is largely conditioned by tax revenues level.

**Table 1. Direct taxes in OECD countries (% GDP)**

<b>Year</b>	<b>Personal income tax</b>	<b>Corporate income tax</b>	<b>Tax on property</b>
<b>1996.</b>	8.7	2.9	1.7
<b>1997.</b>	8.9	2.9	1.7
<b>1998.</b>	8.8	2.9	1.8
<b>2000.</b>	8.7	3.2	1.8
<b>2001.</b>	8.7	3.0	1.7
<b>2002.</b>	8.3	2.9	1.7
<b>2003.</b>	8.1	2.9	1.8
<b>2004.</b>	8.0	3.0	1.8
<b>2005.</b>	8.0	3.3	1.8
<b>2006.</b>	8.1	3.6	1.8
<b>2007.</b>	8.2	3.6	1.8
<b>2008.</b>	8.2	3.3	1.7
<b>2009.</b>	7.9	2.7	1.7
<b>2010.</b>	7.7	2.7	1.7
<b>2011.</b>	7.8	2.8	1.8
<b>2012.</b>	8.1	2.8	1.8
<b>2013.</b>	8.2	2.8	1.9
<b>2014.</b>	8.4	2.8	1.9
<b>2015.</b>	8.4	2.8	1.9
<b>2016.</b>	8.3	2.9	1.8

*Source:* Authors based on <https://stats.oecd.org/index.aspx?DataSetCode=REV>

Table 1 shows the share of direct taxes in the gross domestic product at the level of OECD countries from 1996 to 2016. As it can be seen, personal income tax has the greatest share in gross domestic product compared to corporate income tax and tax on property. Namely, the highest share of this tax is recorded in 1997 (8.9%), while on the other hand, personal income tax was on the minimum level in 2010 (7.7). Further, the trend of corporate income tax was in the interval from 2.7% to 3.6%. For example, the highest share of this tax form is recorded in 2007 and 2007 when it was 3.6% of gross domestic product. After that, the share of corporate income tax has decreased in next ten years. Finally, tax on property has the smallest share in gross domestic product and it is around 1.8% in gross domestic product. Having in mind their share in the tax structure of OECD countries, it is necessary that any potential change in relation to these taxes be

carefully considered by tax authorities in order to avoid negative implications on the stability of public finance in observed countries.

## 5. Empirical research and results

The correlation between direct taxes and the gross domestic product is shown through a group and individual correlation matrix including a dispersion diagram to represent the interdependence between selected variables.

**Table 2. Group correlation between direct taxes and gross domestic product**

Variable		GDP	TR growth	PIT	CIT	TOP
GDP	Pearson Correlation	1	<b>0.459**</b>	<b>-0.113**</b>	<b>0.066**</b>	-0.047
	Sig. (2-tailed)		0.000	0.002	0.075	0.204
	N	735	735	735	735	735
TR growth	Pearson Correlation	<b>0.459**</b>	1	<b>-0.176**</b>	<b>-0.075**</b>	<b>-0.164**</b>
	Sig. (2-tailed)	0.000		0.000	0.042	0.000
	N	735	735	736	735	735
PIT	Pearson Correlation	<b>-0.113**</b>	<b>-0.176**</b>	1	<b>0.110**</b>	<b>0.285**</b>
	Sig. (2-tailed)	0.002	0.000		0.003	0.000
	N	735	735	735	735	735
CIT	Pearson Correlation	0.066	<b>-0.075**</b>	<b>.110**</b>	1	<b>0.179**</b>
	Sig. (2-tailed)	0.075	0.042	0.003		0.000
	N	735	735	735	735	735
TOP	Pearson Correlation	-0.047	<b>-0.164**</b>	<b>0.285**</b>	<b>0.179**</b>	1
	Sig. (2-tailed)	0.204	0.000	0.000	0.000	
	N	735	735	735	735	735

Source: Authors calculation

Table 2 shows the correlation between direct taxes and gross domestic product at the level of OECD countries from 1996 to 2016. Looking at the value of the coefficient, we can notice a positive and significant correlation between tax revenues growth and corporate income tax on the one side and gross domestic product on the other side. The negative correlation was identified between the other two tax forms and gross domestic product, whereby statistical significance was recorded in the case of personal income tax. Analyzing the level of correlation, there is a weak nexus between tax revenues growth and gross domestic product, where the value of the coefficient was in the interval of 0.3 to 0.5. Likewise, a slight correlation is determined between corporate income tax and gross domestic product where the coefficient value was below 0.3.



**Table 3. Correlation between tax revenues growth and gross domestic product by OECD countries**

<b>Country</b>	<b>AUS</b>	<b>AUT</b>	<b>BEL</b>	<b>CAN</b>	<b>CHI</b>	<b>CZE</b>	<b>DEN</b>
<i>TRgrowth-GDP</i>	0.484* (0.026)	0.509* (0.018)	0.747** (0.000)	0.722** (0.000)	0.737** (0.000)	0.640** (0.002)	0.631** (0.002)
<b>Country</b>	<b>EST</b>	<b>FIN</b>	<b>FRA</b>	<b>GER</b>	<b>GRE</b>	<b>HUN</b>	<b>ICE</b>
<i>TRgrowth-GDP</i>	0.730** (0.000)	0.786** (0.000)	0.736** (0.000)	0.638** (0.002)	0.459* (0.036)	0.456* (0.038)	0.675** (0.001)
<b>Country</b>	<b>IRE</b>	<b>ISR</b>	<b>ITA</b>	<b>JAP</b>	<b>SKR</b>	<b>LET</b>	<b>LUK</b>
<i>TRgrowth-GDP</i>	0.866** (0.000)	0.752** (0.000)	0.502* (0.020)	0.687** (0.001)	0.792** (0.000)	0.901** (0.000)	0.683** (0.001)
<b>Country</b>	<b>MEK</b>	<b>NET</b>	<b>NZ</b>	<b>NOR</b>	<b>POL</b>	<b>POR</b>	<b>SLK</b>
<i>TRgrowth-GDP</i>	0.628** (0.002)	0.852** (0.000)	0.710** (0.000)	0.545* (0.011)	0.430 (0.051)	0.773** (0.000)	0.733** (0.000)
<b>Country</b>	<b>SLO</b>	<b>SPA</b>	<b>SWE</b>	<b>SWI</b>	<b>TUR</b>	<b>UK</b>	<b>US</b>
<i>TRgrowth-GDP</i>	0.792** (0.000)	0.776** (0.000)	0.771** (0.000)	0.668** (0.001)	0.092 (0.691)	0.833** (0.000)	0.744** (0.000)

Source: Authors calculation

Based on results from Table 3, it can be seen there is a significant and positive correlation between tax revenues growth and gross domestic product in almost all economies, except Poland and Turkey. At the same time, a strong correlation has been identified in Belgium, Canada, Estonia, Finland, France, Ireland, Israel, South Korea, Netherlands, New Zealand, Portugal, Slovakia, Slovenia, Spain, Sweden, United Kingdom and the United States, where the coefficient value was above 0.7. The intensity of the relationship between these variables is the highest in Latvia, where the value of the coefficient was above 0.9. Also, a weak correlation is presented in Australia, Greece and Hungary, which is manifested in the coefficient value below 0.5. The middle level of correlation has been recorded in economies such as Czech Republic, Denmark, Mexico and other countries. It can be noted that Poland and Turkey are only countries where there is no significant correlation between observed variables.

Table 4 shows that personal income tax and gross domestic product are positively correlated in sixteen countries, whereby statistical significance has been confirmed in Australia, Greece, Italy, Netherlands, Poland, Switzerland and Turkey. Bearing in mind that personal income tax has a significantly higher share in the gross domestic product, the absence of a strong correlation is a surprising fact. A middle correlation has been identified in Australia, Italy, Poland and Turkey, while the variables are weakly correlated in Greece, Netherlands and Switzerland. Personal income tax is not significantly correlated with the gross domestic product in other countries, especially in Chile, France, Germany, Israel and Latvia, where the coefficient values were below 0.1.

**Table 4. Correlation between personal income tax and gross domestic product by countries**

Country	AUS	AUT	BEL	CAN	CHI	CZE	DEN
PIT – GDP	0.628** (0.002)	-0.201 (0.383)	0.345 (0.125)	0.347 (0.123)	-0.094 (0.686)	0.291 (0.200)	-0.167 (0.470)
Country	EST	FIN	FRA	GER	GRE	HUN	ICE
PIT – GDP	0.127 (0.582)	0.273 (0.244)	-0.010 (0.966)	-0.094 (0.686)	-0.454* (0.039)	-0.083 (0.721)	0.176 (0.445)
Country	IRE	ISR	ITA	JAP	SKR	LET	LUX
PIT – GDP	0.391 (0.079)	0.016 (0.946)	-0.614** (0.003)	-0.159 (0.503)	-0.408 (0.066)	0.076 (0.750)	-0.157 (0.496)
Country	MEK	NET	NZ	NOR	POL	POR	SLK
PIT – GDP	0.142 (0.539)	-0.489* (0.025)	0.482* (0.027)	0.126 (0.585)	-0.600** (0.004)	-0.206 (0.371)	-0.046 (0.844)
Country	SLO	SPA	SWE	SWI	TYP	UK	USA
PIT – GDP	0.108 (0.640)	-0.419 (0.059)	0.302 (0.184)	-0.491* (0.024)	-0.531* (0.013)	-0.126 (0.586)	0.172 (0.455)

Source: Authors calculation

**Table 5. Correlation between corporate income tax and gross domestic product by countries**

Country	AUS	AUT	BEL	CAN	CHI	CZE	DEN
CIT – GDP	0.026 (0.911)	0.146 (0.529)	0.221 (0.335)	0.560** (0.008)	0.253 (0.269)	0.582** (0.006)	0.505* (0.020)
Country	EST	FIN	FRA	GER	GRE	HUN	ICE
CIT – GDP	-0.376 (0.093)	0.712** (0.000)	0.577** (0.006)	0.338 (0.134)	0.530* (0.013)	0.110 (0.635)	0.010 (0.966)
Country	IRE	ISR	ITA	JAP	SKR	LAT	LUX
CIT – GDP	0.645** (0.002)	0.413 (0.063)	0.282 (0.215)	0.377 (0.102)	-0.285 (0.210)	0.161 (0.497)	0.150 (0.515)
Country	MEK	NET	NZ	NOR	POL	POR	SLK
CIT – GDP	-0.233 (0.309)	0.777** (0.000)	0.242 (0.291)	-0.267 (0.242)	-0.340 (0.132)	0.280 (0.218)	0.186 (0.420)
Country	SLO	SPA	SWE	SWI	TUR	UK	US
CIT – GDP	0.209 (0.364)	0.579** (0.006)	0.408 (0.067)	0.553** (0.009)	-0.192 (0.403)	0.271 (0.234)	0.555** (0.009)

Source: Authors calculation

Looking at the correlation between corporate income tax and gross domestic product by countries, there is a positive relationship in more than thirty economies of OECD. However, statistical significance has been founded in only eleven countries, which points to the fact that this tax is not significantly correlated with the gross domestic product in most observed countries. These variables are negatively correlated in Estonia, Mexico, Poland and Turkey, but without statistical significance. Bearing in mind that positive correlation is more present, it can be concluded that growth of this tax form leads to economic growth in most of the analysed countries. A strong correlation is presented in Finland and Netherlands,

while the variables are moderately correlated in Canada, Czech Republic, Denmark, France, Greece, Ireland, Spain, Switzerland and the United States. In other countries, there is no statistical significance between selected variables which implies there is no interdependence of corporate income tax and gross domestic product.

**Table 6. Correlation between tax on property and gross domestic product by OECD countries**

<b>Country</b>	<b>AUS</b>	<b>AUT</b>	<b>BEL</b>	<b>CAN</b>	<b>CHI</b>	<b>CZE</b>	<b>DEN</b>
<i>TOP – GDP</i>	0.175 (0.448)	-0.145 (0.530)	-0.467* (0.033)	-0.536* (0.012)	-0.006 (0.980)	-0.116 (0.617)	-0.326 (0.149)
<b>Country</b>	<b>EST</b>	<b>FIN</b>	<b>FRA</b>	<b>GER</b>	<b>GRE</b>	<b>HUN</b>	<b>ICE</b>
<i>TOP – GDP</i>	0.108 (0.641)	-0.409 (0.074)	-0.386 (0.084)	0.075 (0.746)	-0.127 (0.582)	-0.143 (0.535)	0.400 (0.072)
<b>Country</b>	<b>IRE</b>	<b>ISR</b>	<b>ITA</b>	<b>JAP</b>	<b>SKR</b>	<b>LAT</b>	<b>LUX</b>
<i>TOP – GDP</i>	0.163 (0.481)	0.740** (0.000)	-0.543* (0.011)	-0.131 (0.583)	0.239 (0.297)	0.613** (0.004)	0.580** (0.006)
<b>Country</b>	<b>MEK</b>	<b>NET</b>	<b>NZ</b>	<b>NOR</b>	<b>POL</b>	<b>POR</b>	<b>SLK</b>
<i>TOP – GDP</i>	-0.517* (0.016)	0.534* (0.013)	-0.490* (0.024)	-0.309 (0.172)	-0.292 (0.200)	-0.112 (0.630)	0.028 (0.904)
<b>Country</b>	<b>SLO</b>	<b>SPA</b>	<b>SWE</b>	<b>SWI</b>	<b>TUR</b>	<b>UK</b>	<b>US</b>
<i>TOP – GDP</i>	-0.104 (0.655)	0.320 (0.157)	0.414 (0.062)	0.197 (0.391)	0.017 (0.941)	-0.172 (0.456)	-0.189 (0.411)

Source: Authors calculation

Based on Table 6, the results show that variables are negatively correlated in nineteen countries whereby statistical significance has been recorded in Belgium, Canada, Italy, Mexico and New Zealand. Tax on property and gross domestic product are positive and significant correlated in Latvia, Luxembourg and Netherlands. Findings reflect that growth of this tax form leads to contributes growth of these four economies. Also, these variables are strongly correlated in Israel, while middle correlation is determined in Canada, Italy, Latvia, Luxembourg, Mexico and Netherlands. Further, tax on property and gross domestic product are weakly correlated in Belgium and New Zealand, where coefficient values are below 0.5. Most of the observed countries recorded no significant correlation between a tax on property and economic growth, which is an expected fact because this tax form has a lower share in gross domestic product compared to other taxes.

## Conclusion

Analyzing various researches from the aspect of tax impact on certain macroeconomic variables, it is noticeable that personal income tax, corporate income tax and tax on property are often determined as main tax forms in

econometric modelling. Also, these taxes are most analysed from their effects on economic growth measured by gross domestic product. The study includes an examination of the relationship between direct taxes and economic growth in OECD countries in the period 1996-2016.

The paper researches the level and intensity of correlation between personal income tax, corporate income tax and tax on property and gross domestic product which is determined as a proxy for economic growth. In addition to these taxes, the analysis includes tax revenues growth in order to identify is there a positive or negative relationship with economic growth. The results of correlation have shown that there is a significant relationship between tax revenues growth, personal income tax, corporate income tax and gross domestic product in OECD countries. On the other hand, tax on property is not significantly correlated to economic growth, which was expected with regard to least share in the gross domestic product in relation to other tax forms. This study enables a certain contribution in terms of better comprehension of the relationship between direct tax forms and economic growth in OECD countries. Also, the results give guidance to policymakers about direct taxes and their correlation with economic growth and identify which tax forms are essential. Future study will focus on indirect taxes and be expanded to the European Union countries in order to examine their potential relationship with economic growth and other macroeconomic indicators such as unemployment, inflation, investment and government expenditures.

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## ODNOS IZMEĐU DIREKTNIH POREZA I EKONOMSKOG RASTA U ZEMLJAMA OECD-a

**Apstrakt:** Cilj rada je utvrditi da li postoji linearna povezanost između direktnih poreza i ekonomskog rasta. Predmet rada podrazumeva utvrđivanje potencijalne linearne povezanosti između direktnih poreza i ekonomskog rasta u zemljama OECD-a, za vremenski period 1996-2016. godina. Analiza uključuje poreske oblike kao što su porez na dohodak građana, porez na dobit preduzeća i porez na imovinu i njihovu potencijalnu korelaciju sa ekonomskim rastom koji je meren putem stope rasta GDP-a. Takođe, uključen je i rast poreskih prihoda kako bi se utvrdilo da li neposredno utiču na rast ekonomije u posmatranim zemljama. Rezultati su prikazani putem grupne i individualne korelacione matrice, kako bi se identifikovao nivo i intenzitet povezanosti između datih

varijabli za svaku posmatranu zemlju. Rezultati grupne korelacione matrice su pokazali da postoji statistički značajna veza između rasta poreskih prihoda, poreza na dohodak građana i poreza na dobit preduzeća i bruto domaćeg proizvoda u zemljama OECD-a. Međutim, bitno je naglasiti da porez na imovinu i bruto domaći proizvod nisu značajno korelisani na nivou OECD-a, što je logično imajući u vidu nisko učešće ovog poreskog oblika u navedenim zemljama.

**Ključne reči:** direktni porezi, ekonomski rast, korelacija, OECD zemlje

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