THE IMPACT OF THE CORPORATE TAX ON THE ECONOMIC DEVELOPMENT. THE CASE OF ROMANIA

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Rezumat

The tax accounting system in Romania suffers many changes from one year to another. We assume that these changes occur in order to have a positive impact on the Romanian economy. One of the most important taxes collected by the state is the corporate tax. In this paper we aim to show the impact of the corporate tax on the economic development of Romania. We selected the period between 2003 and 2015. We provide an argument for the selection of the indicators which describe the economic development. For the period analyzed we described the changes in the regulations regarding the income tax, the impact on the economic development (assessed in terms of foreign direct investment) and the correlation between the two.

Cuvinte cheie: *Romania, tax, economic development, foreign direct investment*

Clasificare JEL : *M40, M41*

1. Introducerea şi contextul studiului

The Romanian tax system is made up of many taxes. Many stipulations in the regulations change from one year to another. The income tax is very important for Romania's budget as it brings annual revenues to the state budget of approximately 2% of GDP, in 2016 having reached 15.4 billion RON. Previous research found that corporate tax is the most harmful for the economic growth (Johansson et al., 2008), meaning that higher corporate tax rates decrease economic growth (Lee and Gordon, 2004). Other research shows that a reduction in income tax has a positive effect on investments (Dobbins and Jacob, 2016). In this context, our research objective is to see which the economic impact of the income tax is in Romania. In order to do this, first of all we analyze the main changes in the regulations regarding the income tax. Even though the statutory flat rate of 16% was maintained for a relatively long period of time (since 2004) there are many aspects which changed. In line with previous literature (Johansson et al., 2008) we call these tax structures. Income tax has a significant influence on decisions made by investors. Investments, foreign direct investments (FDI) in our case, influence economic development and growth, which means that the profitability of the investment has an influence on the flow of investments from Romania. Based on this hypothesis, in our study we focused on the influence of the FDI on economic development measured in terms of GDP. We studied the international literature and extracted a set of indicators specific to the economic development on which tax has an impact. In the end, we analyzed the correlations between the changes in the regulations specific to the impact tax and the economic development.

We consider that Romania represents a good environment to conduct this type of research. For instance, the Romanian tax regulations change constantly. So, we assume that many situations can be found here. In the same time, the changes are perceived by the Romanians as an instability factor harming the economic development (Nasta and Ivan, 2015). Another aspect is that the regulations are very complex. For example, the Romanian Tax Code includes 46 paragraphs regarding only the income tax.

Given the importance of the aspects debated and the fact that the national literature on the impact of taxes on the economic development is quite scarce, we consider that our research

presents a good potential. The results of our research could also help the Romanian Ministry of Finance in shaping a practical tax reform.

2. Economic development indicators

Economic development represents the process through which an economy grows or becomes more advanced, which implies an improvement in economic and social conditions. It refers to adopting new technology, transition from economy based on agriculture to the one based on industry and a general improvement of the living standard.

Economic growth is quantified by the dynamics of the macroeconomic indicators measured in real terms, i.e. Gross Domestic Product (GDP), Gross National Product (GNP) and National Income (NN). Macroeconomic dynamics needs to be correlated with the demographic dynamics, so that the variation of the macroeconomic indicators needs to be related to the variation of the total population. Thus, we measure the economic growth by the growth rate of both total and per capita indicators.

Economic growth is influenced by a number of factors, classified as direct and indirect. The direct ones are:

A) Human resources: education, discipline, motivation, job offer;

B) Natural resources: subsoil resources, land, climatic conditions, fuels;

C) Technical Capital Stock: Buildings, machinery, equipment, transport means;

D) Technology: engineering, science, organization, management, innovation, entrepreneurship.

Indirect factors also have a significant influence: the size of aggregate demand - the absorption capacity of the domestic market, the investment and savings rates, the efficiency of the banking system, capital and labor migration, fiscal and budgetary policy.

The economic development indicators studied by other authors are included in table 1.

Table 1. Economic development indicators

Article	**Indicators**
Țâțu, Dragotă and Vintilă, 2011	Level and destination of foreign direct investments
Djankov et al., 2009	Informal economy Tax evasion
Brașoveanu and Obreja Brașoveanu, 2009	Corruption Investment in production Investment in services
Johansson et al., 2008	GDP per capita
Bozio et al., 2015	Unit labour costs Unemployment Fiscal deficit Net borrowing
Lee and Gordon, 2005	GDP per capita Primary school enrolment rates Average trade openness ICRG's corruption and bureaucrats' quality Population growth rates Average inflation rates

Source: processed by the authors

3. Foreign Direct investment

Foreign direct investment (FDI) contributes significantly to the economic growth of any country, because it creates jobs, allows the transfer of technology, optimizes the allocation of resources and stimulates trade. Foreign direct investment represents a sustainable investment relationship between a non-resident entity and a resident entity. As a rule, it involves the exercise of significant managerial influence by the investor in the investee. Examples of direct investments are: the paid-up share capital and reserves belonging to an investor holding at least 10% of the subscribed share capital of an enterprise, the reinvested earnings by the investor, as well as the loans between that investor and the enterprise in which he invested.

Foreign direct investment consists of:

A) Ownership: which includes the subscribed and paid-up share capital, in cash and/or by contributions in kind, which is held by non-residents in resident companies, but also the share of the reserves;

B) Net credit: loans received by the resident enterprise from the non-resident investor or non-resident group of companies to which he belongs.

Depending on the contribution to the renewal and development of economic assets in the recipient country, FDI is divided into:

- Greenfield: investments in enterprises set up and developed by or together with foreign investor - investments started from scratch;
- Brownfield: investment in enterprises wholly or partially taken over by the foreign investor from residents if more than 50% of the intangible and tangible assets are made after takeover;
- Partial or full business receivables: investments in enterprises wholly or partially taken over by the foreign investor from residents, where more than 50% of the intangible and tangible assets are carried out prior to takeover.

FDI has had a positive evolution in Romania, as can be seen in the chart below.

Source: author's conception

The final FDI balance at 31.12.2015 was 64.433 million euros. The equity investment (including the reinvested earnings) of the FDI companies as at 31.12.2015 amounted to EUR 45,098 million (accounting for 70% of the final FDI balance) and the net credit received by FDI from foreign direct investors registered the level of EUR 19,335 million, representing 30% of the final balance of FDI.

4. Research method

In this article we will focus on the changes in the income tax regulations in Romania and their impact on the economic development of the country for the period 2003-2015. The impact will be measured in terms of FDI and GDP.

However, the favorable impact of FDI on economic development must also be proven by statistical methods. Thus, we analyzed, using a simple regression model, whether FDI influences economic development through the prism of gross domestic product.

Foreign direct investment (FDI) is made by multinationals to make profits. Return on FDI is expected to decline with rising energy prices, taxes, labor costs, and so on. In terms of taxation, the negative relationship between the fiscal burden and the FDI flows is mainly confirmed by the empirical evidence for the OECD countries. However, empirical evidence on FDI and taxation in Central and Eastern European countries (CEECs) did not consistently prove that taxes are important for investment location decisions.

Regarding the income tax regulations, we analyzed the Fiscal Code in force each year. Based on the changes identified, we tried to make a periodization in order to better understand the strategy of the Romanian governments. In order to demonstrate the link between GDP and FDI, we will use a simple linear regression model based on the data for the period 2003-2015 for GDP and net FDI flows. The data was collected from Eurostat and from the Romanian National Statistics Institute.

The influence of FDI on GDP can be determined using a simple linear regression model, where GDP is the resultant variable and FDI is the explanatory variable. The econometric model is as follows: $GDP = \alpha + \beta * ISD + \varepsilon$

- Dependent variable: GDP – the phenomenon analyzed;
- Independent variable: FDI.

Given the nature and the sources of the data which was collected we assume that the research is characterized by objectivity.

5. Income tax regulations in Romania

The regulation of corporate tax profit realized in several stages:

Stage 1: Law no. 12/1991 regarding corporate tax

It was characterized by imposing quotas on profit progressive trance, trance up to RON 25,000 being exempted. For the remaining 66 instalments, rates were between 2.5% and 77%. Simultaneously, there were provided tax incentives. The large number of allowances and instalments did not provide an optimal forecast of monetary flows and their incidence on financial management of enterprises.

Stage 2: Decision no. 804/1991 to update Law no. 12/1991

Taxation was made through proportional share of profit on 2 instalments:

- Up to RON 1,000,000 - 30%;
- Over RON 1,000,000 - 45%.

The Government was granting tax incentives, for stimulating the creation of a viable private sector and attracting foreign capital. Economic facilities included:

- Deduction from the taxable base of revenues obtained from increasing product quality and those for advertising and publicity;
- 50% reduction in the tax for reinvested profits for the development, modernization and obtaining additional profit;
- A deduction of the profit tax with 25% for the companies with foreign capital which realized certain investments, created a number of jobs etc.

The incentives granted to foreign investors have led to distortion of competition between domestic capital and foreign capital.

Stage 3: Ordinance no. 70/1994 regarding corporate tax

In order to raise tax corporation neutrality, a normal rate of 38% was established. Legal persons, who obtained at least 80% of income from agriculture, were subject to a tax rate of 25%.

Legal entities that obtained more than 50% of revenue from the organization of gambling or bars or nightclubs, support an additional 22% share.

Stage 4: Law no. 414/2002 regarding corporate tax

The normal rate of 38% was replaced by a 25% rate for entities, and a special 80% rate for the National Bank of Romania.

Stage 5: Law no. 571/2003 regarding Fiscal Code

2004 marked a fiscal revolution: the introduction of the Fiscal Code which contained rules for every tax. The flat tax of 16% has replaced the old profit tax (25% applied in 2003 and 19% proposed for 2004).

The revenues collected to the general consolidated budget in 2015 totaled 22.45 billion euros, or about 30% of GDP, estimated at Euro 75 billion. During 2005, the revenues to the state budget recorded a real growth of 5.3% compared with 2004.

The current profit tax rate is 16%, which, as market studies show, is one of the lowest in the European Union. The taxpayers that are carrying on activities such as casinos and nightclubs are either subject of 5% tax of the revenue obtained from such activities or 16% of the taxable profit, depending on which is higher.

In order to be a profit tax payer, a company must reach an annual turnover of €500,000. Companies that do not exceed this threshold are taxed on their total income.

Over the years, with the scope of increasing the investments, the Government has provided fiscal facilities that influenced the effective corporate tax rate. Some of the tax incentives provided had a significant impact on investments and economic growth. One category is represented by the tax incentives on research and development expenditures. The Government provides an additional deduction for research and development expenses, in amount of 50% of the eligible expenses. In addition, the companies that perform such activities may opt for accelerated depreciation method for equipment used for these activities. The tax incentives were necessary because Romania ranks among the last countries on research and development activities conducted.

Table 2. R&D expenditure

	R&D expenditure (as % of GDP)		**R&D expenditure** (mil. Euros)	
	2004	**2014**	**2004**	**2014**
Romania	0.38	0.38	235	575
EU	1.76	2.03	194,341	283,009

Source: Eurostat

Also, in 2014, almost half of R&D expenditure was conducted within the public sector.

Table 3. R&D expenditure in Romania on domains

Year	Business enterprise	Government	Higher education
2004	55%	34%	10%
2014	41%	43%	15%

Source: Eurostat

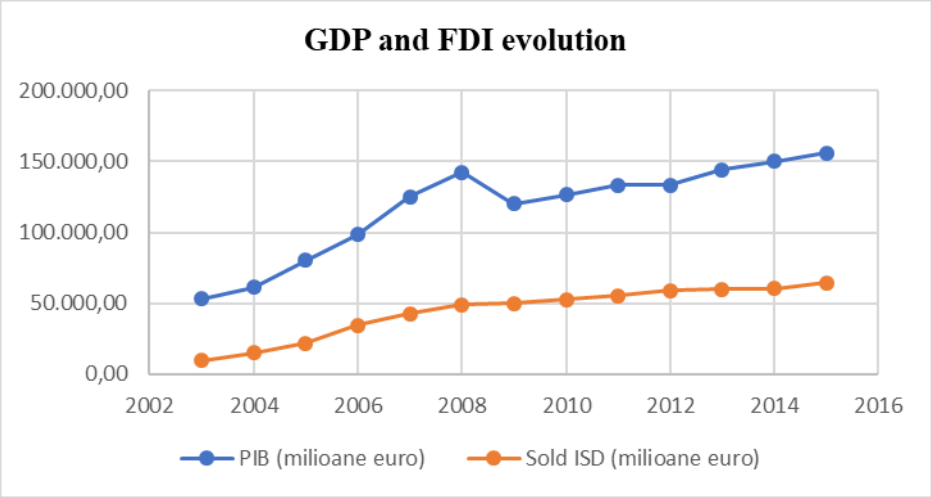
Another incentive is the tax exemption for reinvested profits. The profit invested in new technological equipment (specifically mentioned in the subgroup 2.1. and 2.2.9 of the Fixed Assets Catalogue) manufactured and/or purchased and put into operation, is exempt from income tax. In order to benefit from this incentive, the technological equipment should be used by the company for the purpose of carrying on the business activity for more than half of its useful life, but for no longer than five years. The companies benefiting from this incentive cannot use the accelerated depreciation method for the respective technological equipment. The tax exemption applies to the accounting profit before tax recorded from the beginning of the year and invested in technological equipment, machinery installation work, computers, machinery and cash registers, production or acquisition of software.

In 2014, 2,500 companies were exempted from paying tax on reinvested profits, amounting to 179.4 million lei.

Two different concepts on effective tax rate have been defined in literature. Average effective rate is useful to measure the distribution of tax incentives between companies or industries, while the marginal effective rate is suitable for analysis of tax incentives for new investments (Țwo , Dragotă and Vintilă, 2011). Though the statutory tax rate is the same for every company, the effective income tax rate is different from one company to another. This is due to the fact that the taxable profit is different from the gross accounting profit.

6. Statistical analysis

Evolution of GDP and FDI in the analyzed period is represented as follows:



Source: author's conception

The average values of the two indicators analyzed are:

	PIB (mil. euro)	Sold ISD (mil. euro)
Valori medii	117.321,09	44.160,77

Source: author's conception

For the analyzed regression model we used the "Data Analysis" option in Excel. Thus, we obtained the following output:

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0,98
R Square	0,95
Adjusted R Square	0,95
Standard Error	7.752,72
Observations	13

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	12.954.821.130,51	12.954.821.130,51	215,54	0,0000000143
Residual	11	661.151.265,62	60.104.660,51		
Total	12	13.615.972.396,13			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	38.025,78	5.813,42	6,54	0,000041863	25.230,53	50.821,02	25.230,53	50.821,02
Sold ISD (mil €)	1,80	0,12	14,68	0,000000014	1,53	2,06	1,53	2,06

The regression model, using the data obtained, will look like: GDP = 38,025.78 + 1.80 * ISD.

The link between GDP and FDI is significant, with the table showing that for each RON attracted as FDI, we have a 1.8-fold increase in GDP.

The very high value of the free term means the existence of many factors influencing GDP, thus confirming that not only FDI influences economic development.

The very low significance value - Significance F (well below 0.5%) and the very high values of R2 and R2 adjusted confirm that the regression model is statistically significant.

We can conclude that economic development also involves attracting FDI.

7. Concluzii

On the basis of the regression model analysis, FDI determines economic development and growth. Romania needs to continue the process of consolidating the economic situation by implementing investment strategies to provide confidence in the foreign business environment and in the national development plan. In this respect, it is necessary to improve the legislative framework and the scale applied by our country in the field of protection and FDI.

The phenomenon studied, the impact of FDI on GDP, considered to be the best indicator of growth and economic development, shows a positive relationship between the two. Thus, we conclude that GDP is influenced by the changes that occur in the foreign investment flow. FDI, with a positive impact on economic development, improves the productivity of production factors but also the efficiency of resource use in the host economy.

Concluding that corporate tax influences FDI, and FDI is a significant factor in GDP growth, we have concluded that corporate tax influences economic development. Its impact, by influencing some indicators such as return on investment, can generate significant growth.

Romania has a competitive advantage over other countries – the legal profit tax rate of only 16% is one of the lowest in the Union, but also in the world. Yet, the effective tax rate is the one that makes the difference between the country's fiscal policies and we need to focus on it.

An effective tax rate well above the legal quota level negatively influences investors' decisions because it involves little or no tax incentives and unrecognized tax amounts with a large share of total expenditure. At the opposite end, an effective lower rate than the legal rate implies significant tax incentives.

The stability of fiscal policy, although not the subject of this paper, is also a factor influencing investment flows. An unstable environment in which medium and long-term forecasts cannot be made accurately due to frequent changes in fiscal policy will not attract investment and therefore will not generate economic growth. This can be seen in our study: the period covered by the empirical analysis is characterized by a flat income tax rate. This contributed to a constant increase in the FDI and in GDP (except for the period affected by the economic crisis).

Several specialists believe that Romania has not carried out enough activities to attract foreign investors, so one of the authorities' concerns should be to create an investor-friendly environment.

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