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## THE DETERMINANTS OF FOREIGN DIRECT INVESTMENT: EMPIRICAL EVIDENCE FROM KOSOVO

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### Abstract

The purpose of this research is to analyse the determinants of foreign direct investment (FDI) in Kosovo via extensive review of existing research studies, and via the development of a multiple regression model for identifying key determinants of FDI in Kosovo from 2005 to 2018. Ordinary Least Square (OLS) is the main method used to identify statistically significant determinants of FDI in Kosovo, and the importance of these determinants. Potential FDI determinants are tested at the 5% level of statistical significance. The empirical results find that corporate tax rate, wages, GDP growth rate and interest rates are the determining factors in attracting FDI to Kosovo.

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### Key Words

Foreign direct investment; determinants; OLS model.

## **INTRODUCTION**

Data on global foreign direct investment (FDI) flows show that in recent years, despite increasing FDI inflows to developing countries, developed economies continue to be the largest recipients of foreign capital. While developing countries have achieved steady, gradual increases in total FDI, they have failed to exploit opportunities arising from economic and financial crises in developed countries. Meanwhile, states in transition are found to be unable to attract FDI flows and influence the reorientation of foreign capital into their markets and economies. FDI has fluctuated globally in recent years, a situation that is creating uncertainty and concern for policymakers. In 2017, total FDI was \$1.43 trillion, about 23% less than in 2016 (UNCTAD, 2018). This decline is surprising as macroeconomic variables such as GDP and trade were stable or improved in 2017. The decline in FDI at this level is due to a decrease in FDI in corporate mergers, and to mergers and investments in greenfield. In terms of economies, investments in developing countries have been stable but the decline has affected countries in transition, as well as developed economies (UNCTAD, 2018).

Despite huge international FDI flows and strong investment potential, Kosovo has consistently failed to achieve the desired levels of capital and to persuade renowned corporations to invest in its economy. Kosovo has not been able to capture FDI inflows like other developing economies and has failed to attain the success of neighbouring countries.

## **THE IMPORTANCE OF THIS STUDY**

Determinants of FDI are increasingly important given the dynamics of evolving markets. These determinants are unique to each country because of the characteristics and differences of each economy. The complexity of FDI determinants demonstrates the need to continuously revise investment policies at national and international levels to accommodate changes. Understanding FDI determinants is vital for host countries to get a clearer picture of the factors that influence the flow of foreign capital into their economies. Countries that are able to achieve this objective will emerge victorious and able to attract more FDI (UNCTAD, 2017).

Researchers conducting studies on FDI determinants in countries around the world have found mixed empirical results, according to Sahiti et al., (2018), but there are no studies on Kosovo. At this level, there is a research gap regarding this phenomenon. This research intends to fill this gap. Knowing and understanding empirical evidence on FDI determinants is of paramount importance for Kosovo's policymakers and potential investors. Firstly, FDI flows affect the economic vitality of a nation. The determinants of such flows provide a framework for how policymakers in Kosovo could improve the attractiveness of the domestic market. They also provide a framework for resource allocation to attract FDI according to the importance of different determinants. Secondly, investors need information on FDI determinants in order to decide whether to invest in Kosovo.

This study has two research objectives. The first is to examine the key FDI determinants in Kosovo. The second objective is to evaluate the importance of potential determinants in respect to the flow of foreign capital into Kosovo.

The following research questions are posed to address these objectives: First, what are the main determinants of FDI in Kosovo? Second, what is the magnitude of the relationship between FDI inflows? Third, how can the government of Kosovo improve the domestic business environment to attract more foreign capital based on these determinants?

## **LITERATURE REVIEW**

There are many microeconomic and macroeconomic factors that determine FDI flows from one country to another (Loksha, Leelavathy, 2012) and, as such, can be used by scientific researchers depending on their objectives. Types of FDI determinants vary from country to country (Economou et al., 2017). Moreover, these determinants differ between regions at the global level. This can be confirmed by the study of Saini and Singhania (2018).

### **Tax rates**

The effect of corporate taxes on FDI flows was studied in 85 countries in 2004, through a questionnaire. The results show that corporate tax rates are negatively related to FDI in production and the size of the informal economy, but not the service industry (Djankov, et al., 2010). The empirical study conducted by Becker et al., (2012), which includes data from foreign businesses in 22 European Union (EU) countries for the period 2000-2006, shows that FDI is negatively correlated with changes in the corporate tax rate, where a 1% increase in the corporate tax rate reduces FDI by 1.4%. Also in this study, the authors argue that countries should worry not only about increasing the amount of FDI, but also about the quality and characteristics of FDI, due to its direct impact on the economy as a result of the intensity of capital investment in production.

The conclusion that higher corporate tax rates negatively affect FDI levels has been confirmed by: Ang (2007) in Malaysia, Bellak and Leibrecht (2009) in Central and Eastern European countries, and by Azam and Lukman (2010) in Pakistan. As for tax rates, not only do countries compete with one another by lowering taxes to attract FDI, but the same phenomenon can be seen in regions within China according to Zhou et al., (2002). Conversely, the study conducted on the importance of corporate taxation for FDI attractiveness in Southeast European countries by Kersan-Škabić (2015) shows that tax rates have not been significant when analysing FDI flows. In this region, Croatia has the highest corporate tax rate at 20% (almost twice the tax rate in most Southeast European countries) yet it has attracted the highest level of FDI.

### **Labour costs**

This variable is mainly measured by wages in a host country. Empirical studies that attempt to explain the relationship between FDI and labour costs show mixed results. According to Bevan and Estrin's (2004) study, labour costs are negatively related to FDI flows, which implies that lower wages stimulate FDI. This study adapts a dataset of bilateral FDI inflows to European Union countries. These results are confirmed by: Vijayakumar et al. (2010) for BRIC states; Wijeweera and Mounter (2008) for Sri Lanka; Kinuthia and Murshed (2015) for Malaysia; and Shamsuddin (1994) for the 34 least-developed states considered.

The positive relationship between labour cost and FDI was confirmed by Sun et al. (2002) for the period of 1987-1991 in China. Most FDI in China in this period came from Hong Kong. Foreign corporations required productive, high-quality workforces and, as a result, were able to offer higher wages to workers rather than train unskilled workers. However, the market price of skilled labour in China during this period was a fraction of that of the developed economies. On the basis of these findings, we can say that the relationship between FDI and wages seems to follow the same trend in developed and less-developed countries, with corporations seeking host countries that offer lower labour costs.

### **Economic growth and market size**

A considerable number of empirical studies conclude that market size and growth has a statistically significant positive impact on FDI inflows. This is confirmed by: Iamsiraroj (2016), whose research includes data from 124 countries in the years 1971-2010; Silajdžić and Mehić (2016) for transitional economies in Central and Eastern Europe; Nistor (2014) for Romania; Pegkas (2015) for Eurozone countries; Suliman et al., (2018) for West Asian countries; and Sirag et al. (2018) for Sudan. Conversely, Belloumi (2014) found that market size and economic growth were insignificant in determining FDI flows for Tunisia in the short run. A negative link has also been found in studies by Irandoust (2016) for Latvia and Lithuania, and Khaliq and Noy (2007) for the mining and quarrying sector in Tunisia.

### **Interest rates**

Empirical studies show different results regarding the relationship between interest rates and FDI. There is a general consensus that real interest rates are negatively correlated with investment in the private sector, and that foreign businesses are discouraged by economies where interest rates are high (Sokunle, 2014). Anna et al. (2012) assessed the impact of interest rates on the economy of Zimbabwe during the period of February 2009 to June 2011, and concluded that interest rates were not determinant and were statistically insignificant in explaining FDI flows. The negative relationship between interest rates and FDI has also been confirmed by Wijeweera and Mounter (2008) for Sri Lanka, and Faroh and Shen (2015) for Sierra Leone. Wijeweera and Clark (2006), in their study on the United States, found that interest rates and FDI had a positive relationship. Other research involving

84 countries confirms that interest rates do not impact FDI flows due to the fact this form of investment is direct and not portfolio investment (Li, Liu, 2005).

## METHODOLOGY

The secondary data used in this study were obtained from the databases of the Kosovo Statistics Agency, the Central Bank of Kosovo and the World Bank. The focus in this section is on quantitative methodology, as the determinants of FDI depend largely on structural differences that refer to fundamental discrepancies in the macroeconomic variables that underlie an economy. The quantitative analysis is based on annual data on the variables selected, over a 14-year period from 2005 to 2018. This period was selected due to the availability of data. The literature used in support of this study was provided by international scientific journals, books and credible institutions relevant to the field of study. Data were imported and analysed using an SPSS software package. As this study incorporates yearly data at the state level, the OLS model fits and is the econometric approach used in this research. The same econometric model has been used in many prior studies.

### Description of the OLS model and variables

To evaluate potential FDI determinants in Kosovo based on the aforementioned theoretical framework and empirical evidence, this research used the general multiple regression model proposed by Studenmund (2006).

$$FDIt = \beta_0 + \beta_1 TAXt + \beta_2 Wage_t + \beta_3 GdpGt + \beta_4 IRt + \epsilon$$

**Table 1.** Description of variables

Independent variables	Acronym	Description of the variables	Unit
Tax	TAX	Corporate tax rate	$\beta_1$
Wage	Wage	Average wage is divided by retail price index	$\beta_2$
GDP growth rate	GdpG	The rate at which a country's GDP changes from one year to another	$\beta_3$
Interest rates	IR	Interest rate adjusted to inflation	$\beta_4$

Source: Own survey.

The dependent variable is measured by FDI flows in Kosovo where data were obtained from the Central Bank of the Republic of Kosovo. The independent variables are based on theoretical studies and empirical evidence in the literature review cited above. Data on the wage variable was

obtained from the Kosovo Statistics Agency and data on GDP growth and interest rates were taken from a World Bank database.

## RESULTS AND DISCUSSION

This section of the study will present the results and findings of the econometric analysis. Explanations of the results will be followed by discussions and possible implications regarding FDI determinants in Kosovo.

### Descriptive statistics

The most critical this part of the study are the results of skewness and kurtosis, so the main focus of the analysis is on these two indicators within the descriptive statistics.

**Table 2.** Descriptive statistics of variables

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
FDI	14	107412815.0	440738143.0	283472068.0	90634738.21	-.243	.597	-.002	1.154
TAX	14	10.00	20.00	12.8571	4.68807	1.067	.597	-1.034	1.154
Wage	14	2.30	5.43	3.8529	1.19846	-.063	.597	-1.840	1.154
GdpG	14	1.20	7.29	3.9921	1.47430	.526	.597	1.395	1.154
IR	14	2.32	17.83	8.9436	4.07588	.735	.597	.634	1.154
Valid N (listwise)	14								

Source: Own survey.

The skewness of variables should not differ significantly from zero for normal distribution of variables (Wooldridge, 2015). According to Wright and Herrington (2011), the values of skewness should be statistically acceptable from -1 to +1. Blaikie (2003) differs, saying that normal values can range from -3 to +3. Based on the results of the descriptive analysis, in which skewness values of variables were around +1 and -1, we can conclude that the variables are within statistically accepted parameters and their distribution is within a normal range.

According to Wooldridge (2015), kurtosis measures the tail thickness of a distribution based on the fourth moment of the standardised random variable, where statistically acceptable values should be from +3 to -3. The kurtosis values of the above results for all variables show that data fit in normal parameters and are statistically acceptable.

## ORDINARY LEAST SQUARES (OLS) MODEL

In regression analysis, before evaluating the significance of independent variables on FDI flows in Kosovo, the focus is on collinearity statistics (see first column on the right). According to Wooldridge (2015), it is impossible for the independent variables to have no relation to each other; the acceptable

value when collinearity is not a problem is when the variance influence factor (VIF) on the independent variables is less than 10. Therefore, according to collinearity statistics, the variance inflation values for all the independent variables in the equation are within acceptable parameters. Collinearity is moderate, at tolerance levels, and does not cause problems in model adaptation and interpretation of the impact of independent variables on FDI flows in Kosovo.

**Table 3.** Regression coefficients of independent variables

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	802815090.3	165827914.3		4.841	.001		
	TAX	-14155127.30	6108589.995	-.732	-2.317	.046	.321	3.115
	Wage	-85179444.52	23896448.20	-1.126	-3.565	.006	.321	3.115
	GdpG	42737035.42	14097190.94	.695	3.032	.014	.610	1.641
	IR	-20101214.52	5138379.079	-.904	-3.912	.004	.600	1.666

a. Dependent Variable: FDI

Source: Own survey.

First, the tax rate coefficient is statistically significant at 0.046, and is negatively correlated with the level of FDI in Kosovo. This indicates that tax cuts are likely to attract more FDI to Kosovo. The literature confirms that the lower the corporate tax rate, the more chance of attracting foreign investors to the host countries. Such results have been confirmed in studies for developing countries including: Ang (2007), Bellak and Leibrecht (2009), and Azam and Lukman (2010).

Second, the wage with the value of  $p=0.006$  has statistical significance at the 0.05 level, and is negatively correlated with FDI flows. This implies that lower wages stimulate FDI. Therefore, increasing labour costs in Kosovo discourage the flow of FDI. These results are supported by literature which argues that low labour costs are important determinants in attracting FDI, especially in developing countries. The result is confirmed by a number of empirical studies including: Shamsuddin (1994) for the 34 less developed states; Vijayakumar et al. (2010) for BRIC states; Wijeweera and Mounter (2008) for Sri Lanka; and Kinuthia and Murshed (2015) for Malaysia.

Third, regarding economic growth as a potential determinant of FDI in Kosovo,  $p=0.014$  indicates positive significance at 0.05 with FDI inflows, confirming that economic growth positively affects FDI levels. This result is in line with the theory that economic growth presents profit potential for foreign investors because it motivates them to launch new product lines or plan additional investments. We can conclude that the Kosovo market is attractive to horizontal FDI because foreign investors pursuing economic growth aim at profitability within an internal market and potential from economies of scale. Vertical FDI in Kosovo could become attractive in future if the government implements the free economic zones project to attract potential investors to use Kosovo as an export market where foreign businesses can act as distributors for markets or other countries. The result of the variable of

economic growth, and its positive affect on attracting foreign investors, is confirmed by Al Nasser (2007) whose study shows that economic growth has a positive and significant impact on foreign investment in Asia.

Fourth, the interest rate variable is statistically significant with a p value of 0.004 and is negatively correlated with the level of FDI. Therefore, it can be said that lowering interest rates has a positive impact on FDI in Kosovo. Similar findings have been confirmed by researchers in other countries, such as Wijeweera and Mounter (2008), and Faroh and Shen (2015).

## **CONCLUSION**

Based on the regression results we can conclude that corporate tax rate, wages, GDP growth rate and interest rates are determinants of foreign direct investment in Kosovo.

The results show that the corporate tax rate has a positive impact on attracting FDI in Kosovo. This is documented by the negative correlation between FDI flows and tax rate. The government of Kosovo has already lowered the corporate tax rate to levels competitive with other countries in the region, with the exception of Montenegro. Thus, there is no room to further improve this indicator as further reductions would have a negative impact on budget revenues.

In terms of wages, the result is consistent with the literature, which shows that lower labour costs stimulate FDI. Therefore, we can say that FDI in Kosovo is driven by businesses with foreign capital that are looking for markets and efficiencies. The rise in average wages in Kosovo, largely driven by public sector wages and publicly owned enterprises, is expected to encourage professionals to continue to prefer the public sector. If this trend continues, Kosovo may lose its competitive advantage in relation to other countries in the near future.

Econometric analysis has shown that economic growth in Kosovo has a statistically strong relationship with FDI inflows. This result shows that the higher the rate of economic growth, the greater the amount of foreign investment, as this determinant motivates foreign businesses to target the economy of Kosovo. Among the key challenges for Kosovo policymakers in coming years will be to maintain sustainable economic growth to ensure market competitiveness. Forecasts are positive so far, provided that other macroeconomic indicators do not deteriorate.

Finally, the real interest rate in Kosovo shows statistical significance in regard to FDI flows. This is also evidenced by the negative relationship between the variables. Although interest rates have fallen sharply in recent years, they are still high compared to other countries in the region. The Central Bank of Kosovo's monetary policy can reduce interest rates to a level that is competitive within the region, acknowledging the importance of this variable.



## REFERENCES

- Al Nasser, O. M. (2007). The determinants of the US foreign direct investment: does the region matter? *Global Economic Review*, 36(1), 37–51.
- Ang, J. B. (2007). Determinants of foreign direct investment in Malaysia. *Journal of Policy Modeling*, 30(1), 185–189.
- Anna, C., Karambakuwa, R. T., Webster, D., Felex, T., Zivanai, O., Lovemore, M., Mudavanhu, V. (2012). The impact of interest rates on foreign direct investment: A case study of the Zimbabwean economy (February 2009–June 2011). *International Journal of Management Sciences and Business Research*, 1(5), 1–24.
- Azam, M., Lukman, L. (2010). Determinants of Foreign Direct Investment in India, Indonesia and Pakistan: A Quantitative Approach. *Journal of Managerial Sciences*, 4(1).
- Becker, J., Fuest, C., Riedel, N. (2012). Corporate tax effects on the quality and quantity of FDI. *European Economic Review*, 56(8), 1495–1511.
- Bellak, C., Leibrecht, M. (2009). Do low corporate income tax rates attract FDI? Evidence from Central and East European countries. *Applied Economics*, 41(21), 2691–2703.
- Belloumi, M. (2014). The relationship between trade, FDI and economic growth in Tunisia: An application of the autoregressive distributed lag model. *Economic Systems*, 38(2), 269–287.
- Bevan, A. A., Estrin, S. (2004). The determinants of foreign direct investment into European transition economies. *Journal of Comparative Economics*, 32(4), 775–787.
- Blaikie, N. (2003). *Analyzing quantitative data: From description to explanation*. London: Sage.
- Djankov, S., Ganser, T., McLiesh, C., Ramalho, R., Shleifer, A. (2010). The effect of corporate taxes on investment and entrepreneurship. *American Economic Journal: Macroeconomics*, 2(3), 31–64.
- Economou, F., Hassapis, C., Philippas, N., Tsionas, M. (2017). Foreign direct investment determinants in OECD and developing countries. *Review of Development Economics*, 21(3), 527–542.
- Faroh, A., Shen, H. (2015). Impact of interest rates on foreign direct investment: Case study Sierra Leone Economy. *International Journal of Business Management and Economic Research*, 6(1), 124–132.
- Iamsiraroj, S. (2016). The foreign direct investment – economic growth nexus. *International Review of Economics & Finance*, 42, 116–133.
- Iranidoust, M. (2016). Structural changes, FDI, and economic growth: evidence from the Baltic States. *Journal of Economic Structures*, 5(1), 14.
- Kersan-Škabić, I. (2015). The importance of corporate taxation for FDI attractiveness of Southeast European countries. *Panoeconomicus*, 62(1), 105–122.
- Khalik, A., Noy, I. (2007). Foreign direct investment and economic growth: Empirical evidence from sectoral data in Indonesia. *Journal of Economic Literature*, 45(1).
- Kinuthia, B. K., Murshed, S. M. (2015). FDI determinants: Kenya and Malaysia compared. *Journal of Policy Modeling*, 37(2), 388–400.
- Li, X., Liu, X. (2005). Foreign direct investment and economic growth: an increasingly endogenous relationship. *World development*, 33(3), 393–407.
- Loksha, B. K., Leelavathy, D. S. (2012). Determinants of foreign direct investment: A macro perspective. *Indian Journal of Industrial Relations*, 459–469.
- Nistor, P. (2014). FDI and economic growth, the case of Romania. *Procedia Economics and Finance*, 15, 577–582.
- Pegkas, P. (2015). The impact of FDI on economic growth in Eurozone countries. *The Journal of Economic Asymmetries*, 12(2), 124–132.
- Sahiti, A., Ahmeti, S., Ismajli, H. (2018). A review of empirical studies on FDI determinants. *Baltic Journal of Real Estate Economics and Construction Management*, 6(1), 1–11.
- Saini, N., Singhania, M. (2018). Determinants of FDI in developed and developing countries: a quantitative analysis using GMM. *Journal of Economic Studies*, 45(2), 348–382.
- Shamsuddin, A. F. (1994). Economic Determinants of Foreign Direct Investment in Less Developed Countries. *The Pakistan Development Review*, 33(1), 41–51.
- Silajdzic, S., Mehic, E. (2016). Absorptive capabilities, FDI, and economic growth in transition economies. *Emerging Markets Finance and Trade*, 52(4), 904–922.

- Sirag, A., SidAhmed, S., Ali, H. S. (2018). Financial development, FDI and economic growth: evidence from Sudan. *International Journal of Social Economics*, 45(8), 1236–1249.
- Sokunle, R. O. (2014). A quantitative study of the relationship between manufacturing sector growth and foreign direct investments, interest rates, inflation, labour costs, and government incentives in sub-Saharan African countries from 2008 – 2010 (Doctoral dissertation). Order No. 3620579
- Studenmund, A. H. (2006). *Using Econometrics: A Practical Guide* (5th Ed.). Boston, MA: Pearson Education, Inc.
- Suliman, A. H., Elian, M. I., Ali, H. E. (2018). Endogenous Specification of FDI and Economic Growth: Cross-Economies' Evidence. *International Journal of Business*, 23(1).
- Sun, Q., Tong, W., Yu, Q. (2002). Determinants of foreign direct investment across China. *Journal of International Money and Finance*, 21(1), 79–113.
- UNCTAD (2017). *World Investment Report 2017: Investment and the Digital Economy*. New York & Geneva: United Nations.
- UNCTAD (2018). *World Investment Report 2018: Investment and new industrial policy*. New York & Geneva: United Nations.
- Vijayakumar, N., Sridharan, P., Rao, K. C. S. (2010). Determinants of FDI in BRIC Countries: A panel analysis. *International Journal of Business Science & Applied Management*, 5(3).
- Wijeweera, A., Clark, D. P. (2006). Taxation and foreign direct investment inflows: time series evidence from the US. *Global Economic Review*, 35(2), 135–143.
- Wijeweera, A., Mounter, S. (2008). A VAR analysis on the determinants of FDI inflows: The case of Sri Lanka. *Applied Econometrics and International Development*, 8(1).
- Wright, D. B., Herrington, J. A. (2011). Problematic standard errors and confidence intervals for skewness and kurtosis. *Behavior research methods*, 43(1), 8–17.
- Wooldridge, J. M. (2015). *Introductory econometrics: A modern approach*. Boston: Nelson Education.
- Zhou, C., Delios, A., Yang, J. Y. (2002). Locational determinants of Japanese foreign direct investment in China. *Asia Pacific Journal of Management*, 19(1), 63–86.