Fiscal Policies and Performance: Evidence from Dominican Republic firms

Alessandra Amendola[1], Marinella Boccia[2], Gianluca Mele[3] and Luca Sensini[4]

Abstract

This paper investigated the impact of fiscal incentives on firm performance in the Dominican Republic. Although the literature on tax incentives is large, the impact of tax incentives on companies has been less studied and is the subject of intense debate. The analysis, carried out on the period from 2006 to 2015, uses panel data models with fixed and random effects to evaluate the relationship between corporate tax incentives and firm-level performance indicators opportunely selected. The empirical finding highlights that corporate income tax exemptions positively impact the performance of individual firms in the Dominican Republic, nonetheless uneven tax treatment across firms affects competition in the industrial sector, with negative impact on overall economic productivity.

Keywords: Corporate Income Tax, Performance, Dominican Republic.

---

[1] Department of Economics and Statistics, University of Salerno.
[2] Department of Economics and Statistics, University of Salerno.
[3] World Bank, Washington, USA.
[4] Department of Management and Innovation System, University of Salerno.

1. Introduction

Tax legislation and policies, and their stability and reliability, represent factors capable of highly influencing the economic system of a country (Ireland, 1994), as well as the start and development of businesses. In the current economic context, characterized by globalization and continuous financial turmoil, governments and businesses, albeit with different perspectives, are increasingly attentive to fiscal dynamics. On one side, governments are interested in attracting resources and investors to promote the growth and inclusive development, reinforcing both social and economic stability and rewarding the production of other positive externalities. On the other side, companies are oriented toward efficiency and financial performance and, therefore, a policy based on tax benefits or other incentives can attract their investment. In this regard, according to Alvarez and Marsal (2012), the tax dimension affects up to 92% of the decision-making choices of company managers. In context outlined, thus the tax system can represent an important development tool both from a microeconomic and macroeconomic point of view.

However, the unique features of tax expenditures have made them both popular and controversial. Tax expenditures are treatments granted to specific individuals, firms, or categories that may include tax exemptions, deductions, tax holidays, and other specific policies. Unlike public spending, tax expenditures are embedded in the tax code and are not recorded as outlays in the annual budget. They increase the complexity of the tax code, which raises both the private cost of tax compliance and the public cost of tax enforcement while expanding opportunities for fraud.

Although tax exemptions are often intended to advance worthwhile policy goals, their public benefits can be difficult to gauge, while their private benefits create a strong incentive for firms and investors to lobby for preferential tax treatment.

Therefore, to implement the use of tax expenses, policymakers must carefully evaluate the economic and social objectives to be pursued and the impact of these benefits on company performance.

In the last twenty years, several theoretical and empirical contributions as emerged in the literature regarding the effect of taxation on performance variables such as productivity, competitiveness, and growth. However, the economic literature on tax incentives is discordant. On the one hand, some scholars argued that tax incentives create an improvement in business productivity and other economic and social benefits (Bora, 2002, Bruce & Turnovsky, 1999). On the other hand, other authors argued that these tools worsen corporate governance and may create several distorting effects, including increasing corruption and tax fraud (Cleeve, 2008).

Despite the controversial debate, many developing countries, as well as most large industrialized countries, have introduced tax expenditures into their fiscal policy strategy. Among them, we focus our attention on the Dominican Republic (DR) that has recently introduced various tax expenditures designed to advance strategic development objectives.

This paper aims at examining the impact of fiscal incentives on firm performance in the DR, contributing in the large debate on the effectiveness off such fiscal

strategies. The analysis employs a panel regression model with both fixed- and random-effects estimation techniques based on a data set of firms- level information related to the period 2006- 2015.

The analysis yields several important policy implications. The results show that the existing exemption regime directly affects firm performance, sector-level competition, and economy-wide productivity. Firms located in special economic zones (SEZ) receive preferential tax treatment, and these firms tend to perform better than their non-SEZ-based peers. The efficient allocation of factor can be influenced by the disparity in tax liability between SEZ and non-SEZ firms, resulting in two parallel production and export structures.

The paper is organized as follow. Section II discusses the DR's fiscal incentives related to corporate income tax (CIT), and Section III identifies the outcome indicators used in the analysis. Section IV describes the data set, and Section V details the methodology. Section VI illustrates the empirical findings while Section VII gives some concluding remarks.

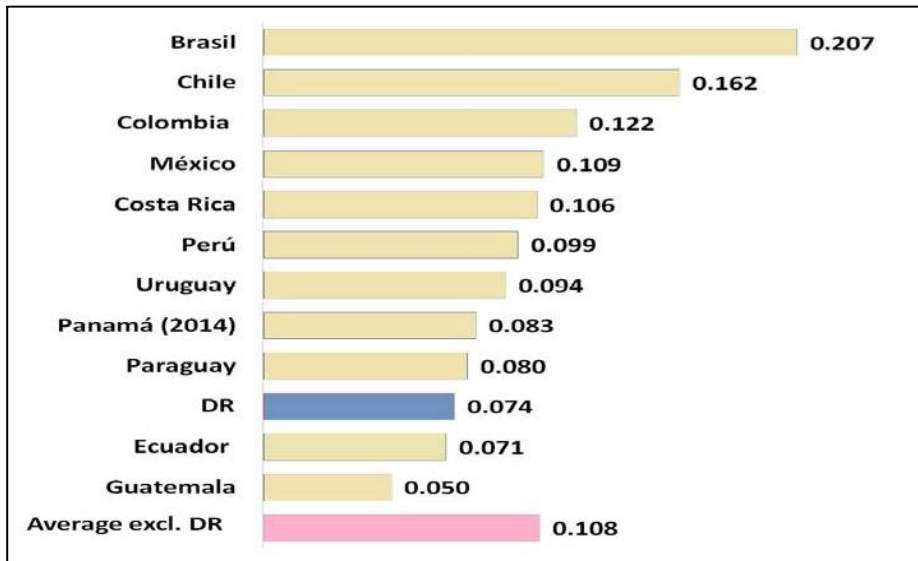## 2. Corporate Income Tax in Dominican Republic

Tax expenses may relate to tax exemptions, deductions, and other facilities that reduce the tax burden on specific sectors, businesses and individuals. The tax expenses of the DR are designed to promote various economic development goals.

The most important types of DR tax concessions are exemptions and deductions from value added tax (Impuesto sobre Transferencias de Bienes Industrializados y Servicios, ITBIS), preferential rates for fuel products, real estate tax deductions and incentives CIT (Corporate Income Tax).
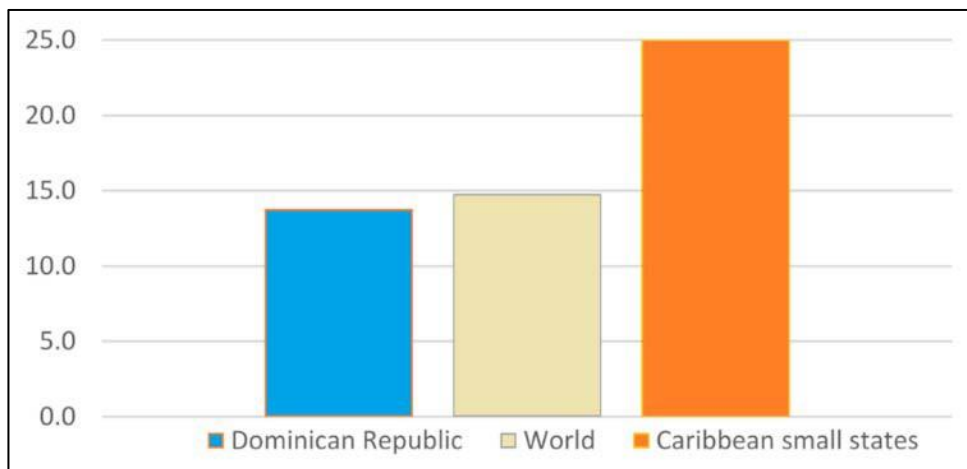
The latter belong to the companies located in the SEZs. CIT and other concessions provide for a complex and generous set of exemptions and tax credits that apply to businesses located in SEZs, tourism development groups, new businesses, film companies, renewable energy companies and a series other activities identified by tax legislation. In addition, law 28-2001 exempts companies located in border regions from CIT and ITBIS. Some previous studies have examined the impact of ITBIS incentives on DR, while there are no studies evaluating the effects of CIT spending on investment and growth. Therefore, the aim of this paper is to bridge this gap in the literature.

During the period 2002-2015, CIT revenue, which is the DR's second-largest source of tax revenue,   accounted for an average of almost 20% of total tax revenue and was equivalent to 1.6 % of GDP. The DR's CIT rate is among the highest in the region at 27 percent, but its revenue efficiency falls short of most comparator countries (Figure 1).

In 2016, total public revenue reached only 14.6 percent of GDP, a much lower percentage than the average of the small Caribbean states and in any case lower than the world average (Figure 2).

Figure 1: CIT Revenue Efficiency, the DR and Regional Comparators, 2015

Source: World Bank staff estimates.

Figure 2: Tax Revenue and GDP, the DR and Comparator Groups (2014 or most recent year)

Source: World Bank's World Development Indicators (WDI)

In recent years, DR tax expenditures have exceeded 6% of GDP, a higher percentage than in countries with similar economic characteristics. Total discounted revenue went from 5.5% of GDP in 2010-13 to 6.6% in 2014-16. The country's 2030 national development strategy has envisaged a plan to consolidate all tax expenditure into a single section of the tax code with the aim of reducing the impact of tax expenditure and minimizing its distorting effect on the economy.

Table 1: Tax Expenditures as a Percentage of GDP, the DR and Comparator Countries

Country	Tax Expenditure (% of GDP)	Most Recent Year
Dominican Republic	6.5	2016
Uruguay	6,3	2014
Ecuador	4,6	2016
Chile	4,2	2016
Brazil	4.2	2016
Argentina	2.8	2016
Guatemala	2.5	2015

Source: Authors' estimates based on national authorities' data.

3. Data types, Indicators and Variables

Profitability and firm's performance are the major aspects of firm welfare. The profits of firms generate income for shareholders and determine spillover and multiplier effects at the individual, household, and economy-wide level. Profitable firms attract more investors and raise greater amounts of capital to finance larger and more sophisticated projects. Profitable firms also tend to employ more workers and have a greater impact on growth and poverty reduction.

The problem of measuring business performance is a topic widely debated in the literature. However, the approaches to the problem can basically be traced back to two: market-based view (MBV) and resource-based view (RBV).

The first (MBV) identifies the determinants of the company's performance in the external environment and in the market characteristics (Geroski & Mason, 1987; Porter, 1979). Conversely, the second (RBV) instead identifies the determinants of performance in the specific characteristics of the company (Barney, 1991; Peteraf, 1993).

The preference for the first or second theory depends on the context in which the theory is applied. However, in transition countries and in emerging economies, the use of the RBV approach is preferable because the instability of the markets and the external environment are less relevant for performance (Grant, 1991). Therefore, in accordance with the main literature, the RBV approach will be used for the purpose of this study. In this regard, according to the RBV approach physical all capital resources, human capital resources, and organizational capital resources controlled by a firm, enabling to improve its efficiency and effectiveness (Daft, 1983).

All these capabilities condition performance and, at the same time, they activate taxation, which affects company accounts as cash outflows.

In accordance with the main literature, in this study, we use ROA to measure a company's performance (Hansen and Wernerfelt, 1989; Goddard et al., 2005; Zeli and Mariani, 2009; Asimakopoulos et al., 2009; Crespo and Clark, 2012; Chen &

Sensini, 2014). Other authors have suggested other indicators, such as the profit–cost margin (McDonald, 1999), the relied on share value (Makhija, 2003) and other variables (Lee, 2009).

However, ROA represents the main variable suggested by the prevailing literature and the one most used in empirical research. Furthermore, in order to estimate the impact of the exemptions from corporate income tax (CIT), multiple result indicators were selected as proxies for corporate performance. About this, the analysis assesses the performance of companies with respect to a series of quantitative measures derived from the economic and financial position of companies.

In particular, the variables of interested selected are economic, equity and financial indicators that reflect various aspects of the structure of the company. The result indicators, which are proxies for corporate performance, include measures of operating structure, profitability, capitalization and turnover (Table 2).

Table 2: Outcome Indicators

Term	Variable	Indicator Type
Expenses to Total Assets (ETA)	Expenses to Total Assets	Operating Structure
Gross Financial Expenses to Sales (GFSAL)	Financial Expenses to Sales	Operating Structure
Return on Assets (ROA)	Net Income to Total Assets	Profitability
Equity Ratio	Equity to Total Assets	Profitability
Turnover	Sales to Current Assets	Turnover

The outcome indicators include computed as the ratio of expenses to total assets (ETA) and the ratio of gross financial expenses to sales (GFSAL).

Finally, the logarithm of total assets is a measure of firm size, while the ratio of sales to current assets measures turnover. These outcome indicators are the dependent variables of the analysis.

Firm size is an especially crucial explanatory variable because larger firms tend to have greater productive capacity and resources, which enables them to take advantage of economies of scale. Large firms are also more likely to have access to qualified personnel. They tend to be more diversified and are generally better able to weather economic shocks. Consequently, firm size is positively correlated with profitability. Confirming Baumol's size-profits hypothesis, Hall and Weiss (1967) found a positive relationship between firm size and firm profitability, and this relationship was further supported by the findings of Nunes et al. (2008) and Babalola (2013).

Moreover, several additional firm characteristics are used as explanatory variables. Amomg them we refer to the Corporate Income Tax, which is the main relevant

variable, the fixed assets (excluding building), which include the value of a firm's machinery and equipment and reflects its productive capacity (Arnold, Mattoo, and Narciso (2008), Clarke (2012), and Rapuluchukwu et al. (2016)); then, the value of buildings, which reflects the quality of a firm's facilities and environs; the average wage (i.e., total wages divided by the number of employees), which can be used as a measure of human capital (Arnold, Mattoo and Narciso, 2008).

For robustness, additional other explanatory variables are also included in the analysis. The impact of a firm's geographic location is accounted for by dividing the country into six geographic areas in which all firms enjoy broadly similar locational advantages. Whether a firm is based in the DR's capital, Santo Domingo, has an especially significant bearing on its performance.

4. Methodology

One methodology to evaluate public policies and programs is represented by "true" or "natural" experiments based on random assignments, as they offer a strong foundation for analyzing causal relationships (Lalonde, 1986).

In experimental designs of this type, units are randomly assigned to treatment and control groups. On average, the units in each group share common characteristics. Thanks to this equivalence, the influence of external factors on the observed results can be excluded. Therefore, the differences among the treatment and control group can be fully ascribed to the implementation of the public program under analysis.

However, this type of experimental framework is generally not applicable to corporate taxation, because treated and non-treated firms often do differ in ways that may affect the results of the analysis (i.e. selection biases). The evaluation of public programs therefore requires an alternative methodological specification: a quasi-experimental approach that compares the results between the treatment and the control groups, while bearing in mind that not all the treatments are randomly assigned.

Due to the need of controlling for unobserved heterogeneity, this paper examines the effects of tax incentives on firm performance indicators by employing both fixed-effects (FE) and random-effects (RE) estimation techniques. Namely, the dependent variables, which are indicators of firm performance, include the ETA, GFSAL, ROA, the ratio of equity to total assets and turnover. Based on this information, the following equations can be estimated:

$$Y_{it} = \beta TAX_{it} + \delta Z_{it} + \mu_i + \varepsilon_{it} \qquad (1)$$

where:
- Y_{it} is a dependent variable for firm i at time t, separately indicating each of the financial indicators used as proxies for firm performance.
- TAX_{it} is a dummy variable indicating whether the firm receives CIT incentives, which takes value one if the firm receives the Fiscal Incentive,

- or zero otherwise.
- Z_{it} is a vector of firm-level explanatory variables such as the capital stock, the value of buildings, the average wage, the value of urban land owned by the firm, and a dummy for the geographic area in which the firm is located.
- μ_i represents unobserved heterogeneity due to firm-level differences in efficiency and managerial skill.
- ε_{it} is an error term assumed to be independently and identically distributed with a mean of zero and a variance of σ^2.

The FE and RE techniques provide an explanation of the dependent variable in different ways. In FE estimations, individual effects are considered fixed and are included among the explanatory variables in the "constant individual." In RE estimations, individual effects are a component of the error term. The analysis assumes that explanatory variables are independent of all error terms in both the FE and RE estimations.

Because the FE approach is conditional on the μ_i values, it is most appropriate in cases where individual subjects are "special" and cannot be thought of as a random extraction from a population. By contrast, when individual subjects can be thought of as random extractions from a larger population, the individual characteristics are a component of the population variability and the inferences generated by the RE approach are related to the entire population.

Generally, the choice between estimation techniques depends on the test developed by Hausman (1978), which can help choose between a fixed-effects model or a random-effects model. The null hypothesis assumes that the preferred model is random effects while the alternate hypothesis is of fixed effects models. Essentially, the test seeks to identify if there is a correlation between the unique errors and the regressors in the model. The null hypothesis is that there is no correlation between the two.

However, the RE model has an inherent advantage over the FE model, as it allows for the explanatory variables to remain constant over time, whereas they get swept away under a fixed-effects estimation. Due to the presence of time-invariant explanatory variables, this analysis applies both the FE and RE techniques. Mayende et al. (2013) employed a similar strategy, estimating the production function that can generally be estimated using both RE and FE techniques; the choice depends on the test developed by Hausman in 1978. Mayende et al. employed only the random effects estimator due to the time- invariant explanatory variables.

5. Empirical Findings and Discussion

Tables 3 and 4 show the results of fixed and random effects related to the Impact of Tax incentive on firms' performance. More in detail as to the effect on ETA and GFSAL, this is positive, but an increase in the latter would imply either that expenses are rising relative to sales or that sales are declining relative to expenses.

These are among the indicators that firm managers may look at to assess whether to cut costs or determine why sales have declined.

The results also show that CIT incentives positively affect ROA, indicating that beneficiary firms more effectively use assets to benefit shareholders (Haniffa & Huduib, 2006; Ibrahim & Abdul Samad, 2011). Similarly, CIT incentives are positively correlated with an increase in the equity ratio, which signals to potential shareholders that the company is worth investing in. Moreover, a higher equity ratio shows potential creditors that the company is financially sustainable and less risky as a borrower (Table 3). Finally, CIT exemptions are positively correlated with higher levels of turnover, implying stronger sales and/or larger discounts (Table 3). All of these results are robust in the RE estimation.

As expected, firms with higher average wages, a larger capital stock, and more valuable urban real estate tend to perform better than their peers.

The most relevant implication of the RE estimation (Table 4) is that location in Santo Domingo is correlated with higher levels ROA, the equity ratio, and turnover. By contrast, firms located in the Eastern regions do not present particularly interesting results (with the exception of a positive effect on the ratio between the Expenses to Assets (ETA) and the Financial Expenses to Sales (GFSAL).

Table 3: CIT Incentives and Firm-Level Outcome Indicators, Fixed-Effects Estimation

Variables	ETA	GFSAL	ROA	Equity Ratio	Turnover
Tax	32,900**	5,936***	47,718**	49,272**	5.427*
	(15,792)	(1,473)	(22,777)	(23,677)	(3.063)
Average Wage	1,432*	-2,943*	2,072**	1,945	6.688**
	(705.4)	(1,623)	(1,009)	(1,225)	(2.996)
Equipment	177.9*	-6,031	267.8*	441.2***	-0.295*
	(101.2)	(3,764)	(157.2)	(141.7)	(0.171)
Building	161.9	2,170*	248.5	242.0	0.00268
	(118.5)	(1,114)	(178.2)	(178.8)	(0.195)
Urban Land	56.63***	-738.8*	74.14***	88.23***	0.555
	(20.41)	(396.3)	(24.28)	(29.07)	(0.650)
Constant	-32,489*	113,209*	-47,189*	-50,162*	-56.54*
	(18,846)	(64,725)	(27,191)	(27,286)	(30.69)
Observations	114,223	43,340	112,240	114,223	45,122
R-squared	0.000	0.001	0.000	0.000	0.001
Number of Enterprises	14,017	11,927	13,880	14,017	12,169
Method	FE	FE	FE	FE	FE

Notes. The treatment variable is the tax incentive. The independent variables are the average value of wage, the value of equipment, the value of building and the value of urban land. Standard errors are reported in parenthesis. *** Significant at the 1 percent level. ** Significant at the 5 percent level. * Significant at the 10 percent level.

Table 4: CIT Incentives and Firm-Level Outcome Indicators, Random-Effects Estimation

Variables	ETA	GFSAL	ROA	Equity Ratio	Turnover
Tax	20,335**	13,311***	29,980**	30,096*	8.108**
	(10,225)	(5,016)	(15,028)	(15,613)	(3.510)
Capital	10,031***	13,965***	14,359***	14,926***	14.31***
	(281.0)	(1,060)	(401.3)	(503.2)	(0.780)
Center	-44.16	-3,680**	-519.1	22.75	5.837***
	(1,170)	(1,578)	(1,820)	(1,806)	(1.825)
West	-766.6	-4,986**	-1,309	-973.4	0.787
	(919.8)	(2,496)	(1,429)	(1,462)	(3.821)
East	-1,436*	-6,368**	-1,137	-2,005	2.176
	(775.7)	(3,057)	(993.7)	(1,278)	(3.873)
South	-223.1	357.5	-657.4	1,060***	1.083
	(241.6)	(612.9)	(498.6)	(375.4)	(1.375)
Average Wage	-57.61	-869.8*	-102.7*	207.8	1.564*
	(35.36)	(460.5)	(57.66)	(317.6)	(0.921)
Equipment	635.9*	-3,426*	953.8*	1,012*	-1.417**
	(383.0)	(2,027)	(573.0)	(528.4)	(0.670)
Building	586.5*	826.5*	892.9*	882.0*	0.730
	(302.8)	(442.4)	(460.8)	(452.3)	(0.470)
Urban Land	1,264*	-402.2**	1,867*	1,891*	-0.638
	(705.3)	(193.3)	(1,044)	(1,060)	(0.466)
Constant	-26,930*	55,784*	-39,413*	46,783***	10.74***
	(14,761)	(31,150)	(21,573)	(17,538)	(1.955)
Observations	114,223	43,340	112,240	114,223	45,122
Number of Enterprises	14,017	11,927	13,880	14,017	12,169
Method	RE	RE	RE	RE	RE

Notes. The treatment variable is the tax incentive. The independent variables are dummies for geographic area, the average value of wage, the value of equipment, the value of building and the value of urban land. Standard errors are reported in parenthesis. *** Significant at the 1 percent level. ** Significant at the 5 percent level. * Significant at the 10 percent level.

6. Conclusion

The analysis presented above reveals clear and compelling evidence of a statistical correlation between CIT incentives and firm performance in the DR. Firms that receive incentives systematically outperform their peers on a wide range of financial metrics, indicating that they enjoy a strong competitive advantage. Moreover, firms located in SEZs benefit most from fiscal incentives, and they receive a full and permanent exemption from CIT. As highlighted by the analysis, the current CIT exemptions regime directly affects firm performance, with negative repercussion for competition and overall economic productivity. Reducing the asymmetry in tax treatment between SEZ and non-SEZ firms could alleviate distortions as a first step toward phasing out the DR's dual production and export structure.

The analysis also reveals that CIT incentives disproportionately benefit larger enterprises, which likely contributes to the DR's elevated levels of market concentration. A recent study by the DR's General Directorate of Internal Revenue (Dirección General de Impuestos Internos) found that 35 percent of the DR's markets are highly concentrated, and 10 percent are moderately concentrated. The industrial sector reveals a 43 % of markets concentration, while in the agricultural sector the level of market concentration is very low or inconsistent. Although market concentration by itself does not necessarily inhibit competition or reduce productivity, the DR's highly concentrated secondary and non-tradable sectors— coupled with its generous system of tax incentives—may entrench the advantages of larger firms over smaller competitors and entrepreneurs.

CIT incentives are only one aspect of the preferential treatment accorded to SEZ-based firms, which also receive customs exemptions, capital allowances, and other benefits. SEZs have successfully attracted international investors, but their low-tax value chains also impose costs on the DR through foregone revenue and economic distortions. A recent World Bank analysis found that the presence of SEZs and other forms of preferential tax treatment strongly encourage various forms of tax avoidance, which contributes to informality and further undermines revenue performance[5]. The government may consider reassessing the costs and benefits of SEZs and other fiscal incentives and developing a plan to improve their effectiveness and gradually reduce disparities in tax treatment.

---

[5] Gearing up for a more efficient tax system in the Dominican Republic, World Bank January 2018.

References

[1] Alvarez, R. and Crespi, G. and Cuevas, C. (2012), Public Programs, Innovation, and Firm Performance in Chile, Inter-American Development Bank.

[2] Alvarez & Marsal (2012), CFO matters: Tax perspectives survey highlights, Available at

[3] http://www.alvarezandmarsal.com/en/about/action_matters/documents/CFOS urvey_FINAL_002.pdf

[4] Almajali A. Y., Alamro S.A. and Al-Soub, Y. Z. (2012). Factors Affecting the Financial Performance of Jordanian Insurance Companies Listed at Amman Stock Exchange. Journal of Management research, Vol. 4(2), pp 266-289.

[5] Arnold, J., Mattoo, A., and Narciso, G., (2008), Services Inputs and Firm Productivity in Sub-Saharan Africa: Evidence from Firm-Level Data, Journal of African Economies, 17(4): 578-599.

[6] Asimakopoulos, I., Samitas, A., & Papadogonas, T. (2009). Firm-specific and economy wide determinants of firm profitability: Greek evidence using panel data. Managerial Finance, 35(11).

[7] Babalola, Y. A. (2013). The effect of firm size on profitability of firms in Nigeria. Journal of Economics and Sustainable Development. Vol. 4, No. 5, pp 90-94.

[8] Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99–120.

[9] Bora, B. (2002) Investment Distortions and the International Policy Architecture, World Trade Organisation, Working Paper, Geneva. Retrieved from https://core.ac.uk/download/files/35/272221.pdf Bureau of Economic and Business Affairs (2013), 2013 Investment Climate Statement – Cameroon, Retrieved from http://www.state.gov/e/eb/rls/othr/ics/2013/204615.htm.

[10] Bhutta, N. T., and Hasan, A., (2013). Impact of Firm Specific Factors on Profitability of Firms in Food Sector. Open Journal of Accounting Vol. 2, pp 19- 25.

[11] Bruce, N., Turnovsky, S.J., (1999) Budget balance, welfare, and the growth rate: "Dynamic Scoring" of the long-run government budget Journal of Money, Credit and Banking, 31 (2), pp. 162-86

[12] Cleeve, E., (2008), How Effective Are Fiscal Incentives to Attract FDI to Sub-Saharan Africa? The Journal of Developing Areas, 42(1): 135-153.

[13] Chen J., Sensini L. (2014), Net working capital, Cash flow and Performance of SMEs: an exploratory study, in Small and Medium Size Enterprises: Governance, Management and Performance, p. 296-315, Malta Univ. Press.

[14] Crespo, G., Clark, R.A: (2012). Analyzing the determinants of profitablity, part 3: evidence from European manufacturers. Tax Management Transfer Pricing Report, 21(6), 297–310, ISSN: 10632069.

[15] Czarnitzk, D., Hanel, P. and Rosa, J.M. (2011), Evaluating the Impact of RD Tax Credits on Innovation: A Microeconometric Study on Canadian Firms, Research Policy, Vol.40, No.2, pp. 217-229.

[16] https://www.dgii.gov.do/informacionTributaria/publicaciones/estudios/Docu me nts/ConcentracionMera do2016.pdf

[17] Daft, R. (1983). Organization theory and design. New York, NY: West Publishing.

[18] Hansen, G. S., & Wernerfelt, B. (1989). Determinants of firm performance: The relative importance of economic and organizational factors. Strategic Management Journal, 10(5), 399–411.

[19] Duch N., Montolio S. and D and Mediavilla M. (2007), Evaluation the impact of public subsidies on a firm's performance: a quasi experimental approach , IEB.

[20] Geroski, P. A., & Mason, R. T. (1987). Dynamic market models in industrial organizations. International Journal of Industrial Organization, 5(1), 1–13.

[21] Goddard, J., Tavakoli, M., & Wilson, J. (2005). Determinants of profitability in European manufacturing and services: Evidence from a dynamic panel model. Applied Financial Economics, 15(18), 1269– 1282.

[22] Grant, R. M. (1991). A resource-based perspective of competitive advantage. California Management Review, 33(3), 114–135.

[23] Gui-Diby, S., and Renard, M., (2015), Foreign Direct Investment Inflows and the Industrialization of African Countries, World Development, 74: 43-57.

[24] Hall, M., and Weiss, L. (1967). Firm Size and Profitability. The Review of Economics and Statistics. Vol. 49, No. 3, pp 319-331.

[25] Haniffa, R., & Hudaib, M. (2006). Corporate governance structure and performance of Malaysian listed companies. Journal of Business Finance and Accounting, 33(7-8), 1034-1062.

[26] Hazak, A. (2009). Companies' Financial Decision under the Distributed Profit Taxation Regime of Estonia. Emerging Markets Finance & Trade, 45(4), 4–12.

[27] Ibrahim, Haslindar and Abdul Samad, F. A. (2011). Corporate governance mechanisms and performance of public-listed family-ownership in Malaysia. International Journal of Economics and Finance, 3(1), pp.105–115.

[28] Ireland, P.N. (1994), Supply-side economics and endogenous growth, Journal of Monetary Economics, 33(3), pp. 559-571

[29] Klapper, L., & Love. I. (2002). Corporate governance, investor protection, and performance in emerging markets. Washington, DC. United States: World Bank. Mimeographed document.

[30] Lalonde, R., (1986), Evaluating the Econometric Evaluations of Training Programs with Experimental Data, American Economic Review, 76 (4), 604-20.

[31] Lee, J. (2009). Does Size Matter in Firm Performance? Evidence from US Public Firms International Journal of the Economics of Business, 16(2), 189–203.

[32] -Lee, J., (1996), Government Interventions and Productivity Growth, Journal of Economic Growth, 1(3): 391- 414.

[33] Masso, J., Meriküll, J., & Vahter, P. (2013). Shift from Gross Profit Taxation to Distributed Profit Taxation: Are There Effects on Firms? Journal of Comparative Economics, 41, 1092-1105.

[34] Makhija, M. (2003). Comparing the resource-based and market-based views of the firm. Empirical Evidence from the Czech Privatisation, Strategic Management Journal, 24(5), 433–451.

[35] Mayende, S., (2013), The Effects of Tax Incentives on Firm Performance: Evidence from Uganda, Journal of Politics and Law, 6(4): 95-107.

[36] McDonald, J. (1999). The determinants of firm profitability in Australian manufacturing. The Economic Record, 75(2), 115–126.

[37] Nunes, P. J., Serrasqueiro, Z. M. and Sequeira, T. N. (2009). Profitability in Portuguese service industries: a panel data approach. The Service Industries Journal, 29(5), 693-707.

[38] Ohaka, J., and Agundu, P.U., (2012), Tax Incentives for Industry Synergy in Nigeria: A Pragmatic Proprietary System Advocacy, African Research Review, 6(3): 42-58.

[39] Porter, M. (1979). The structure within industries and companies' performance. Review of Economics and Statistics, 61(2), 214–227.

[40] Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. Strategic Management Journal, 14(3), 179–191.

[41] Rapuluchukwu, E. U., Belmondo, T.V. Ibukun, B. (2016), Incentives and Firms Productivity: Exploring Multidimensional Fiscal Incentives in a Developing Country, OCP Policy Center, Research paper.

[42] Ross, Westerfield, and Jaffe (2003). Corporate Finance, 6th Edition. McGraw-Hill/Irwin.

[43] UNCTAD (2004), Incentives, Geneva: UNCTAD.

[44] UNCTAD (2015), Broadening the Sources of Growth in Africa: The Role of Investment, Geneva: UNCTAD.

[45] Zeli, A., & Mariani, P. (2009). Productivity and profitability analysis of large Italian companies: 1998–2002. International Review of Economics, 56(2), 175–188.