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The Tax Waiver Impact on Profits and Dividends as an Economic Efficiency Instrument

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Abstract – The tax waiver, which is an increasing discussion in Brazil, motivated this study, that objectified investigate what is the tax waiver impact on profits and dividends as an economic efficiency instrument. It also searches to identify if there is a statistic correlation that can explain the maintenance of this public expenditure. The quantitative approach research, used two independent scenarios. In the first one, it was verified in relation to the period of 2007 to 2016, the tax expenditures and tax waiver correlation, with economic growth, GDP and investments indicators. In the second one, it was verified through a multiple regression, the correlation between tax waiver and profits and dividends, with economic growth, GDP and investments indicators. It was shown that in regime of exception, as it is in the current recessive economic period, the tax waiver on profits and dividends economic efficiency find itself compromised. Affected by the constant inflation raises, it was verified that the waived values are not explained by the variable that, in 1995, justified their institution – the investments. As of those results was possible to identify that the budget balance pass through a tax policy similar to the successful examples observed in OECD country members, that is capable of balance the taxation profit, corporate production and that contribute to companies' cash flow production capacity and more investments. This study aims to not only contribute to draw tax restructuring plans, but also to instigate the proposes in Brazilian tax legislation changes debates that finds horizons to clear the Sistema Tributário Nacional, that in time, through an effective and efficient taxation, contribute to a tax justice and budget balance. Future researches can evaluate these results in a context with a more representative sample of these data and obtain more statistic sensibility.

I. INTRODUÇÃO

The tax waiver is a lasting subject in Brazilian society and that gains a horizon even more critical and controversial. The debate does not derive of a tax waiver itself, but of the object where it concerns. A historical question in Brazil, that in these does not find couples in developed countries, is that the Brazilian taxation system customarily promote tax break on the income and the more privileged property, and immunize typical behaviors of this class. In counterpart, significantly encumber the income on the work and consume, colliding with a taxation system of more progressives' bases, that under the optic of many specialists, among them Gobetti e Orair (2016), would be necessary to the economic and social development, besides finding amparo in the constitution.

The activities and governmental decisions are economic fundamental determinants of the economic establishment, growth and social wellness of a country. To this mission, the main macroeconomic instruments to the Govern disposal are tax and monetary policies. As center of this research, stands out the tax policy that manifest through public expenditure, investments and collection, this last one, in turn, delimited in this study by the main government revenue resource: the taxation.

Facing the power to tax, the Govern must respect the constitutional principles current in Magna Carta, that has as essential function, through the imposition of Govern limitations, guarantee to the homelands taxpayer rights that preserve their integrity. In this context stands out the contributive capacity principle, that in tight syntheses can be defined as the economic possibility to pay tributes.

As this contributive capacity indicator, the legislator disposes to definition the tax system rule, income, assets and taxpayers' consumption. Derived from the contributive capacity principle, the progressivity concept defends the incidence of a bigger taxation for those who has bigger income, that in ideal conditions can be associated to the distributive function of tax collection.

In the last years, the debate about the taxation ideal model earned a more complexed outline. In one side, defends that the tax adjustment, much needed in Brazil, must primarily pass by the taxation profits and dividends return, in strict obedience to the contributive capacity principle. On another perspective, driven by a macroeconomic imbalance nature changes analysis, provoked by the recent financial-economic globalization evolution, characterized by commercial relations expansion between the companies, exists defending chains a modern taxation system evolving to a bigger consume taxation.

Is a general understatement that Brazil needs to suffer a structural reform in taxation system that reaches tax justice and budget balance. On this background, stands out the main measurement forces points that subside the present work. As an example of this pole, it can be quoted the recent IPEA researchers work, Gobetti and Orair (2016), which the title is “Progressividade Tributária – A Agenda Negligenciada”. In this study, by making an income tax and profit in Brazil critic analysis, the authors defend that the income tax exemption on profits and dividends spread to the shareholder is the main reason to this distortion, because contribute in bigger proportion to the existence of a high degree income concentration in the top of the distribution, low progressivity and equity principles violation, that restrict the income tax distributive role.

As counterpoint to these arguments, exist the defending pole to, once the profits are taxed in company, the income tax taxation on profits and dividends, in shareholders transfer occasion, would incur in double taxation. Including, this was one of Govern proposes biases, that in the occasion, in unifying the profits tax in only one phase, it was pretended to simplify the control, inhibit the evasion, besides promoting incentives to investments in productive activities. Besides that, the tax waiver is always revested by an incentive character and must be analyzed based in their results, marked by its existence propose. This context, is more than reasonable to make the effort to search tangible arguments to justify the participation of tax incentives with tax waiver as supportive in economic development (AMARAL FILHO, 2003).

The restructuration in the taxation system must derive of these polarities confrontation. The urgency sense is strengthened by the current recognition of both poles that the distributive potential of tax policy by expenses side, give exhaustive signs, especially in fiscal crisis scenarios. The recessive moment does not allow any measure being excluded in the sense to guarantee the economic efficiency of tax expenditure with tax waiver. In this way, this research aims to investigate which is the tax waiver impact on profits and dividends as an economic efficiency instrument. Besides that, views contribute not only to draw tax restructuration, but also without the pretension to burn out in its reading, instigate the technical debate of changes in Brazilian tax legislation propositions, that finds horizons to clear the Sistema Tributário Nacional, that in time, through an effective taxation, contribute to a tax justice and budget balance.

This study justify itself by its relevance in academic world and the society. The tax justice and budget balance are persevering challenges that concern taxpayers and governs in many parts of the world. The debate about the tax agenda in Brazil must approach how the tax system works, besides problematize tax waiver as an expense way and counter with the progressive concept derived of the contributive capacity principle predicted in the constitution. However, it must get away from a simplistic position, and sometimes just moralist, to approach with transparency the motivation of such expenses and debate about the necessity of a restructuration in the Govern collection and expenses system that can emerge from a wider comprehension about the theme, that recovers the utility, the form and impacts caused by tax incentive concession. To Giambiagi and Além (2011), the distributive function, as the Govern tax policy, is associated to adjusts in income distribution that allow that the prevailing distribution can be the one considered to be the fairest by society.

This study has as general goal to investigate if there is a correlation that can explain, through GDP (X^1) and the Public and Private Investments, (X^2), the Tax Waiver maintenance. As specific goals, it investigates if there is a correlation that can explain through GDP (X^1) and the Public and Private Investments, (X^2), the Income Tax Tax Waiver on Profits and Dividends paid to the companies' shareholders and associates.

II. LITERATURE REVISION

2.1 Teoretical referential and research hipoteses

The financial management in public sector, as well as in private companies, deals with essentials subjects to the accounts harmonization and balance. Among them, stands out the collection way and the resources allocation, that, in short, must be realized in an efficient and effective way, generating results that by public management nature, attends the various interests and needs of the society. In other words, a financial management in front of a macroeconomic, political, social, technological and others scenarios, that are quickly changeable, in an imperfect capital market; in an asymmetrical information world to the multiple economic agents; in a country that has contradictory legislations Kasnar (2014).

To Dalton (1972), the public financial subject is one of those there are in the partition line between the Economy and Politics, and handle the public power expenditure and profits, as well as its coordination. Meanwhile in privates financial is the revenue that determinates the amount of the its possible expense, in public finances is the expense that determinate the needed collection. To be defined as collection and expenses rules, the Govern needs to obey the constitutional principles, besides performing their activities with tax discipline. This Govern activity consist in raising and spend only what is approved by law, as manager and provider of public welfare, because is the State attribution to offer what is the society interest.

Is fact that the governs exists and affect the life of each person. The existence of the Govern is necessary to guide, correct and complement the market system that, by itself, is not capable to perform every economics function (GIAMBIGI; ALÉM, 2011). However, these economics function demand expenses that are originated from individuals and collectives needs of each citizen, being assigned, as Adam Smith (1996) observed, to each citizen, as well as private companies' expenses are to associates.

1) This duty to contribute, that before already was volunteer, today has compulsory character, and particularly in Brazil is surrounded by a complexity that is in constant changes, affecting the taxpayers purchasing power. These changes are provoked by the need to more control of elision and evasion, or by the efficiency loss or the matter, besides the changes that happen in virtue of the measures that are needed to promote the tax adjustments and economic balance maintenance. However, even surrounded by interest conflicts, resistance and complexity, the taxation is constituted in the main Govern collection way. In this base there is a principle that can be forgotten, called The Principle of Maximum Social Advantage (DALTON, 1972).

When argument about the distributive function of a tax policy, where the Govern uses the transfer as instrument, Giambiagi e Além (2011) observe that the Govern can promote a direct income redistribution, when taxing in bigger measure the individuals belonging to a higher income layer of the society, while subsiding individuals of lower income. In light of this concept, it can be observed that an efficient income redistribution can emerge from a bigger taxation, for example, of the profits generated by companies, or on the richer individuals' income, while the common worker income, the basic needs grocery items and the commodities derivatives, defined as consume items, are unencumbered. As counterpart to this argument, Rezende (1996) observe that the deeper transformations promoted in global tax systems break down old beliefs regarding to evolution tendencies of the tax structure for the next millennium. For him, the strong trait of this transformation in course is the bigger emphasis in general tax on consume, as the tax progressivity on income started to be shown as more perverse.

Another principle that deserves to be highlighted is the equity principle. It isn't always that the law cold expression finds, in a concrete case, a constant and unchanging relation. When elaborating a law, the legislator hopes that it can translate a conduct pattern that reflect at least the majority behavior. To guarantee the compliance of this principle in a taxation right matter, the item IV, of the Law 5.172, 108 article from October 25, 1966 (Código Tributário Brasileiro), predict, in the absence of express disposition, the equity application in tax legislation interpretation and application.

According to Arienti (1987), the tax justice has as base the equity principle and, from then on, two chains present the criterium to the equal treatment application of revenue. In one side, there is a criterium that the equality between the individuals must be evaluated, to taxation purposes, according to the benefits received by the taxpayer of the services provided by the State. The other chain, that without a doubt is the theorical base of most of the current tax systems, considers that the treatment must be according to contribution capacity of the individuals. The classic author Adam Smith, in his work "The Wealth of Nations", when making a reflection about the tax system of his time, presents the equity as one of the principles of an ideal taxation (SMITH, 1996).

The traditional public finances manuals, highlighting Dalton (1972), teach, in one of his chapters about taxation theories, that the tax justice has as base the equity principle. This principle has as goal the guarantee of an equitable distribution of the tax burden by individuals, that can be defined in two ways: in first place, the tax burden should have been divided between the individuals according to the benefits that each receive related to the assets and service offered by the Govern; in second place, the tax distribution should have as base the contributive capacity. The contributive capacity principle is dated to a long time. Historic registers and classical literature references indicate it being prior to the benefit principle. Gomes (2006) stands out that in a society that isn't fully mercantile, based in a work still not free, the taxation management according to the paying capacity was most appropriate, but the only conceivable.

However, the capitalist mercantile society and of a State, over the years evolved to wider functions than the needed to this principle maintenance. This amplitude, that can be exemplified by stagflation, that is the coexistence of the unemployment with high inflation rate, provoked in the tax systems deep changes to be adjusted to economic evolution and society demands to more tax justice. In the 70's, the supply-side economics these, which the adepts defended that the economic growth could be obtained with tax incentives that induced the companies to perform productive incentives, gained strength in media and had accession of United States of America during the Ronald Reagan government. Driven by this theory, Arthur Laffer, with his theorical representation of the relation between the collected value with a tax in different aliquot, the called "Laffer curve" illustrated the "Elasticity and tax incidence" concept, considering the collecting value obtained with aliquot between 0% to 100%. Starting from the premise that one aliquot of 0% does not generate collecting, the Laffer curve affirm that an aliquot of 100% also wouldn't generate revenue, once it wouldn't have production incentive. It is concluded that the aliquot of 0% and 100% does not generate revenue, must exist an aliquot in which achieve the maximum collecting value. For Rezende (1996), although the supply-side economics theory, if it weren't well received in the academics' environments and north-american public administration, it anticipated the debate about tax changes that came to be implemented later.

The macroeconomic scenario analyses enable the elaboration of answers to some of the big questions related to economic life of a nation and the whole world. Questions like the growth rate, employment, investments, govern role, inflation, public expenditure, and in this case, tax waiver, must be analyzed under the economic changes prism that are capable of affecting it. The macroeconomy can also raise the capacity to evaluate the proposes of the leaders to the tax policies, public expenditure and other policies that affect in a crucial way the national and international economy. These questions are important not only to the nation economic well-being, but also the people.

As observed by Sachs and Larrain (2000), the macroeconomy evolved with time, in the question nature studied as well as in the kind of offered answer. According to those authors, these alterations derive of an action of two forces: in first place, as well as any other science, occurred theorical advances and the old theories will be abandoned, for not being proven, or by the appearance of new theories. In second place, the global economy evolved, generating new questions and demanding new answers.

Mankiw (2004) observe that, to some economist, the economy has an inherent instability and need a stabilizing tax policy, capable to move in a sense to stimulate the economy when it is depressed and reduce the rhythm of economy when it finds overheated. While for some economist the economy has a natural stability, others blame the bad economic policies for the big and inefficient oscillation that some time is experimented. However, is possible to affirm that independently of the adopted premise, the tax policy must be conducted with high tax responsibility level. The balanced use of public resources must view the gradual reduce of net debt as GDP percentual, in a way to contribute to stability, the growth and economic development of the country.

Facing all the exhibit, having as purpose sequence the theorical referential extensive brought as backdrop to this research, has as goal, starting from a study of correlation of tax waiver with GDP, the Public and Private Investments and the Primary Result, instigate a wider comprehension about the theme, including important aspects as utility, the way and impacts derived of tax incentives concession, refining by its weight and relevance with the proposed theme the correlation of tax waiver of income tax retained in the sources of profits and dividends paid to the associates and shareholders, with the same variables proposed in the macro scenario. With this research it is desired to reject or accept the following hypotheses:

H1 "The tax waiver on profits and dividends in Brazil contribute to the budget imbalance, by its inefficiency to contribute for the economic growth".

III. METHODOLOGY

To accomplish this study purpose, it was used a quantitative research approach. To cross the methodologic rout will be used as base to research classification the systematic presented by Vergara (2016), proposing two criteriums, in terms of purposes and means. About purposes, the research is classified as descriptive, for showing aspects related to the collection way and tax expenses promoted by the Federal Government, through their tax system and code exam, besides confronting macroeconomic data with the collection methodology, using data provided by OECD, IPEA, Brazilian Federal Revenue, besides a theoretical referential immersed in the finances and public management principles.

About means the current research will be classified as bibliographical, because it will be performed a systematic study about the theme, developed with base in material published in books, magazines, newspapers, electronic networks, in other words, material accessible to the public in general, that provide analytic instrumental to any other kind of research, but also can burn out in itself. As documental, because besides the referenced sources and legislation, will be used data published by public and private bodies in any nature and *ex post facto* because refers to an already occurred fact, applied when the researcher, can't or doesn't pretend to control or manipulate variables, because his manifestations already occurred, or the variables are not controllable. (Vergara, 2016).

As statistic instrument, will be used the multiple regression, for existing two or more random variables at the same time, X and Y, the goals being to measure the correlation between those variables and what they represent. Favero & Belfiore (2017) stand out that the econometry consist in the application of mathematic and statistic methods to economy problems, having in regression analyses the most important method, when needed to know the effects that a variable exercise or seem to exercise in another variable. It was used to data treatment the *software IBM® Statistics 22.*

Stand out here a relevant subject that will guide the next steps of this research, that consist in observing the motivation to this tax benefits concession, in front of factors that determine or motivate a tax waiver, or evaluate the participation of such incentives as one of economic development process factors. To Amaral Filho (2003), there is no reason to deny tax waiver participation in economic development of one region, however, is more than reasonable to make an effort to search palpable arguments that justify this participation.

The Lei de Responsabilidade Fiscal in article 14º item I, express that the tax waiver, besides to be considered in budget law revenue estimative, shouldn't affect the targets of budget guidelines tax law. In thesis, is possible to affirm that the tax benefits concession must have temporary function and objectify the investment attraction and/or economic development. As a way to measure this relation, the present study will investigate two scenarios. In the first one, the tax waiver predicted in Tax Expenditure Statements (TES), denoted as variable (Y), will be correlated with GDP (X^1) and Publics and Privates Investments, (X^2). In the second scenario, the tax waiver of income tax on profits and dividends paid to companies' shareholders and associates, denoted as variable (Y), will be correlated with GDP (X^1) and Publics and Privates Investments, (X^2).

The Organization for Economic Co-operation and Development – OECD, through its efforts in organizing and spreading data related to its country members taxation, presented in May 02, 2018 a document having the effectives-imposed taxes on the dividends distribution to shareholders, considering the corporative tax, the personal income tax, also considering any kind of mechanism to integrate or reduce the double taxation effects.

The following Table 1, show based in data made available by OECD in 2018, a comparative picture of nominals aliquots referred to legal person's profits taxation, concomitantly with the nominals aliquots referred to income tax on profits and dividends distributed to shareholders. It can be noticed that when compared to countries (United Kingdom, United States, Chile), Brazil presets a smaller aggregate aliquot in comparison to others countries, especially the more developed ones. This difference is derivative of tax waiver of income tax on profits and dividends distribute to associates and shareholders.

Table 1. Taxation on profits exercise of 2018

Taxation on Profits and Dividends (%)				
Countries	Distribute Profits	Taxes/ Profits	Taxes/ Profits	Total Tax
	Before Tax (A)	Companies	Shareholders (C)	(B+C)/ A
United Kingdo	123,46	23,46	38,10	49 ,86

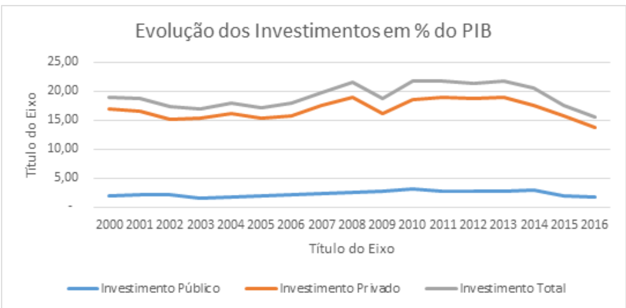
m				
United States	134,84	34,84	29,24	47 ,52
Chile	133,33	33,33	13,33	35 ,00
Brazil	151,52	51,52	-	34 ,00

Source: research date – OECD

The data above, although bring evidences that Brazil has a peculiar income distribution and tax progressivity way, in isolation doesn't respond to the critical question of this study, that is the tax waiver impact as an instrument of economic efficiency. This element, only reenforce the motivation that trough a quantitative research, considering the weight and the relation of tax waiver and tax waiver of income tax on profits and dividends, correlated with public and private investments and GDP, become possible to an exam of the characteristics and motivations to the existing tax waiver in Brazil, inside its reality and economic context.

According to the data published by IPEA, it verifies that the long recession in which Brazil finds itself in almost three years, brought down the investments to the lower level since the early 2000. This reduction is potentialized by retraction of private sector that reached its lowest indices since 2000, 13,7%. Lining with privates' investments retraction, the public sector investment rate, that was already low, dropped to 1,8% of GDP in 2016, the lowest level since 2004.

In front of this scenario, the added investment to public and private sector, ended in 2016 in its worst mark since the year 2000. The following graphic (Figure 1) show the public and private investments evolution in Brazil, in historical series of 2000 till 2016.



Source: research data – IPEA

It is determinate that the total investments line receives significantly impact of privates' investments, being this one not only its most valuable parcel, but also one conditioner of its evolution. In one study published by IPEA, Orair (2016) arguments that the economic thinking schools presents divergencies in its analyses about public expenditure impacts or about the Govern function as economic developer inductor. However, recognizes the strategic role that the public sector investments can perform in our economy, mainly when oriented to infrastructure segments.

Table 2 contemplate the study construct, which is segregated in two variables groups (dependent and independent), describe its definition, calculation formula, source of data collection.

Table 2 – Research Construct

Variable	Definition	Formula	Collection	Source
Dependent Variable (Regression)				
Total Tax Waiver	Total of Government expenditure	∑ of government expenditure	Federal Government	Year of reference PLOA
Tax waiver on profits and dividends	Waiver of total profits	Profits and dividends x 15%	Federal Government	Receita Federal do Brasil (CETAD)
Independents Variables (Regression)				
Gross Domestic Product (GDP)	Total of wealth generated in the country	PIB=C+I +G (X – M)	Federal Government	Year of reference PLOA
Investments	Total of investments	∑ of Investments	Federal Government	IPEA

Legend: CETAD: Centro de Estudos Tributários e Aduaneiros; PLOA: projeto de Lei Orçamentária Anual; IPEA: Instituto de Pesquisa Econômica Aplicada - **Source**: Research data

The tax policy result can be evaluated under different angles that can go since the quality of public expenditure measurement until the tax policy impacts to the well-being of citizens and to the economy. As an example, stand out the primary tax result, that is the difference between the primary revenue and primary expenses during a given period, executing the interest payments. Therefore, in thigh syntheses, it is spoken that the Govern has a tax surplus, to the interest payment on its debt, when revenues exceed the expenses in given period, on the other hand, there is deficit when the revenues are smaller than the expenses. To teste the proposed study model, it was formulated the following regression equation:

$Y = \beta o + \beta 1 \text{ x } X^1 + \beta 2 \text{ x } X^2 + \varepsilon$

Where Y = is the predicted waiver;

X^1 = is the year of reference GDP;

X^2 = are the year of reference Investments;

βo, β1, β2 = are the multiple linear regression coefficient.

ε = regression error

Table 3 - Pearson Correlation – Scenario 01

Pearson Correlation – scenario 02

Variable	**RFT**	**GDP**	**INV**	**Variable**	**RFL**	**GDP**	**INV**
TTW	1	0,000*	0,002*	TWP	1.	0,000*	0,000*
GDP	0,000*	1	0,000*	PIB	0,000*	1	0,000*
INV	0,002*	0,000*	1	INV	0,000*	0,000*	1

Legend: TTW: Total Tax Waiver; PIB: Gross domestic product; INV: Investments; TWP: Tax Waiver on Profits.

Notes: *Significance to level of 1%, **Significance to level of 5%, ***Significance to level of 10%

Source: Research Data

Referent to Pearson Correlation it is perceived the correlation existence between the variables. Not only TTW but also TWP, has positive and significant correlation with GDP and INV, in this way the Tax Waiver is correlated with the GDP and Investments variables.

3.1 Scenario 1 (Total Tax Waiver)

To reach the stablished goals in this research it was analyzed two macroeconomic scenarios. Based in data to multiple regression, it was used in the first scenario the total value of taxation expenditure, identified as total tax waiver, in a series of 10 years, comprehended between the years of 2007 to 2016, as showed in Table 4.

Table 4. Total Tax Waiver (Data Bases)

Scenario 1 data bases – Total tax waiver in billions			
Period	Tax waiver (Y)	GDP(X^1)	Investments (X^2)
2007	52,74	2.299,47	455,29
2008	76,06	2.744,83	592,88
2009	101,96	3.186,64	599,34
2010	113,88	3.326,52	725,18
2011	116,08	3.892,48	848,56
2012	145,98	4.537,48	971,02
2013	170,02	4.973,61	1.079,27
2014	249,76	5.242,91	1.080,04
2015	282,44	5.733,44	1.009,09
2016	271,01	6.253,18	969,24

Source: research data – Federal Government: PLOA; IPEA.

Will be presented now the multiple regression results resume to the construction of a model capable of stablishing a relation between the presented variables.

Table 5 - Regression Result Scenario 1

Variables	**Predicted Signal**	**Model 1 Coefficient**	**Value-P**	**Beta Standart**
_Cons	+/-	-77,104	0,0461 **	
GDP	+	0.0725***	0,0015 *	1,168
Investments	+	-0,0851***	0,3522	-0,232
Significance		0,0001*		
R^2		0,92		
N		10		

Notas: *Significance to level of 1%, **Significance to level of 5%, ***Significance to level of 10%

Source: Research Data

The significance of regression test is used to determinate if there is a linear relation between the variable answer Y and some of regression variables, X', X^2

etc. To be considered any relation evidence, is necessary that the value-p of test F be < than 5%. As it was observed, it is possible to suggest that is statistic evidence that at least one variable is related to tax waiver. From the finding through the global significance, that at least one independent variable is related to the dependent variable, it become necessary to identify which variables are directly related to tax waiver. To be considered any relation evidence, is necessary that the value-p of the test is < than 5%.

As highlighted in Table 5, is possible to affirm that there is statistic evidence that only the variable X^1 GDP is related with total tax waiver. Also, from the relation consideration between variables, it must be observed the R^2 results to test how the variable together explain the variability of total tax waiver. Stands out that R^2 presents significantly relation of variables with the tax waiver variability.

3.2 Scenario 2 (tax waiver on profits and dividends)

To the second scenario, it was isolated as data bases to multiple regression the total value of tax waiver of tax income on profits and dividends, found through the percentual application of 15% current until December 31, 1995 according dispose in Law 8.849/1994 on value of profits and dividends received by associates and shareholders, informed to Brazil' Federal Revenue. It was used the same temporal series of 10 years, comprehended between the years of 2007 and 2016.

Table 6. Tax waiver on profits and dividends (data bases)

Scenario 2 data bases - Tax waiver on profits in billions			
Period	Tax waiver (Y)	GDP(X^1)	Investments (X^2)
2007	16,13	2.299,47	455,29
2008	22,46	2.744,83	592,88
2009	23,43	3.186,64	599,34
2010	28,86	3.326,52	725,18
2011	34,46	3.892,48	848,56
2012	38,16	4.537,48	971,02
2013	43,10	4.973,61	1.079,27
2014	48,03	5.242,91	1.080,04
2015	50,10	5.733,44	1.009,09
2016	52,54	6.253,18	969,24

Source: research data – Federal Government: PLOA; IPEA e CETAD - RFB

It is now presented a resume of multiple regression results, to the construction of a model capable to stablish a relation between the presented variables.

Table 7 - Scenario 2 Regression result

Variable	**Predicted signal**	**Model 1 Coefficient**	**Valor – P**	**Beta Standard**
_Cons	+/-	-6,6944	0,007*	
GDP	+	0.0074*	0,00001*	0,785
Investments	+	0,012*	0,0295**	0,227
Significance		0,0001*		
R^2		0,99		
N		10		

Notes: *Significance to level of 1%, **Significance to level of 5%, ***Significance to level de 10%

Source: Research data

It is kept the same methodology of scenario 1 and stands out the data capable of verifying the pre requisite adequation of an analysis by multiple regression. As already highlighted in this study, the regression significance test is to determinate if there is a linear relation between the variable answer Y and some of regression variables, X', X^2 etc. To be considered any relation evidence is necessary that the value-p of test F is < than 5%. As it was observed, it can also be affirmed that in the second scenario has statistic evidences that at least one variable is related to tax waiver. Therefore, the regression analyses will have utility, also to scenario 2. From the finding through the global significance test that at least one independent variable is related to dependent variable, it can also identify which variables are directly related to tax waiver on profits and dividends. To be considered any relation evidence, is necessary that the value-p of the test is < than 5%.

As highlighted in Tabel 7, it was possible to affirm that there are statistic evidences that all variables are related to tax waiver on profits and dividends. In comparison to scenario 2, also considering relation between variable, it was observed the R^2 results to test how the variable together explain the tax waiver variability. Stands out in Table 7 that the R^2 significantly evidences the variables relation, with tax waiver on profits and dividends variability.

3.3 Statistic Significance Test

When proposed in a research that a new approach to certain matter, it becomes necessary to add information to statistical significance concept. Therefore, considering that independent variables are continuous, it was used the Cohen F^2 test, to estimate the effect size that describe the variability proportion of continuous dependent variable that is due to each independent variable. The Cohen F^2 is appropriate to calculate the size effect inside of a model where the interest independent variable and dependent variable are both continuous (Lindenau & Guimarães, 2012). Cohen F^2 is calculate by the following equation:

f²=r2AB −r²A 1−r²AB$f^2=\frac{r2AB - r^2A}{1-r^2AB}$

Where:

R^2AB = the determination coefficient of moderation (GDP x INV)

R^2A = the determination coefficient of original model

To test the moderation effect of the proposed study, it was formulated the following regression equation:

$$RFt = \beta 0 + \beta 1PIBt + \beta 2\ INVt + \beta 3PIBt \times INVt + \varepsilon$$

In both scenarios, it was observed by Beta standard that the GDP has a bigger influence in Tax waiver variable, than investment variable. The statistical significance test results show that the moderate effect of variable is medium, but significant.

3.5 Result analyses

The dynamic of tax waiver economic impact, where it wight the observed measures by GDP with investment correlation result, find less relevance when analyzed the scenario 1 statistic result. It is noticed that the total taxation expenditure with tax waiver, according to the used statistic model, although in the variable group has one R^2 of 92%, that means, as already stand out, how two independent variables together explain dependent variable, the dependent variable (tax waiver) can be explained in isolation only by GDP. Consequently, it is observed that there is no statistic evidence of relation between the investments variable and total taxation expenditure called tax waiver, in other words, it can't be affirmed that the investments evolution can statistically explain or justify the total tax waiver. However, it can be observed the positive linear relation found in the GDP and tax waiver correlation suggest that, in economic term, such expenditures it would be shown efficient only in the measure that contributed to GDP growth, being the optic and allegation of Government authorities than justifying the waiver.

That being said, it is considered after all that was presented about the subject tax waiver, that the growth or reduction of such expenditure must be conceived as one of determinant factors in economic development of one region, or even one country. However, is hard to precise the factors that determine the results of an isolated variable impact on the growth of an economy, in front of incentives or chance accidents, inside of this uncertainties and indetermination world. Therefore, an efficient tax policy must promote results not only in short period, in the longing to keep under control its budget goals, but being capable of, over time, reach results that can promote the growth in sustainable way.

In the second scenario, according to results of correlation with GDP and investments it is observed that exists bigger relevance in tax waiver of income tax on profits and dividends economic impact. As the used statistic model, it is observed that, together, the two independent variables, GDP and investments, justify or explain 99% of the variance value of tax waiver of income tax profits and dividends. It also turns out that, in isolation, each independent variable keeps strong statistic evidence of relation with dependent variable, in other words, statistically, the growth of both variable, GDP and investments, would be capable to explain of justify the permanence of tax waiver of income tax on profits and dividends.

By its nature, tax waiver of income tax on profits and dividends was originally conceived to, through a complete integration between legal and physical person, where the income tax taxation on profits and dividends would have incidence exclusively in the company exempting when receipt by beneficiaries, could stimulate, in reason of leveling the treatment and applicable aliquots, the investments in productive activities. Therefore, from the presented results in this study it was possible to suggest that, statistically, the increase in investments and the consequent GDP increase, justify such taxation expenditure under the economic efficiency aspect. In this way, it is rejected the hypotheses that "the tax waiver on profits and dividends in Brazil contribute to the budget imbalance, by its inefficiency to contribute for the economic growth". Considering the moderation effect size, it was observed that the influence in dependent variable is medium. In future studies, a bigger statistic sample, as well as insertion of another variables, can contribute with more significant moderating effects.

IV. CONCLUSION

The study presented important limitations about the researched sample.The first limitation refers to a difficulty to obtain a more significant sample. Until the study conclusion, the Federal Revenue, disposes of a historic series of only 10 years regarding to informed profits and dividends. This factor contributes to this study limitations, because certainly a more significantly and representative sample of these data would allow a bigger statistic validation. The second limitation is related to the lack of studies with the same goal of this work and the same data sample. The study exploratory character significantly limited in terms of literature revision and result comparison with others conducted studies.

The present study finds substantial relevance in the current economic and politic Brazilian scenario. In this way, to strongly contribute to the proposed theme debate, it is recommended to, in the future, apply the measuring instrument used in this study to a bigger data sample, in the effort to obtain a closer to reality result and, because of that, more conclusive. It is also recommended correlate the tax waiver values with the interest rate of the selected period. The Brazilian interest rate is a key variable in the country public indebtedness, once the gross debt increase related to GDP is provided, among other factors, by the interest increase. The importance to measure the interest variable is potentialized in this context mainly due to the gradual decline occurred in the last 15 months, period where the interest basic tax passed 14,25%, in August 2016, to 6,5% a year in August 2018. On such scenario, it could increase the sample statistic sensibility to measure the interest basic tax variations impacts, and, in this way, obtain a successful contribution.

As business management and accounting sciences contribution, this research is characterized as an incentive instrument to the reading and debate of a theme that approach, in a macroeconomic view, the tax policy with tribute waiver impact, in strategics subjects to the companies. It was observed a literature gap in the administration and countability field, that could objectify face the labyrinths of our economic and taxation system, to instigate thoughts that determinate the governing, legislators and businessman, actuation borders, in their managers role.

It is also highlighted, that the literature absence, provoke in the majority of managers, a mistaken distance and in consequence a substantial unawareness, of the tax agenda maze. Notably, such condition, show itself potentially capable to restrict the strategic decisions efficiency, besides compromise the expectations of future projections. It is hoped, however, that the present study wakes the academic community and other professionals that act in business management and accounting sciences field interest, to collaborate with a construction of a more amplified and strategic view of this tax policy economic impact.

REFERENCES

[1] Amaral Filho, Jair do (2003). Incentivos Fiscais e Políticas Estaduais de Atração de Investimentos. Fortaleza: IPECE.

[2] Arienti, Wagner Leal (1987). A Teoria Tributária de Adam Smith: uma revisão. Pesquisa, Estado, Tributação e Teoria Econômica: Abordagens Alternativas, n. 2, p. 43-58, jun. 1987.

[3] Brasil (1966). Lei nº 5.172, de 25 de outubro de 1966. Dispõe sobre o Sistema Tributário Nacional e institui normas gerais de direito tributário aplicáveis à União, Estados e Municípios. Diário Oficial da União, 27/10/1966, p. 12452. Available in:http://www.planalto.gov.br/ccivil_03/Leis/L5172.htm. Accessed in: June 08, 2018.

[4] ______ (1988). Constituição da República Federativa do Brasil de 1988. Available in: http://www.planalto.gov.br/ccivil_03/Constituicao/Constituicao.htm. Accessed in: June 08, 2018.

[5] ______ (1994). Lei nº 8.849, de 28 de janeiro de 1994. Altera a legislação do imposto sobre a renda e proventos de qualquer natureza e dá outras providências. Diário Oficial do Estado, 29/01/1994, p. 1383 (edição extra). Available in: http://www2.camara.leg.br/legin/fed/lei/1994/lei-8849-28-janeiro-1994-372565-normaatualizada-pl.html. Accessed in: June 25, 2018.

[6] ______(1995). Lei nº 9.249, de 26 de dezembro de 1995. Altera a legislação do imposto de renda das pessoas jurídicas, bem como da contribuição social sobre o lucro líquido, e dá outras providências. Diário Oficial da União, 27/12/1995, p. 22301. Available in: http://www2.camara.leg.br/legin/fed/lei/1995/lei-9249-26-dezembro-1995-349062-exposicaodemotivos-149781-pl.html Accessed in: 06/11/2018.

[7] ______(1999). Decreto nº 3.000, de 26 de março de 1999. Regulamenta a tributação, fiscalização, arrecadação e administração do Imposto sobre a Renda e Proventos de Qualquer Natureza. Diário Oficial, 29/03/1999, p. 1. Available in: http://www.planalto.gov.br/ccivil_03/decreto/d3000.htm. Accessed in: June 25, 2018.

[8] ______ (2000). Lei Complementar nº 101, de 4 de maio de 2000. Estabelece normas de finanças públicas voltadas para a responsabilidade na gestão fiscal e dá outras providências. Diário Oficial, 05/05/2000, p. 1. Available in: http://www.planalto.gov.br/ccivil_03/leis/LCP/Lcp101.htm . Accessed in: July 09, 2018.

[9] ______ (2018). Lei nº 13.587, de 2 de janeiro de 2018. Estima a receita e fixa a despesa da União para o exercício financeiro de 2018. Diário Oficial da União, 03/01/2018, p. 1. Available in: http://www.planejamento.gov.br/assuntos/orcamento-1/orcamentos-anuais/2018/loa-2018/lei-no-13587-de-2-de-janeiro-de-2018.pdf. Accessed in: March 06, 2018.

[10] Dalton, Hugh (1972). Princípios de finanças públicas. Rio de Janeiro: FGV.

[11] Dornelles, Francisco Oswaldo Neves (2008). O Sistema Tributário da Constituição de 1988. Senado Federal, Brasília.

[12] D. Sachs, Jefrey; Larrain B., Felipe (2000). Macroeconomia em uma Economia Global.São Paulo: Pearson Makron Books.

[13] Fávero, L. P., Belfiore, P. (2017). Manual de Análise Multivariada de Dados – 1. Ed. – Rio de Janeiro: Elsevier

[14] Giambiagi, Fábio; Além, Ana Cláudia (2011). Finanças Públicas: teoria e prática no Brasil. 4. ed. Rio de Janeiro: Elsevier.

[15] Gobetti, Sergio Wulff; Orair, Rodrigo Octávio (2016). Progressividade tributária: a agenda esquecida. Rio de Janeiro: IPEA.

[16] Gomes, Antonia Helena Teixeira (2006). Tributação e Sonegação Fiscal: um estudo do comportamento do Estado ante a sonegação fiscal. 2006. Dissertation (Master in Constitutional Law) – Universidade de Fortaleza, UNIFOR, Fortaleza.

[17] Hoffman, Rodolfo (2015). Análise de regressão: uma introdução à econometria, recurso eletrônico. Piracicaba: ESALQ/USP.

[18] Lindenau, Juliana Dal-Ri; Guimarães, Luciano (2012). Calculando o Tamanho de Efeito no SPSS: Porto Alegre: Revista HCPA.

[19] Kasznar, Istvan Karoly (2014). Gestão Financeira do Setor Público. Rio de Janeiro: FGV.

[20] ______(2016). Política Fiscal e Macroeconômica: Tributação no Brasil. Rio de Janeiro: FGV.

[21] Mankiw, N. Gregory (2004). Macroeconomia. Rio de Janeiro: LTC.

[22] Orair, Rodrigo Octávio (2016). Investimento Público no Brasil: trajetórias e relação com o regime fiscal. Rio de Janeiro: IPEA.

[23] RECEITA FEDERAL. Ministério da Fazenda. Gastos Tributários – Previsões PLOA. **Receita Federal.**[on-line]. Available in: http://idg.receita.fazenda.gov.br/dados/receitadata/renuncia-fiscal/previsoes-ploa/gastos-tributarios-2013-previsoes-ploa. Accessed in: March 03, 2018.

[24] ______. Grandes Números das Declarações do Imposto de Renda das Pessoas Físicas. **Receita Federal**. [on-line]. Available in: http://idg.receita.fazenda.gov.br/dados/receitadata/estudos-e-tributarios-e-aduaneiros/estudos-e-estatisticas/11-08-2014-grandes-numeros-dirpf/grandes-numeros-dirpf-capa. Accessed in: June 18, 2018.

[25] Rezende, Fernando (1996). Evolução da Estrutura Tributária: experiências recentes e tendências futuras. Planejamento e Políticas Públicas, n. 13, jun.

[26] ______.; Afonso, José Roberto (2014). 50 Anos da Reforma Tributária Nacional:origens e lições. Rio de Janeiro: FGV; IBRE.

[27] ______.; Cunha Armando (2014). A Reforma Esquecida II. Rio de Janeiro: FGV.

[28] Smith, Adam (1996). A Riqueza das Nações: investigação sobre sua natureza e suas causas. São Paulo: Nova Cultural.

[29] TESOURO NACIONAL. Sobre política fiscal. Tesouro Nacional. [on-line]. Available in: http://www.tesouro.fazenda.gov.br/sobre-politica-fiscal. Accessed in: June 08, 2018.

[30] Tinoco, Guilherme; Gimbiagi, Fábio (2018). O Crescimento da Economia Brasileira: 2018 - 2023. Rio de Janeiro, BNDES.

[31] Vergara, Sylvia Constant (2016). Projetos e Relatórios de Pesquisa em Administração.16. ed. São Paulo: Atlas.

[32] BCB – BANCO CENTRAL DO BRASIL. Available in: https://www.bcb.gov.br/.

[33] BRASIL. Ministério do Planejamento, Desenvolvimento e Gestão (MPDG). 1. Resultado Primário. **MPDG**, 20/03/2017 (com atualizações). [on-line]. Available in: http://www.planejamento.gov.br/assuntos/orcamento-1/informacoes-orcamentarias/arquivos/estatisticas-fiscais/resultado-primario. Accessed in: June 25, 2018.

[34] Castro, José Roberto (2017). Quanto o governo gastou com juros nos últimos anos e qual a previsão para 2017. Nexo Jornal, 14/02/2017. Available in: https://www.nexojornal.com.br/expresso/2017/02/14/Quanto-o-governo-gastou-com-juros-nos-%C3%BAltimos-anos-e-qual-a-previs%C3%A3o-para-2017. Accessed in: August 02, 2018.

[35] Colnago Jr., Esteves Pedro. em nº 00061/2018 MP/ Projeto de Lei. Brasília, 12 abr. 2018. Available in: https://legis.senado.leg.br/sdleg-getter/documento?dm=7718670&disposition=inline. Accessed in: July 23, 2018.

[36] Graner, Fábio; PUPO, Fábio. Déficit primário de 2017 soma R$ 124 bi e fica abaixo do previso. Valor Econômico. 29/01/2018. Available in: http://Www.Valor.Com.Br/Brasil/5289311/Deficit-Primario-De-2017-Soma-R-124-Bi-E-Fica-Abaixo-Do-Previso. Accessed in: June 08, 2018.

[37] IPEA – INSTITUTO DE PESQUISA ECONÔMICA APLICADA. Available in: http://www.ipea.gov.br/portal/. LIMA, Flávia. Investimento privado no Brasil recua ao menor nível desde 2000. Folha de S.Paulo, 02/07/2017. Available in: https://www1.folha.uol.com.br/mercado/2017/07/1897709-investimento-privado-no-brasil-recua-ao-menor-nivel-desde-2000.shtml. Accessed in: June 25, 2018.

[38] OECD – ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT. Tax on corporate profits (indicator). OECD. [on-line]. Available in: 10.1787/d30cc412-en. Accessed in: March 06, 2018.

[39] ______. Tax on personal income (indicator). OECD. [on-line]. Available in: 10.1787/94af18d7-em. Accessed in: March 06, 2018.

[40] ______. Revenue Statistics: Comparative tables. *OECD Tax Statistics* (database). OECD. [on-line]. Available in: http://dx.doi.org/10.1787/data-00262-en. Accessed in: March 06, 2018.

[41] RECEITA FEDERAL (2014). Demonstrativos dos Gastos Tributários – DGT. Receita Federal. 25/11/2014 (com

atualizações). Available in: http://idg.receita.fazenda.gov.br/dados/receitadata/renuncia-fiscal/previsoes-ploa/arquivos-e-imagens/demonstrativos-dos-gastos-tributarios-dgt. Accessed in: June 18, 2018.

[42] ______. Ministério da Fazenda. Demonstrativos de Gastos Tributários. Receita Federal. [on-line]. Available in: https://idg.receita.fazenda.gov.br/dados/receitadata/renuncia-fiscal/previsoes-ploa/arquivos-e-imagens/. Accessed in: March 06, 2018.

[43] SENADO FEDERAL (2018). Congresso Nacional aprova Lei de Diretrizes Orçamentárias para 2019. Senado Notícias, 12/07/2018. [on-line]. Available in: https://www12.senado.leg.br/noticias/materias/2018/07/12/congresso-nacional-aprova-lei-de-diretrizes-orcamentarias-para-2019. Accessed in: July 17, 2018.

[44] TESOURO NACIONAL. Responsabilidade Fiscal / Dívida Pública Federal. Available in: http://www.tesouro.fazenda.gov.br/.

[45] Torres, Fernando; Watanabe, Marta; Lamucci, Sergio. Candidatos estudam taxação a dividendos. Valor Econômico, 23/07/2018. Available in: https://www.valor.com.br/brasil/5676927/candidatos-estudam-taxacao-dividendos. Accessed in: July 23, 2018.