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Analysis of Biases in Corporate Income Tax-CIT

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Abstract

This paper analyzes the biases in CIT in some countries around the world. Most corporate tax systems are found in the Tax Codes. The sample covers the Tax Codes in force in ten countries in Africa, America, Asia and Europe. Assuming that corporate tax is the cost of using public capital, the analysis of the content of these tax codes relating to corporate income taxation, has made it possible to identify several biases or differences in taxation and/or tax treatment. The biases in CIT identified relate to financing, investment, result, rate and tax base. This paper is one of the first to expand the literature by analyzing the biases in CIT, likely to affect tax behavior and, by extension, the financial behavior of firms.

Keywords: Corporate income tax; tax difference; tax bias; Tax Code.

Code JEL: G32 ; G34 ; G38 ; H24 ; H32.

1. Introduction

In Benin, as in most countries in the world, whether emerging market economies, low-income countries as well as advanced economies, the corporate income tax system has many biases that cause enormous economic harm to the firm and, in turn, has been the basis of many long-lasting controversies in corporate capital structure theory for over six (6) decades. Modigliani and Miller [26, 27] were the precursors of these controversies on the corporate capital structure theory. Then, authors talked about these biases in the related literature, including among others, the authors in [1, 32, 13, 16, 20, 19, 18, 22, 23, 24, 37, 38, 39, 41], to quote only those. But the list of these biases is not exhaustive in the related literature.

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In this article, the Tax Codes of some countries of the world will be analyzed by highlighting other biases that affect the tax and financial behavior of firms.

This article is structured into five sections, of which section 1 is the introduction. Section 2 is devoted to a critical review of the literature on biases related to CIT and measures to combat these biases. Section 3 outlines the methodology. Section 4 presents the results and section 5 the conclusion.

2. Critical literature review

The Court of Cassation has defined the tax as being a "levy imposed by authority by the State, the provinces and the communes on the resources of the people who live on their territory or have interests there to be assigned to the services of general utility" [10]. The General Tax Code of the Republic of Benin for the year 2023, stipulates in its article 2: "The profits made by the firms and other legal persons designated by this chapter are subject to an annual tax called corporate tax". It is therefore clear that corporate tax is a corporate income tax, which exists in most countries, and has as its tax base or base the gross operating profit or surplus. The consequence of this article 2 is that the losses realized by firms will not be subject to corporate tax or will experience a different tax treatment; which constitutes a bias called differential taxation or tax treatment.

The corporate income tax system in Benin, as in most other countries around the world, contains several biases that disrupt the fiscal and financial behavior of firms. These are debt bias, interest rate bias and tax base bias.

2.1. Debt bias

Still called bias of the burden of borrowed funds, the "*debt bias*" of the firm consists in establishing a tax reduction of the burden of the borrowed funds of this one, violating suddenly, the principle of fair and efficient treatment of various corporate financing charges such as the dividend from equity, the interest on borrowed funds and why not corporate tax, which is indeed a financing charge for the firm because it benefits directly or indirectly from public investment by the state. This is why Modigliani and Miller [27: 433] made a correction to their basic theory of 1958 by encouraging firms to go into debt as much as possible to take advantage of the tax economy caused by the tax deductibility of interest on funds borrowed.

According to Aujean and his colleagues [2: 50], "the bias thus created can induce two kinds of economic distortions. On the one hand, this difference in treatment leads firms to seek a leverage effect, and therefore an excessive debt/equity ratio, which ultimately increases the systemic risk for the financial markets. On the other hand, the favorable treatment of borrowing encourages multinational firms to use interest deductibility or to use hybrid instruments to shift profits to less taxed places. Thus, the debt of the subsidiaries is located in countries where the CIT is high while the interest is paid to the lending firms of the group, located in countries with low taxation, which translates into lower total taxation at group level".

According to Fatica and his colleagues [13: 5], "The tax deductibility of interest payments under most corporate income tax systems while with no such measure is foreseen for equity financing can create a distortion in the financing decision of firms. This tax-induced bias in favor of debt-financing instead of equity-financing (retained earnings or new equity) has led to a policy recommendation for fixing it in the context of the European Semester (European Commission, 2012). The bias results in at least two types of economic distortions. First, the deductibility of interest expenses exacerbates opportunities to shift and decrease reported profit via debt-shifting or the use of hybrid instruments. Second, it may lead to too-high leverage in firms, increasing systemic risk".

"Most tax systems today contain a "*debt bias*," offering a tax advantage for corporations to finance their investments by debt. This has grown increasingly hard to justify. One cannot compellingly argue for giving tax preferences to debt based on legal, administrative, or economic considerations. The evidence shows, rather, that debt bias creates significant inequities, complexities, and economic distortions. For instance, it has led to inefficiently high debt-to-equity ratios in corporations. It discriminates against innovative growth firms, impeding stronger economic growth. Debt bias also threatens public revenues, because it enables firms to reduce tax liabilities by using hybrid financial instruments as well as by restructuring their finances internally, moving debt between affiliates" [17].

But there are other harms caused through "*debt bias*" that these authors did not point out. Indeed, the word deduction according to the French dictionary Larousse means "Action of subtracting a sum from a total to be paid". It is necessary to start from a total amount to be paid which is the total debt from which an amount representing the deduction will be subtracted. However, in the firm, the amount on which the deduction is made represents the Earnings Before Interest and Taxes (EBIT). But this amount does not constitute the total corporate tax debt of the firm on which the deduction should be made; since it is the return generated by the business investment without taking into account the source of financing. This return is intended to pay the financing charges, which are interest, dividends and corporation tax. Any remainder constitutes the net return (gross return minus cost) of the investment.

The term "deduction" used in corporate income tax is therefore an abuse of language because it is first necessary to find the debt resulting from the observation of the CIT charge before making the said deduction. Moreover, several authors who have written about the debt bias have never sought to ask this no less relevant question: What is the impact of the deduction of interest charges from debt in the liquidation of the CIT? Or: Who is the "real" loser or winner of the deduction of debt interest charges in the calculation of corporate tax? Admittedly, the State through the law authorizes the deduction of the burden of funds borrowed in favor of the firm with non-zero financial leverage, where the financial leverage of a firm is the ratio of "financial debt to equity". Under these conditions, is the State the real loser of this tax deduction? Since EBIT is not corporate tax debt, any deduction whatsoever from this amount is a real tax trickery. Consequently, the State does not actually bear the burden of the tax deduction of interest on borrowed funds since at this stage, the amount of corporate tax has not yet been liquidated. It would be necessary to find the amount of corporate tax to be paid before any deduction, which has never been the case.

2.2. Rate bias

In Benin, as in most other countries in the world, the CIT rate of the tax codes is generally very high compared to the interest rate of borrowed funds and the dividend rate of equity: this relatively very high level of the CIT rate constitutes the "*rate bias*". The reason that justifies this rate bias is the narrowing of the corporate tax base, reinforced by tax relief measures or exemption from corporate tax such as the tax deduction of the burden of borrowed funds. According to the OECD [28: 160], a higher CIT rate reduces business investment, because it reduces the after-tax return on investment, with negative consequences for growth.

High CIT rates discourage foreign direct investment and hence the presence of foreign multinationals, which has negative effects on productivity, as multinationals boost productivity by facilitating technology transfers and diffusion of knowledge in national firms (Keller 2004; Griffith *and his colleagues* 2004; Criscuolo, 2006; Bloom *and his colleagues*, 2007, quoted in [28: 162]). In relation to the yield of CIT, the World Bank [3: 25] concludes: "Despite high statutory rates, revenues are weakened by excessive reliance on exemptions from CIT and the minimum flat tax. Marginal effective common law tax rates are unattractive due to statutory CIT rates at the African average, but high compared to the rest of the world".

Regarding the evolution of the CIT rate according to the regions, the OECD [31: 12] notes that "Since 2000, average statutory tax rates have declined across OECD member states and the three regional groupings of jurisdictions considered: African jurisdictions, Asian and Pacific jurisdictions and Latin America and the Caribbean (LAC) jurisdictions. The grouping with the most significant decline has been the OECD (a decline of 9.2 p.p., from 32.3% in 2000 to 23.1% in 2022) followed by the African average with a decline of 8.4 p.p. in 17 jurisdictions, from 34.2% in 2000 to 25.8% in 2022. While the averages have fallen for each grouping over this period, significant differences between the averages for each group remain: the average corporate tax rate for Africa was 25.8% in 17 jurisdictions in 2022, compared to 23.1% for the OECD, 19.9% in 31 jurisdictions for LAC and 19.2% for 23 jurisdictions in Asia and Pacific. In recent years, averages have stabilised in the OECD, LAC, and Asia and Pacific groupings".

Admittedly, the effective tax rates (ETR) give a more precise view than the statutory rates of the effects of corporate tax systems on the tax actually due. TEIs are generally lower than the statutory tax rates for firms, taking into account the rules on tax depreciation, deductions and allowances specific to corporate tax systems. In short, the CIT rate still remains problematic because it is relatively high and cannot be aligned with the interest rate on borrowed funds and the dividend rate on the firm's equity.

This is why a move towards a model that combines a reduction in the rate and an increase in the base ensuring competitiveness, fairness and efficiency, would have the merit of reducing the biases linked to the CIT. This would make it possible to comply with the Ramsey Rule, a fundamental principle of taxation theory, specifying that the ideal tax is "*at a low rate, applied to a broad and inelastic tax base*" (Benassy-Quéré and his colleagues, 2009a cited in [15: 116]).

2.3. The tax base bias

The "*tax base bias*" consists in choosing a relatively low base compared to the nominal value of the borrowed funds and the nominal value of the firm's equity. This base is determined from the Earnings Before Interest and Taxes (EBIT) which is supposed to cover not only the two costs of financing the firm, namely the interest of the funds borrowed and the equity dividend but also the corporate tax charge. This operation of determining the tax base is redundant and misleading because EBIT is variable, random, uncertain and generally weak because, whatever the speed of the productivity of the firm's investment, the profit of it cannot reach the level of investment.

However, the taxation of corporations on the profit generates enormous problems such as, for example, the attempt to reduce the declared tax profit, the non-equalization of corporate tax charges, corruption, tax evasion and the transfer of profit. Tax evasion consists of the violation of tax law with a view to totally or partially evading the payment of tax, or even with a view to obtaining tax refunds to which the taxpayer is not entitled [10: 11]. The tax base bias is accentuated by the tax deduction of interest charges on borrowed funds. This deduction of interest on borrowed funds significantly reduces the tax base to two components which are corporate income tax and the dividend, i.e., the Earnings Before Taxes (EBT). The tax deduction of interest from borrowed funds can lead to nullification of the tax base if EBIT consists only of "interest which is not taxed at the enterprise level and cannot be taxed at all if it accrues to foreign debt holders or exempt entities" [8: 811].

This state of affairs is at the root of the phenomenon of national tax base erosion and profit shifting, known as "Base Erosion and Profit Shifting (BEPS)", which refers to tax planning strategies that exploit weaknesses and disparities in the rules of corporate tax regimes to "disappear" profits for tax purposes or shift them to countries or territories where the firm has little real business activity, but where they are low taxed, which results in a low or zero corporate tax charge for the firm. According to the OECD [29: 1], "globalization has opened up possibilities for multinational firms to considerably reduce their tax burden, by resorting to schemes allowing either to eliminate profits or to transfer them artificially to zones with low or no taxation. It is this phenomenon that is referred to as "base erosion and profit shifting" (BEPS)".

It is clear and obvious that the firm's taxable profit and the corporate tax charge are both obtained at time (t+1) if the firm's investment that generates this profit has been financed at moment t. The taxable profit after the deduction of the interest of the borrowed funds is supposed to cover the dividend and the CIT and can in no case be the financing whose investment generates the CIT. If so, the financing operation of the firm would be circular, redundant and very complicated. A questioning of global sources of financing of the firm known until now, proves to be necessary and sufficient in order to reconsider the process of financing of firm to integrate a third source of financing used by the firm and whose charge is the corporate capital tax-CCT.

The theoretical literature has never addressed the issue of corporate financing from this aspect; it treated the financing of the firm by always considering the CIT as a constraint to be respected. The question that

arises is whether there is a contribution of funds by the State to the firm whose remuneration is the CIT. Many studies of the financial theory of the firm have not explicitly addressed this problem. Indeed, for Charreaux [7], tax levies constitute a particular form of distribution intended to remunerate the collective services offered by the State (infrastructure, security, education, etc.). Moreover, in his model of the financial circuit, this author excludes the State and pays attention only to managers, shareholders and creditors. It would therefore be wise to now include the State as one of the financial partners of the firm insofar as the latter pays the corporate tax in return for part of the public collective services that it uses.

Tax today plays an important economic role and is no longer limited to covering the traditional functions of the State, having become:

- an instrument for the redistribution of resources (example: granting of scholarships, subsidies to non-profit organizations, etc.),
- an instrument of economic interventionism by the public authorities (aid for firms in difficulty, aid for new investments, fight against environmental pollution, etc.) [10].

If corporate tax is the remuneration of a source of financing called taxable funds, then why shouldn't these funds be estimated or valued as a corporate tax base? This could solve the perennial and controversial problem of capital structure and other problems caused by current tax systems to the firm.

In sum, the tax base bias tends to fix a relatively very low tax base, as opposed to the rate bias which tends to keep the corporate tax rate relatively very high; which changes the tax system from the "*broaden bases, low rates*" type to a tax system of the "*shrunk bases, raise rates*" type, in violation of the fundamental principle of the theory of taxation, specifying that the ideal tax is "*to low rate, applied to a broad and inelastic tax base*" (Benassy-Quéré and his colleagues, 2009a cited in [15: 116]).

2.4. Policies to combat these biases

Faced with these biases relating to the debt, the rate and the base of corporate taxation, the public authorities have adopted tax policies to cancel or limit the said biases in terms of corporate tax. Simple tax reform measures are the *Reduction of the Corporate Tax Rate* and the use of *Thin Capitalization Rules* (TCRs) that are intended to prevent firms from resorting to debt financing or the transfer of international debt for tax planning reasons. The fundamental tax reform measures are represented by the *Comprehensive Business Income Tax*-CBIT- [42: 40-60], the *Allowance for Corporate Equity*-ACE- [21: 19-43, 12]), the *Allowance for Corporate Capital*-ACC- [13: 14, 38: 37], the *Cost of Capital Allowance*-COCA- [40, 5] and the *Allowance for Growth and Investment*-AGI- [9]. But all these tax reform measures are far from eliminating or reducing the "*debt bias*", the "*rate bias*" and the "*tax base bias*".

3. Methodology

The General Tax Code of Benin, like the tax codes of most other countries around the world, contains more or less incentive provisions for financing, investment and business results operations, allowing

corporate managers, to fulfill their tax obligations. Because corporate tax is generally considered a business cost, management typically attempts to minimize tax expenditures that significantly affect the firm's operating results and financial position [25: 615]. In fact, governments appropriate part of the firm's benefits through taxes to the detriment of shareholders and management ([11] cited in [25: 612]) and, corporate managers have no legal or moral obligation to pay a maximum amount of tax, nor do democratic societies require them to do so (Hasseldine and Morris (2013) cited in [25: 616]).

Given that the key objective is to maximize shareholder value, business managers, from the financial incentives contained in tax codes, adopt tax strategy behaviors that allow them to minimize their corporate tax burdens. Governments in order to improve the business climate in the national economy, put in the tax codes favorable and attractive provisions for businesses. But it is clear that these tax provisions create biases. The objective of this research is to analyze the biases arising from corporate income taxation. The target population is composed of CIT systems in countries around the world. The sample covers the tax codes in force for the year 2023 in ten countries in Africa, America and Europe. These are the following countries: Belgium, Benin, Canada, Chile, Colombia, South Korea, Côte d'Ivoire, France, Morocco and Nigeria. We will analyze the content of the corporate income tax systems of these ten countries, highlighting the biases relating to financing, investment, income, rate and tax base.

To carry out this research, we posed a postulate according to which "the CT is the charge of a capital used by the firm". This postulate is based on the assumption that there is no free income or cost. If in an economy, there are not only the two contributors of funds that are the shareholders and the bondholders but also the notorious presence of the State to collect the CIT, then from there can we say that the corporate investment is financed by the two global sources of financing known up to now, namely shareholders' equity and funds borrowed from bondholders?

Saying yes as an answer is wrong and misleads those who accept it because it masks the efforts of public authorities in the form of public investment from which the firm benefits, undervalues the real investment of the latter and puts the firm in the impasse: after the recovery of the investment, which is financed by the two sources of financing, namely equity and borrowed funds, the potential return generated by this investment should cover not only two financing charges, namely the dividend and the interest but also a third charge which is the CT. This state of affairs violates the principle of equalization of the return generated by business investment because there are two sources of financing (equity and borrowed funds) against three charges which are corporate tax, interest and dividend.

Saying no as an answer is true and testifies to the recognition of the State's public investments enjoyed by the firm, such as the construction of roads, markets, hospitals, schools, the assurance of justice, the protection and citizen security, to name but a few. Recognition of the public investment from which the firm benefits, starts with the questioning of the two global sources of firm financing and the integration of the State in the category of contributors of funds in order to justify the burden of CT. In this case, the firm's investment is financed not only by equity and borrowed funds but also by the "*taxable*" funds of the State called the "*taxholder*". The financial flow of this operation between the shareholders, the

 Equity
 Debt

 SHAREHOLDERS
 Dividend

 FIRM
 Interest

 Spung signade
 Growner Tax

 TAXHOLDER

 (STATE)

bondholders, the *taxholder* or State and the firm can be schematized 1.

Figure 1: Integrated financing flow of the firm

Source: Personal realization of the researcher from the literature review (2023)

According to diagram 1, the earnings of the firm under normal business conditions should cover corporate tax, interest and dividend. It should not serve as a base for the CT. The term deductibility is used incorrectly, the State does not have the right to speak of the deductibility of interest or to grant the deduction of interest because the profit of the firm is not its equity. To speak of the deductibility of interest and even the *taxholder* that is the State, are victims of a fiscal illusion, which consists in tax deducting from the profit of the firm the interests of the borrowed capital and in taxing the dividends of the equity. This state of affairs distinguishes two notions of cost in financial language: a cost before tax and a cost after tax. The cost of debt before or after taxes is a good example. As CT is also a cost, to speak of a cost before or after tax, without the possibility of a hierarchy of costs, would be an abuse of language.

4. Results

The analysis of the content of the Tax Codes on corporate income tax systems in the ten countries of the sample constituted, made it possible to identify several biases relating to CIT. These biases relate not only to financing, investment and business results, but also to the corporate tax rate and base.

4.1. Biases relating to corporate financing

There are two biases relating to corporate financing: the bias of debt financing compared to equity financing and the bias of financing by contributed capital in relation to financing by taxable capital.

4.1.1. The bias of debt financing compared to equity financing

Also referred to in related literature as the "*debt bias*", the "*debt vs. equity financing bias*" involves differential tax treatment of debt financing and equity financing at the corporate level. This is a difference in taxation at the corporate level which allows the deductibility of interest expense on borrowed funds against the taxation of dividend expense on equity. As a result, the winners of this bias are firms with non-zero financial leverage while the losers are firms with zero financial leverage. Thus, any rational corporate in pure and perfect competition seeks to indebt itself as much as possible by reducing its corporate tax burden to reduce its corporate tax debt as much as possible.

4.1.2. The bias of financing by contributed capital compared to financing by taxable capital

The "bias of financing by capital provided in relation to financing by public capital" consists, from a tax point of view, in underestimating the financing by taxable capital used by the firm whose expense is the corporation tax and in considering only financing by contributed capital, i.e., borrowed capital, the cost of which is interest, and equity capital, the cost of which is dividend. In other words, this bias substitutes the taxable profit of the firm for taxable capital and therefore favors loss-making firms and disadvantages profitable firms.

4.2. Biases relating to business investment

There are three biases relating to business investment: the bias of tangible fixed assets compared to intangible fixed assets, the bias of tangible fixed assets compared to financial fixed assets and the bias of intangible fixed assets compared to financial fixed assets.

4.2.1. The bias of tangible fixed assets compared to intangible fixed assets

The "*tangible fixed assets vs. intangible fixed assets bias*" is the differential tax treatment of tangible and intangible assets. Indeed, tangible fixed assets are subject to different tax depreciation methods from those undergone by intangible fixed assets. These are straight-line, accelerated, and declining balance methods. This bias favors firms with high tax savings linked to the deductibility of depreciation allowances for depreciation of fixed assets more than firms with tax savings with little or no depreciation.

4.2.2. The bias of tangible fixed assets compared to financial fixed assets

The "tangible fixed assets versus financial fixed assets bias" consists in making a differential tax treatment of tangible fixed assets and financial fixed assets. Indeed, the yield generated by capital contributions in kind (for example the contribution of tangible fixed assets) benefits from the tax deduction of depreciation allowances, while the income from shares is taxed and that from bonds is deductible in the calculation of CIT at the firm level. This bias favors firms with high tax savings linked to depreciation and debts and disadvantages firms with low or even zero tax savings linked to depreciation and debts.

4.2.3. The bias of intangible fixed assets compared to financial fixed assets

The "*intangible assets versus financial assets bias*" consists of differential tax treatment of intangible assets and financial assets. Intangible assets offer a tax saving linked to the deduction of depreciation while bonds offer a corporate tax saving linked to the deduction of interest expense and income from shares are taxed at the firm level.

4.3. Biases relating to business results

There are several biases relating to the business result: the bias of the Loss result compared to the Profit result, the bias of the Loss result compared to the Nil result, the bias of the Nil result compared to the Profit result, the bias of Earnings Before Interest and Tax (EBIT) compared to Earnings Before Tax (EBT), the bias of expenses in relation to income, the bias of deductible expenses compared to non-deductible expenses and the bias of non-taxable products compared to taxable products.

4.3.1. The bias of the Loss result compared to the Profit result

The "Loss result compared to the Profit result bias" consists of taxing the "Loss" result and the "Profit" result of the firm differently. Indeed, the firm which achieves a "Loss" result leading to a tax deficit, is not taxed and benefits from a carryforward of the deficit. On the other hand, the firm which achieves a "Profit" result leading to a tax benefit, is taxed and does not benefit from any savings in corporate tax. That bias favors loss-making firms more than profit-making firms.

By way of illustration, consider, for example, the case in a national economy where the statutory corporate tax rate is 30%, two firms E and F achieving the same tax result but in the opposite direction; i.e., firm E has a deficit of XOF 100 and firm F has a profit of XOF 100. Firm F being taxed at 30%, will pay a corporate tax charge equal to XOF 30 while firm E is not taxed and benefits from a loss carry forward characteristic of a corporate tax saving equal to XOF 100. The analysis of this case allows us to say that firm E has a double advantage from the point of CIT view: firm E has no CIT charge but benefits from a CIT credit equal to XOF 100. The CIT differential between firms E and F is XOF 130.

4.3.2. The bias of the Loss result compared to the Nil result

The "Loss result compared to the Nil result bias" consists of taxing the "Loss" result and the "Nil" result of the firm differently. Indeed, the firm which achieves a "Loss" result is not taxed and benefits from a loss carryforward while that which achieves a "Nil" result is not taxed but does not benefit from anything. This bias favors firms that achieve a "Loss" result and disadvantages firms that have a "Nil" result.

4.3.3. The bias of the Nil result compared to the Profit result

The "Nil result compared to the Profit result bias" consists of taxing the "Nil" result and the "Profit"

result of the firm differently. Indeed, the firm which achieves a "Nil" result is not taxed while that which achieves a "Profit" result is taxed. This bias favors firms that achieve a "Nil" result and disadvantages beneficiary firms.

4.3.4. The bias of EBIT compared to EBT

The "Earnings Before Interest and Tax (EBIT) versus Earnings Before Tax (EBT) bias" consists of deducting interest expense from EBIT and taxing EBIT of the firm. This bias favors firms with higher interest charges more than firms with low or even zero interest charges.

4.3.5. The bias of costs in relation to products

The "*bias of expenses compared to products*" consists in deducting the expenses and imposing the products of the firm when calculating the CIT. This bias favors firms with higher costs and lower income more than firms with low or even zero costs and higher income.

The "bias of deductible expenses compared to non-deductible expenses" consists of deducting certain expenses and imposing others on the firm when calculating the corporate tax. This bias favors firms with higher deductible expenses more than firms with low or even zero non-deductible expenses. The "bias of non-taxable products compared to taxable products" consists of not taxing certain products and taxing others of the firm when calculating the CIT. This bias favors firms with higher non-taxable income more than firms with low or even zero non-taxable income.

4.4. The biases relating to the rate

There are six biases relating to the rate: the bias of multiple tax rates compared to the single tax rate, the bias of the legal tax rate (LTR) compared to the effective tax rate (ETR), the bias of the legal tax rate (LTR) compared to the marginal tax rate (MTR), the bias of the effective tax rate (ETR) compared to the marginal tax rate (MTR), the bias of tax rate compared to the interest rate and the bias of corporate tax rate in relation to the dividend rate

4.4.1. The bias of multiple tax rates compared to the single tax rate

The "bias of multiple tax rates compared to the single tax rate" consists in fixing by law multiple tax rates of the common law instead of single tax rates of the common law. The multiplicity of CIT rates leads to a rate differential which constitutes a potential CIT saving. This bias favors firms with low tax rate and disadvantages those with high tax rate. Table 1 shows the multiplicity of statutory CIT rates for ten countries around the world in 2023.

4.4.2. The bias of the legal tax rate (LTR) compared to the effective tax rate-ETR

The "statutory tax rate compared to the effective tax rate bias" consists of setting by law a tax rate for

corporate income and imposing Earnings Before Tax-EBT, taking into account tax provisions such as deductions, exemptions and credits, at an effective tax rate (ETR), in order to attract financing and business investment. The rate differential generally constitutes, taking into account the tax advantages granted, a CIT saving for the firm benefiting from these advantages. This bias favors firms that have obtained corporate tax benefits and disadvantages other firms.

In the example mentioned above of the two firms E and F having respectively a tax deficit of XOF 100 and a tax profit of XOF 100, the LTR is 30% for the two firms but the ETR is 30% for the firm E and 100% for firm F because of corporate tax credit generated by the deficit. The ETR differential is 70%.

Country	Source	Statut	tory CIT	rates of ten count	ries in 2	023	
Belgium	https://practiceguides.chambers.com/practice- guides/corporate-tax-2023	20%	25%				
Chile	https://practiceguides.chambers.com/practice- guides/corporate-tax-2023	25%	27%				
Canada	https://practiceguides.chambers.com/practice- guides/corporate-tax-2023	9%	15%	38,67%			
Morocco	Art. 19 of the General Tax Code-2023	20%	35%	40%			
Benin	Art. 46 of the General Tax Code-2023	25%	30%	More than 30%			
South Korea	https://practiceguides.chambers.com/practice- guides/corporate-tax-2023	9,9%	20,9%	23,1%	26,4%		
Ivory Coast	Art. 64; 65; 69 & 70 of the General Tax Code-2023	13%	15%	25%	30%		
France	Art. 219 & 219bis of the General Tax Code-2023	10%	15%	19%	24%	25%	
Colombia	https://practiceguides.chambers.com/practice- guides/corporate-tax-2023	15%	20%	35%	38%	40%	50%
Nigeria	https://practiceguides.chambers.com/practice- guides/corporate-tax-2023	0%	20%	30%	50%	65,75%	58%

Table 1: Statutory CIT rates of ten countries in 2023

Source: Personal realization of the researcher from the tax codes (2023)

4.4.3. The bias of the legal tax rate (LTR) compared to the marginal tax rate-MTR

The "*bias of the legal tax rate (LTR) in relation to the marginal tax rate (MTR)*" consists in fixing by law a tax rate of the corporate income and imposing any additional unit of this income with a marginal tax rate-MTR. The rate differential can be positive, negative or zero. This bias favors firms with MTR lower than LTR and disadvantages other firms.

4.4.4. The bias of the effective tax rate (ETR) compared to the marginal tax rate-MTR

The "bias of the effective tax rate (ETR) in relation to the marginal tax rate (MTR)" consists of setting, on the basis of the tax benefits, an effective tax rate (ETR) and taxing any additional unit of corporate income with a marginal tax rate-MTR. The rate differential can be positive, negative or zero. This bias

favors firms with a ETR lower than MTR and disadvantages other firms.

4.4.5. The bias of corporate tax rate in relation to the interest rate

The "bias of corporate rate in relation to the interest rate" consists of setting the CIT rate at a level that is generally too high compared to the interest rate of the firm's borrowed capital. This bias favors firms with non-zero financial leverage and disadvantages firms with zero financial leverage because of the principle of deductibility of debt interest charges in the calculation of corporate tax, the consequence of which is the saving of corporate tax.

4.4.6. The bias of corporate tax rate in relation to the dividend rate

The "bias of corporate tax rate in relation to the dividend rate" consists of setting the corporate tax rate at a level that is generally too high compared to the corporate's equity dividend rate. This bias favors firms with non-zero financial leverage and disadvantages firms with zero financial leverage because of the principle of taxation of equity dividend charges in the calculation of corporate tax, the consequence of which is dividend leakage.

4.5. Biases relating to the tax base

The biases relating to the tax base combine the bias of the tax base with respect to the interest base and the bias of the tax base with respect to the dividend base.

4.5.1. The bias of the tax base in relation to the interest base

The "bias of the tax base in relation to the interest base" consists of choosing as the basis for calculating CIT, the firm's Earnings Before Interest and Tax -EBIT- which, is an unknown, random variable, uncertain and subject to caution, in relation to the basis for calculating interest charges, which is the nominal value of the corporate capital borrowed. This bias favors firms with non-zero financial leverage and disadvantages firms with zero financial leverage because of the principles of deductibility of debt interest charges and taxation of equity dividend charges in the calculation of CIT.

4.5.2. The bias of the tax base in relation to the dividend base

The "bias of the tax base in relation to the dividend base" consists of choosing as the basis for the calculation of corporate tax, the Earnings Before Tax-EBT- of the firm which, is an unknown variable, random, uncertain and subject to caution, in relation to the basis for calculating dividend charges, which is the nominal value of the corporate's equity. This bias favors firms with non-zero financial leverage and disadvantages firms with zero financial leverage because of the principle of taxation of equity dividend charges in the calculation of CIT.

5. Conclusion

The analysis of the corporate income tax systems of the countries of the world makes it possible to count a total of, in a non-exhaustive way, 20 biases linked to the CIT. Of this number, 2 biases relate to corporate financing, 3 to corporate investment, 7 to corporate earnings, 6 to corporate tax rate and 2 to the tax base. These corporate tax biases affect the tax and financial behavior of firms because of the corporate tax savings they provide and constitute the cause of a tax optimization strategy. A questioning of corporate income tax systems and of the corporate's overall sources of financing is necessary and sufficient, in order to financially integrate corporate income taxation system to a corporate capital. This would make it possible to move from a corporate income taxation system to a corporate tax. Research to estimate or value taxable capital has been done in a previous article. The corporate tax rate on capital remains to be determined; which will be the subject of a later article.

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