
Reforms Effectiveness and Fiscal Performance in Car

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Abstract

The CAR is a landlocked country in the heart of Africa with enormous potential not yet exploited but economically poor. The breasts providing it with the revenue to finance its public expenses are made up of tax and customs revenue as well as external donations and loans. Tax and customs revenues are preponderant and decisive in its own resources but they bring in little compared to the total wealth of the country measured in terms of GDP. Several reforms whose main goal is to improve the yield of Central African tax revenues have led the country to review the legal (tax code, investment code, tax treaties), economic (tax provisions applicable to the sectors of economic activity) and tax (measures in terms of tax rates, tax base and basis, conditions of liability and exemptions). The ultimate objective was to achieve profitable and inexpensive taxation for the Central African taxpayer. The aim of this article is to analyze the effectiveness of these reforms in terms of performance with regard to the successive measures applied to modify the country's tax system.

Keywords— Efficiency, Reforms, Tax performance

I. INTRODUCTION

The underdeveloped countries, particularly those of sub-Saharan Africa, experienced in the last of 1970 and earlier 1980 economic crises (linked to the collapse in the price of raw materials for export) and financial crises (linked to the collapse of internal banking systems and the international over-indebtedness of these countries). One of the most popular solutions to these crises was the implementation of economic and financial reforms, one of the components of which was budgetary reform. These aim to reduce the imbalance of the budget by improving revenue and reducing its expenditure included in the State budget. The reforms of the tax system of the countries that have experienced these crises are part of this perspective.

II. LITERATURE REVIEW

The literature is abundant on the experiences of tax reforms in Africa and around the world. The differences in results observed in these countries are mainly due to structural differences between the economies.

2.1. Theoretical Arguments on Tax and Tax Reform

There is an abundant literature on tax reforms and their background in both developed and underdeveloped countries. The conclusions of this work are mixed and emphasize that the results of tax reforms depend on the economic structure of each country. Starting from the theoretical debates on the acceptability or otherwise of taxation in a society, a traditional debate opposing the classics to the Keynesians, the classics are for a minimal State so as not to modify the behavior of economic agents and consequently the economic equilibrium through taxation. This thought will be taken up by supply-side economists with Arthur Laffer (1974) who think that too much tax kills tax. This means that a tax rate above a certain threshold harms its base, a consequence of the discouragement of private initiatives and investments.

The idea of optimal taxation inspired Ramsey (1927) based on the work of Pigou (1920) who sought to solve the problem of the distribution of the tax burden between final consumption goods in order to maximize the utility of the representative agent. His model will be taken up later by Diamond and Mirrless (1971) by

proposing the tax incidence model to take equity into account in a multi-agent framework.

However, by summarizing the oppositions of these currents of thought, we note that a consensus has emerged, in particular on the concept of the minimal State which would like the tax resources to be used by the State not to be excessive to the point of discouraging private initiatives and investments. The Keynesians being convinced of this thought that the existence of an optimal rate of pressure is necessary to act on the tax multiplier to impact on the macroeconomic objectives of full employment and economic growth, while the neo-classics focused on determining an optimal tax structure. These two currents of thought have made taxes an instrumental variable of economic policy.

Conceptually, the degree of intervention of a State in an economy determines the weight of taxation in the wealth created and the rate of tax pressure is the main indicator. It cannot therefore be excessive above or low below a certain threshold, hence the concept of the optimal tax pressure rate, which serves as a benchmark in almost all economies that have started tax reforms.

Ultimately, economic theory justifies tax levies by the three sovereign functions falling to the State: the function of allocation (financing of collective services), the function of redistribution (guarantee of justice and social stability) and the function of stabilization (promoting employment, price stability and economic growth).

2.2. The empirical literature on tax reforms

In the majority of sub-Saharan countries, the objectives of tax reforms aim to obtain optimal taxation by taxing broad-based goods at a low rate and greater economic neutrality that does not modify the behavior of economic agents to the point of modifying the economic balances determined under Paretian optimum conditions. Many studies have addressed the evaluation of the effectiveness of tax reforms based on the criteria of optimal taxation. Thus, for Ngongang (2007) having worked on the CEMAC countries having opted for the fixed exchange rate, faced with a shock in these countries, the main adjustment variable gives priority to the budgetary policy favoring the fiscal instrument. The latter consists of raising the rate of VAT and excise duties and reducing direct taxation, in particular including corporate income tax to boost business competitiveness. States whose tax burden remains low should seek to converge towards the CEMAC average. An increase in the indirect tax burden

as an objective of the reforms in these countries often gives more priority to improving the efficiency of the VAT by rationalizing tax expenditures by eliminating or reducing exemptions, adopting the reduced rate VAT for certain categories of goods and the institution of the VAT reverse charge mechanism for the importation of certain capital goods rather than an increase in the standard rate (CEMAC Commission, FERDI August 2017).

For authors such as Bassolet (1993), the main objective of the reforms is to broaden the tax base and reduce tax rates in order to maximize tax yield and make the tax fairer by making the tax burden according to the contributory capacity of each taxpayer in the society. Increased tax revenue can come from discretionary measures both through broadening the tax base or from changes in the tax structure by the government.

Adam, Bevan et al. (1998), in their work on a panel of 22 countries over the period from 1980 to 1996 in sub-Saharan Africa, gave the following results:

- 1) The share of agricultural production in total production has a positive but significant marginal impact on trade taxes but conversely, it has a negative and significant impact on income tax yield while the share of I industry has a positive effect on performance, although this is only significant in aggregate terms. Public spending in the 1980s within the franc zone countries had positive effects on tax yield with a marginal elasticity of 0.2 falling to 0.06 in the 1990s.
- 2) During the 1980s, public expenditure in the CFA zone countries had a positive impact on tax yield (with a marginal elasticity of 0.2) but for the 1990s it fell to less than 0.06. Conversely, high government spending was negatively associated with total income tax.
- 3) Terms of trade effects have a robust and more significant impact on trade taxes than on indirect and income taxes. An increase in export prices improves trade and income tax returns while an increase in import prices uniformly has negative effects on income returns, and in this case the effect is significant for total and commercial taxes
- 4) The effects of the real exchange rate are studied and have given interesting results even if they are counter-intuitive. A depreciation of the equilibrium exchange rate has a positive and growing effect on total income tax in countries outside the CFA zone, a finding contrary to this trend is observed in the CFA zone where real exchange rate depreciations have tends to increase the total tax on income, while the removal of

the real exchange rate imbalance also reduces the tax yield.

Research applied to the experimentation of reforms in an individual setting on certain African countries has given markedly different results despite the convergence of certain results of the reforms. This is the case with the work of Nashashibi et al. (1994) who found that the increasingly important cause of the deterioration in tax performance in the countries of the FCFA zone in the second half of the 1980s where the rate of exchange rate is fixed is linked to the divergence of the real exchange rate from its equilibrium path. Conversely, countries with a flexible exchange rate observe a convergence of their real exchange rate towards its equilibrium path thanks to their ability to improve their fiscal performance.

For Newman-Kwandwo (1998), the institution of the VAT as an essential tool for mobilizing taxes on consumers in developing countries responds to the additional revenue needs experienced by these countries.

The work of Bassolet (1993) in the case of Senegal showed a small difference between the overall elasticity, thus demonstrating that the reforms did not produce a significant influence on the yield and productivity of taxes in this country.

Nehemiah-Osoro (1995) who worked on the returns to reforms in the case of Tanzania, showed that these reforms resulted in high rates that were likely to generate more revenue but ended up causing distortions such as exemptions excessive tax, fraud, smuggling and weak tax administration.

Finally, the work of Kouassi et al. (1996) on the major sources of financing tax operations in the case of Côte d'Ivoire in the 1970s favored export earnings and external borrowing, the gradual drying up of which in the early 1980s combined with the narrow domestic financial markets and the rules of the franc zone and the CEMAC almost no longer allowed domestic financing and gave the only alternative for budgetary adjustment the reduction of the public deficit by the contraction of public expenditure or the increase in tax revenue or other public revenue.

III. THE FOUNDATIONS AND STRATEGIES OF TAX REFORMS IN THE CAR

A) The Root Causes of CAR's Tax Reform

Before the 1950s, the CAR already had a tax collection system established by the colonial administration for

the benefit of the French government. During the postcolonial period that followed the independence of the French colonies in Africa in the 1960s, in particular that of the CAR on August 13, 1960, the new government of the Central African Republic at the time was responsible for ensuring the autonomy and control of its institutions, its economy and hence its budget. It is in this context that the Directorate General of Taxes and Domains was created in 1962 and at the same time, several taxes and duties were instituted in order to allow the State to ensure its functioning. By the signing of Decree No. 70-314 of November 11, 1970, a Collection Department was set up which had three departments: the accounting department, the payment department and the pursuit and collection department.

A few main causes of inefficiency that led to in-depth reforms were mentioned most often during IMF assessment missions, but also by evaluation reports and proposals for reform strategies of the Central African tax system by groups of experts and consultants appointed for this purpose. The conclusions of all its missions converged towards the same findings: the tax system is characterized by the existence of numerous tax rates backed by the same tax base, which makes the tax system more complex and does not encourage consent voluntary tax, even worse does not allow a reduction in the administrative costs of tax. We also note the weakness of tax revenue due to a less effective collection policy, the coexistence of specific and ad valorem tax rates based on the same base, the slowness noted during a certain period of the harmonization of tax legislation of the CAR with the sub-regional directives in the CEMAC relating to VAT, IS, investments, etc.

Human problems have also been explanatory factors for the low tax yield of the CAR, in particular the low capacity of tax staff, many of whom have not received specialized training in tax administration and management, but are still plagued by corruption, ineffective control and verification. Finally, we note the other major causes such as the preponderance of the informal sector in the face of taxation, the irrationality of the policy of exemptions causing loss of earnings, as well as the problem of digitization and digitization of the tax administration.

B) The start of the reforms

Ordinance number 58/9 of December 30, 1958 created the RCA CGI and its subsequent modifications were made under the LDF. Three main periods in the reform of Central African tax policy have been observed:

1) The period from 1958 until the end of 1970

According to the directory of texts relating to the CGI, during the above-mentioned period, ordinances taken relating to the LDF made it possible to modify the CGI created in 1958 by providing additional provisions which made it possible to create new taxes and duties or to modify or abolish those existing in the CGI in order to adapt tax policy to the economic and social objectives of the government. It can be noted that during this period, the following taxes and duties were instituted: the IFPP (LDF of January 1962), the TA, the IPN, the Patent, the License and the ICA (LDF of December 31, 1962), the CDS (LDF of December 28, 1962), as well as the TA (LDF of December 23, 1965). Other ordinances have been issued relating in particular to specific provisions with regard to the collection of taxes (LDF of April 24, 1970), as well as the creation of the IS (LDF of April 3, 1971). Similarly, taxes such as the land registration tax (LDF of 1972), the tax on the distribution of credits (order of January 24, 1974), the tax on transactions (order of December 31, 1973), the special tax on coffee (LDF of December 22, 1977) as well as the exceptional levy on company reserves (order of December 22, 1977) were created. Over the same period, multifaceted changes were made to adjust the CGI and adapt it to the tax policy of the State. These modifications concerned, among other things, the adjustment of the ICAI rate, the modification of the code of tax benefits under common law, the registration of income from securities and the stamp, the code of tax benefits, etc.

2) The period from 1972 until 1992

The creation of a few fiscal instruments marked this period. It focused in particular on the institution of a Minimum Fiscal MF (LDF of January 14, 1984), the creation of the tax representative of the tax on diamonds (LDF of January 20, 1987). Over the same period, other ordinances were issued setting the terms of the transfer tax (LDF of January 4, 1988), the creation of a flat-rate levy on games (LDF of February 3, 1988), the creation of a chapter of the CGI relating to the tax on income from movable capital (LDF of 19 May 1988).

CGI modification projects were undertaken over the period in question and were intended to modify or supplement the previous provisions by orders and LDF. We can note for example the taxation on savings (LDF of May 30, 1989). It should be remembered that this period was characterized by several texts of ordinance

having allowed subsequent modifications of the CGI of the RCA.

3) Reforms from 1993 to 2012

The 1990s marked a decade of Central African public finance reforms in general, and the tax system in particular, in the history of Central African taxation. These reforms have been implemented according to observations in all the countries of the franc zone affected by the devaluation of the CFA franc on January 1, 1994 and whose restructuring of the economic and financial sectors constitutes one of the priorities for the success of this devaluation. Thus, the reforms implemented in the public finance sector are more focused on the institutional, legal and organizational fields and on the instruments of taxation.

The major reform that took place during this period was the one that took place in 2008 resulting from the reports of assessment missions and proposals for reform strategies of the CAR tax system by groups of experts and consultants appointed for this purpose. .

The examination of the structure of internal taxation instruments has shown that the Central African tax administration has carried out legislative and organizational reforms of the provisions contained in the directives issued by the CEMAC. We find among others:

- Directive 02/01/UEQC-050-CM-06 of August 3, 2001 relating to corporation tax (IS);
- Directive No. 01/04-UEAC-177 of July 30, 2004 relating to personal income tax;
- Directive 1/99/CEMAC-028-CM-03 of December 17, 1999 harmonizing the laws of the Member States with regard to VAT and Excise Duties
- The OHADA uniform act on the organization and harmonization of business accounting adopted on February 22, 2000

The diagnosis reveals a tangle of several tax rates on the same tax base, a complexity of the control of the procedure of liquidation and payment of taxes making control costly and causing a bad business climate in the CAR.

3.1. Income tax shortcomings

3.1.1. Single annual personal income tax

This type of tax is levied on both the additional tax and the flat tax on personal income as the tax base. In addition, the flat-rate personal income tax (IFPP) is separate from the personal income tax (IRPP) according to the provisions of the CGI relating to the

categories of persons subject to each of these taxes, the combination of these two separate taxes makes the method of payment and recovery complex. Another difficulty imposed by the characteristics of the IRPP is to include a scale composed of several slices (8 slices of annual income) ranging from the slice of 0 to 360,000 to the slice of 3,300,000 and more with rates progressive (marginal rates for the upper brackets) varying from 0 to 50%. The liquidation of such a type of tax according to such a scale is both tedious and heavy for the Central African tax system.

3.1.2. Corporation tax

This type of tax is due by a category of taxpayers referred to in article 121 of chapter 2 of title 1 of the CGI in this case are taxable to IS, capital companies or similar (SA, SARL and SURL), cooperative societies and their unions, limited partnerships and joint ventures.

The corporate tax rate is set at 30% by article 31 of the finances law of 1999 with the exception of agricultural activities for which the rate is set at 20%.

The major drawback noted on the CIT is that it is a tax with a single taxation regime (regime of real profit) which represents a constraint for taxpayers in that it compromises the principle in force of the segmentation of the taxable population in almost all the tax systems prescribed by the CEMAC directive relating to corporation tax. This leads to the risk of inefficient file management.

The institution of a second rate of 20% to encourage the development of the agricultural sector despite the non-existence of agricultural companies in the file of the DGID is made by way of derogation from the provisions of article 55 of the CEMAC directive relating to corporate income tax which authorizes the setting of a single rate in the range between 25 and 40%.

3.1.3. Minimum flat rate tax (IMF)

It is a tax to which companies subject to income tax are liable. Its tax base is the overall turnover as well as the various products and profits made during the previous calendar year. The MFI as an installment of corporate tax is liquidated on the basis of declaration to the tax authorities of the amount of their turnover achieved the previous year no later than July 15 of each year.

a) For agricultural activities: 0.50%

b) For other activities:

- Turnover of less than 100,000,000 F: collection of a flat rate of 1,500,000 F
- 101,000,000 F < Turnover 200,000,000 F: 2%

- 201,000,000 F < CA < 500,000,000 F: 1.85%
- Turnover greater than 500,000,000 F: 1.70%

Only as a deposit or even a method of liquidation of IS, the MFI includes both tax rates, the scale comprising slices of turnover and lump sums and allows to have a rate applied turnover with a fixed minimum amount, which is contrary to the practice in force in countries south of the Sahara.

In addition, the MFI corresponding to the installments of corporate tax for the year is determined on the basis of a provisional turnover that the taxpayer must declare no later than February 15, which is a hassle violating article 23 of the uniform act of OHADA on the accounting organization of companies.

3.1.4. The insufficiencies of deductions at source in lieu of down payment of IS or IRPP

Source deductions are a mechanism to fight against the informal sector and to reach people carrying out activities liable to tax but not listed by the tax authorities. In Central African legislation, withholding taxes are generalized to all natural and legal persons who make commercial and non-commercial industrial profits without any restriction, which is contrary to the primary objective of combating the informal sector.

These installments or deductions at source affect imported goods, commercial purchases under the domestic regime from producers and importers by taxpayers under the real tax regime, payments made to service providers by State bodies and public or semi-public companies, payments made to service providers by private companies under the real system, payments for rent.

The shortcomings noted that:

- ✓ A homogeneous tax base with the existence of a multitude of rates varying between 2% and 15% does not facilitate rational management of the recovery of deductions.
- ✓ The scope of these deductions at source is too broad, which does not allow easy control of the effective repayment by all the persons who make the deduction.
- ✓ The obligations of the persons who make the deduction are not sufficiently clarified to allow the control of the affairs of the persons on whose behalf the deductions and repayments are made.
- ✓ The deferred payment granted to certain companies in good standing vis-à-vis the tax authorities and whose list is drawn up by the

DGID is not transparent and is likely to break the confidence of companies that offer less risk.

3.1.5. The shortcomings of direct taxes related to income taxes

3.1.5.1 Final taxes

Directive number 01/04-UEAC-177 of July 30, 2004 relating to personal income tax provides in its article 58, three tax regimes including the basic regime or minimum cash system. The discharge tax is part of the minimum or basic regime that applies to individuals who achieve an annual turnover of less than or equal to 30,000,000 FCFA.

However, this tax does not obey the provisions of the community directive relating to personal income tax and corporation tax or to those of OHADA on the fact that it excludes from its scope certain natural persons and all persons corporations which nevertheless meet the turnover criterion set to determine those subject to the discharge regime, yet neglecting the segmentation of taxpayers provided for by the Community directive.

Other inconsistencies noted on the discharge tax are:

- The discharge tax is established on the basis of information provided by the taxpayer or information in the possession of the administration.
- The declaration obligation is not effective because it does not distinguish between the obligation to declare existence and the obligation to declare results according to the minimum cash system.
- The management of the discharge tax is complicated with regard to its mode of liquidation which combines several elements in this case the sector of activity and the amounts fixed by slice of turnover

3.2. Low performance of the tax system: stylized facts

The performance of the Central African tax system is very marginal because of the very small size of the tax base characterized by weak private sector dynamism combined with the lower number of private sector companies and the predominance of the informal sector. Annually, taxation brings in a little less than 100 billion FCFA to the State and registers an average annual pressure rate of less than 10%, which deprives the country of any possibility of increasing its own resources. The presentation of the data of the stylized

facts allows us to appreciate the performance of the tax system of the CAR:

Table 1: Evolution of the fiscal pressure of the CAR

Year	2013	2014	2015	2016	2017	2018	2019
Tax revenue	39.80	37.58	60.90	52.92	84.57	102.19	111.68
GDP	835.45	935.57	1002.59	1081.51	1203.32	1233.63	1301.13
Tax pressure	4.80 %	4.02%	6.07%	4.89%	7.03%	8.28%	8.58%

Source: Central African Financial Administrations

The table shows us that the tax burden rate of the CAR remains low, it is less than 10% per year and varies between 4.80% in 2013 and 8.58% in 2019 despite the long-term implementation of the reforms focused on modernizing tax administration and management. The explanatory factors incriminated are the difficulties of broadening the base because of the predominance of informal activities, the non-rationality of tax exemptions, the non-taxation of the land deposit where a strong fiscal potential.

IV. THE REFORMS IMPLEMENTED

The reforms implemented are long-term and continue to this day. They have been the subject of a mid-term evaluation because the expected results escape any prediction of the probable timeframe for achieving their objectives, but also of the structural or short-term nature of the tax measures, some of which are long-term and others in the short term. However, the main axes of the reforms do not only target tax rates but also the legal and institutional framework. We only consider here the tax rate reforms.

4.1. Reform measures for the single annual personal income tax

The main measures taken to reform the IRPP recommend the abolition of the additional tax and the integration of the flat tax on the income of natural persons into the IRPP as a minimum tax due.

It is agreed that the IRPP remains the only tax on the income of natural persons who generates more than 30,000,000 FCFA in turnover.

In addition, the single real regime (annual turnover greater than 100,000,000 FCFA) to which persons subject to the IRPP are subject is now supplemented by the simplified real regime (turnover less than 100,000,000 FCFA but greater than 30,000,000 FCFA) with subsequent obligations.

Finally, certain measures aim to make the IRPP effective by:

- The use of the minimum tax to recover the IRPP
- The definition of the new methods of collection of the IRPP taking into account the tax paid the previous year
- The merger of commercial and industrial artisanal benefits schedules and non-commercial benefits to make them comply with the provisions of OHADA law
- The revision of the IRPP scale by reducing the number of brackets as well as the marginal tax rate which is far higher than that of the IS

Table 2: reformed monthly scale for calculating the personal income tax

Monthly net income brackets	Difference	Rate applicable to net	monthly IRPP	Cumulative IRPP
0 à 31.500	31.500	0%		
31.501 à 140.000	108.499	10%	10.850	10.850
140.001 à 280.000	139.999	15%	21.000	31.850
200.001 à 420.000	219.999	25%	35.000	66.850
Over 420.000	-	35%		

Source: Head of Central African Tax Legislation

4.2. Corporate tax reform measures

The strategies in this area aim to modify the rates, methods, regimes and thresholds of corporate tax.

The main measures focused first on the pure and simple abolition of the IMF, which is a tax with a plurality of rates. It is instituted to replace the IMF a

single rate to be applied to the turnover to obtain the minimum corporate tax due by the companies. New terms and conditions for the collection of corporate tax are set which take into account the tax paid the previous year, whether it is liquidated on the profit or on the turnover.

The tax regimes have been reformed as follows:

- The real tax benefit regime for legal entities that achieve an annual turnover of more than 100,000,000 FCFA.
- The simplified real profit tax regime for those who achieve an annual turnover greater than 30,000,000 FCFA but less than 100,000,000 FCFA with subsequent obligations.

With regard to the liability regime, the main reform measures relate to:

- The submission of all natural and legal persons who achieve an annual turnover of more than 100,000,000 FCFA whatever the nature of their activities to the real profit regime with the accounting obligations of the OHADA accounting law system and liability to VAT
- The submission of all companies without distinction of their legal form and the nature of their activities which achieve an annual turnover greater than 30,000,000 FCFA but less than 100,000,000 FCFA to the simplified real profit regime with the accounting obligations of the system relief from OHADA law and VAT liability:
- Are subject to the basic regime all natural or legal persons who achieve an annual turnover of less than 30,000,000 FCFA and who are excluded from the scope of VAT
- Within taxpayers subject to the basic system, the reforms provide for the distinction between micro enterprises which achieve a turnover of 5,000,000 FCFA per year and which will not be subject to the accounting obligations of small enterprises which will be subject to the accounting obligations of the system minimum cash requirement of OHADA accounting law

4.3. The reform of advance payments and deductions at source

4.3.1. Persons and taxable materials

Corporate tax's down payment policy consists of harmonizing the mechanism for determining down payments and restricting the scope of down payments

and deductions at source to persons who must be deducted the down payment during their transactions or who must carry out the withheld and return it to the counters of the tax collectors

4.3.2. Exemptions

The reform of exemptions from deductions at source consists of:

- ✓ Extend exemptions to companies subject to real profit both with regard to imports and local purchases.
- ✓ Pursue efforts to eventually include medium-sized enterprises in the scope of exemptions from withholding tax

4.3.3. Basis and calculation of the deduction

The reforms provided for an accumulation of the withholding tax with the installments of IS and IR. It is also planned to abolish multiple rates in compensation and are retained at most two rates applicable both to the customs cordon and inside. In addition, a much reduced rate is provided for registered companies other than those subject to the real system and a high rate for companies that do not have the NIF. Finally, the rate of 15% in discharge is maintained for services provided by foreign companies.

4.4. The reform of the discharge tax (IL)

The name of the IL has been reviewed and the new name adopted is the Single Global Tax. Then the scope of the IL was extended to all natural or legal persons who carry out artisanal, industrial, commercial, agricultural or non-commercial activities which achieve a turnover of less than or equal to 30,000,000 FCFA instead of 500,000 FCFA in vigor. In addition, the distinction between the obligations to declare the existence of the obligation to declare results has been defined, and the scales applied before the reform have been abolished. Furthermore, the turnover limit retained to be subject to the obligation to keep accounts is now 5,000,000 FCFA instead of 500,000 FCFA previously in force before the reform.

4.5. The patent contribution reform

The business license contribution is not governed by community provisions, however those that govern it are national but vary very little from one country to another in CEMAC and WAEMU. What catches the attention is the complexity of the calculation mechanism as well as the administrative heaviness linked to the provisions of the CGI which require the use of a multitude of tables comprising classes, the list of activities and amounts to determine the tax. . The

fact of resorting to the number of personnel for certain activities, to the capacity of production facilities for others, to permanently fixed installations and tools for still others is uneconomic in that this practice does not encourage 'investment.

The reforms of the patent contribution have removed the tables of the scale of the said patent in force to institute a new method of calculation highlighting the option between:

- One or two rates to be applied to the CA to obtain the fixed business license fee while maintaining the current mechanism for determining the Proportional Duty.
- Three to four rates applicable to the turnover to obtain the total amount of the patent (DF + DP + additional cent).

In addition, the advance payment has been maintained in full or in two installments on the basis of the business license for the previous year and according to the nature of the activity with regularization when declaring income.

4.6. The Social Development Contribution (CDS)

According to the findings, the CDS is not the emanation of community but national provisions and is due by natural or legal persons who make industrial, commercial, artisanal, agricultural or non-commercial profits. It is therefore intended to finance the construction of schools, health centers or their equipment and appears as a national effort which must be required of all those who have income. Its average annual contribution to the state budget is about 800,000,000 FCFA.

Its tax base is the remuneration paid to employees, which is both inconvenient and a brake on the payment of decent wages to employees and therefore support for consumption. Its rate of 10% seems too high and the CDS is very similar to the employer's tax or the employer's contribution depending on the country.

The reforms envisaged the following modifications:

- The reduction of the CDS by half and its base is now linked to the level of turnover for companies and income for all other persons earning an income in the CAR and no longer the remuneration paid to employers,
- Taxable persons are now all persons who have a certain income threshold,
- CDS reporting deadline is now no later than the 15th of the month.

4.7. Value Added Tax (VAT)

Directive number 1/99/CEMAC-028-CM-03 of December 17, 1999 harmonizing the laws of the Member States with regard to VAT and excise duties has been transposed into the CGI. However, certain provisions for which the option is left to the Member States do not allow easy management of the tax.

Thus the possibility offered by article 5 of the directive to create a real system and a simplified real system to limit obligations and facilitate administrative management has not been exploited.

The provisions of the CGI relating to the pro rata deduction which fix the deduction rates according to the pro rata percentages are not in conformity with those of the directive in its articles 26 and 27 which prohibit the deduction when the pro rata is lower than 10%.

The limitation of the right to deduction is a violation of the fundamental principles of VAT which is intended to be a neutral tax. The VAT reforms consisted of modifications to the following variables:

- For taxable persons: the treatment of natural and legal persons for income tax has been harmonized by excluding from the scope of application legal persons with an annual turnover of at most 30,000,000 FCFA,
- For tax rates: the reduced rate of 5% has been removed,
- For the base and the calculation of the VAT: the provisions relating to the percentage of the pro rata deduction have been brought into line with those of the CEMAC directive on VAT by putting an end to the limitation established,
- For the tax system: a new segmentation of the population subject to VAT has been carried out by creating:
 - ✓ A real regime for natural or legal persons who achieve more than 100,000,000 turnover per year,
 - ✓ A simplified real regime for natural or legal persons who achieve a turnover less than or equal to 100,000,000 FCFA but greater than 30,000,000 FCFA.
- For obligations: the reporting, accounting and payment obligations for the simplified real profit regime have been set.

V. EVALUATION OF THE PERFORMANCE OF CENTRAL AFRICAN TAXATION: ECONOMETRIC APPROACH

5.1. Model specification and estimation technique

5.1.1. Technique for estimating fiscal elasticity and buoyancy

By convention, the elasticity of tax revenue to income is estimated in aggregate models as a single number, however it is usually expressed as the weighted average of individual tax elasticities that differ widely with changes in income. In this way, tax elasticities must be measured by analyzing individual tax elasticities separately. Analytically, it is necessary to decompose the income elasticity of each tax into two elements: the elasticity of the tax to the base and the elasticity of the base to the income. According to Mansfield (1972) symbolically these elasticities are defined as follows:

$$E_T^R = \frac{\Delta T_t}{\Delta R} \times \frac{\Delta R}{\Delta T_t}$$

Considering that total tax revenue is the sum of individual tax revenue, we can decompose the formula for the elasticity of total tax revenue to income as the sum weighted by the share of each tax in total tax revenue of the product of the elasticity of each tax with respect to its base by the elasticity of the base of each tax with respect to income:

$$E_T^R = \frac{T_1}{T_t} \left(\frac{\Delta T_1}{\Delta R} \times \frac{\Delta R}{\Delta T_1} \right) + \dots + \frac{T_k}{T_t} \left(\frac{\Delta T_k}{\Delta R} \times \frac{\Delta R}{\Delta T_k} \right) + \dots + \frac{T_n}{T_t} \left(\frac{\Delta T_n}{\Delta R} \times \frac{\Delta R}{\Delta T_n} \right) \quad (1)$$

Equation (1) means that the total tax elasticity is the weighted sum of the individual tax elasticity.

Similarly we find:

$$E_{T_k}^R = \left(\frac{\Delta T_k}{\Delta A_k} \times \frac{A_k}{T_k} \right) \left(\frac{\Delta A_k}{\Delta R} \times \frac{R}{A_k} \right)$$

In expression (2), we can decompose the elasticity of any tax whatsoever and taken in isolation into the product of the elasticity of the tax to its base and the elasticity of the base to income. By combining equations (1) and (2), we find:

$$E_{T_t}^R = \frac{T_1}{T_t} \left[\left(\frac{\Delta T_1}{\Delta A_1} \times \frac{A_1}{T_1} \right) \left(\frac{\Delta A_1}{\Delta R} \times \frac{R}{A_1} \right) \right] + \dots + \frac{T_k}{T_t} \left[\left(\frac{\Delta T_k}{\Delta A_k} \times \frac{A_k}{T_k} \right) \left(\frac{\Delta A_k}{\Delta R} \times \frac{R}{A_k} \right) \right] + \dots + \frac{T_n}{T_t} \left[\left(\frac{\Delta T_n}{\Delta A_n} \times \frac{A_n}{T_n} \right) \left(\frac{\Delta A_n}{\Delta R} \times \frac{R}{A_n} \right) \right] \quad (3)$$

The interest of analyzing the income elasticity of the tax system has the double advantage of identifying the sources of rapid income growth on the one hand, and the sources of slow income growth on the other hand.

Moreover, equation (3) makes it possible to identify this part of growth that decision-makers can control (Mansfield, 1972).

With regard to our study, we estimate the elasticity of total tax revenue with respect to the Gross Domestic Product in nominal value, which leads us to formulate the model:

$$T_k = \delta_k R^{\gamma_k} \theta_k$$

By taking the double logarithm of this equation, we get:

$$\ln T_k = \ln \delta_k + \gamma_k \ln R + \ln \theta_k$$

Where the logarithm of tax revenue, the logarithm of GDP, is constant and the model error term.

The method of ordinary least squares is used to estimate the coefficients of the variables and the equation being in the form of the double logarithm, it provides an estimate of tax buoyancy because it determines the percentage response of the change in tax revenue to the percentage of the change in GDP.

5.1.2. Model estimation

We have retained the multiple regression model whose estimation by Ordinary Least Squares using E-views 9.0 software gives the following results:

$$\text{LOG (TAXREVENUE)} = 0.44 * \text{LOG}$$

(3.06)

$$\text{(TAXREVENUE (-1))}$$

$$+ 0.56 * \text{LOG (NOMINALGDP)} + 0.03 * \text{TIME}$$

$$(3.14) \quad (0.29)$$

$$- 0.35 * \text{DUMMY} - 1.47$$

$$(-3.10) \quad (-0.94)$$

$$R^2 = 0.73 \quad N = 30 \quad F\text{-stat} = 16.2 \quad P (F\text{-stat}) = 0.00 \quad DW = 2.07$$

Table 3: Econometric tests of violation of assumptions

Test	Object	Statistic	P-value	Decision
Jarque-Bera	Normality	JB = 1,74	0,42	Les erreurs sont normalement distribuées
Breusch-godfrey	Autocorrelation	nR ² = 0,3	0,86	Lack of errors autocorrelat

				ion ¹
Breusch-godfrey	Homoscedasticity	nR ² = 3,75	0,44	Lack of errors Heteroskedasticity

Source: The author

According to Table 3, all the probabilities of the tests are above the critical threshold $\alpha = 0.05$, which confirms the null hypotheses of the normality of the errors of Jarque-Bera ($P = 0.42 > 0.05$), of absence of self-correlation of Breusch-Godfrey errors ($P = 0.86 > 0.05$) and of homocedasticity of Breusch-Pagan-Godfrey errors ($P = 0.44 > 0.05$). We can confirm that the residuals of our regression model are normally and independently distributed and therefore are representative of Gaussian white noise.

VI. RESULTS AND DISCUSSION

The results of the estimation show that the exogenous variables explain 73% of the model. The latter is globally significant ($P (F\text{-stat}) = 0$) and the regression residuals are not auto correlated ($DW = 2.07$).

The regression allows us to see that the level of tax revenue in a current period is influenced by that of the previous period. Thus, a 1% increase in tax revenue a year earlier translates to an increase in current year tax revenue of 0.44%. This reflects a low elasticity of current tax revenues compared to their level of the previous year.

The short-run elasticity of tax revenue is $0.56 < 1$ (tax revenue is inelastic to changes in GDP). This means that a 1% increase in nominal GDP without discretionary tax changes translates in the short term to a less than proportional increase in tax revenue of 0.56%. This elasticity is low and reflects the fact that in the short term and with an unchanged tax structure and tax rates, it is not possible to increase public expenditure by increasing tax revenue.

On the other hand, in the long term, assuming that tax revenues converge towards their equilibrium value, the income elasticity of tax revenues is equal to 1 (unit elasticity). This means that a 1% variation in GDP results in a variation in tax revenue of exactly 1%.

¹ This test confirms the Durbin-Watson statistic presented above

The coefficient of the dummy variable DUMMY capturing the negative effects of the recurrent mutinies and coups d'Etat that occurred in the country during the period retained by the model is negative and significant, which demonstrates the negative consequences of the socio-political crises that occurred successively in 1996, 1997, 2003 and 2013 on the country's tax revenue.

The effect of time has a positive but insignificant effect on the level of tax revenue in the country.

Indeed, the tax pressure of the CAR is not influenced by structural factors such as time, demographic structure, sectors of activity which do not explain the variation of tax revenues in the Central African context. But it is influenced much more by discretionary factors dependent on government action. In doing so, among the structural factors mentioned above, the sectorial transformations must hold the attention of the government because they appear as factors prior to the triggering of the economic growth necessary for the consequent increase in tax revenues.

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