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The growth of government annual budget through taxes collection

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Abstract. In this case study we examine the relationship between the collection of taxes and the growth of government annual revenues (case of republic of Mali) .Taxation is the most important source of revenue for modern governments, typically accounting for ninety percent or more of their income, Taxes revenues has contributed a big chunk of funds to the Malian Treasury, about 40%, with our focus being on the years (2012-2017). The primary economic goals of developing countries are to increase the rate of economic growth and hence per capita income, which leads to a higher standard of living. Government needs money to be able to execute its social obligations to the public and these social obligations include but not limited to the provision of infrastructure and social services. Progressive tax rate can be employed to achieve equitable distribution of resources. After economic modeling and estimation, we realized that there is a positive correlation between taxes collection changes and the government annual revenue.

1 Introduction

In modern industrial economies, the budget is the key instrument for the execution of government economic policies. Because government budgets may promote or retard economic growth in certain areas of the economy and because views about priorities in government spending differ widely, government budgets are the focus of competing political interests.

forecast by a government of its expenditures and revenues for a specific period of time. In national finance, the period covered by a budget is usually a year, known as a financial or fiscal year, which may or may not correspond with the calendar year. According to [1] Taxation imposes welfare costs on individuals which, expressed in money terms, exceed the tax paid. This gives rise to the idea of the excess burden of taxation, which is one of the most important concepts in public economics. It represents an efficiency loss caused by distortion in choices arising from a change in relative. According to [2], four key issues must be understood for taxation to play its functions in the society. First, a tax is a compulsory contribution made by the citizens to the government and this contribution is for general common use. Secondly, a tax imposes a general obligation on the tax payer. Thirdly, there is a presumption that the contribution to the public revenue made by the tax payer may not be equivalent to the benefits received. Finally, a tax is not imposed on a citizen by the government because it has rendered specific services to him or his family. Thus, it is evident that a good tax structure plays a multiple role in the process of economic development of any nation which Nigeria is not an exception [3]. In order to achieve the broader objectives of social justice, the tax system of a country should be based on sound principles. [4]-[5] listed the principles of taxation as equality, certainty, convenience, economy, simplicity, productivity, flexibility and diversity.

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Equity principle: states that every taxpayer should pay the tax in proportion to his income. The rich should pay more and at a higher rate than the other person whose income is less [6] [7] states that it is only when a tax is based on the tax payer's ability to pay can it was considered equitable or just. Sometimes this principle is interpreted to imply proportional taxation.

Certainty principle: of taxation states that a tax which each individual is bound to pay ought to be certain, and not arbitrary. The time of payment, the manner of payment, the quantity to be paid ought to all be clear and plain to the contributor and every other person [8]..

1.1. Malian economic situation during military crisis in 2012

Given the economic and military crisis that followed it would have taken a miracle for the realization of this revenue target allocated for the year 2012. This was the situation of macro-economic indicators of Mali in the year 2012; economic growth drastically fell from 5.3% in 2011 to −1.2% (negative rate) for the year 2012. Also another unflattering indicator was that inflation increased from 3.5% in 2011 to 5% in 2012 (see Figure A1 in the Appendix). Military and security crisis could have been the influencing factors in the drastic changes of the inflation rates and economic growth. Therefore we took the year 2012 as our point of reference. Fortunately as of now the government is trying to have solutions to this crisis by establishing a fiscal framework over 3 years, from 2013 to 2015. Following this strategy, which depends largely on external financing, the government hoped to realize a growth of 7% for the year 2013; 5.7% for the year 2014 and 5.3% for the year 2015. Whether these are optimistic or unrealistic goals, only time will confirm

1.2. The economic and financial performance of Mali with the leaders of the IMF and the World Bank to better take into account the new perspectives in april 2017

Mali's economic growth rate is 5.3% on average over the past five years(2013-2017) , control of the inflation rate, excellent agricultural campaigns and the quality of the reforms implemented were strongly welcomed by senior officials of the IMF And the World Bank, despite an unfavorable security context.

While several performances have been recorded, notably in the context of the consolidation of the growth rate, the control of inflation, the reforms undertaken in the context of fiscal consolidation, other challenges remain to consolidate acquired. These include improved tax revenues, the development of agro-industry, access to electricity and the rationalization of agricultural subsidies. Improving access to health and education facilities, training and youth employment were also at the heart of the discussions, including the reorganization of Mali's financial sector and access to SME financing The Malian banks [9]

Amazed by Malian performances, the Vice-President Africa Region of the World Bank has from the start of his remarks, announced the granting in Mali of supplementary budgetary support of 10 million US Dollars, pending a more in-depth analysis Of the requests of Mali with his staff[10]

The IMF's Department of Public Finance also received the Malian delegation, where more technical aspects of tax revenue, improved balance of payments and sectoral aspects such as agricultural development, livestock, Mali Were discussed[11]

The increase in tax revenues is a major component of growth. The payment of tax and taxes is a prerequisite for economic growth. Citizenship helps to finance their own economic and social development[12]

The paper is organized as follows: next is Section 2 which deals with the Methodology of the study. Section 3 is focused on Results and Findings of our research. Conclusions and Recommendations are availed in Section 4

2. Research Methodology

2.1. Data Collection

The data collected were provided by the Accounting Management Section of the Central Accounting Agency of the Treasury (CAAT) of Mali. This is the department responsible for the supervision and centralization of all accounting transactions and financial services of the state. Daily accounting transactions are saved from all directorates using the TABOR public accounting software, that is, state accounting. The software is designed to track weekly income and expenditure of all financial administrations. The data is updated on a weekly basis.

We chose to collect data by this method because it is modern and its simplicity, reliability and consistency are advantageous to us. This method is very reasonable because the data can be captured effectively between different structures involved in the chain of command. It has the advantage of taking account balances at the beginning. [13]

2.2. The Model

The data were analyzed through the use of the econometric software EVIEWS. In order to evaluate the relationship between the collection of taxes and revenue targets, the following regression model was built.

$TYt = \beta + \alpha\, TEXt + \alpha\, TMt + \alpha\, DNt + \alpha\, SAVYt + \theta$ (1)

Where *TYt* is considered as the dependent variable and *TEXt*, *TM*2*t*, *DNt* and *SAVYt* are the independent variables.

TYt is the Growth of Government Annual Budget ,

TEXt is the Taxes Recovery by Taxation Administration,

TM*2*t is Taxes from Customs Administration,

DNt is Foreign Dept , and ***SAVYt*** represents the Aid gives by Technical and Financial Partners . These variables are used mostly in the form of rates of change with respect to time.

3. Results and Main Findings

3.1. Results of Estimating and His Interpretation

The trend for the collection of taxes in 2012 shows that the largest revenue months are June and December. We have the following periods in a calendar year cycle. Analysis shows that during the first quarter (January; February and March), revenues are very low; this weakness can be attributed to lack of dissemination of tax information to citizens. The second quarter (April; May and June) revenue increases because beyond liquidation warnings, people begin to pay their tax. Third quarter (July; August and September) is the rainy season. This is a period when citizens have difficulties because of agricultural work which includes the purchase of pesticides; and the fourth quarter (October; November and December) shows recovery probably due to the sale of crops, therefore people have the means and naturally fulfill their tax obligations. We will initially estimate the model as the second step for interpreting the results.

3.2. Parameter Estimation

For all revenue collected by the Directorate General of Taxes, the means results we got are as follows (**Table 1**): *P-values are in parentheses, R2 = 0.72 and DW = 2.009.

Such that the model would look like:

$TYt = 97.71 + 0.119\, TEXt + 0.012 TM\, t + 0.030 DNt + 0.492 SAVYt$

From these results we note that only one variable, that is the *SAVYt* is not significantly different from zero (0) since its p-value is greater than the level of significance 0.05.

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Table1: Revenue Collected by the Taxation Administration

Months	Revenue Collected
JANUARY	1 000
FEBRUARY	760
MARCH	870
APRIL	7 000
MAY	51 000
JUNE	65 000
JULY	50 000
AUGUST	35 000
SEPTEMBER	30 000
OCTOBER	45 000
NOVEMBER	51 000
DECEMBER	76 000

Amount in US Dollars, 2012 year, source: Section Compte de Gestion ACCT

Table 2. Estimated parameters

$\alpha 1$	$\alpha 2$	$\alpha 3$	$\alpha 4$	$\beta 0$
0.119 (0.031)	0.012 (0.048)	0.030 (0.023)	0.492 (0.074)	97.71 (0.043

3.3. Results and Main Findings

After the modeling and estimation we can say from the value of α1 = 0.119 that there is a positive correlation between the collection of taxes and Government annual revenues. We can also say that the estimate of revenue growth model of government annual budget sshows that it is influenced by changes in the collection of taxes. This significant and positive relationship shows that the two clusters are moving in the same direction.

Thus it confirms that all revenues from the taxation administration in the long term depend in volatility and low amounts collected by the tax authorities. It also shows that with the current revenue structure of Malian taxation administration it would be impossible to achieve the fiscal targets fixed by the International monetary found (IMF) and World bank.

4. Conclusion and Recommendations

4.1. Conclusion

After the modelling and estimation we can say from the value of α1 = 0.119 that there is a positive correlation between the collection of taxes and revenues generated by financial services (government annual budget). We can also say that the estimate of revenue growth model of taxation administration shows that it is influenced by changes in the collection of taxes. This significant and positive relationship shows that the two clusters are moving in the same direction.

4.2. Recommendations

To achieve the fiscal objectives fixed by the Government of Republic of Mali, we definitely need some remedial solutions. To achieve the revenue assigned, the Taxation administration must take robust measures in their effort on the collection of taxes, and implement a proper administration of VAT including the improvement of research methods and the creation of mixed brigades between financial services. The directorate can also pursue the quest for efficiency through local communication and explain and educate our economic and administrative partners about the real issues of the taxes. This would help to offer the best quality of service to users, assess the potential of

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different localities and give effective support to the Ministry of Economy and Finance and financial and educational support of partners. Then with the dynamic internal organization having already initiated the precepts of planning, Results Based Management and PAMORI (a program for the improvement and modernization of the taxes services) can be achieved.

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APPENDIX

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