

**COMPARING THE TREND BETWEEN SOUTH AFRICAN GOVERNMENT SPENDING
AND THE INCREASE IN TAX REVENUE FOR THE COUNTRY'S TAXPAYERS**

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—Abstract—

Adam Smith provides guidance through the four Canons of Taxation to assist government to design a good tax system based on a set of principles. These principles are being applied throughout the world, as well as in South Africa. However, the South African government has been challenged to reduce income inequality and promote growth. This has led to an increase in government spending.

Although literature provides information about governmental spending, spending patterns have not been investigated. Therefore, this study followed a partially mixed sequential dominant status design by investigating actual versus budgeted governmental tax revenue and spending, as well as the relationship between governmental tax revenue, spending and the inflation rate. This was done for the period of 2000 to 2007, seven years before the global financial crisis and 2008 to 2017, seven years after the global financial crisis. Qualitative data were collected by means of a literature study to identify the main themes. The main themes were used in the investigation of the budgets and compared to the budget reviews. Quantitative data were analysed to determine the correlation between governmental tax revenue, spending and the inflation rate. The findings suggest a strong correlation between governmental tax revenue and spending but a weak correlation between the governmental tax revenue, spending and the inflation rate.

This study will enable South African stakeholders, including the country's residents and potential foreign investors, to determine the trend between governmental tax revenue, spending and inflation.

Keywords: South Africa, governmental spending patterns, distributable tax base

JEL Classification: H20

1. INTRODUCTION

Adam Smith provide guidance through the four Canons of Taxation to assist government to design a good tax system based on a set of principles (Smith & McCulloch, 1937; Smith, 2005). Government function reformed since the guidance set out by Smith, to endorse income inequality, promote growth and manage effective spending (de Mello & Tiongson, 2003).

On 3 April 2017, South Africa received a junk status credit rating from Standard & Poor, a global rating agency (Gernon & Mabuza, 2017). This may be a result of a drifting economy that the country has experienced during the past several years, that causes citizens to reduce trust in the public sector (Transparency International, 2014), while individuals and businesses provide the full distributable tax base to the government (National Treasury, 2017b). Mohammed Nalla, head of strategic research at Nedbank Capital, highlighted government's inefficient spending (Du Plessis, 2017). As taxpayers are overburdened (Moerane, 2015), concern is raised to the way in which hard-earned tax money is spent. Idenyi, Ogonna, Chinyere and Chibuzor (2016) explain that public expenditure link to the operating cost made by government to care for the general public. Georgantopoulos and Tsamis (2012) point out that government expenditure is able to influence inflation, while as early as 1977 Tanzi indicates that inflation cuts the real tax revenue due to a delay in tax payments and compliance effects (Tanzi, 1977).

2. THE TAXATION OF SOUTH AFRICANS

The National Treasury (NT) manages South Africa's governmental finances in a way to promote "economic development, good governance, social progress and a rising standard of living for all South Africans" (National Treasury, 2017c). Government's role is to safeguard the community's long-term well-being, and this performance is linked to the willingness of citizens to pay taxes (Glaser & Hildreth, 1999). People pay taxes as they appreciate the public goods that it finances (Alm, McClelland & Schulze, 1992:21). Therefore, the NT should plan and implement the distributable tax base in such a way as to improve the South African taxpayers' long-term well-being.

Income tax contributes 55.4 per cent of the country's tax revenue: individuals pay 38.1 while businesses pay 17.3 per cent respectively (National Treasury, 2017b). The rest of the country's tax revenue is also supplied by individuals and businesses through value added tax (VAT) (24.7 per cent), customs and excise duties (7.6 per cent), fuel levies (5.6 per cent), and other taxes (6.7 per cent)

(National Treasury, 2017b). However, the problem is that only 14 per cent of South Africa's population pay income taxes and government continues to increase the pressure on these taxpayers, especially on the high income earners (Legwaila, 2017). Statistics South Africa (2016) indicated, with regard to businesses, the reduction in profit margins of companies due to a pressured economy, will also result in a reduction of taxable income. Both South African individuals and businesses are pressured for more taxes, while the effective spending thereof is questioned. Nazrien Kader, managing partner of Deloitte Africa Taxation Services, is of the opinion that the 2017 Budget Speech was "all about tax", as the then Finance Minister, Pravin Gordhan looked for creative ways to raise money and tighten expenditure while continuing to deliver on national priorities (Kader, 2017).

Budget deficit occurs if the government is forced to spend beyond its tax revenue. In the budget review of 2017, Lungisa Fuzile, Director-General: National Treasury, stresses that to achieve government objectives, government proposed to reduce spending by a total of R26 billion but needs to raise additional tax revenue of R28 billion over the next two years (National Treasury, 2017a:vii). Milton Friedman accentuated during an interview with *The Washington Times*, "You cannot reduce the deficit by raising taxes" (Anderson, Wallace & Warner, 1986:631). Budget deficit is an indicator of a government's financial health, where the government spend more than the tax revenue received (Khumalo, 2013:725).

Although progressive taxation, which is currently applied on individuals in South Africa, is necessary in a country with economic inequality, continued burden on current taxpayers is not sustainable and focus should rather be placed on the reduction or elimination of corruption, wasteful expenditure and governmental spending (Legwaila, 2017). Friedman (Anderson *et al.*, 1986:631) strongly emphasise that "the problem is not that we're not taxing enough but that we're spending too much". Anderson *et al.* (1986) support this with their finding in "Government Spending and Taxation: What Causes What?", that current over spending by government will lead to higher taxes on individuals later. Jaiswal (2016) emphasises that government spending may every so often lead to a fall in economic growth, possibly due to inefficient spending.

Effective spending of the distributable tax base, would mean that the available monies should be spent in such a way as to produce the desired result (Pharos, 2017). The long-term vision for South Africa's development and for the country's taxpayers is set out in the National Development Plan (NDP) 2030 (National

Planning Commission, 2011) and 14 priority outcomes were set as medium-term goals for the 2014–2019 medium-term strategic framework (National Treasury, 2017a). The annual budget is set up in such a way as to achieve the goals set by government (National Treasury, 2017a). Therefore, should government spend the distributable tax base in accordance with the budget, it would be an indication of effective spending. The minimisation or elimination of wasteful expenditure would further increase effectiveness governmental spending, as the available monies would then be implemented in line with the goals set by government. For the first time since 2009/10, tax revenue did not grow as fast as the economy (National Treasury, 2017a:41). Comparing government spending over time in nominal Rand is misrepresentative due to the fact that it does not take into account inflation or growth in population and the real economy (Merwe, 2017).

Government spending in South Africa is categorised in Economic affairs and agriculture, Education, Defence and public safety, Health, General admin, Local development and infrastructure, Debt-service costs and Social protection (National Treasury, 2017a). Government place its main focus on Education, Health and Social protection (Treasury, 2014) and Infrastructure to promote economic growth (Treasury, 2016). Economic growth is positively influenced by a low inflation (Gokal & Hanif, 2004). Inflation is the increase in money supply while the economy did not grow in the same ratio (Craft, 2011). Khumalo (2013:725) proposes that budget deficits seem to unsettle the economy as this may lead to inflation if monetised. The consequences of high budget deficits are high inflation and a high tax rate (Jaiswal, 2016).

3. PROBLEM STATEMENT

Taxpayers entrust government with hard-earned money, collected by means of taxes. This forms government's distributable tax base that the NT should effectively implement to the long-term well-being of the country's citizens. As taxpayers are overburdened and a reduction in trust is experienced towards the public sector, it is vital to establish the effectiveness of government's spending. While previous studies have researched the effectiveness of South Africa's governmental spending and government spending and inflation across the world, this study investigates actual versus budgeted governmental tax revenue and spending, as well as the relationship between these themes and the inflation rate for the period 2000–2017.

4. RESEARCH METHODOLOGY

4.1 Instrument and procedures

Johnson and Onwuegbuzie (2004) developed a framework for mixed-methods research, supported by a definition for mixed-methods research as mixing more than one method in a single study (Johnson, Onwuegbuzie & Turner, 2007:123). A sequence was followed where a qualitative method was first explored to understand the literature, followed by a quantitative method as the dominant methodology approach (Venkatesh, Brown & Sullivan, 2016:439-440). For this reason a partially mixed sequential dominant status design was followed in this study. Literature regarding South Africa's budgeted and actual spending as well as revenue, was investigated for the periods 2000 to 2017 and compared to the inflation rate for the same period. The focus was placed on these 17 years, as it encompasses seven years before and after the global financial crisis, providing a broad overview of different economic times. A quantitative approach was followed to determine patterns in spending for the said periods. This was coupled by a qualitative documentary analysis of these spending and revenue patterns compared to inflation. A document analysis is a process to set out the content to receive data (Saunders, 2016). Swart, Swanepoel and Surujlal (2014) effectively implemented a document analysis in their study, with the use of documents acquired from government departments.

The target population of the study was selected based on information acquired from the NT. The budget review was used to compile the data for actual as well as budget figures from 2000–2017. The information used from the budget reviews was accumulated from the statistical annexure. The 2017 budget review, statistical annexure, Table 2: Main budget: estimates of national revenue were used to gather the actual tax revenue. Table 6: Consolidated national, provincial and social security funds expenditure: functional classification was used to gather the information for the actual and budgeted government expenditure, classified in the following categories 1) General public, 2) Defence, 3) Public order, 4) Economic affairs, 5) Housing and community amenities, 6) Environmental protection, 7) Health, 8) Recreation and culture, 9) Education and 10) Social protection as well as the budget tax revenue figures.

This information was compared using analytical procedures according to International Standard on Auditing (ISA) 520, in order to establish the trend by obtaining the actual and budgeted income and expenditure from the budget review for the period 2000–2017.

4.2 Data analysis

Collected data were captured on an Excel spread sheet and analysed using the Statistical Package for the Social Sciences (SPSS – Version 24). Descriptive analysis was used to describe the sample compilation. A Pearson product-moment correlation coefficient (r) was used to measure the association between continuous variables. The relationship strength is determined within a range of -1 to +1: the size of the absolute value is an indication of the strength. A dependent t-test was conducted, as the data were spread evenly, to compare the means of actual versus budget tax revenue and expenditure.

5. FINDINGS AND RESULTS

5.1 Correlations among variables in the study and discussion

In examining the relationship between the variables, (actual vs budget tax revenue, expenditure (for the above-mentioned categories) and inflation), parametric correlations using Pearson correlation coefficients to establish the strength of the relationship among the variables were used. It is clearly evident from the data that there is no significant correlation between the increase in both actual and budgeted income and total expenditure with inflation, and inflation plays no role in the decision-making of determining the individual income tax payments for government. This seems to be the trend for the last 31 years as confirmed in the study by Anderson *et al.* (1986) which still seems to be applicable. For this reason income is not driven by inflation but rather by policies.

Out of the correlation analysis only the following three variables were chosen to confirm NT's commitment to addressing the objectives of the NDP to improve the well-being of the country's citizens. The three variables are Health, Education and Social protection as set out in Table 1.

Table 1: Correlation analysis of government actual and budget expenditure variables

Correlations									
Pearson's r		Tax revenue	Expense – Health	Expense – Education	Expense – Social protection	Budget – Tax revenue	Budget – Health	Budget – Education	Budget – Social protection
	Tax revenue	1							
	Expense – Health	.987	1						
	Expense – Education	.987	.999	1					
	Expense – Social protection	.994	.993	.984	1				
	Budget – Tax revenue	1	.987	.987	.994	1			
	Budget – Health	.984	.999	.999	.991	.983	1		
	Budget – Education	.983	.999	.999	.989	.983	.982	1	
	Budget – Social protection	.994	.993	.991	.999	.994	.958	.99	1

Significant < 0.05

Based on Table 1 there is a strong correlation between the actual tax revenue, budgeted tax revenue and Health, Education and Social protection expenditure. The above correlations indicate a perfect positive correlation with a high significance. Cohen (1988:79-81) suggests that a large relationship occurs between $r = .50$ to 1.0 .

From the above table a clear indication exists that actual government spending exceeds budgeted spending. The strongest correlation exists between social protection and tax revenue for both actual and budget ($r = .994$). Social protection in South Africa consists out of different grants, particularly to the young, elderly and disabled. The Social protection expenditure grows by an annual average of 8.2% (Treasury, 2017:59)

Further analysis based on the t-test for the chosen variables is provided in Table 2.

Table 2: Paired sample test

Pair	Mean	Std. Deviation	t-test	Sig. (2-tailed) – p-value
Tax revenue – Total expenses	-89651.765	120755.969	-3.061	0.007
Tax revenue – Budget total expenses	-72545.882	117214.761	-2.552	0.021
Budget tax revenue – Total expenses	-92441.235	121278.316	-3.143	0.006
Budget tax revenue – Budget total expenses	-75335.353	117917.122	-2.634	0.018
Expense Health – Budget Health	-1184.118	2100.166	-2.325	0.034
Expense Education – Budget Education	976.529	3481.846	1.156	0.265
Expense Social protection – Budget Social protection	-590.647	3193.221	-0.763	0.457

There was a non-significant difference in all of the above variances, with an almost normal distribution for pair 1 and 3. The p-values for all the pairs in Table 2 is < 0.05 . The last pair, Expense Social protection – Budget Social protection, is the closest to a significant difference in the scores for Social protection ($M = -590.647$, $SD = 3193.221$) conditions; $t = -0.763$, $p = 0.457$.

A negative value is an indication that the first variable is less than the second variable in the relative pair that is tested. The t-test highlights the fact that total government expenditure exceeds total tax revenue. In the same way, this may be an indication that government looks at expenditure first and then focus on how much income is needed to fund governments' strategic plans. For this reason, only the actual Education expense is not under budgeted.

Cohen (2017) explains that 15% of the total budget for a 12 month period ending March 2016 is allocated to Education according to the NT and the distribution is predictable to rise with an average of 7.4% annually over the next three fiscal years.

Even though there is a strong correlation in the increase in tax revenue and the increase in total government expenditure it does not mean that the individual taxpayers' burden is less. This was confirmed by Kader (2017) after the 2017/2018 budget speech when she mentioned that the individual "carry the lion's share of the tax burden" by contributing an additional R16.5 billion as part of the R28 billion that the government needs to meet its expenditure targets. Furthermore, there is only a 1 per cent inflation adjustment in the tax brackets for the rest of the taxpayers. This is an indication of the insignificance of inflation on government income and expenditure.

6. CONCLUSION

The main aim of this study was to establish the effectiveness of government's spending as well as the link between actual government income and expenditure as well as budgeted government income and expenditure with inflation.

There was no significance between any of the themes and inflation. This is an indication that the budget deficit has no influence on inflation.

However, the significance between actual tax revenue and actual government expenditure and budget tax revenue and budget government expenditure is very strong. From the data it seems that government aims to budget for expenditure needed. Based on the NDP 2030, government wants to improve the basic needs and humanity of the citizens of South Africa. Currently, from the data analysed it seems that in South Africa the "rich" is looking after the "poor". This may be a sign that government do not raise the standard of living for all South Africans, although they may be reaching the goal of reducing income inequality.

Further research can be done to confirm if government is still on track with the NDP 2030 or if government is only, as it seems now, budgeting for tax revenue to cover government spending.

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