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Isaac Sharara's Law of Proportional Value Added Tax Calculation in a Multi-currency economy. A case for Zimbabwe 2023

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Abstract

This paper has a cardinal goal of suggesting a way or method to calculate Value added tax (VAT) in a multi-currency economy where the VAT must be collected and remitted in the currency of tender. This paper notes that a good VAT system must not affect the choices of the consumer in any way and also that, each taxpayer must be allowed to contribute to state tax collections in any of the officially allowed currencies in that economy. In this paper, proportions are used to calculate the contribution per currency within a single transaction involving a single standard rated product or service.

Keywords: Value added tax, Proportion, Multi-currency, Base-currency, tender

1.1 Introduction

Value Added Tax (VAT) is an indirect tax on consumption charged on the supply of taxable goods and services(Zimbabwe Revenue Authority, 2004). It is claimed to have replaced the old sales tax regime because of its flaws, which included that the old sales tax regime did not cater all the stages of the supply chain. There is yet to be consensus on the origin of VAT among scholars(James, 2011).. Some claim that it originated from German while others claim that it came from America. However, it is France in 1955 that became the first country to administer VAT and the other countries followed(James, 2011). Zimbabwe in particular administered VAT in 2004 to increase government revenue.

Table 1. VAT years of introduction in SADC countries

Country	**Year**
Malawi	1989
Madagascar	1994
Zambia	1995
DRC	1997
Mozambique	1999
Namibia	2000
South Africa	1991
Tanzania	1998
Swaziland	2013
Zimbabwe	2004
Lesotho	2003

Source: adapted from "VATs in Africa" by Krever (2008).

Currently VAT in Zimbabwe is charged at 15% on standard rated goods and 0% on zero rated goods. However, in Zimbabwe there are goods that are exempted from therefore not charged VAT. These goods must not be confused or interchanged with those that are zero rated.

In 2019, Zimbabwe introduced the Finance act 1 of 2019 to revise SI205 of 2018 to assert that VAT must be charged in the currency of tender per transaction in relation to goods that are standard rated. This act sought to rectify the problem of foreign currency revenue leakages where registered operators would sell goods in foreign currency and then declare their tax in inflation eroded local currency. This created arbitrage opportunities for the registered operators due to exchange rate variations between the inflated local currency and the relatively stable foreign currencies like the South African rand and United States dollar. To a greater extent, the act reduced the leakages and arbitrage opportunities but creating a constrain on the consumers who wish to use two or more different currencies within the same transaction. When a single transaction involving a standard VAT rated product is completed, there are complications in determining the currency in which VAT is collected. This paper seeks to suggest a way to calculate VAT under such circumstances.

2. Literature Review

2.1 Conceptual Framework

The concept of Value Added Tax as a concept originated from the French Economist, Maurice Laure. It was originally referred to as “taxe sur la valueur”. Omesi&Nzor (2015) define VAT as a consumption tax payable on the goods and services consumed by persons, business organizations and individuals (Fowler,2016; Embuka, 2012; Kagan, 2020). According to Messre and Norregard 1999, five features of a good Value Added Tax system are:

1. Its interference with the choices made by both producers and consumers must be minimal
2. It is accompanied by appropriate change in other taxes and in social system to alleviate or neutralize negative distribution consequences.
3. It generates huge amount of revenue for government and minimizes the possibilities of a tax evasion and avoidance.
4. It does not lead to sustained inflationary pressure either at its introduction or in the long-run.
5. It minimizes government administrative and compliance cost.

2.2 Theoretical Framework

Some of the important theories of taxation include the social political theory, the expediency theory, the benefit- received theory, the cost of service theory and the ability-to-pay theory.This study is anchored on the benefit- received theory and the cost-of-service theory which are stated briefly below.

2.2.1 Benefits-Received theory

This theory emphasizes on the relationship between government and the taxpayers or citizens. It asserts that people or taxpayers should pay for free things or social goods they receive from the government through tax and in this case through VAT (Miller and Oats,2009). Therefore the payment of tax just open an exchange relationship between the government and the taxpayers so that the later should then pay for the supply of the benefits already received (Bhartia, 2009; Anyafo,1996).

2.2.2 Cost Service theory

Proponents of this theory argue that for there exist a semi-commercial relationship between the government and the taxpayers or citizens. This implies that government performs its welfare and protective functions for the good of the taxpayers and in return, taxpayers contribute to the cost of providing these services.

2.2.3 Ability to Pay Theory

Ability to pay theory asserts that tax should be charged based on ability to pay. Many scholars would like to attribute this theory to Income tax but in this research it is important to look at it from a VAT point of view where basic commodities like mealie-meal and the other lot, are exempted from paying VAT because even those who are not "able" to contribute towards tax should be able to buy these products. It is also very important for governments to note that certain taxpayers are not able to contribute towards tax in one currency but in multiple currencies, therefore the door should always remain open to willing contributors.

2.3 Empirical Literature

Many Scholars have looked at the Vat Issue but unsurprisingly overlooked the calculation issue in a multi-currency regime for obvious reasons. One of the reasons being not many countries are multi-currency economies. However, of the researches that were done, the hot topic was the effect of VAT on State revenue. Ajakaiye (1999), concluded that VAT improved state revenue significantly in Nigeria. Whilst, Remer &Romer (2000), concluded that VAT results in positive economic growth. Okoli (2016) examined the correlation between VAT and national income for the Nigerian economy. Bonga (2017) looked at the contribution of VAT to total tax revenues in Zimbabwe. Finally, Madzivanyika (2017) looked at deficiencies of Zimbabwe's VAT system and this was before the act which tied VAT contribution to currency which was then introduced in 2019.

3 Problem Statement

Consumers are being restricted to the use one currency in the same transaction for the purposes of easy VAT calculation and collection in Zimbabwe. For example, if one buys one bottle of coke drink cannot do a partial payment that is to pay some of the amount in USD and some in ZWL local currency. This is frustrating and turning away so many consumers who do not have enough money to complete the transaction using the same currency and this ultimately reduces the number of buyers or consumers and in the long-run the state loses revenue which should have been collected through VAT from those consumers who were turned away. In addition to that, a good VAT system should not interfere with choices of consumers and in this case, it is interfering, as "no choice" is actually a choice.

4 Method

If a transaction involves a partial payment that is 2 or more currencies the calculation of VAT should use proportions using the following steps:

1. Convert the whole transaction amount to economy's official currency
2. Convert the amounts of all currencies involved in the transaction to the official currency or the base currency of a Point of sale system being used.

3. Calculate the transaction contribution ratios
4. Calculate each currency's VAT contribution using those ratios
5. Step 5: Convert all unofficial currencies to using the exchange rate

Example

Daili supermarket in Eastlea, Harare 2kg of (VAT standard rated) cereal to Vongai Dhlakama costing ZWL$8000 and Vongai makes the following part payments (i,ii& iii) in that transaction:

i) South African Rands R20
ii) USD$5
iii) Swiped the remainder using his FBC local currency (ZWL) card.

Assuming the standard VAT rate in Zimbabwe is 14.5%.

Assuming that the official currency is ZWL and the exchange rate being used by Daili supermarket are as follows:

R10: ZWL$500

USD$ 1: ZWL$ 800

Calculate the VAT Daili supermarket must remit to the Zimbabwe Revenue Authority for this transaction using Proportional law.

Answer using proportional law

1. Step 1: the transaction amount is already in official currency as $8000

2. Step 2: converting the part payments to official currency
   Rand payment is equivalent to ZWL$1000
   The USD payment is equivalent to ZWL$4000
   The ZWL payment is ZWL$3000

3. Step 3: Calculation of Ratios and VAT
   Ratios are 1000:4000:3000 which is 1:4:3
   VAT is (14.5/114.5)X8000=ZWL$ 1013.100436

4. Step 4: Calculation of VAT per currency
   Rand (1/8)X ZWL$ 1013.100436
   USD (4/8) X ZWL$ 1013.100436
   ZWL (3/8) X ZWL$ 1013.100436

5. Step 5: Convert all unofficial currencies to using the exchange rate
   i) Rand (1/8)X ZWL$ 1013.100436=ZWL$126.637554/50= R2.53275108= **R2.53** as **VAT**
   ii) USD (4/8) X ZWL$ 1013.100436=ZWL$506.550215/800= USD$0.63318777= **USD$0.63 as VAT**

5 Conclusion and Recommendations

This method or law can be used in customs calculation especially when the valuation is done on transaction value and the payer's invoice has two or more currencies. For instance, South African rand and United States dollar (USD). This method is flexible as it works in all scenarios where there is a single currency and when there are more currencies involved in a single transaction. This method is useful not only in Zimbabwe but in other multi-currency regimes in terms of tax collection. However, further studies can be carried out to narrow down each currency's contribution towards the payment of VAT per standard rated product or service in the event that the transaction has more standard rated products.

References

1. Afolayan, G., &Okoli, O. (2013). The impact of value added tax on Nigeria Economic Growth.European Journal of Business and Management, 7 (9).
2. Ajakaiye, D. O. (1999). Macroeconomic effects of VAT in Nigeria: Empirical analysis. *Internationalresearch journal of finance and economics issue 95, 51-61.*
3. Anyafo, A. M. O. (1996) Public finance in developing economy: the Nigerian case. Department of Banking and Finance University of Nigeria Enugu Campus Enugu.
4. EzeraMadzivanyika (2017). A diagnosis of the deficiencies in the Zimbabwean value added tax system. Public and Municipal Finance, 6(2), 16-26.
5. Fowler, B. (2016). Synopsis of Value Added Tax Administration in Nigeria.
6. James, K. (2011). Exploring the origins and global rise of VAT.Tax Analysts Faculty of law, MonashUniversity, Melbourn.
7. Krever, R. (2008). *VAT in Africa.* (R. Krever, Ed.) Pretoria: Pretoria University Press.
8. 43. Kagan, J. (2020). Value Added Tax.Investopedia.
9. Miller, A., & Oats, L. (2009). *Principles of international taxation*. 2nd edition. West Sussex: Tottel Publishing.
10. Norregaard, J., & Khan, T. S. (2007).Tax Policy: Recent Trends and ComingChallenges, 39 (IMF,Working Paper 274).
11. Omesi, I., &Nzor, N. P. (20150. Tax reforms in Nigeria: Case for Value Added Tax(VAT)>AfricanResearch Review;9(4);277-287.
12. Remer, C., &Romer, D. (2000). The macroeconomic effects of tax changes: Estimates based on a new measure of fiscal shocks. http://elsaberkeley.edu/dromer.in *The Research Journal of Finance and Accounting, 4(2)*, 65-77.
13. W.G. Bonga. (2017). Empirical Examination of the Link between Value Added Tax andTotal Tax Revenues in Zimbabwe.*Journal of Economics and Finance.*
14. Zimbabwe Revenue Authority. (2023). VAT. Retrieved 2023 from http://www.zimra.co.zw