

Challenges of tax revenue generation in developing countries: Adopting the carrot and stick approach

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Abstract: The study reiterates the challenges of tax revenue generation in developing countries. While the advanced countries have traditionally performed well in tax revenue generation, developing countries continue to perform poorly. This accounts for the economic development challenges faced by these countries. The study identifies tax noncompliance as a key factor for the current underperformance of tax revenue in developing countries. However, there are over sixty variables associated with tax noncompliance in existing literature and this could lead to confusion in the effort to tackle noncompliance. There is need to streamline existing variables by identifying the key ones in the context of developing countries. This study advocates for the carrot and stick model in tackling the challenges of tax compliance in developing countries. The study further identifies socioeconomic condition, citizen engagement and tax service quality as constituting the carrot factors while audit and sanction constitute the stick factors. It argues that an optimal mix of the carrot and stick factors will go a long way in tackling the tax revenue challenges of developing countries.

Keywords-*Audit and sanction ,Carrot and stick, Developing countries, Socioeconomic condition,Tax compliance*

I. INTRODUCTION

Prior to civilization, the human race lived in disorderly societies where survival was for the fittest. It was an era when might was right and the weak were unprotected and vulnerable. According to Locke (1689), that era was characterized by fear of death and there was no motivation for industry. He described the life of man as “solitary, poor, nasty, brutish and short”. Understandably, people were not satisfied living in that condition of fear of the unknown where their freedom and prospect of self-fulfillment were curtailed. In men’s quest for a solution to this unsatisfactory state of nature, early philosophers propounded the social contract theory (Locke,1689). The social contract theory is a situation whereby, in order to protect people from the vagaries of the brutal state of nature, they surrendered their individual sovereignties to live in a society governed by laws which are enforced by others on their behalf. Thus the primary responsibility of the organized state is to safeguard the lives and property of citizens. Governments evolved as a result of the necessity to organize societies into administrative units where the lives and properties of citizens can be safeguarded. How government raise the money to finance its role is where taxation comes in. The Ugandan Revenue Authority (URA,2011) defines tax as “monetary charge imposed by the government on persons, entities, transactions or property to yield public revenue”. It is a logical sequence of the social contract theory, which underpins the existence of government that funds should be provided to finance government activities. How this is done is the subject of a vast, dynamic and expanding field of study called taxation. According to Besley and Persson (2014), the fund government utilizes to prosecute its numerous programs are acquired through tax and non-tax revenues. While it is agreed that governments could raise finance for their activities through tax and non-tax revenues like public enterprises, foreign aids and others, taxation has been projected as the major source of revenue (Brautigham,2002). Liman (2009) sees tax as the most significant and most reliable source of government revenue.

The measure of the amount of tax revenue countries are expected to raise is widely measured by the tax to GDP ratio. It is adopted globally as a standard benchmark for assessing how well governments are raising tax revenues to finance their activities. This position is officially adopted by world bodies in their global monitoring of government fiscal activities (OECD, 2013; IMF, 2011). The international monetary fund (IMF) recommends 15% of GDP as the minimum benchmark on which countries should raise tax revenue. IMF’s position is based on the expert advice of Kaldor (1963). Kaldor’s position is that countries which fall below this benchmark are at fiscal risk. The position of the United Nations on this matter is a notch above that of the IMF. UNDP (2005) asserts that developing countries should raise 20% of their GDP in tax revenue as a requirement for achieving the Millennium Development Goals (MDGs). The tax revenue to GDP (also called tax ratio)

globally is such that the more advanced countries raise an average of 35% of their GDPs as tax revenue while developing countries/sub-Saharan African countries raise an average of 17% (OECD, 2013). This large gap between developed and developing countries is of utmost concern to global policy makers and tax compliance researchers (Besley&Persson, 2014). Among numerous reasons adduced for the low tax revenue generation in developing countries, tax noncompliance appears to be key (IMF, 2015).

There is a unanimous agreement among authorities in developing countries, tax researchers and international agencies that noncompliance with tax provisions is a huge challenge currently hampering tax revenue mobilization efforts. This position is supported by data from existing research which points to a large scale noncompliance by taxpayers in developing countries. To mention a few instances, a study by Kangave, Nakato, Waiswa&Zzimbe (2016) which investigated 60 top lawyers (Commercial law firms) in Uganda discovered that only 12 paid income tax in 2012 and only 13 paid in 2013. This constitute about 21 percent compliance leaving about 79 percent noncompliance with tax provisions. Nigeria is also witnessing a large scale noncompliance similar to what is obtainable in Uganda. Nigeria's former finance minister, Okonjo-Iweala, asserted that 75 percent of registered firms in Nigeria are not in the tax system. Even among the 25 percent that are registered, 65 percent had not filed any tax return for two years (Okonjo-Iweala, 2014). McCluskey (2016) found that in Kenya, only 100 high-net-worth individuals are registered with the tax authority out of a possible 40,000. She further stated that about 114, 000 high-net-worth individuals in South Africa are not registered with the revenue authority and this costs the government about \$10.9 Billion in tax revenue. Fjeldstad and Heggstad (2011) who investigated tax compliance in Tanzania stated that out of the country's population of 45 million people, those registered for tax purpose are only 400,000. In 2010, only 400 large taxpayers contributed 80 percent of the total tax revenue while an overwhelming majority evaded their tax obligations.

Developing countries in other parts of the world are also affected by massive noncompliance. For instance, Everest-Phillips (2010) noted that in Bangladesh, only one percent of the population pay tax and this contrast sharply to more than 50 percent in advanced countries. Sabaini and Jimenez (2012) stated that tax evasion for individuals and firms in Guatemala is about 64 percent and the average for Latin America is about 50 percent. Keen (2012) stated that tax non-filers may be about 50 percent in Uganda and Cameroon but only about 7 percent in USA. IMF (2013) stated that the richer population of self-employed people in Greece are largely outside the tax net.

There are many factors identified to be responsible for tax noncompliance in existing literature. According to Kirchler (2007), The American Inland Revenue Service, IRS, has identified over 60 of such factors. Among the plethora of factors identified as causing noncompliance in existing studies, there is need to identify key factors that apply to developing countries. Given the massive nature of noncompliance in developing countries, there is need to focus on those key variables that could serve as low hanging fruits in the attempt to tackle evasion in developing countries. More so that it may not be feasible to address over 60 factors simultaneously. The objective of this study is, firstly, to identify such key factors. Secondly, the study will classify the key factors under a carrot and stick model and explain how this model could be applied to solve tax compliance problems in developing countries. The carrot and stick model has its origin in the work of Cowell (2002). The model holds that taxpayers will evade taxes if it pays more to do so. Hence, maintaining a loyal base of taxpayers requires the authorities to provide incentives (carrots) and brandish the stick (audit and sanction) at the same time.

II. THE CARROT FACTORS

Socioeconomic condition: The supply of public goods has been found to be a key factor influencing tax compliance (Alm, Jackson & McKee, 1992). This position is understandable due to the fact that the fiscal social contract of taxation is itself built on the understanding that individuals will contribute to a common government purse from where their collective welfare will be catered for. The tax-benefits relationship between government and citizens is as old as the onset of civilization. For instance, an ancient Indian philosopher, Kautilya, who was a contemporary of Aristotle and an adviser to ancient Indian kings, was cited by Sihag (2009) emphasizing the fiscal social contract of taxation even as at that time.

When there was no order in society and only the law of the jungle prevailed, people (were unhappy and desirous of order) made Manu, the son of Vivasvat, their king and they assigned to the king one sixth part of the grains grown by them, one-tenth of other commodities and money. The king then uses these to safeguard the welfare of his subject. Those who do not pay fines and taxes take on themselves the sins of kings, while kings who do not look after the welfare of the people take on themselves the sins of their subjects.

Furthermore, the classical economist, Adam Smith, was implicit about the role of government. Anderson (2012) cited Adam Smith roles of government as follows:

- 1) The protection of citizens from external evasion.
- 2) The protection of citizens from internal injustice and oppression; in other words, maintenance of law and order.

3) Creation and maintenance of public infrastructure which are by their nature not attractive to private investors.

In view of the importance of public goods in the fiscal social contract of taxation, it should be a key factor among those classified as carrots in the carrot and stick model. The provision of public goods and services is a function of government that is easily evaluated by taxpayers and they react according to their perceptions. They increase tax payments when they perceived that government is supplying adequate public goods with their tax monies and they are quick to resort to evasion when they perceive otherwise (Alm et al., 1992; Doerrenberg, 2014). Governments of developing countries are particularly underperformers in the area of public goods and services. Moore (2004) described governments in these countries as predatory. Not surprisingly, they have always been ranked poorly in various global governance indices. Due to the fact that public goods is a general term and could lead to ambiguity, there is need to adopt socioeconomic condition by governments and researchers of tax compliance in developing countries. Socioeconomic condition refers to the social and economic condition created by governments in terms of access to and quality of basic social services such as education, healthcare, public security and the financial condition. Governments that are more effective in maintaining satisfactory socioeconomic condition are able to generate more tax revenue. Favorable socioeconomic condition makes citizens happy and satisfied citizens comply more with tax provisions and vice versa. *Citizen engagement*: Tax awareness is required as part of the carrot factors that influence tax compliance. The importance of tax awareness was emphasized by Kirchler, Hoelzl and Manetti (2010). OECD (2007) maintained that governments need to embark on tax information campaign to sensitize citizens on their tax obligations and the importance of tax payments. According to OECD (2005), adequate information on tax matters is a right of taxpayers as part of the fiscal social contract of taxation. Currently, it appears taxpayers in developing countries are not adequately informed about the tax system hence they do not know their roles, rights and obligations in the tax system. For instance, Aiko and Logan (2014) in an Afrobarometer study which surveyed taxpayers in Africa found that taxpayers are willing to pay tax but are discouraged by the opaque nature of the system. They complained of not being adequately informed. They also stated that they are at a loss when it comes to knowing their rights, obligations and what tax monies are used for. As noted by Kirchler (2007), adequate information campaigns and framing of tax information in terms of benefits accruing to citizens from payments of taxes can influence their compliance behavior in a positive direction.

Tax service quality: Many factors have been adduced for the noncompliance among taxpayers in developing countries. OECD (2007) identified taxpayer service delivery as a crucial factor that will engender compliance. The organization posits that user-friendly services to taxpayers would go a long way in improving voluntary tax compliance. In the same vein, OECD (2005) earlier elaborated on the need to foster voluntary tax compliance by establishing high standards of services. OECD (2005) outlines some recommended steps:

- i. Providing clear explanations of the law, in a form and manner and at a time suitable for taxpayers
- ii. Establishing arrangements that assist taxpayers meet their obligations at a minimal cost and inconvenience
- iii. Giving accurate responses to taxpayers questions in reasonable period of time
- iv. Quickly resolving taxpayers' complaints

III. THE STICK FACTORS

Audit and sanction: Audit as a factor in tax compliance research emerged from the seminal work of Allingham and Sandmo (1972). The authors kick started the scholarly interest in the study of tax compliance. Despite the fact that tax evasion has been of concern to governments for a long time (Kirchler, 2007), Allingham and Sandmo arguably were the first to arouse scholarly interest in the matter (Sandmo, 2004). Based on Becker's (1968) economics of crime theory, Allingham and Sandmo (1972) considered the situation of taxpayers when faced with the decision to declare income for tax purpose as a decision under uncertainty. Two pathways are open to the taxpayer: 1. He may declare his actual income, 2. He may declare less than the actual income. According to Allingham and Sandmo, the choice of any of the above options is not an easy one. Some economic calculations come into play in choosing any of the above options.

The most important factor that determine the option the taxpayer will eventually chose is the probability of audit. If he chooses option one and he is not audited, he suffers the loss of the amount paid as tax. He is therefore inclined to gamble with the probability of audit. If he chooses option two, that is, declaring less than his actual income, and he is not audited, he makes more gain by keeping his taxable income to himself. But this option is a risky one depending on the probability of audit. If the taxpayer is audited, the consequences are not light. He faces the grim prospect of not only paying the original amount due as tax but also an additional sum as possible penalty. In extreme cases, he faces the scary prospect of prosecution which could possibly lead to a jail term. Thus, the fundamental determinant of taxpaying decision under the Allingham and Sandmo model is the probability of audit and the income function. The implication of Allingham and Sandmo's first shot at tax compliance research is that increased audit activities will invariably lead to improved compliance while the

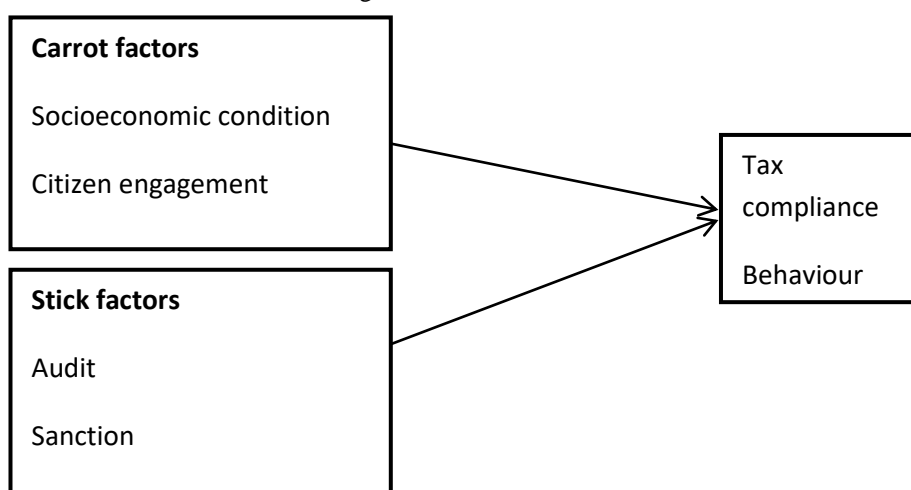
implication of lesser audit would be lesser compliance. Sanctions in form of fines and prosecution are also required to make audits effective as a deterrent to evaders and those that are likely to contemplate evasion.

IV. OPTIMAL MIX OF THE CARROTS AND STICK

Tackling the serious tax compliance challenge in developing countries requires an optimal mix of the carrot and stick factors. Governments of developing countries must ensure that the level and quality of public goods (education, healthcare, public security and financial condition) are satisfactory to taxpayers. While in some cases, these governments are constrained by limited resources, in most cases, taxpayers are genuinely angered by the prevalence of corruption among the ruling elites (Aiko & Logan, 2014)

Despite the positive effect of the carrot factors, tax evasion would always occur. In all ages, there have been people who are inclined to cheating the system and would only be deterred by strict law enforcement hence the need to apply the stick factors – audit and sanctions. In developing countries, there is greater need for the stick factors because noncompliance with tax provisions occurs on a massive scale.

Figure 1. Carrot and stick model



An optimal mix of the carrot and stick factors as depicted in fig. 1 requires that governments of developing countries should be circumspect in applying both factors. For instance, previous studies have reached the conclusion that there is need to treat taxpayers with respect in order to encourage compliance Kirchler (2007) asserted that a cop and robber approach tend to discourage compliance. That is, a situation whereby there exist mutual suspicion between taxpayers and the authorities and where taxpayers are treated like criminals is counterproductive. Despite this position of Kirchler, there is need to utilize the full force of the law on taxpayers who are confirmed to be criminally-minded. The repercussions of criminal evasion are two-fold; firstly, less revenue is available for government activities. Secondly, the compliant taxpayers are unfairly treated as they are made to bear a disproportionate burden in funding public services. Hence there is need to ensure fairness by bringing down the full weight of the stick on criminal tax evaders. As noted by Kirchler (2007), when tax evaders are not adequately punished, it sends a wrong signal to the compliant ones. With time, the ranks of the compliant taxpayers will shrink as they will see no good in being compliant while others free ride. On the long run, a tax system where evaders are not appropriately dealt with will experience massive tax evasion tending towards zero compliance. In the light of the adverse effect of uncontrolled evasion as depicted in the preceding paragraph, the best policy for developing countries is to determine an optimal policy of carrots and stick whereby incentives (socioeconomic goods, citizen engagement, good quality tax services) are made available to encourage tax compliance. Alongside these incentives, audits should be aggressively pursued and criminal evaders appropriately dealt with as a deterrent to future evasion.

V. CONCLUSION

Developing countries are facing critical challenges in their developmental efforts largely attributed to low tax revenue generation. This study advocates the carrot and stick model as a potential solution to the tax revenue crises in these countries. While the carrot and stick approach could be a silver bullet in tackling the problem, there are obligations on both parties to the fiscal social contract of taxation – government and taxpayers. Governments in developing countries have a duty to urgently improve the socioeconomic condition of their countries by increasing access to public services, engage with citizens on matters of taxation and make

the tax payment procedure simple and easy to comply with. When governments have done their own part, the law enforcement organs need to tackle tax evaders with the full weight of audit and sanction. The carrot and stick model is capable of holding the tax system at an equilibrium and any deviation could result in disastrous consequences for tax revenue generation as currently being witnessed in developing countries.

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