Determinants of Tax Collection from Multinational Enterprises in Tanzania

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Abstract
Tax collection to finance public expenditure is a major challenge for developing countries. There is a concern that Multinational Enterprises (MNEs) avoid paying taxes by shifting taxable income to countries with low corporate tax rates. The paper explores the factors that determine tax revenue collection from MNEs in Tanzania. Primary data from 140 MNEs respondents, were collected using a questionnaire, and analyzed using multiple linear regression analysis. The findings indicate that a lack of comparable data for price benchmarking of transactions undertaken between MNEs to determine if they are at arm’s length affects tax revenue collection from MNEs. The availability of comparable information is critical as it enables the use by MNEs of an appropriate transfer pricing method hence appropriate tax payments. Practically, the paper highlights the need for the government to work with MNEs to address the challenge of lack of comparable data and consider the effectiveness of alternative methods to transfer pricing methods including the fixed margin method and the use of global minimum tax rate. Not including other factors that may influence tax collection from MNEs, using only primary data and use of a questionnaire to collect data are limitations that may be addressed in future studies.

Keywords: MNE Internal Factors, Tax and Regulatory Factors, Environmental Factors and Tax Collection.

JEL Classification: H25, H26

1. Introduction
Tanzania, like many other developing countries, faces shortfalls in revenue to provide for essential public goods, such as supplying clean drinking water, primary education and health care. Total tax revenue collection as a percentage of GDP is low, at 12.6% of GDP (IMF, 2022), compared to an estimated taxing capacity of about 20 percent of GDP (IMF, 2023). Fuest & Riedel (2009) conclude that developing countries are losing between $35

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billion and $160 billion per year from MNEs' profit shifting. The OECD (2017) estimated that between four and ten percent of global tax revenue is lost through tax avoidance. UNCTAD (2016) reported that emerging market MNEs are adopting more aggressive tax avoidance strategies. Also, reports by non-governmental organizations reveal that MNEs have been involved in corporate tax avoidance (Christian Aid, 2009; ActionAid (2010). They avoid tax by reducing taxable income, or re-allocate profits to low tax countries where limited or no economic activity is undertaken (Durst, 2019). Vijayaraghavan and Ostwal (2010) assert that tax avoidance techniques used by MNEs include the use of transfer mispricing. This is done through the mispricing of transactions undertaken between MNEs, including debt, intangibles, managerial and technical services, purchase of raw materials, and the selling of goods. However, Scholes and Wolfson (1992), as cited in Klassen et al. (2017), argue that this is a one-dimensional view that does not consider other uses of transfer pricing, including enabling decentralization and coordination.

MNEs operate in a variety of sectors in Tanzania (Tanzania Investment Report, 2018). The leading sectors in attracting foreign direct investment are manufacturing, mining and quarrying, finance and insurance, accommodation and food, telecommunication, and electricity and gas (Tanzania Investment Report, 2018). MNEs in these sectors are mainly from South Africa, Canada, Nigeria, the Netherlands, the United Kingdom, Mauritius, Kenya, the United States of America, Vietnam and France. MNEs, which are resident in Tanzania, are taxed on their worldwide income, regardless of source. Non-resident MNEs are taxed on income from a source in Tanzania. Some payments to non-resident MNEs, such as interest, royalties, dividends and management fees, are taxed through withholding tax mechanisms.

Tanzania has been experiencing several instances of corporate tax avoidance by Multinational Enterprises (MNEs). For instance, in 2015 it was confirmed that one large MNE did not allocate income of US$ 818,431,285 for tax purposes. Adreoni and Tasciotti (2019) found that trade under-reporting in Tanzania between 2013 and 2017 amounted to over US$10 billion. They attribute this to trade mis-invoicing, whereby customs information is misreported or manipulated to achieve several objectives, including transfer

1 This amount was sourced from its only subsidiaries doing business in Tanzania leading to underpayment of tax amounting to US$ 41,250, 426 (Tax Appeal Case No.16 of 2015).
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mispricing. Transfer mispricing in Tanzania has also been undertaken through the use of interest on loans and the misreporting of sales by MNEs (Readhead, 2016). Curtis et al (2012) assert that Tanzania may have lost US $1.07 billion in revenue in recent years, caused by tax incentives, illicit financial flows, inflated claims for expenditure, misreporting of sales and losses and other factors. They also argue that tax exemptions given to corporations, including MNEs, are depriving Tanzania of an average of Tshs 458.6 billion ($288 million) a year.

This paper has been motivated by the lack of adequate revenue by developing countries to provide essential public goods, such as supplying clean drinking water, primary education health care and infrastructure development. There is a concern that MNEs avoid paying taxes by shifting taxable income to countries with low corporate tax rates. Most of the studies on profit shifting by MNEs in developing countries (Adreoni and Tasciotti (2019), Curtis et al (2012) and Readhead (2016)) focus on the challenges of tax payments from the perspectives of tax authorities. There are limited studies with a focus on tax collection challenges from MNEs’ perspective. Establishing effective ways to collect taxes from MNEs will, therefore, have significant benefits to governments and MNEs. This paper aims at establishing the determinants of tax revenue collection from MNEs. The paper envisaged a fit between MNEs’ profit shifting, regulatory and environmental factors and tax collection from MNEs. We believe that this paper is important for the following reasons. Firstly, studies of the impact of regulatory factors on tax collection from MNEs, including Jost et al (2010), Cooper & Ngoyen (2020), Borkowski (1997) and Readhead (2015), left out the effect of some variables from the income tax evasion theory, such as contemporaneous documentation requirements and the availability of comparable data. Secondly, these studies did not consider developing countries’ distinctive cultural characteristics and unique taxation challenges. Jost et al (2010), for instance, found that MNEs’ preparation of transfer pricing documentation does not affect their decisions about tax payments as it is prepared ex-post. Li (2005) and Klasen et al (2014) found that compliance with tax laws and regulations is the most important factor in transfer pricing decisions by MNEs and not tax payment minimization. Cooper & Ngoyen (2020) and Borkowski (1997) mention that these studies were conducted in developed countries and did not consider developing countries’ distinctive cultural characteristics and unique taxation challenges. Readhead (2015) identifies the lack of comparative data for comparability analysis as a unique challenge, through a case study using a small sample, but does not back it up with adequate empirical data.
The income tax evasion theory advocates the importance of tax audits and the need to obtain information from taxpayers to enforce tax payments. However, previous studies on the impact of regulatory factors on tax payments from MNEs by Jost et al (2010), Li (2005), Klasen et al (2014) and Barry and Fleischer (2017) ignored the effects of some variables from the income tax evasion theory such as documentation requirement.

Previous studies on the impact of environmental factors on tax payments from MNEs by Plasschaert et al. (1985), as cited in Li (2005) and Al-Eryani et al (1989) were not conducted in developing countries. The United Nations argues for the need to consider the special needs and perspectives of developing countries when dealing with the problems of base erosion and profit shifting (UN, 2017). For instance, developing countries lack comparable data to be able to use ALP based methods (Readhead, 2016) and have weak tax administrations to effectively enforce transfer pricing rules (Fuest et al, 2011). The UN also argues that each country must assess its own conditions to identify its specific challenges and establish the most relevant taxing mechanisms.

The main contributions of this paper are twofold. Firstly, it is among a few studies to establish a relationship between MNE profit shifting, regulatory factors, environmental factors and tax collection. Secondly, it contributes to the body of knowledge about the relationship between MNE internal factors, regulatory factors, environmental factors and tax collection by applying the income tax evasion theory.

We analyze data using a questionnaire administered to 140 Chief Executive Officers, Heads of Finance Departments, Heads of Tax Departments and Accountants of MNEs operating in Tanzania. The use of these respondents helped to obtain the perception of the main actors with adequate knowledge of tax collection from MNEs. The results were analyzed using multiple regressions. Our analysis found that the availability of comparable data affects tax collection from MNEs in Tanzania. However, MNEs’ profit maximization, tax audit and documentation requirement, the desire by MNEs to maintain good relations with the government and political pressure do not affect tax collection.

The general objective of this paper is to determine the factors that influence tax collection from MNEs. Specifically, the paper aims to determine: the effect of MNEs’ internal factors on tax payments; the influence of regulatory factors on tax payments from MNEs; and the effect of environmental factors on tax payments from MNEs.
2. Literature review

2.1 Theoretical Review

2.1.1 Tax Evasion Theory

The income tax evasion theory assumes that tax declaration by taxpayers is not certain and failure to report income may not lead to penalties (Allingham and Sandmo, 1972). Thus, a taxpayer may declare actual income or less than actual income. When this gamble by the taxpayer is not investigated by the tax authority, it enables the taxpayer to maximize utility. The taxpayer will not declare full actual income if expected gains on the undeclared income are greater than the costs of non-compliance. A rise in the penalty rate and the probability of detection leads to increased declared income. As per the theory, tax evasion depends on the possibility of being caught through tax audits, information shared, the size of the penalty for evasion, as well as the individual degree of risk aversion. The theory is criticized for ignoring other factors affecting a taxpayer’s tax evasion decision, such as his reputation as a citizen in a society, or ethical orientation. Also, others, e.g. Baldry (1986), as cited in Abdullah (2010), have rejected the notion that tax evasion is a gamble, as treating it as such is associated with social stigma, with psychological costs to evaders. Other taxpayers do not pay taxes due to their perception of the fairness of the tax system (Bordignon (1986) as cited in Abdullah (2010)). The theory was initially applied to income taxation but has been subsequently extended to other taxes. This theory has been used in this paper to test the relationship between contemporaneous transfer pricing documentation, transfer pricing audits and tax revenue collection from MNEs in Tanzania.

2.1.2 The Arm’s Length Principle (ALP)

The theory behind this was first introduced in the Carroll report (1932) about an inquiry into the allocation or apportionment methods of the taxable profits of enterprises. Subsequently, the ALP was inserted into Article 9(1) of the OECD Model Tax Convention on Income and Capital. It provides that: “(Where) conditions are made or imposed between the two (associated) enterprises in their commercial or financial relations which differ from those which would be made between independent enterprises, then any profits which would, but for those conditions, have accrued to one of the enterprises, but by any reason of those conditions, have not so accrued, may be included in the profits of the enterprise and taxed accordingly” (OECD, 2017, p.35).

The ALP assumes that the members within the MNE group operate as separate entities and not inseparable parts of a single unified business. It assumes that associated enterprises often aim to replicate the dynamics of market forces while trading with each other and that the conditions
established in the commercial and financial relations between associated enterprises will invariably not deviate from what the open market would require. The ALP is criticized for being weak, as it treats MNEs as independent enterprises operating under market conditions when trading with each other and ignores the impact of corporate group synergies on pricing (Spencer and McNair, 2012; Coulier and Andrus, 2017). The ALP has been accepted as an organized system of knowledge to explain the allocation of taxing rights on profits generated by MNEs.

Under the ALP, two categories of methods have been developed. These are the traditional transactional methods and the profit methods (UN, 2017). The methods are applied in calculating or testing the arm’s length nature of transfer prices or profits. For the ALP methods to be applied, a comparability analysis of transactions with independently undertaken transactions (market transactions) must be made. The ALP has been used in this paper to establish whether the pricing of transactions between MNEs is benchmarked with arm’s length comparable transactions from the market.

2.2 Empirical review
The empirical literature on the taxation of MNEs is divided into profit shifting, transfer pricing, financing of MNEs, foreign direct investment motivations and locations’ specific advantages (Cooper et al, 2020). This review focuses on literature regarding the MNEs’ internal factors, regulatory factors and environmental factors affecting tax payments.

2.2.1 MNEs Internal Factors and Tax Payments
Azemar (2010) explored the effects of corporate taxation on U.S. capital invested abroad and on tax planning practices, including dividend payments, profit shifting and passive investment. The study used data from about 7,500 largest foreign corporations controlled by U.S. MNEs for the years 1992, 1994, 1996, 1998, and 2000, extracted from Treasury CFC files and compiled by the Internal Revenue Service (IRS). The data was analyzed using econometric analysis. The study found that investment is strongly influenced by average tax rates, with a magnified impact for particularly low-tax rates, implying that the attractiveness of low-tax countries is not weakened by anti-deferral rules and cross-crediting limitations. MNEs report higher profits and may largely not repatriate dividends if located in low-tax countries.

Dyreng and Lindsey (2009) investigated the influence of tax havens and other foreign jurisdictions on the income tax rates of MNEs based in the United States. The study uses data of all U.S. incorporated firms in the Compustat database between 1995 and 2007 with at least $10 million in total assets. The
sample period started in 1995 when most firms had access to electronic filing. A new regression methodology was developed using financial accounting data to estimate the average worldwide, federal, and foreign tax rates on worldwide, federal, and foreign pretax book income for a large sample of U.S. firms with and without tax haven operations. The study found that U.S. MNES, which had significant operations in at least one tax haven country, have a worldwide tax burden on worldwide income approximating 1.5 percentage points lower than firms without operations in at least one tax haven country. The study also found that U.S. MNEs with operations in some tax haven countries have higher federal tax rates on foreign income than other MNEs. Thus, in some cases, having MNEs in tax haven operations may increase U.S. tax payments, affecting foreign country tax payments.

Desai and Dharmapala (2006) analyzed the connection between corporate tax avoidance, the growth of high-powered incentives for managers, and the structure of corporate governance, integrating several different data sources. The study used the book-tax gap data of a large sample of firms from Standard and Poor Compustat databases. The data was linked to an index of the quality of corporate governance by Gompers et al. (2003). The study developed and tested a model showing the role of complementarities between tax sheltering and managerial diversion, to establish the effects of high-powered incentives on tax sheltering decisions. A hypothesis that firm governance characteristics determine how incentive compensation changes sheltering decisions was developed. Data analysis was done using a regression model, and the study found that the relationship between incentive compensation and tax sheltering is caused by a firm’s corporate governance.

Brajcich et al (2013) analyzed the ability of the typical U.S. Corporation to obtain gains from establishing subsidiaries and determined whether those gains result from differences in tax rates across political jurisdictions. The study was driven by the fact that the U.S. has one of the highest statutory corporate tax rates in economically developed nations and that MNEs officers face pressure to reduce their companies’ effective tax rates. Also, tax experts/practitioners have designed sophisticated international structures to support their clients’ needs. Thus, MNEs use low-tax jurisdictions to minimize the overall tax expense. The study used tax rate as an explanatory variable and other non-tax factors (institutional related) that may influence investment abroad, including business climate and economic activity. The study used data culled from Inland Revenue Service (IRS) Form 5471, Information Return of U.S. Persons Concerning Certain Foreign Corporations, which is used by U.S. corporations to report the activities of
foreign corporate subsidiaries controlled by the U.S. parent. In this form, the U.S. taxpayer is supposed to report information with respect to the results of operations, location and any transactions between related parties. Data from these forms were collected for the years 2004, 2006 and 2008. The study found that tax rates influence where MNCs shift income, but to a limited extent and only after foreign operations are established. This study did not consider the influence of transactional costs on the profitability of MNEs.

The above studies indicate that MNEs may shift profits to maximize group profitability, thus affecting tax payments. However, these studies were conducted in the U.S. and there have been limited studies conducted in developing countries.

In Tanzania, recently undertaken studies include; Curtis et al (2012) and Adreoni and Tasciotti (2019), which show mixed results. Curtis et al (2012) analyzed Tanzania’s tax policies to establish how much revenue is lost through tax evasion, capital flight and tax incentives. The study estimates that Tanzania is losing about 1 billion dollars in tax revenue annually, largely through tax evasion, capital flight and tax incentives. Adreoni and Tasciotti (2019) studied trade mis-invoicing in Tanzania. The study uses disaggregated trade data from 1995 to 2017, and was analyzed using econometric analysis. The results show trade under-reporting of over US$10 billion between 2013 and 2017. Also, trade under-reporting is positively correlated with an increase in important tariffs. While these studies indicate the presence of profit shifting by MNEs, the focus was from the perspectives of the tax authorities. These studies do not consider factors influencing tax payments from MNEs’ perspective. Further, the study by Curtis et al (2012) used a desktop review of information, which may have limitations related to secondary data.

2.2.2 Regulatory Factors and Tax Payments
Nguyen and Cristea (2013) argue that MNEs are fast-growing global operations which generate significant operating profits and that MNEs avoid paying taxes on a significant part of their profits by shifting taxable income to countries with low corporate tax rates. This, coupled with significant budget deficits and a sluggish world economy, has driven governments to tighten their regulations and led to increased audits of companies, with MNEs as key targets, to raise tax revenues.

Gupta (2017) investigated the determinants of tax revenue performance in 120 developing countries. The study found that per capita GDP, the share of agriculture in GDP, trade openness and foreign aid, corruption, political
stability and the share of direct and indirect taxes have significant influence on revenue performance.

Palil and Mustapha (2011) explored the determinants of tax compliance in Malaysia to improve tax revenue collection. Tax knowledge, the probability of being audited, perceptions of government spending, penalties, personal financial challenges and referent groups were found to have an influence on tax collection.

Readhead (2016) uses a case study to investigate the challenges of implementing transfer pricing rules in the mining sector in Tanzania. Fifteen interviews were conducted with stakeholders in the mining sector, including the TRA International Tax Unit staff. The study reports that, of the few transfer pricing audits conducted, there has been an upward adjustment of taxes from MNEs, although these were under dispute. It also found that improvement of reporting from taxpayers regarding TP documentation requirements, the challenge to retain trained staff, the need to strengthen penalties, and lobbying for the exchange of information with other tax jurisdictions are challenges in implementing transfer pricing regulations. The study used a small sample for interviews.

Deloof & Vanstraelen (2015) examined the impact of tax enforcement and public listing status on income shifting by MNEs. The study used a sample of over 8,000 subsidiaries of 959 European MNEs from 1998 to 2009. Subsidiary-specific reported profitability was analyzed by applying to its country’s statutory rate and the rate in the parent country. Data analysis was done using regression analysis, and the study found that MNEs shift income from high to low tax countries. It also found that the shifting of income from high-tax countries occurs when there is weak local tax enforcement. The study did not consider the impact of penalties on tax payments from MNEs.

Azemer (2010) estimated the role of effective transfer pricing regulation, which includes tax audits, on income-shifting activities, considering the quality of MNEs’ countries’ law enforcement. The study used data of about 7,500 of the largest foreign corporations controlled by U.S. MNEs for the years 1992, 1994, 1996, 1998, and 2000 extracted from Treasury CFC files and compiled by the Internal Revenue Service (IRS). Econometric analysis was used to analyze the data, and the study found that a low level of law enforcement leads to higher income shifting.

Mooij & Liu (2018) explored the real effects of TP regulations on multinational investment, using panel data on domestic and multinational
companies in 27 countries during 2006-2014. The study applied a quasi-experimental research design. The study's main analysis is a standard difference-in-differences (DD) approach, where the identifying variation comes from the differential change in investment by an MNC affiliate, relative to investment by a purely domestic affiliate responding to the introduction of TP regulations in a country. Panel regressions were used to analyze the data. The study found that MNEs’ affiliates reduced their investment by over 11 percent after the introduction of transfer pricing regulations. However, from the MNEs’ group perspective, there is no significant reduction in total investment, which suggests the likelihood that the investments are shifted to affiliates in other countries. The study found that transfer pricing regulations do not have significant effects on foreign direct investment. The study suggests that the restrictions in transfer pricing regulations might be ineffective, or may be more easily substituted with other mechanisms of tax planning. Overesch (2009), Lohse and Riedel (2013) and Buettner and Wamser (2013) used a similar estimation approach to estimate changes in the tax sensitivity of multinational investment due to TP regulations. However, Buettner et al. (2014) found that transfer pricing regulations do not have significant effects on FDI.

Li (2005) found that compliance with tax laws and regulations is the most important factor in transfer pricing decisions. Klasen et al (2014) surveyed 219 MNEs and investigated the extent to which cross-border transfer prices are used for tax maximization. They found out that most transfer pricing strategies focus on tax compliance and not minimization of cash taxes paid. These studies ignored the effect of some variables from economic compliance theory, such as contemporaneous documentation requirements. Information sharing by MNEs through documentation may act as a deterrent, thus affecting tax compliance by MNEs, which may positively affect tax payments.

The threat of a transfer pricing audit by the tax authority may compel MNEs to price their transactions fairly to avoid penalties related to the adjustment of their prices and other costs, such as time consumed on transfer pricing audits. This may lead to increased tax payments. For instance, Borowski (1997 and 2010) found that Japanese MNEs changed their preference from cost-based transfer pricing methods to market and negotiated methods. The change may have been triggered by intensified activities and audits by the tax authority. Borowski (1997) noted that the conclusions cannot be generalized to the global MNE population, as the study focused on Japan and the US and their distinctive cultural characteristics. Li (2005) found that New Zealand firms use both non-market and market-based transfer pricing. There is increased use of market-based transfer pricing due to more surveillance.
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and investigation of multinational transfer pricing practices by the tax authority. Market prices are used to defend pricing policies. Li (2005) found that transfer pricing audit was considered to be moderately important in transfer pricing decisions. Business International Corporation & EY (1991) found that avoiding transfer pricing audits affects the pricing decisions of MNEs. There is a need to determine the impact of tax audits on tax payments from MNEs. This is due to weak tax enforcement in developing countries (UN, 2017).

Jost et al (2010) investigated whether, and to what extent, the awareness of transfer pricing from the tax compliance perspective reacts to country and industry characteristics and MNEs’ specifics. The study used data collected from a survey carried out by a Big 4 accounting firm in 2007 and 2008. It estimated the number of firms reporting transfer pricing as the largest risk issue about subsequent tax payments. The study found that MNEs’ preparation of transfer pricing documentation does not affect their decisions about tax payments, as they are prepared ex-post. However, inter-company guidelines and agreements affect tax payment decisions. These agreements determine the terms and conditions applicable to inter-company transactions ex-ante. However, the study ignores the fact that in some countries, such as Tanzania, there is a requirement to prepare contemporaneous transfer pricing documentation; that is, documentation should be prepared as and when the transactions occur. There is a need to consider the impact of this documentation on decisions by MNEs about tax payments.

Readhead (2016) used a case study to investigate the challenges of implementing transfer pricing rules in the mining sector in Tanzania. Fifteen interviews were conducted with stakeholders in the mining sector, including the TRA International Tax Unit staff. The study reports that the lack of comparable data is a challenge for MNEs in Tanzania. A lack of comparable data may lead to the choice by MNEs of a method that does not lead to effective tax payments. When comparable data are not locally available, MNEs tend to use comparable data from foreign markets. The study uses a very small sample to generalize the impact of comparable data on tax payments from MNEs.

2.2.3 MNEs Environmental Factors and Tax Payments

Tang (1979) used a questionnaire to study the key environmental variables related to international transfer pricing and the methodologies used to fix transfer prices for domestic and cross-border international transactions by US MNEs. The study used a questionnaire and found that overall profit maximization and income tax rate differentials, restrictions on the
remittance of profits or dividends, competitive position of subsidiaries abroad and minimization of taxes were important variables for MNEs. Plasschaert (1985) asserts that although global profit maximization is an overriding variable for MNEs, the price level of internally traded commodities and services is not relevant for overall profit performance because sales revenue can only be deducted from external sales. Plasschaert et al. (1985), as cited in Li (2005), found that MNEs can sacrifice some profits using transfer pricing to create a relationship with the host government where subsidiaries are located. This is to avoid government actions that may have damaging effects on the MNE business.

Chan and Lo (2004) conducted an empirical study of the association between management perception of the importance of environmental variables and their choice of international transfer pricing methods in China. Data was collected through interviews of management officials of large foreign MNEs covering investors from the US, Japan and Europe and analyzed using logistic regression. The study found that the more important the MNE considers the need to have a relationship with the host government, the higher the likelihood of using a market-based transfer pricing method as it leads to fair tax payments.

MNEs may transfer profits from host countries to avoid the risk of political instability, expropriation and nationalization, which are more common in developing countries. Strong trade unions may also put pressure on subsidiaries to raise wages, which may reduce MNE profits. These factors may lead to overpricing by MNEs' transactions with subsidiaries to transfer profits from host countries and, thus, affect tax payments. Plasschaert et al. (1985), as cited in Li (2005), found that MNEs can use transfer pricing to shift profits to avoid the risk of political instability, which may lead to expropriation and nationalization. Al-Eryani, Alam and Akhter (1989) found that political factors, such as expropriation, nationalization, civil wars, class conflicts and ethnic conflicts, may motivate MNEs to undertake transfer mispricing.

The studies by Plasschaert et al. (1985), as cited in Li (2005), and Al-Eryani, Alam and Akhter (1989) about environmental factors did not consider the impact of the availability of comparable information on tax payments. The choice of a transfer pricing method will depend on the identification of uncontrolled comparable transactions, which may be challenging, especially for developing countries that may have limited access to information about comparable data. This will, in turn, affect tax payments.
The survey of literature has found some determinants of tax collections from MNEs. However, no study has empirically adequately explored the effect of the availability of comparable information for benchmarking pricing transactions between MNEs and those of market participants. Further, studies on tax and regulatory factors ignore the impact of MNEs documentation/information requirements, which is key for the tax authority to assess the pricing of transactions of MNEs. Also, most of these studies were conducted in developed countries. The United Nations advocates for the need to consider the special needs and perspectives of developing countries when dealing with the problems of base erosion and profit shifting (UN, 2017). For instance, developing countries lack comparable data to be able to use ALP-based methods (Readhead, 2016) and have weak tax administrations to effectively enforce transfer pricing rules (Fuest et al, 2011). The UN also argues that each country must assess its own conditions to identify its specific challenges and establish the most relevant taxing mechanisms.

This paper intends to fill these gaps in the literature.

3 Methodology
The paper is guided by the positivist research paradigm. The choice of the positivist research paradigm was because the study applied an explanatory research design. This was to explain the cause-and-effect relationship between the different factors that determine tax revenue collection from MNEs and to generalize the study findings. Positivism has also been chosen because the paper uses the existing theory, namely, the income tax evasion theory and Arm’s Length Principle to develop the hypotheses. The hypotheses were tested and those confirmed in full or in part will lead to the development of theory.

3.1 Hypotheses
The paper is guided by the following hypotheses:

3.1.1 Profit maximization
Profit maximization is one of the objectives of many MNEs. This is achieved by, among other means, shifting income from higher to lower tax countries to reduce total tax liabilities and, hence, maximize profits after tax (Nguyen and Cristea, 2013). Curtis et al (2012) analyzed Tanzania’s tax policies to establish how much revenue is lost from tax evasion, capital flight and tax incentives. The study estimated that Tanzania was losing about 1 billion dollars in tax revenue annually largely through tax evasion, capital flight and tax incentives. The paper used a desktop review of information, which may provide partial answers. However, the study does not consider other factors...
influencing tax collection from MNEs, such as the cost of doing business and the financing of the firm, and tax and regulatory factors, including tax audit and information requirements from MNEs. Desai and Dharmapala (2006) analyzed the connection between corporate tax avoidance, the growth of high-powered incentives for managers, and the structure of corporate governance. They found that the relationship between incentive compensation and tax sheltering is caused by a firm’s corporate governance. The study was conducted in the U.S. and there are limited studies conducted in developing countries. Adreoni and Tasciotti (2019) studied trade mis-invoicing in Tanzania. The study found trade underreporting of over US$10 billion between 2013 and 2017, which is positively correlated with an increase in important tariffs. The paper focuses on the impact of import tariffs and does not look at the impact of MNEs’ profit shifting. A study by Oktrivina (2022) found that profitability, leverage and size have a negative effect on tax avoidance; that is, the higher the profit the lower the tax avoidance. Mulyati, Juni, Subing, Fathonah & Prameela (2019) found that profitability does not affect tax avoidance. Companies take tax avoidance as a risky activity and when the return on assets (ROA) is high, they can meet their tax burden and thus comply with all applicable tax provisions. Thus, when ROA is low, there is no need to carry out tax avoidance. A study by Mocanu, Constantin and Raileanu (2021) in Romania found that larger companies with lower financial performance tend to undertake tax avoidance. McCarthy (2021) found that MNEs undertake significant earnings management for tax avoidance purposes. There is a significant and positive relationship between earnings management and tax avoidance. On the other hand, Darsani and Sukartha (2021) found that profitability has a positive effect on tax avoidance; that is, the greater the profitability of MNEs, the greater the tax avoidance efforts undertaken by management. We thus hypothesize that:

**HI: MNEs’ profit maximization objectives negatively affect tax revenue collection**

### 3.1.2 Tax Audits and Tax Collection

The threat of a transfer pricing audit by the tax authority may compel MNEs to price their transactions fairly to avoid penalties related to the adjustment of their prices and other costs, such as time consumed on transfer pricing audits. This may lead to increased tax collection. For instance, Palil and Mustapha (2011) found that, the probability of being audited, perceptions of government spending, penalties, personal financial challenges and referent groups were found to have an influence that affects tax collection. Further, Borowski (1997 and 2010) found that Japanese MNEs changed their preference from cost-based transfer pricing methods to market and
negotiated methods. The change may have been triggered by intensified activities and audits by the tax authority. The U.S. MNEs, on the other hand, slightly prefer cost-based methods to market and negotiated methods. Borowski (1997 and 2010) asserts that cost-based methods are theoretically given equal standing to market-based methods in transfer pricing regulations, although the use of the cost method attracts audits by the U.S. tax authority more than other methods. MNEs continue to use cost-based methods as this enables them to minimize tax liabilities due to the poor success record of tax cases by the tax authority. Business International Corporation & EY (1991) found that avoiding transfer pricing audits affects the pricing decisions of MNEs. There is a need to determine the impact of tax audits on tax collection from MNEs. This is due to weak tax enforcement in developing countries (UN, 2017).

We therefore hypothesize the following:

**H2: Tax audits positively affect tax collection from MNEs**

### 3.1.3 Documentation Requirements

A positive relationship exists between the requirement for MNEs to submit transfer pricing documentation and tax collection. The positive relationship is predicted because income tax laws (Tax Administration TP Regulations, 2018) require MNEs to prepare and submit to TRA contemporaneous transfer pricing documentation to show that their prices are at arm’s length. The income tax evasion theory by Allingham and Sandmo (1972) also assumes that information on tax matters from companies will deter them from reporting a fair amount of profits and, thus ensure appropriate tax collection by the tax authority. Deloof and Vanstraelen (2015) examined the impact of tax enforcement and public listing status on income shifting by MNEs. The study found that MNEs shift income from high to low-tax countries when there is weak local tax enforcement. Azemer (2010) estimated the role of effective transfer pricing regulation related to income-shifting activities, considering the quality of MNEs countries’ law enforcement. The study found that a low level of law enforcement leads to higher income shifting. Mooij & Liu (2018) explored the real effects of TP regulations on multinational investment using panel data on domestic and multinational companies in 27 countries during 2006-2014. The study found that transfer pricing regulations do not have significant effects on foreign direct investment. It suggests that the restrictions in transfer pricing regulations might be ineffective, or may be more easily substituted by other mechanisms of tax planning. Jost et al (2010) investigated whether, and to what extent, the awareness of transfer pricing from the tax compliance perspective reacts to country and industry characteristics and MNEs’ specifics. The study found
that MNEs’ preparation of transfer pricing documentation does not affect their decisions on tax payments as it is prepared ex-post. However, intercompany guidelines and agreements affect tax payment decisions. These agreements determine the terms and conditions applicable to intercompany transactions ex-ante. However, the study ignores the fact that in some countries, such as Tanzania, there is a requirement to prepare contemporaneous transfer pricing documentation, that is, documentation should be prepared as and when the transactions occur. There is a need to consider the impact of this documentation on decisions by MNEs about tax payments.

We hypothesize that:

**H3: Transfer pricing documentation positively affects tax collection from MNEs**

3.1.4 Availability of comparable data
For the Arms Length Transfer Pricing methods to be applied, the comparability analysis of transactions with independently undertaken transactions (market transactions) must be made. This involves the identification and analysis of comparable data using five factors. These are: characteristics of the property or services; contractual terms; functions, assets and risks performed by the associates; economic conditions of the market; and any potential factors including business strategies (Eden, 2016). The identification of uncontrolled comparable transactions may be challenging, especially for developing countries, which may have limited access to information on comparable data. Lack of comparable data may lead to the choice by MNEs of a method that does not lead to effective tax collection from MNEs.

Readhead (2016) used a case study to investigate the challenges of implementing transfer pricing rules in the mining sector in Tanzania. Fifteen interviews were conducted with stakeholders in the mining sector, including the TRA International Tax Unit staff. The study reports that, of the few transfer pricing audits conducted, there had been upward adjustments of taxes by MNEs. It was also found that improvement of reporting by taxpayers regarding TP documentation requirements, the challenge to retain trained staff, the need to strengthen penalties and lobbying for the exchange of information with other tax jurisdictions were all challenges in implementing transfer pricing regulations. The paper used a small sample for the interviews did not look at the impact of TP methods on tax collection from MNEs and made proposals for Tanzania to fully adopt the OECD final BEPS report recommendation to limit interest deductibility based on MNEs earnings, that
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is, interest deductions between 10 and 30 percent of earnings before interest, tax, depreciation and amortization (EBITDA). However, it did not consider its impact on Tanzania’s ability to attract foreign investment and whether or not the current interest deductibility rules (thin capitalization rules) were adequate. Lack of comparable data was also found to be a challenge for MNEs in Tanzania. A lack of comparable data may lead to the choice by MNEs of a method that does not lead to effective tax collection. When comparable data are not locally available, MNEs tend to use comparable data from foreign markets. However, it has been noted that the use of imperfect data mostly from foreign markets by taxpayers and tax authorities “has not been studied sufficiently to enable definitive conclusions to be drawn on when they are reliable or how any adjustments to account for such differences should be applied” (The Platform for Collaboration on Tax, 2017, p.12).

We therefore hypothesize the following:

**H4**: Availability of comparable data positively affects tax revenue collection

### 3.1.5 MNE Relation with the Government and Tax Collection

MNEs seek to maintain a good relationship with the host governments when developing their transfer pricing policies to avoid disputes. They can sacrifice some of their profits to pay more taxes to maintain good relations with the host government. Plasschaert et al. (1985), as cited in Li (2005), found that MNEs can sacrifice some profits using transfer pricing to create a good relationship with the host government where subsidiaries are located. This is to avoid government actions that may have damaging effects on the MNE business. Thus, we hypothesize the following:

**H5**: Good Relations with the Government is positively related to tax collection

### 3.1.6 Political Pressure and Tax Collection

MNEs may transfer profits from host countries to avoid the risk of political instability, expropriation and nationalization, which are more common in developing countries. Strong trade unions may also put pressure on subsidiaries to raise wages, which may reduce MNE profits. These factors may lead to overpricing by the MNE group of transactions with subsidiaries to transfer profits from host countries and, thus, affect tax collection. Plasschaert et al. (1985), as cited in Li (2005), found that MNEs can use transfer pricing to shift profits to avoid the risk of political instability, which may lead to expropriation and nationalization. Al-Eryani, Alam and Akhter (1989) found that political factors, such as expropriation, nationalization, civil wars, class conflicts and ethnic conflicts, may motivate MNEs to undertake transfer mispricing. We therefore hypothesize the following:
H6: Political pressures on MNEs negatively influence effective tax collection

Independent Variables

Profit maximisation/shifting

Tax audit Documentation

Availability of comparable data
MNE relation with the Government, Political Pressure

Dependent Variable

Tax Collection

Figure 3.1: Theoretical Framework
Source: Author’s conceptualization based on various literature reviewed

3.2 Empirical Model
To estimate the relationship between tax collection from MNEs in Tanzania and the explanatory variables, a multiple regression model is specified as follows:

\[ TC = \beta_0 + \beta_1 \text{PM} + \beta_2 \text{TA} + \beta_3 \text{D} + \beta_4 \text{CD} + \beta_5 \text{RG} + \beta_6 \text{PP} + \text{ut} \]  

\[
(3.1)
\]
Where TC is tax collection, PM is MNE Profit Maximization, TA is Tax Audit, D is Documentation, CD is Comparable Data, RG is Relation with Government and PP is Political Pressure. The beta terms are the model coefficients being estimated, while $u_t$ is the error term or residual for the model.

### 3.3 Data and Variable Description

The paper used an explanatory approach, in which primary data from 107 MNEs were selected purposefully from a population of 504 MNEs and from each, three respondents were selected, one head of finance or tax, one accountant and one chief executive officer. These formed a sample size of 321 respondents. Out of 321 questionnaires sent to respondents, 140 questionnaires were completed and returned, representing a 44% response rate. The questionnaire had six statements representing factors, one statement representing tax collection and two statements representing transfer pricing methods. The collected data were analyzed using descriptive and inferential statistics. For descriptive statistics, the paper used frequency, percentage, mean and standard deviation. In the case of inferential statistics, multiple regression analysis was used.

The research design is consistent with several studies conducted on the taxation of MNEs, such as Li (2005), Zhao et al, 2015 as well as Chan and Lo (2004).

### 3.4 Dependent Variable

Tax collection was the dependent variable measured by a 5-point LIKERT scale (from very low to very high). Tax collection is defined as the amount of corporate tax collected from MNEs by the tax authority.

#### 3.3.2 Independent Variables

Independent variables included MNE internal factors, environmental factors and regulatory factors that affect tax collection. MNE internal factor (profit maximization), relates to MNEs’ maximization of long term profit. Environmental factors included good relations with the government,

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2 This is after several reminders through electronic, physical visits and telephone. Some respondents from MNEs in the mining, tourism and construction were not available to respond to the questionnaire as they had closed offices and left the country due to COVID 19 and other challenges and others were found not to be operating in Tanzania. Padhi (2019) indicates that studies related to transfer pricing tax matters have a response rate of between 19% and 48%.
availability of comparable data and political pressure. Good relations with the Government relate to the sacrifice of some profits by MNEs, using transfer pricing to create a good relationship with the host government where subsidiaries are located to avoid damaging effects. The availability of comparable data relates to the existence of transactions between the tested party and the independent party (internal comparable) or transactions between independent parties outside the controlled transactions. Political pressure relates to instabilities which may lead to expropriation and nationalization of MNEs. Regulatory factors included transfer pricing audit and documentation requirements. Transfer pricing audit relates to examination of MNEs’ transactions with associates to determine whether they conform to the arm’s length principle. Documentation refers to the documentation required by the tax authority to justify that related party transactions were carried out at arm’s length. Independent variables are measured using a 5 LIKERT, with the weight of factors affecting tax collection (from not important to extremely important) (UN, 2017; Li, 2005; Chan & Lo, 2004; Lu, Ding, Peng & Chuang 2018).
### Table 3.1: Variable Description

<table>
<thead>
<tr>
<th>Category</th>
<th>Research Variable</th>
<th>Operational Definition</th>
<th>Measurement</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent variable</td>
<td>Profit maximization</td>
<td>MNEs profiting shifting to reduce tax payment.</td>
<td>Likert Scale (1-5)</td>
<td>Brajcich et al. (2013); Azemer (2010), Dyreng and Lindsey (2009); Lanis and Richardson (2012); Dyreng and Hanlon (2010); Desai and Dharmapala (2006).</td>
</tr>
<tr>
<td>Audit</td>
<td>Audit conducted by the tax authority.</td>
<td>Tax audits by TRA (Likert Scale:1-5)</td>
<td></td>
<td>Borowski (1997&amp;2010); Li (2005)</td>
</tr>
<tr>
<td>Documentation</td>
<td>Contemporaneous TP documentation required to be submitted to the authority by MNEs with transactions with associates.</td>
<td>Requirement to prepare and submit contemporaneous transfer pricing documentation to the tax authority. (Likert Scale:1-5)</td>
<td>Mooij &amp; Liu (2018), Azemer (2010), Jost et al (2010)</td>
<td></td>
</tr>
<tr>
<td>Relation with the Government</td>
<td>MNEs relations with the government to ensure smooth operations of their business.</td>
<td>(Likert Scale:1-5)</td>
<td>Plasschaert et al. (1985) as cited in Li (2005)</td>
<td></td>
</tr>
<tr>
<td>Comparable data</td>
<td>Information from MNEs independent parties for benchmarking of prices of transactions with related parties.</td>
<td>(Likert Scale:1-5)</td>
<td>Mooij &amp; Liu (2018), Azemer (2010)</td>
<td></td>
</tr>
<tr>
<td>Political Pressure</td>
<td>Pressure from civil wars,</td>
<td>(Likert Scale:1-5)</td>
<td>Plasschaert et al. (1985)</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Research Variable</td>
<td>Operational Definition</td>
<td>Measurement</td>
<td>Source</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>nationalization or expropriation causing an MNE to shift profits.</td>
<td>as cited in Li (2005)</td>
<td></td>
</tr>
<tr>
<td>Dependent</td>
<td>Tax collections</td>
<td>Tax paid by MNEs as measured by effective tax rate.</td>
<td>The amount of tax paid to tax authority (Likert Scale:1-5) for primary data.</td>
<td>Jost et al (2010).</td>
</tr>
<tr>
<td>Variable</td>
<td></td>
<td></td>
<td>It is also measured Effective tax rate=Income Tax Charge/Profit Before Tax for secondary data.</td>
<td>Dyreng and Hanlon (2010)</td>
</tr>
</tbody>
</table>
4 Empirical Results

In this section, we present the results of the regression analysis. Firstly, descriptive statistics are reported together with the correlation results in Section 4.1. This is followed in Section 4.2 by a presentation of the regression results.

4.1 Descriptive Statistics

The descriptive results, which include demographic details and respondents’ perceptions of factors and tax collection, are presented in Table 4.1. As per the results, 140 completed questionnaires were returned. However, the collected data met the requirements of the preferred minimum sample size as stipulated by Hair et al. (2018), i.e., a minimum observation-to-variable ratio of 15:1. Also, Padhi (2019) indicates that studies related to transfer pricing tax matters have a response rate of between 19% and 48%.

Table 4.1 shows the descriptive statistics for the independent variables relating to the perceptions of the respondents on factors affecting tax collection from MNEs. There were six (6) statements showing various factors determining tax collection from MNEs in Tanzania. The results are a summary of a five-point Likert scale (i.e., summarized into five levels: not important, slightly important, moderately important, very important and extremely important).

The variables in Table 4.1 were measured based on a 5-point Likert Scale. The results show that the mean value for profit maximization is 3.53, with a standard deviation (SD) of 1.37. Tax audit has a mean of 3.87 and SD of 1.30. TP documentation has a mean of 3.71 and SD of 1.26. The availability of comparable data has a mean of 3.25 and SD of 1.55. Relation with the government has a mean of 3.88 and SD of 1.16. Political and Social Pressure has a mean of 2.61 and SD of 1.39. The mean result for tax payments is 3.60 with a SD of 1.39.

From the analysis, with the exception of political and social pressure, the mean results for profit maximization, tax audit and TP documentation and good relations with the government and tax collection with the government were sufficiently high to influence tax payments.
Table 4.1: Descriptive Statistics for individual items of factors.

<table>
<thead>
<tr>
<th>Research Variable</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer Pricing Documentation</td>
<td>139</td>
<td>0</td>
<td>5</td>
<td>3.71</td>
<td>1.254</td>
</tr>
<tr>
<td>Tax Audit</td>
<td>135</td>
<td>0</td>
<td>5</td>
<td>3.87</td>
<td>1.278</td>
</tr>
<tr>
<td>Profit Maximisation</td>
<td>137</td>
<td>1</td>
<td>5</td>
<td>3.53</td>
<td>1.362</td>
</tr>
<tr>
<td>Availability of Comparables</td>
<td>121</td>
<td>0</td>
<td>5</td>
<td>3.25</td>
<td>1.551</td>
</tr>
<tr>
<td>Relation with the Government</td>
<td>131</td>
<td>1</td>
<td>5</td>
<td>3.88</td>
<td>1.157</td>
</tr>
<tr>
<td>Political and Social Pressure</td>
<td>127</td>
<td>0</td>
<td>5</td>
<td>2.61</td>
<td>1.398</td>
</tr>
<tr>
<td>Tax Collection</td>
<td>136</td>
<td>0</td>
<td>5</td>
<td>3.60</td>
<td>1.395</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>113</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In addition to the descriptive statistics, the study also did tests for validity using Cronbach’s alpha and the results presented in table 4.2 as shown.

Table 4.2: Cronbach’s Alpha (Ca) Coefficient and Research Variables

<table>
<thead>
<tr>
<th>No.</th>
<th>Research Variable</th>
<th>Cronbach’s Alpha Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Transfer Pricing Documentation</td>
<td>0.720</td>
</tr>
<tr>
<td>2</td>
<td>Tax Audit</td>
<td>0.711</td>
</tr>
<tr>
<td>3</td>
<td>Profit Maximisation</td>
<td>0.736</td>
</tr>
<tr>
<td>4</td>
<td>Availability of Comparable</td>
<td>0.710</td>
</tr>
<tr>
<td>5</td>
<td>Good Relation with the Government</td>
<td>0.734</td>
</tr>
<tr>
<td>6</td>
<td>Political and Social Pressure</td>
<td>0.715</td>
</tr>
<tr>
<td>7</td>
<td>Tax Collection</td>
<td>0.771</td>
</tr>
</tbody>
</table>

Briefly interpret the Cronbach alpha coefficients in Table 4.2

4.2 Regression Results

One model that included possible variables was estimated. Possible multicollinearity was checked using diagnostic tests. This was done using variance inflation factor (VIF) and correlation analysis. VIF was less than 10 in line with the rule of thumb (see Table 4.6), thus no concern with multicollinearity. Table 4.3 shows the results of model goodness of fit when measured by $R^2$, which shows the effect of the independent variables over the variables. In this study, the adjusted $R^2$ of 0.69 indicates that independent variables in this study have a contribution of 69 percent in the determination of their relationship with tax collection.
Table 4.3: Summary

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>0.344</td>
</tr>
<tr>
<td>Coefficient of determination (R^2)</td>
<td>0.119</td>
</tr>
<tr>
<td>Adjusted R^2</td>
<td>0.69</td>
</tr>
<tr>
<td>Standard error of estimate</td>
<td>1.383</td>
</tr>
</tbody>
</table>

Table 4.4 shows the results of the multiple regression analysis, which confirms that the regression model (overall) was significant at the five percent significance level (p-value 0.034). Also, the measures of multicollinearity showed that multicollinearity was unlikely to affect the inferences, as all VIF values were less than 2. Further, the tolerance values ranged from 0.643 to 0.770. As per Ho (2006), tolerance values greater than 0.10 and VIF values less than 10 are acceptable, as they indicate the unlikely occurrence of multicollinearity.

Table 4.4: Analysis of variance

<table>
<thead>
<tr>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>6</td>
<td>4.548</td>
<td>2.378</td>
<td>0.034</td>
</tr>
<tr>
<td>Residual</td>
<td>106</td>
<td>1.913</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>112</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To establish independent relationships, standardized regression coefficients (Beta Weights) were used, as suggested by Ho (2006). Ho (2006) suggests the use of standardized regression coefficients as it helps in making the regression coefficients more comparable, unlike unstandardized coefficients (β-values), which are appropriate when the units of measurement are not different. These are shown in Table 4.5.

Table 4.5: Regression model results and Hypothesis test findings

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Variable</th>
<th>Beta</th>
<th>SE</th>
<th>t-value</th>
<th>p-value</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a</td>
<td>Profit Maximization</td>
<td>0.096</td>
<td>0.110</td>
<td>0.912</td>
<td>0.364</td>
<td>Rejected</td>
</tr>
<tr>
<td>H2a</td>
<td>Tax Audit</td>
<td>-0.009</td>
<td>0.147</td>
<td>0.070</td>
<td>0.944</td>
<td>Rejected</td>
</tr>
<tr>
<td>H2b</td>
<td>Documentation</td>
<td>0.067</td>
<td>0.148</td>
<td>0.553</td>
<td>0.581</td>
<td>Rejected</td>
</tr>
<tr>
<td>H3a</td>
<td>Comparable data</td>
<td>0.230</td>
<td>0.104</td>
<td>2.026</td>
<td>0.045</td>
<td>Accepted</td>
</tr>
<tr>
<td>H3b</td>
<td>Relations with the Government</td>
<td>.149</td>
<td>0.133</td>
<td>1.450</td>
<td>0.150</td>
<td>Rejected</td>
</tr>
<tr>
<td>H3c</td>
<td>Political Pressure</td>
<td>-.094</td>
<td>0.150</td>
<td>-.812</td>
<td>0.418</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

Table 4.5 shows that the regression model had one variable (comparable data) as statistically significant in influencing tax collection, while the other variables were found to be insignificant as their p-values exceeded 5 percent level of significance.
Therefore, the hypothesis for comparable data was accepted while the other hypothesis could not be accepted based on the 5 percent level of significance.

Table 4.6: The Collinearity Statistics

<table>
<thead>
<tr>
<th>No.</th>
<th>Variable</th>
<th>Collinearity Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>VIF</td>
</tr>
<tr>
<td>1.</td>
<td>MNE Internal Factors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Profit Maximization</td>
<td>1.0</td>
</tr>
<tr>
<td>2.</td>
<td>Tax and Regulatory Factors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Documentation</td>
<td>1.731</td>
</tr>
<tr>
<td></td>
<td>Tax Audit</td>
<td>1.392</td>
</tr>
<tr>
<td>3.</td>
<td>Environmental Factors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Availability of Comparable data</td>
<td>1.370</td>
</tr>
<tr>
<td></td>
<td>Good Relation with the Government</td>
<td>1.133</td>
</tr>
<tr>
<td></td>
<td>Political and Social Pressure</td>
<td>1.301</td>
</tr>
</tbody>
</table>

4.3 Interpretation and Discussion of the Findings

The objective of this paper was to examine the influence of the MNE's internal factors, tax and regulatory factors and environmental factors on tax collection from MNEs in Tanzania. The paper used the income tax evasion theory to develop three categories of factors influencing tax collection. The three categories of factors were MNEs’ internal factors, tax, regulatory factors and environmental factors. Through these categories, six hypotheses were formulated and tested using multiple regression analysis. The MNE internal factors comprised one factor: MNEs’ intentions to maximize profit. The tax regulatory factors comprised two factors: tax audits and information provision through transfer pricing documentation. Environmental factors comprised three factors: availability of comparable data for use by MNEs in ensuring their pricing is at arm’s length, the relation between MNEs and the Government, and political pressure exerted on MNEs.

The results from the multiple regression analysis shown in Table 4.5 have shown that profit maximization does not have a statistically significant influence on tax collection, with a p-value of 0.364. One possible reason for the lack of significant influence of MNEs’ profit maximization on tax collection could be the nature of the firm-specific transactions undertaken by MNEs’ subsidiaries in Tanzania not involving significant research and
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development expenditure, advertising and intangibles. Overesch and Schreiber (2010), Grubert (2003) and Harris (1993) suggest that these transactions are associated with profit shifting by MNEs using transfer pricing, as it is difficult to obtain comparable market transactions. Perhaps, also, this could be because the lack of comprehensive data on the make-up of the costs has limited our analysis of whether the MNEs in Tanzania are using aggressive tax planning mechanisms to shift profits to low-tax jurisdictions.

The multiple regression analysis results showed that there was a positive relationship between tax audit and tax collection, which was statistically not significant, with a p-value of 0.944. One possible reason for this finding could be the fact that transfer pricing regulations are ineffective or may be more easily substituted by other mechanisms of tax planning (Mooij and Liu, 2018). Perhaps this is explained by the fact that the majority of MNEs in Tanzania are loss-making. Thus, even though enforcement activities through audits and documentation requirements are partly done by TRA, the overall impact on tax collection may be negligible, as most of the MNEs are loss-making. Also, the lack of adequate auditors, as indicated by the Controller and Auditor General’s performance report on control over transfer pricing by TRA for the period from 2016/2017 to 2019/2020, may have led to failure by the empirical research data to support the hypothesis that regulatory factors positively influence tax collection. This view is also supported by Muller and Kolk (2015) and Durst (2016), who report that enforcement of tax regulations varies between countries and that MNEs with this understanding may exploit it. Also, Azemar (2010) found that a low level of law enforcement leads to high-income shifting.

The multiple regression analysis results showed that there was a positive relationship between transfer pricing documentation and tax collection, which is statistically not significant, hence, the p-value of 0.096; β=−0.215; t=1.681; p>0.05. One possible reason for this finding could be that transfer pricing regulations are ineffective or maybe more easily substituted by other mechanisms of tax planning (Mooij and Liu, 2018). The data therefore reveals that transfer pricing had no significant effect on tax collection at the 5 percent significance level, but became statistically significant at the 10 percent level.

The hypothesis that comparable data affects tax collection was supported by the empirical research data. The availability of comparable data was found to be statistically significant in influencing tax collection. The multiple
regression analysis results showed that there was a positive relationship between comparable data and tax collection, which was statistically significant at $P = 0.045$; $\beta = 0.230$; $t = 2.026$; $p > 0.05$. The comparable data has a mean of 3.25 and a standard deviation (SD) of 1.551. This finding implies that there is a need by both MNEs and the tax authority to establish comparable data for MNEs.

The hypothesis that relations with the government affect tax collection was not supported by the empirical research data. The desire to maintain a good relationship with the host government was found not to be statistically significant in influencing tax collection. The multiple regression analysis results showed that there was a positive relationship between the government and tax collection, which was not statistically significant, hence, the $p$-value of 0.150; $\beta = 0.149$; $t = 1.450$; $p > 0.05$. The relation with the government has a mean of 3.88 and SD of 1.157. This finding was against expectations since good relations with the government would have been expected to influence tax collection by the government.

The hypothesis that political pressure on MNEs affects tax collection was supported by the empirical research data. Political pressure on MNEs was found not to be statistically significant in influencing tax collection. The multiple regression analysis results showed that there was a negative relationship between political pressure and tax collection, which was statistically not significant at $p$-value of 0.418; $\beta = -0.094$; $t = -812$; $p > 0.05$. Political pressure has a mean of 2.61 and SD of 1.398. Perhaps this is caused by low political pressure on MNEs in Tanzania.

5. Conclusion and Policy Implications

The objective of the paper was to determine the factors that influence tax collection from MNEs. We found that tax collection from MNEs in Tanzania is affected by environmental factors. MNE internal factors and tax and regulations were found not to have a significant relationship with tax collection from MNEs. The results of this paper should be of interest to governments, tax authorities and MNEs, as they show the factors that influence tax collection, and tax collection from MNEs.

Lack of comparable data in the Tanzanian economic environment has a significant influence on tax collection. Thus, the availability of comparable information is critical as it enables the use by MNEs of an appropriate
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transfer pricing method, which leads to high tax payments. Therefore, the government needs to work with MNEs to address the challenge of lack of comparable data for benchmarking. The government should also consider simplifying the existing transfer pricing rules applicable to MNEs. The requirement to undertake complex transfer pricing studies to demonstrate that pricing of transactions between associates is at arm’s length, while comparable data are not available, poses a challenge to MNEs. Thus, there is a need to reconsider whether the use of the transfer pricing studies and methods, which impose significant costs on the taxpayers or other simplified measures, will be more appropriate for ensuring that appropriate tax payments are obtained from MNEs while at the same time, eliminating uncertainties for taxpayers and encouraging foreign direct investment.

Cooper and Nguyen (2020) suggest that the recent requirement for Country by Country (CbC) Reporting from the OECD will provide new data for governments. They call for mandatory publication of these data to make them useful for research. The OECD (2021) report for the G20 Finance Ministers and Central Bank Governors for developing countries suggests the use of fixed margins or other prescriptive measures to arm’s length return, joint audits and other co-operative approaches, greater use of anti-abuse rules and greater flexibility in the application of TP rules. For instance, Picciotto (2018) contends that Brazil adopted the three traditional OECD-approved methods, but developed them differently from the OECD interpretation of them for activities involving imports and exports. Although the approach provides simplicity and it is easier to administer, Picciotto (2018) challenges the approach as taking less account of variation between industry sectors or business models and not taking into account the actual profitability of the entity covered.

For MNEs, the government should also consider the adoption of the BEPS Action 13 report, which provides for transfer pricing documentation rules as they enhance transparency for tax administrations and, at the same time, take into consideration the compliance costs for business. This will enable the government to have a comprehensive and appropriate framework for the taxation of MNEs, as TRA will have important information for conducting transfer pricing risk assessment and, thus, effective transfer pricing audits. It will also enhance compliance by MNEs. This involves a standardized approach covering the local file, master file and Country-by-Country Report. Also, it should consider the simplification and exemption measures included
in the recommendations by the Platform for Collaboration concerning a practical tool-kit to support the successful implementation by developing countries of effective transfer pricing documentation requirements. These include exemptions from the requirement to comply with the detailed transfer pricing documentation requirements for smaller MNE taxpayers (with few transactions e.g., inter-company loans) or low-risk taxpayers (for instance, with no transactions with associates in tax havens). Simplified documentation requirements in the form of a check-list for these taxpayers can be developed. This will reduce the compliance costs of taxpayers, as TRA will obtain only the required information and, thus, focus its resources on high-risk taxpayers. It should also consider the advantages and disadvantages of adopting the recently agreed global minimum tax rate of 15% as proposed by the OECD.

Also, the Business Registration and Licensing Agency’s filing requirements should be improved to ensure that comprehensive information from MNEs for benchmarking is obtained.

This paper has some limitations that need to be acknowledged. Firstly, the study focused on the determinants of tax revenue collection from MNEs in Tanzania. However, the statement of factors influencing tax payments from MNEs covered only six factors. Although some of these variables were covered by previous papers and some developed and used only in this paper, there could be other relevant factors influencing tax payments from MNEs. These include the cost of doing business and the quality of tax administration among others. Secondly, the paper collected primary data using a questionnaire survey, which has some inherent limitations that may have affected the findings of the study. The use of questionnaire compared to interviews, for instance, does not involve engagement with respondents to clarify the questions. Also, the respondents may not have put in writing their responses about sensitive information related to taxation of the MNEs for fear of reprisal. Thirdly, the paper did not study other alternatives to transfer pricing methods such as fixed margin approach and global minimum tax rate. Future studies could focus on these limitations.
References


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