The Effect of International Transfer Pricing Practices on Economic Growth in Kenya

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Abstract

The use oftransfer pricing and other highly complex tax planning schemes have been a major concern by policymakers in many jurisdictions including KenyaIn the process countries lose out on revenue necessary for development and recurrent expenditures which has negative implication on economic growth. The general objective of the study was to determine the effect of international transfer pricing practices on economic growth in Kenya. This was guided by three specific objectives namely to determine the effect of trade mis-invoicing practices on the economic growth of Kenya; to determine the effect of foreign exchange rate adjustmentpractices on the economic growth of Kenya; and to determine the effect of transfer pricing policies on the economic growth of Kenya. The study employed a quantitative research design and used a time series to covering twenty years from 1997 to 2016. Error correction model was used for analysisgiven the presence of cointergrating variables. The study found that trade misinvoicing practices had a positive and insignificant effect on economic growth of Kenya, while foreign exchange rate fluctuations had a negative and significant effect on the economic growth of Kenya. Additionally, trade misinvoicing practices and foreign fluctuations as attributes of transfer prices jointly account forabout sixty six of the variations in the dependent variable in this case economic growth. The studyadds to the existing literature on international transfer pricing practices and economic growth, it is of great value to the academic fraternity and as a basis for, investors, creditors, Kenya Revenue Authority and the government. Kenya should introduce measures aimed at curbing trade misinvoicing practicesand foreign exchange fluctuation. Kenya shouldalso introduce rules aimed at avoiding the undue transfer of profits through controlled transactions conducted between related entities within a multinational group in order to deter international transfer pricing practices.This will lead to an increase in the GDP of Kenya and consequently economic growth.

Keywords*: International transfer pricing, trade misinvoicing, Foreign exchange fluctuation.*

I. Background of the Study

Globalization and economic integration has caused increased economic activity within a very small number of MNEs increasing the difficulty for governments to collect public revenue given that multinationals are able to move their profits across jurisdictions to minimize their tax liability (Liu, Schmidt-Eisenlohr&Guo, 2017). At times, MNCs manipulate the priceby transferringgoods and services between controlled entities within the multinational group (Desai, Foley &Hines, 2006). With globalization MNEs are able to create branches or subsidiaries, in supposedly favorabletax jurisdictions to take advantage of foreign direct investment incentives, double tax treaties and reduced taxes. The ability of MNEs to also optimize on global production brings in new and greater opportunities for transfer pricing strategies by making it possible for multinational corporations to shift profits to more desirable locations and thereby reduce their tax liabilities or avoid taxes altogether consequently reducing economic growth(Bhat, 2009). They achieve this by transferring goods between controlled entities operating in different tax jurisdiction (Kaplan and Atkinson, 1998). This is among the set of strategies through which MNEs attempt to send a fraction of their profits offshore in order to reduce their income tax liabilities. This implies that the price of goods and services is determined by a highly sophisticated internal sales system within subsidiaries of the MNE and not by the local market structure. This in the process creates opportunities for MNEs to alter the market prices depending on the market dynamics in different jurisdictions. Multinational corporations can thus minimize the taxes payable, foreign exchange rate risks and thereforeoptimize their global profits (Moussavi, 1996).

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According to business analysts, the mostimportant international tax issue facing MNCs and that they will continue to face is transfer pricing (Ernst & Young, 2006) since the extent of profit shifting has intensified in recent years causing a concern for policymakers (Zucman, 2014). The economic dependency of developing countries like Kenya on the more developed and industrialized nations leaves them greatly vulnerable to MNEsinternational transfer pricing practices. These practices including trade mispricing practicesalso known as misinvoicing, and foreign exchange adjustment practices are considered have an adverse impact on the economic growth (GDP) of a country. Revenue collection authorities all over the world have been faced with leakage of tax revenues especially resulting from international transfer pricing. All controlled transactions between the related entities of an MNE should be carried out at arm's length in order to improve compliance and fair distribution of the tax base among the related entities in a Multinational (Wangai, 2016). Failure to use the arm's length principle may lead to double taxation where two or more tax authorities insist on taxing the profits generated to get their share and therefore multinational enterprises devise means to reduce their tax liabilities through manipulation of transfer prices (Azemar&Corcos, 2009) or double non taxation, where the multinational pays no tax in both jurisdictions.

There are many MNCs operating in Kenya whose cross-border transactions with their non-resident related entities have become a key area of focus by the KRA. Section 18(3) of the Income Tax Act (ITA)authorizes the Commissioner of Domestic Taxes to adjust the profits accruing to a resident person from a course of business conducted with related non-resident persons to reflect such profit as would have accrued if the course of business had been conducted by independent persons dealing at arm's length. In the country, Transfer Pricing (TP) rules were introduced in June 2006 to clarify provisions of section 18(3) which 'did not provide a clear cut way of determining the transfer prices comparable to one that would be arrived at in an arms' length set up. Before the introduction of the TP rules, there were no specific guidelines to assist multinational companies setting of an agreeable arms' length price and they depended and used the OECD transfer pricing guidelines which are universally accepted and applied (Ngumy and Khanna, 2010).

By law, MNCs are required to adhere to the provisions of the transfer pricing rules and pass transfer pricing adjustments in their books of accounts by the end of each financial year. This is meant to ascertain that they adopted the arm's length principle (Income Tax Act, 2013). As such, transfer of goods and services from one tax jurisdiction to the other by related corporate entities in different tax jurisdictions is done at market prices. This process gives room for manipulation of transfer prices for goods and services so as to move income and profits across borders from the high jurisdiction country to the low jurisdiction country. This in effect affects the country's ability to mobilize adequate tax revenue. (Wangai, 2012). Thisnegatively influences the Gross Domestic Product (GDP) or economic growth of a country. The economic growth of a country not only includes the rise in its productive capacity but also advancement in the quality of life of its citizenry and it is associated with advances in technology (Alegana, 2014).

1.2 Statement of the Problem

Worldwide, revenue collected in form of taxes is very critical in financing government's budget Tax avoidance by multinational corporations through transfer pricing have constrained the capability of developing countries governments to meet set revenue targets (Muyundo, 2012). The Kenya Revenue Authority (KRA) for has been missing its revenue targets for a long period of time, for instance it missed its target by KSH 54.8 billion in the 2016/2017 fiscal year compared to the revised target of KSH 1.4554 trillion (The National Treasury, 2017). There is an increasing concern all over the world since governments are losing fairly large corporate tax revenues due to tax-planning schemes by MNEs geared towards moving incomes and consequently profits through taxable base erosion to jurisdictions with more favourable tax treatment (Schindler &Schjelderup, 2014). There has been concern about the activities of MNCSin developing countries where they formulate complex tax avoidance measures to transfer profits to their parent company leading to negative revenue effects, and unfair tax positions to the developing countries. (Cottarelli,2011). As a consequence of international transfer pricing practices, governments are deprived of the much needed revenue for both recurrent and public expenditure, and therefore it has a negative effect on a country's economic growth.

Based on the contribution of MNCs to a country's economic growth (GDP), their compliance and noncompliance is focus areas by revenue authorities as they are significant contributors to the revenue basket. Despite the significant public revenue contribution, by MNCs, in Kenya, there is little coverage of this area of research. Few studies have been done on transfer pricing in Kenya, for instance, Mwangi (2008) discussed the Kenyan law in regard to arm's length principle of TP and its applicability. Kebwaro (2012) studied the effect of transfer pricing on tax planning for multinationals in Kenya; Muli, (2012) studied on the relationship between tax enforcement environment, transfer prices and taxes on optimal companies and Kinuthia (2014) studied the effectiveness of Transfer pricing in developing countries among others. Most of these studies only focused on the MNCs perspective and none has looked at it both angles, the transfer mispricing and the government's effort in mitigating these practices. To the best of the researcher's knowledge, there has been no study thathas covered

the effects of international transfer pricing practices on economic growth in Kenya, a gap that the current study sought to fill.

1.3 Objective of the Study

The general objective of this study was to determine the effect of international transfer pricing practices on the economic growth in Kenya.

II. Literature Review

2.1. Theoretical review

2.1.1 Economic deterrence theory

This theory is based on models by Allingham and Sandmo (1972) who developed models to measure individual tax compliance behavior thoughanalyzing the relationship between tax rates and taxpayer's manipulative behavior. This implies that these models try to link higher tax rates with tax compliance levels. The study found that increases in chances of detection and penaltieslead to higher tax compliance. Other researchers further developedthis model by adding more factors to their models. Economic deterrence may be attained in various ways: increase in the probability of being detected, increase in the rate of tax or by charging higher rates of penalties, orthrough increased advertising/publicity and incentives and better education. (Devos, 2014) As per this theory, the taxpayer is a neutral individual in terms of risk to evade tax and yet maintains the morality expected. In measuring tax compliance by Kenyans, respondents lied about their tax payment (Ali,et.al., 2013). The method used by this theory is higher penalties if the chance of being detected is low and low penalties if the chance is high. In Kenya, transfer pricing penalties are applicable under the ITA. The economic deterrence model of tax compliance is suitable for the study on effects of international transfer pricing practices on economic growth in Kenya. In view of the fact that in maximizing their profits, MNEs seek to minimize their tax liabilities; they arrange their global structures in such a way that tax liability is paid in jurisdictions where rates of corporation tax are lowest. When the deterrence theory works, it means that the government will raise its planned revenues and thus this would lead to economic growth (Maseki, 2015).

2.1.2Economic transfer pricing theory

Also known as the accounting theory, this theory was advanced by Solomons (1965) in an aim to apply Hirshleifer's (1956) theory to accounting. He explained five different transfer prices applicable in five different environmental conditions. The first was when the external market was highly competitive the market price was applicable. The other four prescriptions were for varying forms of cost, dependent upon how important the transfer price issue was to the organization which were for situations when the external market was not highly competitive. Thelastof the prescriptions was for when there was no competitive external market for the product and mathematical programming was fronted as a solution. This was due to the assumption that the producing division was operating under capacity constraints and that most of the producing department's goods were transferred to other departments.

There are therefore two sides to the accounting approach to transfer pricing, economic efficiency and selection of a transfer price, a process which is complicated by MNEs that grant managers the right to set prices, as this is linked to their performance evaluations and appraisals and thus may be affected by profit-shifting incentives. The target by this accounting theory is the impact of transfer prices on economic decisions that are used to determine how much a company can produce. Further, it is used to determine the type of market price that should be charged by a firm. Thus based on the accounting theory, firms can change transfer prices so as to pay less taxes in high tax countries; and when firms pay less taxes, this hinders optimal economic growth in those countries (Adams &Drtina, 2010). In Kenya, KRA allows adjustment of prices at the during financial year ends before the financial statements are prepared if an MNE had previously charged higher than the market price which in turn reduces the tax collected by KRA (Delloite, 2015).

2.1.3 Optimal Taxation Theory

Optimal tax theory was introduced by Ramsey (1927) and Mirrlees (1971), who addressed the shortcoming of raising revenue through commodity taxes from a single commodity. This theory states that a tax system should be selected to optimize the social welfare function subject to a set of constraints. Lessons from the optimal taxation theory are that the optimal marginal tax schedule could decline at high incomes;optimal marginal tax rate schedules rely on the distribution of ability; taxes should depend on personal characteristics as well as income; a flat tax, with a universal lump-sum transfer, could be close to optimal; the optimal extent of redistribution rises with wage inequality; only final goods should be taxed, and typically they should be taxed evenly; capital income should be untaxed; and optimal tax policy requires increased sophistication (Mankiw, Weinzierl&Yagan, 2009).

Tulkens et al., (1971) argued that, tax evasion did not exist. According to them to promote efficient resource allocation, taxes should be levied primarily on commodities that are inelastic in demand or supply.

Generally, it is widely agreed that when labor is perfectly inelastic in supply,the best way to effect a redistribution of incomes is through an income tax. This conclusion should be modified if it is concluded that income tax may offers higher opportunities for tax avoidance than commodity taxes. The policy tools used by the government to counter tax avoidance include tax rates, penalty rates and the expenditure on investigation (probability of detection). Slemrod et al., (1987) noted that in optimal taxation theory, aregular exercise is to have a tax system that minimizes these costs, or to have a tradeoff between the costs andwelfare distribution of welfare in the society. With tax avoidance and evasion therefore, cost efficiency ought to be described broadly. When there is optimal taxation and no evasion this leads to economic growth in a country.

2.2 Empirical Literature
2.2.1 Trade Misinvoicing Practices
According to GFI (2014), trademisinvoicing refers to thedeliberate falsification of the volume or value of an international commercial transaction of goods or services by at least one party of an MNE group. In simple terms it is the difference between import and export mispricing. In simple terms, when two traders engage in any form of trade, the trade data recorded by one country should be similar to that recorded by the other country after making adjustments for cost insurance and freight. In many cases and for various reasons which include trade misinvoicing this does always happen. Trade misinvoicingpractices happens when entities under-invoice their exports or over-invoice their imports (and thereby misprice) for tax avoidancepurposesor capital flight in either direction.

In a report titled on "Trade misinvoicing in primary commodities in developing countries: The cases of Chile, Côte d'Ivoire, Nigeria, South Africa and Zambia" published by UNCTAD (2016), which revealed that records of trade data (both exports and imports) over a period of fourteen to twenty years by the respective developing countries did not match those of their reported trading partners (destination) for selected commodities. It concludes that there is significant trademisinvoicing (under invoicing and/orover invoicing) in the countries studied. These discrepancies according to the report amount to tens of billions of dollars or 67% of commodity exports in some countries.

Baker et al. (2014) conducted a study on trade misinvoicing in five African countries for the period 2002 to 2011 using UN Comtrade data. They appliedBhagwati's methodology and estimated that Tanzania experienced illicit flows of $1.87 billion, Kenya $1.51 billion and Ghana$1.44 billion annually. Trade misinvoicing loss was estimated at $386 million for Ghana, $435 million for Kenya, $187 million for Mozambique, $248 million for Tanzania and $243 million for Uganda during 2002–2011. In all cases, these losses a representative resources the government was unable to collect and reinvest. This highlights significant amounts of lost revenue (tax revenue) and foreign exchange earnings to the state. For any country, revenue and foreign exchange losses cannot be taken lightly (Adjasi, 2017). This implies that capital outflows in terms of trademisinvoicing have a huge and negative impact on economies of developing countries (Kar, 2010).Adjasi (2017) indicates that there are serious revenue loss implications with trade misinvoicing and, even if these discrepancies are just statistical artefacts of wrong trade reporting formats, they signify bad bilateral trade data or inaccurate bilateral trade information. Either of the two cases has a debilitating effect on an economy particularly on its growth and development efforts. A persistent loss of revenue can create a conducive route for further undesirable economic leakages such as loss of capitalcases like export under invoicing and smuggling cases like import under invoicing, as noted by UNCTAD.

The concept of tax-motivated transfer pricing was introduced by Hassett and Newmark (2008). The profits of each portion of MNE business are most likely structured through intercompany transactions, like intercompany sales, licensing and leasing among others. Management of MNC is often interested in maximizing global profits as well as minimizing the overall tax paid by the group. Thus, the management of MNE group examines and review tax laws and administrative requirements in various jurisdictions of operation with a view of assessing their potential tax liabilities. One way through which MNEs minimize their effective tax exposure is through TP by transferring incomes and profits from relatively highly tax jurisdictions to lowly tax jurisdiction and in some cases to tax havens (Hollingshead, 2010). Firms that are not involved in manufacturing are likely to pursue tax maximization as compared to non-manufacturing firms. Firms whose international transfer pricing practices are geared towards minimizing taxable income utilize most of their TP expenses/resources in devising tax planning schemes compared to being compliant (Awour and Ngigi, 2012).

Okwoma (2014) in his study on the effects of international transfer pricing on host nations: An overview of developing nations, he reported that the effects are more in the developing nations; For instance, in Nigeria, the multinationals usually over-invoice materials and equipment shipped to the country. Arbitrary prices, are usually used to transfer goods and services to Nigeria, so as to increase costs and thereby, reduce the profit and eventually reduce tax liability. Huge revenue is lost annually due to MNC transfer pricing manipulation which creates adverse economic conditions, which exert a lot of pressure on the countries.

2.2.2 Foreign Exchange Rate Adjustment Practices

An exchange rate refers to the value given to one currency for the purpose of conversion to another. They are determined in the FOREX markets which are open to a many kinds of buyers and sellers, and where there is continuous currency trading therefore the exchange rates are susceptible to fluctuations. Exchange rate movements may cause important tax transfer pricing implications which could be either short-term or long-term.

When multinational corporations engage in international business which isdenominated in currencies other than the domestic currency and consider this when setting the prices/margins if such risks are not transferred to their counterparts, they are exposed to foreign exchange rate risk. Multinationals may thus change their transfer prices to reduce the FOREX risk which is the risk of change in the MNCs future economic value (a gain/loss) resulting from a change in the foreign exchange rate (Abdallah, 2004).Basirat et.al, (2014) in a study aimed to investigate the effect of exchange rate fluctuations on economic growth considering the rate of development of financial markets in developing countries over the period 1986-2010 analyzed panel data of 18 countries and found that the effect of exchange rate fluctuation on economic growth is negative and significant. Under the recently concluded initiative of base erosion and profit shifting, there has to be a relationship between FOREX risk allocation and the entity assuming the risk. Therefore, risk allocation to group members who do not lack the competencies and resources to manage this risk, despite contractual arrangements, is debatable from a tax transfer pricing perspective. Thus groups should record all intra-group transactions affected by the FOREX fluctuations s, analyze the effect expected, analyses the functional, asset and risk profiles and allocate the risk (Wyss, 2015).

One of the vehicles that MNCs use to move the losses to another subsidiary by moving assets from one country to another under the floating exchange rate regime is transfer. This goal is achieved through choosing the currency for which payments will be denominated in and whether the buying or selling entity bears the FOREX risk and thus liable to FOREX adjustment. Therefore, money is moved in the weak currency country through transfer pricing adjustments. Multinationals are thus able to alter transfer prices to benefit from anticipated exchange rate fluctuations.They are thus able to invoice higher transfer prices when there is expectation of depreciation of a currency. This means more cash outflows from a country which has a direct effect on the country's GDP, balance of payments and consequently the economy and thus economic growth (Abdallah, 2004).

2.2.3 Transfer Pricing Policies in Kenya

According to Ngumy, Anjarwalla& Khanna (2010), before the introduction of the TP rules, there were no specific guidelines to assist multinational companies setting of an agreeable arms' length price and they relied on the OECD transfer pricing guidelines which are universally accepted and applied. Over the years, Kenya hasundertaken andimplemented several tax policies and tax reforms aimed at improving the efficiency of its tax system includingthose related to transfer pricing practices of MNEs.

The transfer pricing rules in Kenya were introduced in July 2006, to guide on the arm's length principle use and application (PwC, 2011). Transfer pricing in Kenya is governed by Section 18(3) of the Income Tax Act and the Transfer Pricing Rules, 2006, which allow the commissioner of taxes to adjust the profits of a person who carries on business in Kenya with a related non-resident person, where the business is such that it produces to the resident person either no profits or less than ordinary profits. Kenya'sITA requires that transactions between the person in Kenya and other controlled non-resident parties to be at arm's length, i.e., the price charged for the transactions should be the same as that which would have been charged between independent enterprises.

Governments and tax collection authorities appreciate that transfer prices can be a tax avoidance tool by manipulating transfer prices and setting them above or below the opportunity cost. This way, the multinational company can decrease its global taxable income and thus tax liability and therefore achieve a higher post tax group profit, which is not possible for non-related entities. Transfer price manipulation is therefore the over/under invoicing of transfer prices in intra-firm trade to ensure that the profits due to the company are above what would normally be achieved in an arms' length setting, majorly in response to government regulations (Wangai, 2012). The affinity of an organization or an individual to avoid tax is prevalent in all areas of professionals and frauds associated with it have been estimated to stand at approximately 5 times all conventional crimes (Croall, 2001).Other than the introduction of the transfer pricing rules, there have been subsequent amendments to the legislation in the subsequent years. These transfer pricing tax reforms have been aimed at increasing the efficiency of the tax system especially in regards to tax collected from multinationals in Kenya. An increase in revenue collected or mobilized means that the country has more resources which it can utilize to meet its needs and thus leading to economic growth.

2.2.5 Economic Growth

Economic growth refers to an increase from a period to another in the capacity of an economy to produce goods and services. Economic growth can be nominal (unadjusted for inflation)or in real (adjusted for inflation) (Econlib, 2018).The growth of an economy is therefore considered in terms of increased productive capacity and in the improvement in the quality of life of the citizens and it is technological advancements (Econlib, 2018).

Gross Domestic Product (GDP) refers to the monetary value of all the finished goods and services produced in a country in a given period of time. GDP includesconsumption (public and private), government expenditure, investments and net exports that occur in a jurisdiction and arerecordedyearly. GDP is commonly used as an economic indicator of the overall health of an economy, as well as to measure the standards of living in a country (Lipsey& Chrystal, 2007).

For any government to succeed and be effective in its duty of providing quality public goods or services to its citizens and also fund its development projects which are key elements of economic growth, it has to adopt and implement policies and reforms that will enable it collect adequate tax revenues to meet its budgetary requirements as set by the treasury. The Kenyan government mainly raises its revenues through taxation and over the years it has been increasingly difficult for KRA to meet its revenue targets. Failure by the institution to raise more revenue and meet budgetary targets implies that budget deficits will continue to be experienced unless proper policies are put in place to seal all revenue loopholes (Alegana, 2014).

III. Research Methodology

3.1 Research Design

A quantitative research design was used in determining the effects of international transfer pricing practices on economic growth in Kenya. This technique was adopted because of its ability to a systematic empirical investigation of observable phenomena through various techniques which include statistical, mathematical, or computational. Additionally, it was used because of the ability to expand quantitative data into predictions and also because the outcome is easy to measure and the results can be clearly shown through objective data.

3.2 Population and Sampling

The target population of the study was time period of 20 fiscal years spanning 1997 to 2016. This particular period was deemed to be appropriate because it is theperiod when most tax policies andalso the tax collection authority, KRA came into being. This period also includes the period before and after Kenya implemented its transfer pricing rules. Years outside this period were deemed to have data that was considered outlier and therefore would have created econometrics problems.

3.3 Data Collection Methods and Instruments

The time series data on trade misinvoicingpractices and exchange rate fluctuation practices was collected from key government institutions namely; Kenya national bureau of statistics (KNBS), Central Bank of Kenya (CBK), and international institutions like the Global Financial Integrity (GFI) data websites. Some data on trade misinvoicing practices was missing for some years and therefore statistical imputation was done to estimate the values for the missing periods.Data pertaining to the transfer pricing policies was collected from key government documentation includingseveral tax Acts including the ITA to ensure that the policies were implemented and effected into law. This data is qualitative in nature and required the use of dummy variables.

3.4 Data Transformation and Coding

The dummy variables for the transfer pricing policies used in the model were coded as follows; a one (1) in the series means that a tax policy on international transfer pricing came into effect in that year of income and a zero (0) means that there was no tax reform on transfer pricing. After transformation of the series and getting the dummy variables, the study variables were regressed against economic growth.

3.6 Data Analysis

This research used a time series regression with a Johansen co-integration with vector error correction techniques to determine the effect of international transfer pricing practices on economic growth in Kenya. The Co-integration test was used since it can be utilized in a higher dimensional system where two or more variables co-integrate and it also considers the short run relationships between the co-integrating variables.Correlation matrix and diagnostic tests were conducted to ascertain whether the results are spurious or biased.

The Error correction model OLS approach was found to be most suitable in obtaining the regression line due to the presence of cointergrating vectors and thus a long run relationship between variables. The optimal lag length for analysis was identified before the error correction model test was performed. The optimal lag length was selected after running the Vectorautoregression model (VAR). VAR is a stochastic process

model used in predicting multiple time series variables using a single model. The lag, which gave positive, and significant relationship between the dependent and the independent variables was selected.The study used a multiple regression model to test the hypotheses of the effect of the two independent variables on the dependent variable. To assess the relationship between the transfer policies and economic growth, dummy proxies of the various reforms were used as the regressors.The hypothesis was tested on a 0.05 significance level. Studies by Yartey (2008) and Lazaridis and Trofornidis (2006) have employed regression analysis while studying the relationships between certain variables. The time series regression model below was used to determine the effect of each variable on the economic growth in Kenya.

$$y = \beta 0 + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + e_t$$

Where:
y = Gross Domestic Product
$\beta 0$ = Constant Term
βi = Beta coefficients
X_1 = Trade Misinvoicingpractices
X_2 = Foreign Exchange Rate Adjustment practices
X_3 = Transfer pricing policies
e_t = Standard error
t = 1-20

Using the model shown above, the study identified the values of the independent variables and dependent variables and gave an estimate of the effect of international transfer pricing practices on economic growth in Kenya.Eviewswas used to analyze the data into frequency distribution. The data collected was analyzed using descriptive statistics, particularly frequencies and percentages. Information was then generalized and summarized using tables and histograms where appropriate.

3.7 Diagnostics
Before running the regression model, several diagnostics were carried out to avoid biased and spurious findings. Thetests carried out included the Augmented Dickey-Fuller to test for stationarity, normality, heteroskedasticity, autocorrelation and multicollinearity tests to ensure that the estimated models are not in violation of any ordinary least square (OLS) assumptions. In the event any violation was detected, appropriate remedies including variable transformations and model re-specification were undertaken.

3.8 Data Analysis, Results and Discussion
3.8.1 Summary Statistics
This presents a summary of the descriptive statistics for the variables used in this study. The secondary data analyzed was for the period between 1997 and 2016.

Table1 : Summary of Descriptive Statistical Results

	Trade Misinvoicing Practices	Forex Fluctuation Practices	TP Policies	GDP growth
Mean	3120.239	3.100811	0.500000	4.185177
Median	2789.013	2.791900	0.500000	4.833754
Maximum	5140.000	16.46535	1.000000	8.405699
Minimum	1581.000	-6.633665	0.000000	0.232283
Std. Dev.	1236.239	6.358346	0.512989	2.401224
Skewness	0.185296	0.399175	0.000000	-0.324454
Kurtosis	1.513767	2.445948	1.000000	2.053723
Jarque-Bera	1.955188	0.786946	3.333333	1.097101
Probability	0.376215	0.674710	0.188876	0.577787
Sum	62404.77	62.01623	10.00000	83.70353
Sum Sq. Dev.	29037433	768.1428	5.000000	109.5516
Observations	20	20	20	20

From Table1, the mean, which describes the average value in the series, and the median, which is the middle value, are close, which implies that there are no outliers in each of the variables under study.Standard Deviation and Variance measure dispersion or spread of the series. Standard Deviation and Variance show how close the samples are centered on the mean. The closer the standard deviation is to the mean, the better. From the results above, other than TP policies, which uses a dummy variable, all the standard deviations, were above

one and thus the results of all variables were all spread from the mean, which implied that they varied from the mean. From the results above, trade misinvoicing practices had a skewness of 0.185296, forex fluctuation practices skewed at 0.399175 and GDP growth had a skewness of -0.324454, which are all between -0.5 and 0.5 meaning that this distribution is thus symmetric around the mean.

From the results above, all the variables under study have a kurtosis less than 3, which implies that the data is platykurtic.

3.8.2 Correlation Analysis

Correlation reveal the magnitude of the association between variables under study (Mugenda, 2008). Negative coefficient indicates there is a negative relationship, while a positive coefficient is an indication of positive relationship between variables. Correlation analysis results were presented in Table 4.2 below.

Table 2: Correlation Results

Correlation Probability	Trade Misinvoicing Practices	Forex Fluctuation Practices	TPpolicies	GDP growth
Trade MisinvoicingPractices	1.000000			

Forex Fluctuation Practices	-0.085989	1.000000		
	0.7185	-----		
TPpolicies	0.792024	0.091372	1.000000	
	0.0000	0.7016	-----	
GDP growth	0.619059	-0.220312	0.446025	1.000000
	0.0036	0.3506	0.0487	-----

The correlation matrix show that the explanatory variables of study are related to economic growth. The results above show a positive and significant correlation between trade misinvoicing practices and GDP growth. It also shows that TP policies and GDP growth have a positive and significant correlation. However, there is a negative and insignificant correlation between GDP growth and forex fluctuation practices. This is consistent with the hypothesis that forex fluctuation practices, trade misinvoicing practices, have an effect on economic growth of Kenya.

The results above also reveal that the values in the correlation matrix results for correlations between variables are low which indicate that the long run Granger causality, variance decomposition and the impulse response results in this study are thus not spurious.

3.8.3 Model Tests
Before running the regression models, diagnostic tests were conducted to verify that the models adhered to the OLS assumptions of Linearity, normality of residuals, homoscedasticity, and no multicollinearity.

3.8.3.1 Unit Root Tests
In statistics, a unit root test tests whether a time series variable is non-stationary and possesses a unit root. . A time series has stationarity if a shift in time doesn't cause a change in the shape of the distribution; unit roots are one cause for non-stationarity. If a series has no unit roots, it is characterized as stationary, and therefore exhibits mean reversion in that it fluctuates around a constant long run mean. Also, the absence of unit roots where data is said to be non-stationary implies that the series has a finite variance which does not depend on time and that the effects of shocks dissipate over time and thus have no tendency to return to a long-run deterministic path.

A unit root test was conducted using the Augmented Dickey-Fuller testand the variables were non stationary.

Granger and Newbold (1974) noted that the regression results from the VECM models of the Granger causality tests using non-stationary variables would be spurious. To avoid this, first differencing of the non-stationary variables was done before running a regression model.The variables thus qualified for the co-integration test.

Table 4: Unit Root Tests at first differencing

	ADF Test	1% level	5% level	10% level	P value	Comment
Trade Misinvoicing Practices	-13.64358	-13.64358	-3.933364	-3.420030	0.0001	Stationary
Forex Fluctuation Practices	-6.430785	-4.571559	-3.690814	-3.286909	0.0003	Stationary

GDP growth	-1.822753	-5.124875	-3.933364	-3.420030	0.0266	Stationary

Since the P-values for the three variables are all less than 0.05, the null hypothesis of non-stationarity is rejected. The series is therefore stationary at levels and does not need furtherdifferencing and the variables thus qualified for the co-integration test..

3.8.3.2Multicollinearity

Multicollinearity is said to exist when independent variables are correlated among themselves (Persaran, 2015). In the study,multicollinearity was assessed using the variance inflation factors (VIF). As argued by Field (2009), variance inflation factor (VIF) of greater than 4 or 4 suggests multicollinearity, VIF of greater than 10 is strong evidence that collinearity is affecting the regression coefficients.
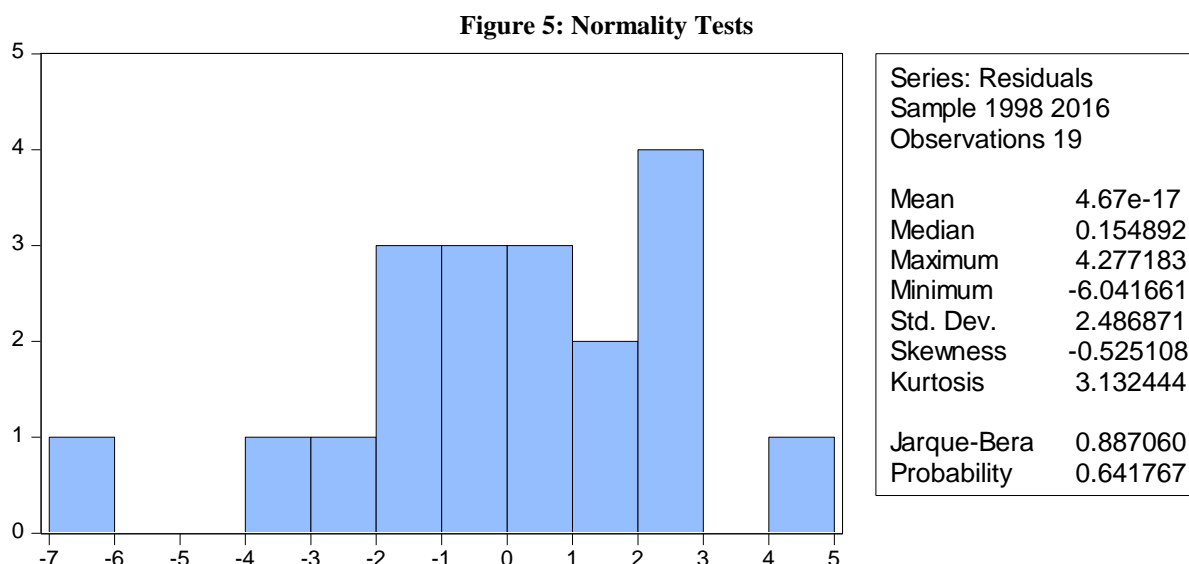
Table 4. 2 : Multicolinearity Tests

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.858473	2.197822	NA
D_TRADE_MISINVOICING	4.54E-07	1.045952	1.016066
D_FOREX_FLUCTUATION	0.005847	1.014736	1.014723
TP_POLICIES	1.597131	2.152052	1.019393

The results above implied that all values were less than 10 thus implying absence of multicolinearity. This implies that there was no relationship between the independent variable and thus regression can be conducted.

3.8.3.3 Normality

Normality tests are used to determine if a data set is well modeled by a normal distribution and to compute how likely it is for a random variable underlying the data set to be normally distributed(Brooks, 2008).The Jarque-Bera test was used to test the normality of the residuals because it is more conclusive than using skewness or kurtosis.

Figure 5: Normality Tests

Series: Residuals	
Sample 1998 2016	
Observations 19	
Mean	4.67e-17
Median	0.154892
Maximum	4.277183
Minimum	-6.041661
Std. Dev.	2.486871
Skewness	-0.525108
Kurtosis	3.132444
Jarque-Bera	0.887060
Probability	0.641767

From the figure 4.5 above, the Jarque-Bera statistic is 0.887060 andthe residuals originating from the model have a p value of 0.641767. Using the 5% level of significance, the assumption of normality of residuals has been met since the p value of the test statistic is more than 0.05. As such, we accept the null hypothesis that the errors are normally distributed.

3.8.3.4 Auto Correlation

Watson (2012) describe Auto correlation as a degree of similarity between a given time series and lagged values of the same variables in an equation. In auto correlation time series is influenced by previous historical values. Serial correlation tests were run in order to check for correlation of error terms across time periods. Durbin-Watson, a test for first order autocorrelation which assumes that the relationship is between an error and the previous one, was used to measure autocorrelation. When the p value of Durbin-watson is less than 1.00 or more than 3.00, the data may suggest presence of serial correlation, thus the test result is better when it is around to 2.00.

Table 6: Autocorrelation test

R-squared	0.562476	Mean dependent var	4.67E-17
Adjusted R-squared	0.015572	S.D. dependent var	2.486871
S.E. of regression	2.467432	Akaike info criterion	4.937130
Sum squared resid	48.70578	Schwarz criterion	5.483911
Log likelihood	-35.90274	Hannan-Quinn criter.	5.029667
F-statistic	1.028473	Durbin-Watson stat	1.943740
Prob(F-statistic)	0.493825		

The probability value has p value of 1.943740 which is within the acceptable limits as stated by Gujarat (2009). This therefore, indicates that we do not reject the null hypothesis of no serial correlation and thusconclude that auto/serial correlation does not exist. This implied that there was no correlation of error terms and thus regression can be conducted.

3.8.3.5Heteroskedasticity

The assumption of homoskedasticity has also been met. Using the White's test criterion, we find that heteroskedasticity is absent in the model as the p-value is 0.5904 which is greater than 0.05 and thus the null hypothesis of homoscedasticity is held. Therefore, the model does not suffer from heteroskedasticity.

Table 7: Heteroskedasticity Test: White

F-statistic	0.838921	Prob. F(8,10)	0.5904
Obs*R-squared	7.630496	Prob. Chi-Square(8)	0.4704
Scaled explained SS	5.070790	Prob. Chi-Square(8)	0.7500

From the above diagnostic tests results, the classical assumptions of ordinary least squares (OLS) have been met for all variables. In all the results discussed above, the p-values are greater than 0.05 which implies that the null hypothesis of no heteroscedasticity and no serial correlation is accepted while the alternative is rejected, while the null hypothesis of no normality of error term is rejected and the alternative accepted.The problem of multicollinearity is also absent as that variance inflation factors in all models are less than 10.

3.8.3.6Cointegration Test

Cointergration is a statistical property possessed by time series data. It is defined by the order of intergration in time series and the concept of stationarity. This study found it necessary to perform cointegration test since the study variables were not stationary at level and became stationary after the first differencing. Johansen's technique was used by the researcher to establish how many cointegration equations exist between the variables of study. At 5% significance level,the maximum eigenvalue statistic results suggests that there are twocointegrating equations among the variables. The test suggests that the set of cointegrated time series have an error-correction representation, which shows the long run adjustment mechanism.

Table 8: Cointergration results

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**

None *	0.902548	85.67573	47.85613	0.0000
At most 1 *	0.859985	46.09304	29.79707	0.0003
At most 2	0.506898	12.67093	15.49471	0.1274
At most 3	0.037584	0.651246	3.841466	0.4197

Trace test indicates 2 cointegratingeqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.902548	39.58269	27.58434	0.0009
At most 1 *	0.859985	33.42211	21.13162	0.0006
At most 2	0.506898	12.01968	14.26460	0.1099
At most 3	0.037584	0.651246	3.841466	0.4197

Max-eigenvalue test indicates 2 cointegratingeqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegrating Coefficients (normalized by b'*S11*b=I):

D_GDP_GROWTH	D_TRADE_MISINVOI CING	D_FOREX_FLUCTUA TION	TP_POLICIES
0.115699	0.001748	-0.089251	0.605934
-0.665207	0.001382	-0.009561	0.217252
-0.188584	-0.000471	-0.245564	0.583874
0.179436	-1.88E-05	0.048784	2.090897

From the table above, the results indicate that in both the trace and maximum-eigen value tests, the F-statistics are greaterthan the critical values with p-values less than 0.05. This implies the existence of a long run equilibriumrelationship among the co-integrating variables i.e. trade misinvoicing practices, forex fluctuation practices, TP policies and economic growth. This therefore implies that VECM will be used.

3.8.4 Regression Analysis

This section presents the analysis of the data collected. The independent variable GDP growth(Y) is regressed against the independent variables Trade Misinvoicingpractices(X_1), Foreign Exchange Rate Adjustment practices (X_2), and Transfer pricing policies (X_3).

Having established the normality of the variables, absence of serial correlation and the presence of cointegration between variables in the study, a regression analysis was conducted. The Error correction model OLS approach was found to be most suitable in obtaining the regression line due to the presence of long run relationship between variables. The optimal lag length for analysis was identified before the error correction model test was performed.

Optimal VAR Lag Length

The lag length selected to determine the long run relationship between international transfer pricing practices and the economic growth in Kenya was 3. This lag length was selected because it gives positive and significant relationship between the dependent and the independent variables. This is indicated by the AIC at 3 which is the least value and significant as shown in the table below.

Table 9: Optimal VAR Lag Length

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-226.7277	NA*	5.94e+08	28.71597	28.86083*	28.72339
1	-221.1944	8.299947	9.46e+08	29.14930	29.72875	29.17898

| 2 | -208.6751 | 14.08425 | 7.13e+08 | 28.70939 | 29.72341 | 28.76131 |
| 3 | -193.0698 | 11.70399 | 4.95e+08* | 27.88372* | 29.33233 | 27.95790* |

Vector Error Correction Model

If variables are found to have one or more cointegrating vectors then the suitable estimation technique is a Vector Error Correction Model (VECM), which adjusts to both short run changes in variables and deviations from equilibrium.A crucial parameter in the estimation of the VECM dynamic model is the coefficient of the error correction term, (ect 1), which is used to measure the speed of adjustment of economic growth to its equilibrium level.

Table 11: Cointergrating Equation

CointegratingEq:	CointEq1
D_GDP_GROWTH(-1)	1.000000
D_FOREX_FLUCTUATION PRACTICES(-1)	0.524980
	(0.10417)
	[5.03985]
D_TRADE_MISINVOICING PRACTICES(-1)	-0.000798
	(0.00108)
	[-0.73601]
C	0.004066

The above shows the presence of one cointegrating equation given as the following:

$Ect_{t-1} = 1.0000 Y_{t-1} - 0.000798 X1_{t-1} + 0.524980 X2_{t-1} + 5.237156 X3_{t-1} + 0.004066 …$ *Equation 4.1*

Table 11: VECM Model lag 2

	Coefficient	Std. Error	t-Statistic	Prob.
Ecm(-2)	0.134949	0.480203	0.281026	0.7858
D(GDP growth)	-0.849134	0.480504	-1.767174	0.1152
D(GDP growth)	-0.310859	0.315658	-0.984798	0.3536
D(Forex fluctuationPractices)	0.112176	0.181042	0.619612	0.5527
D(Forex fluctuation Practices)	0.257566	0.108738	2.368681	0.0453
D(Trade misinvoicing Practices)	0.001809	0.001034	1.749922	0.1182
D(Trade misinvoicing Practices)	-0.000699	0.000891	-0.784320	0.4554
C(8)	0.256356	0.734072	0.349224	0.7359
R-squared	0.783422	Mean dependent var		0.116024
Adjusted R-squared	0.593916	S.D. dependent var		4.568196
S.E. of regression	2.911072	Akaike info criterion		5.281772
Sum squared resid	67.79471	Schwarz criterion		5.668067
Log likelihood	-34.25418	Hannan-Quinn criter.		5.301554
F-statistic	4.134019	Durbin-Watson stat		1.477083
Prob(F-statistic)	0.032190			

When lagged twice, the VECM is positive and insignificant as indicated by the coefficient 0.134949 and a p value of 0.7858. This indicates that there is no convergence in the long run. The researcher therefore run an error correction model lagged once as shown below.

Table 12 : VECM Model lag 1

	Coefficient	Std. Error	t-Statistic	Prob.
Ecm(-1)	-0.805357	0.221270	-3.639705	0.0034
D(GDP growth)	-0.114133	0.241231	-0.473126	0.0446
D(Forex fluctuation practices)	-0.100096	0.056738	-1.764187	0.0131
D(Trade misinvoicing practices)	0.002516	0.000765	3.290612	0.0065
C	0.288520	0.728252	0.396182	0.6989
R-squared	0.659005	Mean dependent var		0.066795
Adjusted R-squared	0.545340	S.D. dependent var		4.427792
S.E. of regression	2.985594	Akaike info criterion		5.265403
Sum squared resid	106.9653	Schwarz criterion		5.510466
Log likelihood	-39.75593	Hannan-Quinn criter.		5.289763
F-statistic	5.797775	Durbin-Watson stat		2.239354
Prob(F-statistic)	0.007788			

Vector Error Correction Result
The estimated VECM with GDP growth as the target variable is stated as follows:
$DYt= -0.805357ect_{t-1}-0.114133Y_{t-1} +0.002516X1_{t-1}-0.100096X2_{t-1}+ 0.288520...$ *Equation 4.2*

Results from the vector error correction indicate that the error correction coefficient is properly signed at -0.805357and significant with a P value of 0.0034. The coefficient indicates that adeviation of GDP growth from the equilibrium in the long run caused by short run shock is corrected by 80.56% in each year. Thus, the short run dynamics does not contradict but rather supports the co-integration relationship that exists between the dependent (GDP growth) andthe independent variables (trade misinvoicing practices) and (forex fluctuation practices). The coefficient of determination (0.659005) shows that 65.9% of variation in economic growth is explained by the variation in trade misinvoicing practices and forex fluctuation practices.

3.8.5 Discussion
The first objective of this study was to determine the effect of trade misinvoicing practices on the economic growth in Kenya. Trade misinvoicing practices had a positive and insignificant effect on economic growth (GDP growth). This is clearly show by β coeffiencient of 0.002516meaning that a unit increase in Trade misinvoicing practiceled to 0.2516 percent increase in GDP growth. P=0.0065which is less than 0.05 level of significance indicate that trade misinvoicing practice influence on GDP growth of Kenya is significant. The finding means that trade misinvoicing practice plays a small role in determining the GDP growth. Reviewed studies found a negative relationship between trade misinvoicing practices and economic growth. The findings of this study therefore are not consistent with Kar (2010), Baker et al. (2014) and Adjasi (2017) who concluded that capital outflows in terms of trade misinvoicing practices have a huge and negative impact on economies of developing countries.
The second objective of this study was to determine the effect of foreign exchange rate fluctuations on the economic growth in Kenya. This study revealed that foreign exchange rate fluctuations had a negative and significant effect on the economic growth of Kenya as measured by the GDP growth. This is shown by a negative β coefficient -0.100096accounting for -10.01 percent changes in GDP growth. The p value of 0.0131 is also less than the required significant level 0.05, an indication that foreign exchange rate fluctuations influence the GDP growth in Kenya. Reviewed studies found a negative relationship between foreign exchange rate fluctuations on the economic growth in Kenya. These findings are in line with that of Basirat et.al, (2014) in a study aimed to investigate the effect of exchange rate fluctuations on economic growth who found that the effect of exchange rate fluctuation on economic growth is negative and significant. The results are also in similar to Abdallah (2004)who concluded that transfer prices set by Multinationals so as to benefit anticipated exchange rate fluctuations have a direct effect on the country's GDP, balance of payments and consequently the economy and thus economic growth.

From the overall findings, it was established that the two independent variables significantly affected the GDP growth of Kenya. The Regression results further indicated that the R squared was 0.659005. This means trade misinvoicing practices and forex fluctuations practices explain 65.9% of the variations in the dependent variable which is economic growth. The F test results show that the model is statistically significant at 5% with a p value of 0.007788. These findings agree with Obasi (2015) who investigated the impact of transfer pricing on economic growth in Nigeria and used a co-integration with vector error correction and Granger causality techniques. The results of the study implied that transfer negatively affected to economic growth in Nigeria.

3.8.6 Regression Analysis with Control Variable

The control variable of the study was transfer pricing policies. The researcher did a regression to ascertain the effect of the control variable on the dependent variable given the independent variables of the study. The results of the regression are as shown below:

Optimal VAR Lag Length

With transfer pricing policies as a control variable, the optimal VAR length selected determine the long run relationship between international transfer pricing practices and the economic growth in Kenya was was 2. This is indicated by the AIC at 2 which is the least value and significant as shown in the table below.

Table 13: Optimal VAR Lag Length with Control Variable

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-251.7357	NA	1.37e+08	30.08655	30.28260	30.10604
1	-228.5093	32.79018*	62863840	29.23639	30.21664	29.33383
2	-203.6285	23.41724	33244604*	28.19159*	29.95604*	28.36698*

With transfer pricing policies as a control variable, the optimal VAR length selected determine the long run relationship between international transfer pricing practices and the economic growth in Kenya was was 2. This is indicated by the AIC at 2 which is the least value and significant as shown in the table above.

Table 14: Cointergrating Equation with control variable

CointegratingEq:	CointEq1
D_GDP_GROWTH(-1)	1.000000
D_TRADE_MISINVOICING PRACTICES (-1)	0.015112 (0.00180) [8.38636]
D_FOREX_FLUCTUATION PRACTICES (-1)	-0.771403 (0.21958) [-3.51310]
TP_POLICIES(-1)	5.237156 (1.92580) [2.71948]
C	-3.531416

From the above the cointergrating equation with control variable is given as following:

$Ect_{t-1}= 1.0000 Y_{t-1}+ 0.015112 X1_{t-1} - 0.771403 X2_{t-1} + 5.237156 X3_{t-1} -3.531416… Equation 4.3$

Table 15: VECM Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Ecm(-1)	-0.191780	0.101075	-1.897395	0.0343

D(GDP growth)	-0.396843	0.254569	-1.558885	0.0173
D(Trade misinvoicing practices)	0.002268	0.001211	1.873356	0.0878
D(Forex fluctuation practices)	-0.105859	0.073700	-1.436342	0.0087
TP Policies	-3.234495	4.339872	-0.745297	0.0007
C	0.423350	0.902300	0.469191	0.6481

R-squared	0.545035	Mean dependent var	0.066795
Adjusted R-squared	0.338233	S.D. dependent var	4.427792
S.E. of regression	3.601966	Akaike info criterion	5.671401
Sum squared resid	142.7158	Schwarz criterion	5.965476
Log likelihood	-42.20691	Hannan-Quinn criter.	5.700633
F-statistic	2.635541	Durbin-Watson stat	2.029841
Prob(F-statistic)	0.083813		

Vector Error Correction Result with control variable

The estimated VECM with GDP growth as the target variable and transfer pricing policies as the control variable is stated as follows:

$DYt = -0.191780\ ect_{t-1} -0.396843Y_{t-1} +0.002268X1_{t-1} + -0.105859X2_{t-1} -3.234495X3_{t-1} + 0.423350$ ... Equation 4.4

Results from the vector error correction indicate that the error correction coefficient is properly signed at -0.19178 and significant. The coefficient indicates that a deviation of GDP growth from the equilibrium in the long run caused by short run shock is corrected by 19.18% in each year. Thus, the short run dynamics does not contradict but rather supports the co-integration relationship that exists between the dependent (GDP growth) and the independent variables (trade misinvoicing practices) and (forex fluctuation practices) and the control variable (transfer pricing policies). The coefficient of determination (0.545035) shows that 54.5% of variation in economic growth is explained by the variation in trade misinvoicing practices, forex fluctuation practices and TP policies.

3.8.7 Discussion with control variable

The first objective of this study was to determine the effect of trade misinvoicing practices on the economic growth in Kenya. Trade misinvoicing practices had a positive and insignificant effect on economic growth (GDP growth). This is clearly show by β coeffiencient of 0.002268 meaning that a unit increase in Trade misinvoicing practicesled to 0.2268 percent increase in GDP growth. P=0.0878 which is more than 0.05 level of significance indicate that trade misinvoicing practices influence on GDP growth of Kenya is insignificant. The second objective of this study was to determine the effect of foreign exchange rate fluctuation practices on the economic growth in Kenya. This study revealed that foreign exchange rate fluctuation practiceshad a negative and significant effect on the economic growth of Kenya as measured by the GDP growth. This is shown by a negative β coefficient -0.105859 accounting for -10.59 percent changes in GDP growth. The p value of 0.0087 is also less than the required significant level 0.05, an indication that foreign exchange rate fluctuations practice influence the GDP growth in Kenya.

The third objective of this study was to determine the effect of transfer pricing policies on the economic growth in Kenya. The results further, established that, holding other factors constant at time t, where international transfer pricing policies have an impact on GDP growth of 3.23 times. This is further determine of p value of 0.0007 which is less than 0.05, thus indication that the influence of transfer pricing policies on GDP growth is significant. These findings are in line with some reviewed studies including recommendations from the OECD (2016) that imply a relationship between transfer pricing policies and the economic growth.

From the overall findings, it was established not all variable significantly affected the GDP growth of Kenya. The Regression results further indicated that the R squared was 0.545035. This means trade misinvoicing practices, forex fluctuation practices and transfer pricing policies explain 54.5% of the variations in the dependent variable which is economic growth. The F test results show that the model is statistically significant at 5%. These findings differ from the first VECM without a control variable that indicate that trade misinvoicing practices and forex fluctuations practices account for 65.9% changes in GDP. However the explanatory variables do not vary significantly and thus the model without the control variable is the better variable as it explains most of the changes in the dependent variable.

IV. Conclusion and Recommendations

Kenya can curb trade misinvoicing practices as an international transfer pricing practice in several ways. The first way is through legislation and improved regulatory measures that discourage multinational enterprises to engage in trade misinvoicing i.e. import misinvoicing and export misinvoicing. Another way Kenya can use is coming up with mechanisms or information systems that are able to detect trade misinvoicing practices when the transactions are occurring and taking preventive and corrective steps in real time other than waiting till incomes are eroded. Kenya as an economy should also improve trade data collection especially on trade misinvoicing practices.Kenya can also claw back lost revenues after trade misinvoicing practices is found through subsequent transfer pricing audits and reviews of multinational entities. Developing economies should also implement laws making trade misinvoicing practices illegal and thus revoke licenses for companies that engage in such activities in order to deter trade misinvoicing practices. There is also need for inclusive policy making to tackle the advantage of good policies. These regulations and policies can also be put in place to institute public beneficial ownership registries and create whole of government teams to address trade misinvoicing practices.

Kenya should also work on advancing the technology it uses for instance by having the Customs Department implement a trade risk-assessment database to identify trade misinvoicingpractices while the goods are still in the port so that the proper amount of duty and VAT can be collected. Other mechanisms the country can adopt include complying with international supervisory standards, Information sharing between countries, introduction of oversight roles of combating trade misinvoicing practices and also undertaking risk assessments of trade misinvoicing practices periodically and involve stakeholders in giving solutions. Once these mechanisms are in place trade misinvoicingpractices is reduced significantly and progressively, it will lead to an increase in the GDP and hence economic growth.Even though FOREX is a variable that cannot be said to be controlled by the multinational enterprises, there exists procedures, ways or methods that MNCs can adopt to mitigate, reduce or even eliminate possible foreign exchange rate fluctuations and consequently transfer pricing tax adjustments.One of these alternatives is for the Kenyan entity's management to negotiate with its related parties located in different jurisdictions the possibility of having transactions and subsequently invoicing and payments denominated in the local currency, theKSH. By doing this, the FOREX risk would remain overseas with the other related entities and thus the profit margins of the Kenyan entity can be estimated prior and proper installment taxes paid to comply with the existing local laws and regulations and maintained without any interference from the FOREX economic driver.Benchmarking can also be done using the existing commercial databases to ensure that the price charged in a foreign currency is benchmarked with other comparable uncontrolled transactions.

When the foreign exchange rate fluctuation is controlled, companies are not going to be able to manipulate their taxable profits and thus this will lead to an increase in the GDP of Kenya and consequently economic growth.In order to deter international transfer pricing practices, countries introduce rules aimed at avoiding the undue transfer of profits through controlled transactions conducted between related entities within a multinational group. Transfer pricing rules were introduced in Kenya in 2016 and since then all controlled transactions including any movements of goods, services, and rights between related entities have been subject to the same rules.Many developing countries, Kenya included do not have the benefits that comewith having well established and large treaty networks. This is due to the fact that they have notput in placethe required administrative procedures formultinational companies to benefit from the protections that come with treaty'sthus leavinginvestors exposed to the risk of double taxation. Kenya should therefore work at signing the pending treaties and ratifying the signed ones to eliminate double taxation as it reduces theattractiveness and conduciveness of the developing economy in becoming a foreign direct investment location (Stern 2013).

When countries enforce transfer pricing rules and policies they stand to benefit from bilateral and multilateral tax information exchanges but since most developing countries are yet to sign tax information exchange agreements, they are still lagging behind most developed countries. Regulating transfer pricing through signing tax information exchange agreements can assist developing countries like Kenya in acquiring taxpayer information and this largely includes as multinationals (Stern 2013).Developing economies also need to conduct transfer-pricing audits of multinationals. This thus implies that it is vital for the tax authorities to be able to effectively risk profile multinationals so as to carry out in depth transfer pricing audits and reviews so as to optimally use their limited resources (OECD2012). Enforcement of transfer pricing legislation through transfer pricing audits, mutual agreement procedures and advance pricing arrangements bydeveloping economieswill lead to an increase in the tax revenue collected (Stern 2013).Kenya needs to ensure that it regulates transfer pricing in order to protect their tax base while also ensuring that they do not impedeforeign direct investment, whichis imperative for any country's economic growth. Though regulating international transferpricing practices is necessary for each and every developing country, it is a difficult task. This therefore implies that a balance ought to be established and maintainedbetween the regulations put in place to protect against tax base and profit shifting and allowing establishing drivers for highereconomic growth. Kenya needs

to keep reviewing and updating its transfer pricing legislation as new methods of tax erosion and profit shifting come up by the day so it can be at par with the multinationals. With this in place, profit shifting will be limited hence growth of GDP and economic growth of Kenya.

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