INFLUENCE OF TAX COMPLIANCE REQUIREMENT ON FORMALIZING SMALL AND MEDIUM ENTERPRISES IN KENYA

Damaris W. Muhika, Dr. Agnes W. Njeru and Dr. Esther Waiganjo

AJP

INFLUENCE OF TAX COMPLIANCE REQUIREMENT ON FORMALIZING SMALL AND MEDIUM ENTERPRISES IN KENYA

[1]Damaris W. Muhika (Corresponding Author)
Jomo Kenyatta University of Agriculture and Technology
Email: damarismuhika@gmail.com.com

[2]Dr. Agnes W. Njeru
PhD, Jomo Kenyatta University of Agriculture and Technology
Email: agneswnjeru@yahoo.co.uk

[3]Dr. Esther Waiganjo
Jomo Kenyatta University of Agriculture and Technology
Email: ewaiganjo@jkuat.ac.ke

ABSTRACT

Purpose: The researcher sought to determine the influence of tax compliance requirement in formalizing small and micro enterprises in Kenya.

Methodology: The study took the form of a descriptive survey design. The target population was 1200 SME's operating in Nairobi Central Business District and registered with the Nairobi County government. The sample size was 369 respondents, calculated using Yamane Sampling Formula. The study employed stratified and systematic random sampling to select SME's from 4 main sectors and also incorporated commercial banks and microfinance institutions in the sampling distribution. Data was collected by use of open and close-ended questionnaires supplemented by an interview schedule and an observation checklist. The researcher used descriptive and inferential statistics such as mean, standard deviation, correlation and multiple regression analysis. Statistical Package for Social Sciences (SPSS) version 21.0 was used to aid in coding, entry and analysis of quantitative data obtained from the closed-ended questions.

Results: Study results revealed that the tax compliance requirement is an essential tool in fostering formalization of business operations.

Unique contribution to theory, practice and policy: The study recommended that the government should review business formalization structures such as the tax administration system and business registration to accelerate formalization

Key words: *SMEs, Credit Access Requirements, Tax Compliance, Formalization*

1.0 Introduction

1.1 Background of the Study

The European Union defines Small and Medium Enterprises (SMEs) as businesses which employ less than 50 employees and with turnover of less than US$10 million (World Bank, 2014).

In Kenya, the informal economy, often referred as 'Jua Kali' account for for 98% of all registered businesses and are characterized by small and medium enterprises (SMEs), with or without hired workers, at a low level of organization, technology and formality (Mage, 2012; Kenya Economic Report, 2013). Terungwa (2012) observes that SMEs are actually the foundation of any economically stable nation. About 83% of Kenyan workers are in the informal economy which is said to create about 90% of all new jobs annually and generally contribute about 34.3 per cent to the GDP (IEA, 2012; Republic of Kenya, 2014).

Recognizing the critical role small businesses play in the Kenya economy, the Government through Kenya Vision 2030 envisages the strengthening of SMEs to become the key industries of tomorrow by improving their productivity and innovation (Maengwe, 2014). The Kenya government has also initiated finance schemes such as the Youth and Women Enterprises Fund and Uwezo Fund with a view of financing SMEs as lack of access to credit is a major constraint to their growth (Atieno, 2009).

Financing constraint is one of the biggest concerns impacting potential entrepreneurs around the world (Kerr and Nanda, 2009; Brown et al, 2011). A World Bank Enterprise Surveys on 130,000 firms in 135 countries identified access to finance as one of the major obstacles of SMEs growth (World Bank, 2014). In Kenya, over 60.4% SMEs do not have access to credit markets (Mwangi & Ouma, 2012). Informal operations such as lack of a formal tax filing system is one of the major reasons for the unwillingness of the formal bank to lend SMEs (Sacerdoti, 2005; Gichuki, Njeru & Tirimba, 2014).

The banking sector in Kenya is composed of 42 commercial banks and one mortgage finance company. Each of these commercial banks have their own tailor-made appraisal techniques that are applicable when lending to various customers including the small and medium-sized enterprises (Chepkorir *et al*., 2014). Feakins (2005) and Fatoki (2014) claim that commercial banks are one of the major sources of finance to new SMEs in Kenya. The Youth Fund, Women Enterprises Fund and UWEZO fund are a government's intervention for financial inclusion of SMEs (Atieno, 2009), but also impose certain credit access requirements especially tax compliance. However, SMEs rarely meet the conditions (Gichuki *et al*., 2014). Currently, there are concerted efforts to make it easier for firms to formalize through various policy and regulatory reforms (Bruhn and McKenzie, 2014), for the benefit of the SMEs growth, government revenue collection, social protection coverage and other stakeholders.

Formalizing efforts include; registration of business, compliance to relevant authorities, inclusion into finance and social protection systems among others. Tax compliance is a person's act of filing their tax returns, declaring all taxable income accurately, and disbursing all payable taxes within the stipulated period without having to wait for follow-up actions from the authority (Olufunso, Herbst, & Lombard, 2010).

1.2 Statement of the Problem

Globalization has accelerated the growth of the informal economy worldwide. It now comprises majority workers in many countries, especially the developing world (Kapoor, 2007). In Kenya the informal economy, which is characterized by Small and Medium Enterprises (SMEs), is the biggest employer accounting for over 83% of the labor force and contributing about 34% of Kenya GDP (Republic of Kenya, 2015). Despite their significance, past statistics indicate that 3 out of 5 businesses fail within the first few months of operation and those that continue, 80 percent fail before the fifth year (Kenya National Bureau of Statistics, 2007; Gichuki and others (2014).

One of the most significant challenge is the negative perception towards SMEs (Kenya National Bureau of Statistics, 2007; Mwobobia, 2012). The informal economy is sometimes criminalized and termed as "illegal", "black market" or even "hidden economy" (Kuria, 2013). It is also a social challenge because informal employment is often associated with low earnings, low-quality jobs and poverty (Jütting & de Laiglesia, 2009; OECD, 2012).

Informality is also an economic challenge, as it affects public revenues and firm productivity. Taxation gives professionals and entrepreneurs significant incentives to work "under the radar" (Koettl and Weber, 2012; UNIDO, 2008). In spite of the informal economy developing at a very fast pace in Kenya, the collection of taxes has been a great challenge. Generally, if these businesses remain untaxed, and as more people transition into the economy, the government is likely to continue losing billions of shillings. Such a scenario will impact on government's ability to meet its income targets and consequently affect its service delivery (IEA, 2012).

For lenders in Kenya to hedge against the perceived high credit risk of SMEs, certain credit access requirements including tax compliance is imposed. Musamali and Tarus (2013) and Gichuki and others (2014) observed that inability to meet the lender's credit access requirements as a result of informality increases SME's credit constraint. However, none of the reviewed studies considered the role of these requirements in formalizing the SMEs in their quest to access credit. It was therefore imperative to explore financing as an approach that can heighten formalization of this sector so that it's players can benefit from sustainable growth and decent work arrangements. For that reason, the researcher sought to find out whether tax compliance requirement as imposed by financial institutions had a role in transitioning the informal enterprises to formal.

1.3 Objectives of the Study

The study sought to examine the influence of tax compliance requirement on formalization of small and medium enterprises in Kenya.

1.4 Research Hypothesis

$H_{01:}$ There is no significant influence of tax compliance on formalization of small and medium enterprises in Kenya.

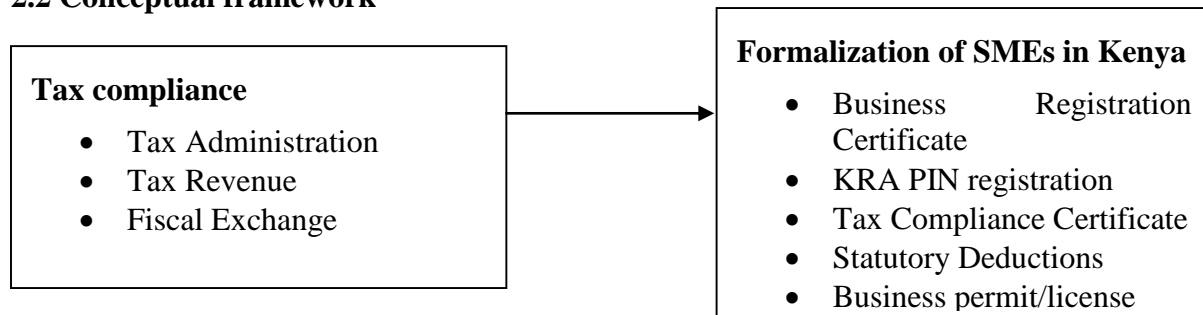## 2.0 Literature Review

2.1 Theoretical Framework

Studies have found that attitude and behavioral intention are positively related (Muller & Turner, 2007) and that attitude about behavior results to intention. A moral hazard is where one person is

accountable for the benefit of another, but has a motivation to put his or her own interests first (Dowla, 2006). The fundamental view of the moral hazard theory are wicked reasons, negative examples, norms, and frustration.

It is opportunistic conduct which takes advantage of an chance for personal gain even if it is at the expense of others. Moral hazard therefore involves the risk that an individual or group will behave immorally, flouting moral conventions and breaching trust (Dowla, 2006). Banks and other financial intermediaries earn profits by having better information about investments than their depositors. Problems of getting people to choose hidden actions appropriately are called moral hazard while the problems of getting people to share hidden information honestly are called adverse selection. Under Basel standards, loans to small businesses and individuals are considered risky and entail maximal capital charges unless "securitized" (Myerson, 2012).

New Keynesian theory assumes opportunistic action on the part of borrowers who hide their increased risk exposure from the lender. They may conceal information, and lenders may find it difficult to assess risk. But even if there were no concealment, lenders are unable to identify true risk, and therefore can only arrive at a judgment to which they attach higher weight. Moral hazard is the danger that these understandings break down, eroding trust.

2.2 Conceptual framework

```
┌─────────────────────────────┐          ┌───────────────────────────────────┐
│  Tax compliance             │          │  Formalization of SMEs in Kenya   │
│                             │          │                                   │
│    • Tax Administration     │───────▶  │    • Business Registration        │
│    • Tax Revenue            │          │      Certificate                  │
│    • Fiscal Exchange        │          │    • KRA PIN registration         │
│                             │          │    • Tax Compliance Certificate   │
│                             │          │    • Statutory Deductions         │
└─────────────────────────────┘          │    • Business permit/license      │
                                         └───────────────────────────────────┘
```

2.3 Review of Literature on Variables

2.4.1 Tax Compliance

Raising more domestic revenue is a priority for most sub-Saharan African countries in order to provide essential public service Merima (2010). In Kenya, taxation is the single largest source of budgetary resources constituting about 80.4% of total government revenue. The presence of a huge untaxed informal economy well as high levels of revenue leakage. Kenyans are yet to adopt a tax paying "culture" hence tax evasion remains high, with a tax gap of about 33.1% (KIPPRA, 2004).

In regard to tax compliance, enterprises that fail to conform are generally termed as 'underground economy'. Ouma and others (2007) states that underground economy comprises both legal and illegal activities but the most dominant component was the micro and small enterprises whose transactions remain largely undocumented and unaccounted for. Indeed, SMEs are commonly referred to as hard to tax taxpayers characterized by low tax compliance which can either be by ignorance or by intent (OECD, 2012). Noncompliance may manifest in different ways, such as non-submission of tax returns within the specified time; understatement of income; overstatement of deductions; and non- payment of due taxes.

www.ajpojournals.org

A good tax regime for small firms is a key policy tool to pave their way out of the "informality trap" of low growth, limited access to markets, and exclusion from formal financial services (Kenyon *et al.,* 2005, Akelentera, 2011). Entrepreneurs in Kenya find the tax system burdensome in the procedure used to prepare and submit tax returns (Institute Of Economic Affairs, 2006).

The incentives for SMEs to enter the tax net are closely connected to formalization. Firms will formalize if the benefits of formalization outweigh the costs. The costs of formalization include time and resources taken in registration, cost of tax compliance, and the cost of following labor laws and other regulations. Benefits are; access to credit and capital markets, government procurement contracts, other external markets, state-provided services and facilities (Joshi *et al*., 2012). Hence, persons who are more content with public service condition are more probable to show tax compliant attitude Research in African countries shows that tax resistance is likely to increase if service provision does not improve, necessitating costly and coercive methods of tax enforcement (IFC, 2005; World Bank and DFID, 2007).

Since informal economy operators are not registered as taxpayers, the simplest way to tax them is indirectly through goods and services bought or sold (Joshi *et al.,* 2012). Unfortunately, this strategy has little effect on formalization of SMEs. The second strategy is increasing enforcement and incentive for compliance such as lower tax rates for SMEs that maintain proper books of accounts. But, this effort may consequently increase tax administration costs and coercive or corrupt behavior by tax officials (Wallace and Howle, 2007; Joshi *et al*., 2012).

Electronic tax register (ETRs) were initiated in Kenya in 2004, as a tool supported by the government to guarantee full payment of VAT on goods and services conducted by retailers. The law makes it mandatory for businesses registered for VAT to issue tax invoices and/or cash sale receipts which must be ETR generated or supported by ETR receipts. However, ETR machines are perceived as an additional cost to the business, have consistently been resisted and a subject of court battles between KRA and Traders' Business Associations (Mativo, Muturi & Nyangau, 2015). In addition, the government of Kenya introduced turnover tax (TOT) in 2007 to enhance revenue collection, improve tax administration and reduce compliance and collection costs. But the performance has been below 50% with 2,890 SMEs registering for taxation against a target of 6,928 between 2009 and 2010. A turnover tax is similar to a sales tax or a value-added tax (VAT), but it is lower and calculated on gross income at a flat rate of 3% without any deductions (KIPPRA, 2006; Kimaru & Jagongo, 2014).

The main challenges that affect the TOT adoption rate are: large size of the SME sector making recruitment difficult, lack of training on TOT to staff, inadequate attention by the tax administration towards the informal sector, mobility of SMEs making compliance difficult, weak enforcement system and tax evasion attitude (Mwangi, Gachoka & Siagi, 2010; IEA, 2012; Kimaru & Jagongo, 2014). Kenya pioneered a single business permit (SBP) licensing system in 1989 and has become a model that has been emulated and adopted by other countries in the region. The Constitution of Kenya mandates County Governments to issue Single Business Permits and the system has become their core source of revenue (Ndunda *et al*., 2015). There are more businesses registered with municipal councils (Current County Councils) than with KRA (IEA, 2012).

Tax experts argue that compliance is less burdensome when tax laws are simple, tax return forms easy to understand and when taxpayers do not need the help of tax specialists to file their returns

(KIPPRA, 2004). Simplifying the registration process and reducing exposure to registration red tape will therefore be key towards this end (Institute Of Economic Affairs, 2006). High costs and difficult formalization procedures drive many small businesses into operating in the informal economy (World Bank and DFID, 2007). Hence, transaction costs should be low enough that they do not act as a disincentive to register (ILO, 2002).

Non-compliance with tax regulation is costly to SMEs in the long term. Firstly, they are not able to reclaim credit for any VAT paid on inputs. Secondly, in many cases the application for an SME credit requires the presentation of a tax Pin identification number (PIN) and therefore the credit is not available to businesses not registered for tax purposes (Calice *et al.,* 2012). The results of informality mean that firms are unsuccessful in accessing formal credit and have to rely on informal lenders (Wellalage & Locke, 2007). However, credit from informal sources may be under extortionate conditions and rates (World Bank and DFID, 2007).

Further, in many developing countries the government tends to be the main client for goods and services offered by SMEs (IFC, 2007). In Kenya, informality may limit an SME from accessing government tenders under the AGPO (Access to Government Procurement (AGPO) program, which require presentation of a copy of business registration certificate, PIN/VAT certificate, tax compliance certificate and certificate of registration with related regulatory bodies such as the National Construction Authority.

2.4.2 Formalization of SMEs in Kenya

Neoclassic approach defines informal economy as one that lack formal registration while neo-structuralism approach emphasize its multiple deficiencies especially lack of capital (UNIDO, 2008). Informal economic transactions are those profitable activities that are unrecorded – or inadequately declared for – in a country's public revenue account. Businesses which have failed to be registered under laws that govern business operations in a country are sometimes termed as "illegal", "black market" or even "hidden economy" (Kuria, 2013).

Informality is often considered both a social challenge and an economic challenge. It is a social challenge because informal employment is often associated with low earnings, low-quality jobs and poverty (Jütting and de Laiglesia, 2009). From a decent work perspective, over 80 percent of Africa's labor force are employed in the informal economy, and are exposed to decent work deficits in terms of employment gap, right gap, social protection gap and social dialogue gap (ILO, 2007). It is an economic challenge for it reduces the tax base, stifles investment and undermines the overall competitiveness of the economy (Bongwa, 2009; OECD, 2012).

The reasons that stimulate informality include: high taxes, complicated regulations, administrative bureaucracy and corruption. In particular, informality is said to be more pervasive in countries requiring entrepreneurs' compliance with a large number of procedures to start a business and in those in which the time and cost associated with business entry are high. Kinyanjui (2010) argues that policy deficits in education system, employment and practice, inheritance, legal structures and lack of social protection generate vulnerability in individuals, who then find their way into the informal sector.

There exist a general legal requirements that all registered businesses must have a Value Added Tax (VAT) and Personal Identification Number (PIN) with the Kenya Revenue Authority (KRA), a National Social Security Fund (NSSF) number, a National Hospital Insurance Fund (NHIF)

number, a Trade License with the ministry of Trade or a Single Business Permit (SBP) with the Local authority. Other requirements are specific to business type. In addition to the above, before one can establish an enterprise, there must be approval by the National Environmental Management Authority (NEMA), which is charged with the responsibility of ensuring that businesses do not have a negative impact on the environment (Maengwe, 2014).

Registration practices in Kenya are often unnecessarily bureaucratic and may involve multiple agencies, and multiple crosschecks; complex due to the different laws, norms, documents and forms required; expensive, and time-consuming. Delays in business registration, which regularly entails numerous government institutions including the tax administration, can be a major impediment to business formation and particularly risky to the small entrepreneur with inadequate start-up capital. While most authors tend to argue that jua kali businesses are not registered and have therefore no legal status (Mead & Morrison 1996; Republic of Kenya 1998), they nonetheless have some form of registration. For example, local authority issues a daily license for Kenyan shilling (Ksh) 100 and is often shown to council askaris or regular police upon demand as proof of legal business. However, the daily receipts do not bear entrepreneurs' names, the kind of job they do, nor the category of business they are engaged in (Kinyanjui, 2010).

Another category of informal enterprises has business names, which are issued by the Registrar of Societies at a fee. It is an official declaration that one is carrying out a business under a particular name. However, a business name is not a legal entity; the legal entity is the owner of the business. The legal requirements for registering a business name are as follows: carry out a name search to ensure that no other business exists with the same name; complete form BN2 at the Registrar of Societies and procure a certificate of registration (Kinyanjui, 2010).

Several studies reveal that reducing compliance costs related to business registration can be a major factor facilitating the formalization of SMEs (UNIDO, 2008). Kenya has successfully reduced the bureaucracies for starting and operating a small business by harmonizing all formalities required for registering and operating SMEs. The Huduma Centre model is an inter-institutional framework between various state departments such as; Registrar of companies, KRA, NSSF and NHIF providing a single window for business formalization. The Huduma centers, which are located in all major towns, provide one-stop shop services for registration and tax payments and other business support services to entrepreneurs. The model has also proven highly effective in the formalization process.

The adoption of ILO Recommendation 204 concerning the informal economy further provides broad guidelines on how Member States of the ILO can transit from informal to the formal economy. The recommendation 204 underscores that formalization brings protection and improved conditions to workers, fair competition and improved sustainability to enterprises and revenues and strengthened authority to governments. Informality is a cost to businesses. Firstly, non-compliance with labor laws such as minimum wage culminates into conflict with trade unions and counterproductive consequences such as strikes (UNIDO, 2008) and low labor productivity (Gelb *et al.,* 2009).

More than 59 percent of SMEs in Sub-Saharan Africa have limited access to formal finance for lenders perceive them as high risk due to their insufficient assets, low capitalization, vulnerability to market instability, and extreme information asymmetry. Moreover, informal SMEs may miss government contacts since they are expected to produce among others: a certificate of registration;

a certificate of tax compliance and five years audited financial reports among others, all which an SME is unable to provide (Maengwe, 2014).

In contrast, formal SMEs face, on average, 18% fewer obstacles to access credit. A study by Terungwa (2012) concluded that the higher the probability of a firm operating in the formal sector, the greater its access to external credit. Other benefits of formalization include; access to capital markets, government procurement contracts, other external markets, a reduced need to pay bribes, access to public services and business support services and availability of basic infrastructure facilities such as electricity, telephone, public sewage, as well as premises (Gelb *et al*., 2009). Being formal also results in major benefits for the employees. Although the benefits of formalization are real, some argue that they are not high enough or exclusive enough to be an incentive to formalize (Joshi *et al.,* 2014).

3.1 Research Methodology

The study adopted a cross-sectional survey research design to determine the influence of tax compliance requirement on formalizing SMEs in Kenya. The target population for the study was drawn from all small and medium enterprises registered with the Nairobi Central Business District Association (NCBDA) 2016. The SMEs represented four main sectors namely; commercial and trade, Services, Pharmaceuticals, and food and beverage as depicted below. In line with the data sourced from the Nairobi County government and NCBDA, there are 1,200 SME's registered within the central business district (Morange, 2015). Financing institutions especially banks and micro-finances were included to ensure consistency with the objectives of the study. This is because the study sought to determine the role of tax compliance as credit access requirement, which is imposed by financial institutions, in formalizing SMEs. Using a stratified random sampling technique, 369 respondents were selected to represent stratas/sectors namely; commercial and trade, Services, Pharmaceuticals, and food and beverage.

The questionnaire contained closed-ended questions using a mixture of yes/no, multiple choice, matrix and scaled questions. There were also a few open-ended questions meant to draw qualitative data on subjective thoughts and different responses related to credit access requirements and formalization. An observation checklist was used by the researcher and research assistants to verify presence of various formalization indicators such as; business license/permits, ETR machines, employees and accounts department. Lastly, a semi-structured interview guide with open-ended questions for in-depth interviews helped the researcher collect opinions and detailed answers from key informants drawn from financial institutions. The questions on the interview guide sought to understand the challenges facing financial institutions in lending to SMEs and common requirements imposed on SME borrowers.

A multiple regression equation was used to detect any relationship between the dependent variable and the independent variable as described below;

$Y = \alpha + \beta_1 X_1 + \varepsilon$

Where:

Y = Formalization of SMEs

α = Model Intercept

β_1 = Slope coefficient representing the influence of the independent variable over the dependent one.

X_1 = Tax Compliance

ε = Error term

The researcher had set up a null hypothesis which the study used the t-test to analyze the relationship between the variables, on the basis of the evidence from the sample. If the null hypothesis is rejected, this offered support to the research hypothesis that there is a real relationship between the variables in the population from which the sample is drawn. The chosen alpha level for the analysis was 0.05 (α=0.05). The decision rule was that if the exact probability is less than the critical alpha level ($p < \alpha$), the finding is significant and the null hypothesis was to be rejected. If the exact probability is greater than the critical alpha level ($p > \alpha$), the finding was to be significant and the study would fail to reject the null hypothesis. The Statistical package for social sciences (SPSS) was the main tool of analysis. Information was then presented diagrammatically by use of tables, bar charts, graphs and pie charts.

4.1 Results And Discussions

4.1.1 Diagnostic test on the instrument

Factor analysis was performed for each variable and it's indicators. From factor analysis, factor loadings were extracted and used as the basis of retaining or expunging observed indicators. An indicator was retained when it load the component by a factor loading greater than 0.4. All the indicators measured had factor loadings greater than 0.4 and were retained except the indicator Y6 which had a loading of 0.0165 that is less than 0.4. This indicator was thus expunged and not considered in computation of the latent variable formalization. The results of the factor loadings are presented in appendix i. Further to computation of factor loadings, factor scores were computed and used to compute latent variables that were used for inferential analysis to test hypothesis and draw conclusions.

4.1.2 Response Rate

The researcher targeted to collect data from a sample of 369 SMEs in Nairobi. However, the study received 292 responses thus a response rate of 79 % (292 / 369). According to Mugenda and Mugenda (2003), a response rate of 50 % is adequate, 60 % is good and above 70% is very good.

4.1. 3 Instrument Validity

The researcher used the results from factor analysis to measure and test the construct validity of the instrument. Construct validity was measured and tested by testing convergent validity and discriminant validity. Convergent validity confirmed that the indicators that were meant to be related were actually related. The average variances extracted (AVEs) of above 0.5 implied convergent validity.

Table 4.1 Average Variance Extracted

	AVE
Tax Compliance	0.743
Formalization of SMEs	0.632

To measure and test discriminant validity, the researcher used a comparison of the AVEs and the squared correlations. Discriminant validity confirmed that the constructs that were not supposed to be related were actually not related. The squared correlations of the latent variables generated were computed and the results compared with the AVEs.

Table 4. 2 Squared correlations

	SME formalization	Asset collateralization	Joint liability	Financial reporting	
SME formalization	0.632	0.409	0.472	0.542	0.612
Tax Compliance	0.612	0.001	0.081	0.000	0.743

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and the Bartlett's test of sphericity were used to test the reliability of the factor analysis results. The KMO revealed the proportion of variance caused by underlying factors. The KMO statistic was found to be 0.958 which is greater than the ideal of 7 and the Bartlett's chi-square had a p-value of 0.000 which was less than 0.05. This implied that the factor analysis results could be trusted.

Table 4. 3 KMO and Bartlett's test

Test		Value
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.95766
Bartlett's Test of Sphericity	Approx. Chi-Square	13985.34
	Df	465
	Sig.	0.000

4.1.4 Reliability of constructs

The instrument was tested for the reliability by computation of Cronbach alpha statistics of reliability. According to the findings, the two variables had Cronbach's Alpha coefficients that were all greater than the 0.7 threshold thus confirming the reliability.

www.ajpojournals.org

Table 4. 4 Reliability Statistics

	N of Items	Cronbach's Alpha	Status
Tax Compliance	7	0.866	Accepted
Formalization of SMEs	6	0.720	Accepted

4.2 Preliminary analysis

4.2.1 Demographic characteristics of the respondents.

According to the study results as presented in Table 4.1, majority of the respondents (66.8%) were male. The female respondents were the least representing 33.2%, a contradiction from several studies that argue that SMEs are predominantly owned by women (Aga and Reilly, 2013). With regard to the respondents' age groups, 2.4% were aged below 21 years, 14.7% were aged between 21 - 30 years and 65.8% were aged between 31 - 40 years whereas 17.1% were aged above 40 years. The findings also show that, majority (62%) of the respondents had achieved secondary education as the highest level of academic whereas 38% had post-secondary education. Further, 50% of the respondents had no technical training related to this business while 41.1% had on-the-job training and only 8.9% had technical training. Further, Abdulsaleh and Worthington (2013) in their study determined that majority of the respondents were experienced and those in managerial positions were aged more than 40 years. However, in contrary to the findings of this study, the majority of respondents were aged 31-40 years.

The table also shows that, majority (34.6%) of the respondents to the study were employees of the business, 31.8% were family relatives of the business owners, 19.9% were joint-owners of the businesses and 13.7% were the owners of the businesses. The findings of the present study agree with the findings obtained by Samreen, Zaidi and Sarwar (2013) and Ndunda, Ngahu and Wanyoike (2015) who determined in their studies that growth from micro to small and medium enterprises is mainly indicated by employment creation.

Table 4. 5 Demographic Characteristics of the Respondents

		Frequency	Percent (%)
Gender	Female	97	33.2
	Male	195	66.8
How old are you	Below 21 years	7	2.4
	21 - 30 years	43	14.7
	31 - 40 years	192	65.8
	Above 40 years	50	17.1
Highest level of education	Secondary	181	62.0
	Post-secondary education	111	38.0
Technical training related to this business	No related training	146	50.0
	On-the-job training	120	41.1
	Technical training	26	8.9
Position in this business	Employee	101	34.6
	Family member of owner	93	31.8

		Frequency	Percent
	Joint-owner	58	19.9
	Owner	40	13.7
How long have you been in this business	1-3 years	81	27.7
	3-6 years	145	49.7
	6-10 years	6	2.1
	Above 10 years	60	20.5

4.2.2 Source of Business Finance

The findings demonstrates the SMEs' sources of business finance. It was revealed that the main source of business finance for the SMEs was bank/ microfinance loans accounting for 79.5%. Other sources were personal savings at 64.7%, 43.5% from family and friends, 40.1% from selling of personal assets and 39.7% from the women enterprise fund/ youth fund. The least source given was the chamas/ROSCAs at 37%.

Table 4. 6 Source of Business Finance

	Frequency	Percent (%)
Personal Savings	189	64.7
Selling personal Assets	117	40.1
Family and friends	127	43.5
Bank/ Microfinance Loan	232	79.5
Chama/ROSCAs	108	37.0
Women Enterprise Fund/ Youth Fund	116	39.7

The findings obtained agree with those posited by Feakins (2005) and Fatoki (2014) who claim that commercial banks are one of the major sources of finance to SMEs in Kenya. Informal financial support services include Merry-Go- Rounds (MGRs) (chamas) and Rotating and Services Credit Associations (ROSCAS) which have roots in traditional mutual guarantee systems (Central Bank of Kenya, 2006; Mwobobia, 2012). The study confirmed that the Youth Fund and Women Enterprises Fund are a government's intervention for financial inclusion of SMEs as observed by Atieno (2009). The study also reveals that formalized economy is characterized by larger enterprises, hired employees, high level of organization and technology.

4.3 Descriptive analysis and discussions on the study variables

4.3.1 Tax Compliance

The study objective sought to find out the effect of tax compliance on SME formalization. The variable tax compliance was measured by various indicators on an ordinal scale. The findings are analyzed as frequency tables basing on the mode as the measure of central tendency.

To measure this variable, the respondents were asked how much they agreed with the statement that tax compliance fosters business brand image; 44 respondents strongly disagreed that tax compliance fosters business brand image, 11 respondents just disagreed while 23 respondents remained neutral. There were 102 respondents who were in agreement that tax compliance fosters business brand image and 112 respondents strongly agreed with the statement. The modal class of the responses to this indicator was found to be 5. This implies that on average, there is agreement in the perception that tax compliance fosters business brand image.

Considering the indicator on the level of agreement with the statement that tax compliance is an essential tool of fostering business legitimacy/formalizing operations; 36 respondents strongly disagreed that tax compliance is an essential tool of fostering the business legitimacy/formalizing operations, 13 respondents just disagreed while 24 respondents remained neutral. There were 99 respondents who were in agreement that tax compliance is an essential tool of fostering business legitimacy/formalizing operations and 120 respondents strongly agreed with the statement. The modal class of the responses to this indicator was found to be 5, implying that on average, there is agreement in the perception that tax compliance is an essential tool of fostering business legitimacy/formalizing operations.

To measure this variable, the respondents were also asked how much they agreed with the statement that tax compliance opens up the business to essential opportunities such as government tendering; 10 respondents strongly disagreed that tax compliance opens up the business to essential opportunities such as government tendering, 18 respondents just disagreed while 21 respondents remained neutral. There are 131 respondents who are in agreement that tax compliance opens up the business to essential opportunities such as government tendering and 112 respondents strongly agreed with the statement. The modal class of the responses to this indicator was found to be 4. The implication here is that on average, there is agreement in the perception that tax compliance opens up the business to essential opportunities such as government tendering.

Considering the indicator on the level of agreement with the statement that tax compliance enables the business to enjoy public service provisions; 11 respondents strongly disagreed that tax compliance enables the business to enjoy public service provisions, 13 respondents just disagreed while 17 respondents remained neutral. There are 121 respondents who are in agreement that tax compliance enables the business to enjoy public service provisions and 130 respondents strongly agreed with the statement. The modal class of the responses to this indicator was found to be 5. This implies that on average, there is agreement in the perception that tax compliance enables the business to enjoy public service provisions.

Analysis of the level of agreement of the respondents that tax compliance enable businesses to recoup paid VAT thus enhancing business financial position; 17 respondents strongly disagreed that tax compliance enable businesses to recoup the paid VAT thus enhancing business financial position, 11 respondents just disagreed while 21 respondents remained neutral. There were 129 respondents who were in agreement that tax compliance enable businesses to recoup the paid VAT thus enhancing business financial position and 114 respondents strongly agreed with the statement. The modal class of the responses to this indicator was found to be 4. This implies that on average, there is agreement in the perception that tax compliance enable businesses to recoup the paid VAT thus enhancing business financial position.

To measure this variable, the respondents were also asked how much they agreed with the statement that payment of SME tax obligations has been hindered by rigid tax administration structures; 44 respondents strongly disagreed that payment of SME tax obligations has been hindered by rigid tax administration structures, 24 respondents just disagreed while 10 respondents remained neutral. There were 99 respondents who were in agreement that payment of SME tax obligations has been hindered by rigid tax administration structures and 115 respondents strongly agreed with the statement. The modal class of the responses to this indicator was found to be 5. This implies that on average, there is agreement in the perception that payment of SME tax obligations has been hindered by rigid tax administration structures.

The respondents also responded the question on whether they agree that high tax obligations contribute to tax evasion among SMEs; 36 respondents strongly disagreed that high tax obligations contribute to tax evasion among SMEs, 22 respondents just disagreed while 15 respondents remained neutral. There were 104 respondents who were in agreement that high tax obligations contribute to tax evasion among SMEs and 115 respondents strongly agreed with the statement. The modal class of the responses to this indicator was found to be 5. This implies that on average, there is agreement in the perception that high tax obligations contribute to tax evasion among SMEs.

Table 4. 7 Tax Compliance and SME Formalization

	SD (1)	D (2)	N (3)	A (4)	SA (5)	Modal class
Tax compliance fosters business brand image.	44	11	23	102	112	5
Tax compliance is an essential tool of fostering business legitimacy/formalizing operations.	36	13	24	99	120	5
Tax compliance opens up businesses to essential opportunities such as government tendering.	10	18	21	131	112	4
Tax compliance enables businesses to enjoy public service provisions.	11	13	17	121	130	5
Tax compliance enable businesses to recoup the paid VAT thus enhancing business financial position.	17	11	21	129	114	4
Payment of SME tax obligations has been hindered by rigid tax administration structures	44	24	10	99	115	5
High tax obligations contribute to tax evasion among SMEs	36	22	15	104	115	5

From the study results, it is observed that firms may prefer informality to avoid taxes. This sentiment is also observed by Kenyon *et al*. (2005) who recommends a decent tax administration

for small firms as a key policy device to clear out of the "casualness trap" of low development, constrained access to business sectors, and rejection from formal budgetary administrations. Hence the motivation for SMEs to enter the tax net is firmly associated with formalization. Firms will formalize if the advantages of formalization exceed the expenses. The expenses of formalization incorporate time and assets taken in enrollment, expense of tax consistence, and the expense of taking after work laws and different directions. The advantages of formalization are; enhanced access to credit and consequential growth of SMEs as posited by Joshi *et al.* (2012).

4.3.2 Formalization

Findings as indicated in Table 4.12 illustrate that, all the businesses were found to have a business permit/ operation license. Similarly, all the businesses studied were registered with line authorities and had a tax compliance certificate.

Of the businesses, 75% had enacted formal structures to support financial information recording and reporting. The findings as well show that 92.8% of the businesses studied were registered with statutory bodies such as NSSF and NHIF.

Table 4. 8 Indicators of formalization by SMEs (check list)

	Frequency	Percent
Business has a permit/license	292	100.0
Business is registered with line authorities	292	100.0
Business has a tax compliance certificate	292	100.0
Business has enacted formal structures to support financial information recording and reporting	219	75.0
Business is registered with statutory bodies i.e. NSSF/NHIF	271	92.8

A keen observation of the SMEs against the checklist of general indicators of formalization revealed a high level of formality. Consequently, majority of the studied SMEs recorded that they had accessed external credit financing. These results are in line with Gichuki and others (2014) who observed that an increase in the level of SME formality reduces credit constraints. The findings also agree with Joshi and others (2012) who found that formalization results in growth in size of SMEs.

4.4 Content Analysis of Qualitative Data Results

The researcher gave the respondents an opportunity to give their views without being restricted to structured responses. The following results were obtained;

On the other ways that tax compliance has fostered business formalization; the respondents said tax compliance helps them reclaim credit for any VAT paid on inputs and in qualification of tenders. The following were the responses obtained;

"Non-compliance with tax regulation is costly and will make one unable to reclaim credit for any VAT paid on inputs."

"In Kenya, not complying with tax will cause an SME not to qualify for government tenders that require presentation of a copy of business registration certificate, PIN/VAT certificate, tax compliance certificate and certificate of registration with relevant regulatory bodies."

On the main benefits of business formalization, the respondents identified access to capital markets, reduced need to pay bribes, government procurement contracts, access to public services and business support services and availability of basic infrastructure facilities such as electricity. The following were the responses obtained;

"Business formalization is important in ensuring that the SMEs follow the required guidelines for day to day operation. This therefore will reduce the need to pay bribes and thereby can help to curb the vice of corruption."

"Business formalization opens doors to access the capital markets."

"When your business is formalized, there is every reason to be involved in government procurement contracts."

"There are more opportunities for a business to access public services, business support services and basic infrastructure facilities such as electricity when it is formalized. Business partners also find a better platform to engage the SMEs with different services."

4.5 Results of the Interviews

Interviews with key informants were conducted in this study and the data analyzed through qualitative methods to reflect their views on the effect of credit access requirements on SMEs' formalization. Their responses show how different requirements affect the formalization of the SMEs in Kenya as follows;

i) Special lending facility for SMEs

The study sought to examine the availability of credit to the SMEs as facilitated by the financial institutions. There was a general view that improved credit accessibility to SMEs is essential for it affects the ability of the firms to grow and eventually formalize.

According to the discussion with the loan managers in the commercial banks, the study established that financial institutions in Kenya valued the SMEs since majority of entrepreneurs fall under this category. The banks confirmed that they had special loans for the SMEs with attractive packages and simple selection process.

In a discussion with one of the lending officers, the respondent had the following regarding the special lending facilities for the SMEs;

"We have recognized the high growth of the SME sector and their significance in the economy and therefore we have put strategies to enable entrepreneurs who are seeking to invest access finances easily with the bank. Our operations are currently geared towards increasing the market share we hold in the SMEs market to ensure our business growth. We always give the business owners a priority since they generally have sound investment opportunities but limited resources to actualize them."

In a further discussion with another respondent who is in the position of credit controller in a microfinance institution, it was recorded that;

> *"SMEs are our main customers. These businesses involve a lot of daily transactions thus they need regular cash flow to meet obligations as they fall due. We have a section for the SMEs where they are given the opportunity to consult on the credits and other business issues that might affect their business turnover. These strategies have seen the bank receive more customers due to the friendly services where entrepreneurs receive some special advice on their investments through the loan facilities offered by the institution."*

Another respondent added that;

> *"The market which the SMEs occupy has a lot of investment opportunities but some entrepreneurs lack capital to put ideas into operations. We have special loan facilities for the small businesses which is offered at a considerable rate and terms to encourage more business investments in the country."*

With similar sentiments, the study clearly established that SMEs in Nairobi have the opportunity to invest more through securing loan facilities available in the financial institutions. However, the SMEs are expected to meet certain requirements for them to access the credit facilities offered. The requirements were observed to include business registration certificate, proper books of accounts among other documents.

ii) Players in the SME loan market

The study also sought to establish the main players in the SME loan market. Thus, in the interviews conducted, the researcher interrogated loan managers and credit personnel in the financial institutions on the main players utilizing their loan facilities. According to the findings, small and medium enterprises are the major loan users in all financial institutions in Kenya. However, ability of the businesses to access credit facilities is affected by the level of formalization of businesses as evidenced by certain required operational tools. The study findings show that formal businesses have greater access to credit facilities since they meet the set criterion given by the banks.

According to the discussion with some of the key informants, the following was deduced;

> *"The SMEs generally account for the major business in our loan section. However, startups find it hard to access credit due to lack of certain documents. Where an entrepreneur is interested in making an investment and has no capital, they come to us for the credit facilities but our offer is dependent on the ability of the entrepreneurs to service the loans. This is also determined by the availability of formal documents attached to the business proposals but most of the startup businesses lack such documents."*

Another respondent also added that;

> *"The main players in the SME loan market are the businesses with many transactions where much investment is required. These businesses are majorly managed by entrepreneurs who are willing to abide by set requirements hence can easily access the finances." and that "When entrepreneurs are required to give collaterals and other credit requirements, the situation makes them look for the documents within the shortest time possible. This facilitates formalization of the businesses providing them with opportunities for more credit accessibility for their investments"*

iii) Main requirements for SMEs to qualify for a loan

The ability of any borrower to access loan facilities is greatly influenced by the ability of the borrower to meet the credit requirements. In this study, the researcher sought to find out the common requirements for the SMEs to qualify for a loan. They were stated to be; collateral especially fixed assets, guarantors, financial reports and managerial skills. In a discussion with one of the respondents, the following was reported;

> *"We have a set of requirements that every borrower should meet for them to access a loan facility. Every financial institution has the set requirements and regulations for the loan policies. These assist in ensuring efficiency in the loan section and avoidance of non-performing loans in the bank which also affects the banks' operations."*

In a further discussion, the respondent was asked to mention the specific requirements that the SMEs should meet for accessing loans in the institution. In response, the respondent said that;

> *"First, every borrower is expected to show the ability to pay back the loan. The ability to pay is determined through assessing the financial management skills of the borrower which affects the utilization of the loan in the intended purpose. Therefore, SMEs are required to submit their financial reports showing their business performances over a time period and how the cash flow has been managed in the business. The financial reports tell us the viability of the business and facilitate assessing the probability of good utilization of the borrowed funds."*

The findings therefore show that the tax compliance requirement leads to business formalization since the banks require firms be legally recognized through formal registration.

4.6 Inferential Analysis Findings

The study sought to determine the influence of tax compliance requirement in formalizing small and medium enterprises in Kenya. The inferential analysis involved determination and checking whether there is any relationship between the independent variable; tax compliance requirement and formalization of SMEs. Inferential analysis also involved the estimation of models to determine the influence of the independent variable on the dependent variable formalization of SMEs. Under inferential analysis, the study conducted analyses using the unobserved latent variables that were generated from factor analysis dimension reduction.

4.6.1 Correlation Analysis

To determine the relationship between the independent variables and the dependent variable, Correlation coefficients were computed as presented in table 4.15 The Pearson correlation coefficient was used as the latent variables generate for inferential analysis were on a continuous scale. The correlation coefficients were computed and 2-tailed test p-values used for testing significant relationships at the 5% level of significance. The strength of association was determined through the Pearson Correlation Scale where a correlation of values between 0.0 – 0.3 is an indication of no correlation, 0.3 – 0.5 is a weak correlation, 0.5 – 0.7 is a moderate correlation and a correlation coefficient of value of 0.7 and above is an indication of a strong correlation between the variables.

Tax compliance requirement was found to have a strong relationship with formalization of SMEs. The findings are also presented in the correlation matrix table 4.15 The table indicates that, there

www.ajpojournals.org

is a strong positive correlation between tax compliance requirement and formalization of SMEs (r = 0.782 > 0.7; p = 0.000 < 0.025). The relationship was found to be statistically significant at the 5% level of significance.

Table 4. 9 Correlation matrix

		SME formalization	Tax Compliance
SME formalization	Pearson's ρ	1	.782**
	2-tailed Sig.		0.000
	N	292	292
Tax Compliance	Pearson's ρ	.782**	1
	2-tailed Sig.	0.000	
	N	292	292

**. Correlation is significant at the 0.01 level (2-tailed).

4.6.2 Regression between Tax Compliance and Formalization of SMEs

A bivariate analysis was also conducted to help determine the influence of tax compliance on formalization of small and medium enterprises in Kenya. The results of the bivariate model for tax Compliance SMEs formalization are as shown in table 4.25. The coefficient of determination R-Square was found to be 0.612. This meant that 61.1% of the variation in formalization in this model is explained by variation in tax compliance.

Table 4. 10Model Summary for Tax Compliance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.782a	0.612	0.611	0.345

a. Predictors: (Constant), Tax Compliance

Table 4.24 shows the ANOVA for the regression model for estimating the influence of tax compliance on formalization of small and medium enterprises in Kenya. The p-value of the computed F-statistic was found to be 0.000 which is less than 0.05 implying that the one predictor model of tax compliance on formalization was generally significant implying that independent variable has a significant influence on formalization of SMEs.

Table 4. 11 Analysis of Variance for Tax Compliance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	54.326	1	54.326	457.416	.000b
	Residual	34.442	290	0.119		

Total	88.768	291	

a. Dependent Variable: Formalization

b. Predictors: (Constant), Tax Compliance

Table 4.25 indicates that tax compliance showed a significant influence on SMEs formalization with the coefficients ($\beta = 0.515$, $t = 21.387$, p= 0.000) implying a positive effect of tax compliance on SMEs formalization. These findings of the study are in line with the findings of Mativo, Muturi and Nyangau (2015) who posited that tax compliance requirement triggers formalization of businesses.

The resulting equation form the model is given by;

$$Formalization = 2.235 + 0.515 * Tax\ Compliance$$

Table 4. 12 Regression Coefficients for Tax Compliance

		Unstandardized Coefficients	Std. Error	Standardized Coefficients	T	Sig.
1	(Constant)	2.235	0.096		23.176	0.000
	Tax Compliance	0.515	0.024	0.782	21.387	0.000

a. Dependent Variable: Formalization

4.6.3 Combined effect of tax compliance on business formalization

Regression analysis was carried in this study to test the relationship between tax compliance requirement (predictor variable) and the formalization of SMEs as the dependent variable. The regression model fitting adopted the use OLS to estimate the parameters of the model. The model summary table 4.26 shows that the R-square for the multiple regression model is 0.916 implying that up to 91.6% of the variation of the dependent variable formalization is explained by variation of the independent variable in the model. This shows that the multiple regression model has a high explanatory power. Only 8.4% of the variance of formalization remains unexplained in the model.

Table 4. 13 Multiple regression Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.957a	0.916	0.915	0.161

a. Predictors: (Constant) Tax Compliance

The ANOVA for regression is used to test the general significance of the model. In multiple regression, ANOVA tests the null hypothesis that the coefficient estimates of the model are jointly equal to zero. From the results of the study shown in the ANOVA table 4.27, the p-value for the F-statistic was found to be 0.000 implying significance at level 0.05. The null hypothesis is rejected and conclusion drawn that at least one of the estimated coefficients of the model is significantly

www.ajpojournals.org

not equal to zero. That means that credit access requirements have a significant influence on business formalization of SMEs in Kenya.

Table 4. 14 Multiple regression ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	81.32	4	20.330	783.577	.000b
1	Residual	7.45	287	0.026		
	Total	88.77	291			

a. Dependent Variable: Formalization

b. Predictors: (Constant) Tax Compliance

Further to the ANOVA, the study proceeded to estimate the beta coefficients of the predictors as indicated in table 4.30. The coefficient of tax compliance were found to be 0.092 with t-statistics of 5.306. The p-value was equal to 0.000 which was less than 0.05, implying significance with 95% confidence. The results imply that tax compliance has a significant influence on business formalization of SMEs in Kenya.

The resulting equation from the model is given by;

$$Y = 0.728 + 0.092X_1$$

Table 4. 15 Multiple regression Coefficients

		Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
1	(Constant)	0.728	0.077		9.502	0.000
	Tax Compliance	0.092	0.017	0.140	5.306	0.000

a. Dependent Variable: Formalization

4.7 Model diagnostic tests

Diagnostic tests were undertaken in this study to verify whether data used had met the assumptions underlying the use of ordinary least squares (OLS) regression analysis for model estimation. The diagnostic tests included the test of collinearity to check the independence of predictors, normality of the residuals, non-autocorrelation of the residuals and homoscedasticity of the residuals.

4.7.1 Normality

OLS models are fitted assuming that the residuals follow a Gaussian distribution. The model fitted for the study data was tested for normality of the residuals. The histogram of the residuals on figure 4.2 shows a possibility of normally distributed residuals with a mean of 0.000 and standard deviation of 0.993.
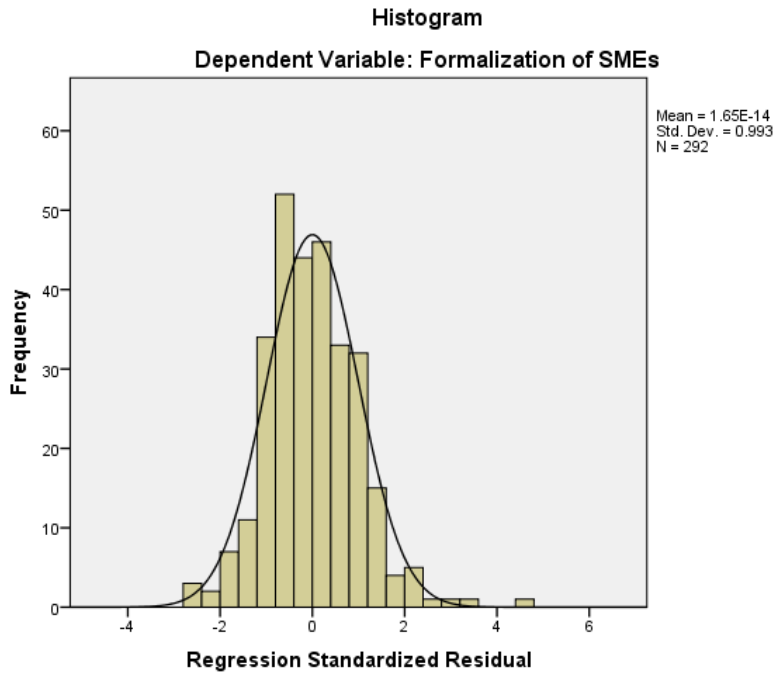
Figure 4. 1 Normality Histogram

To confirm normality of the residuals, a statistical test was used to test whether the residual follow a normal distributions. The Kolmogorov-Smirnov test was applicable as the sample size was greater than 30. According to the test as shown in table 4.31, the p-value of the K-S statistic is 0.200 which is greater than 0.05 implying a significant normal distribution of the residuals.

Table 4. 16 Normality test

Kolmogorov-Smirnov[a]			Shapiro-Wilk		
Statistic	**Df**	**Sig.**	**Statistic**	**Df**	**Sig.**
0.028	292.000	.200*	0.997	292.000	0.931

4.7.2 Homoscedasticity

A homoscedastic variable is one that has a constant variance. OLS estimation assumes that the residuals of the estimated model are homoscedastic as they have a constant variance. A graphical presentation of a scatter plot of the standardized residuals against the predicted values is shown in figure 4.3. The figure shows a scatter plot with no pattern of an increasing or decreasing function. The line of best fit from this scatter plot is a line of y=0 with no slope. This is a sign of homoscedasticity.
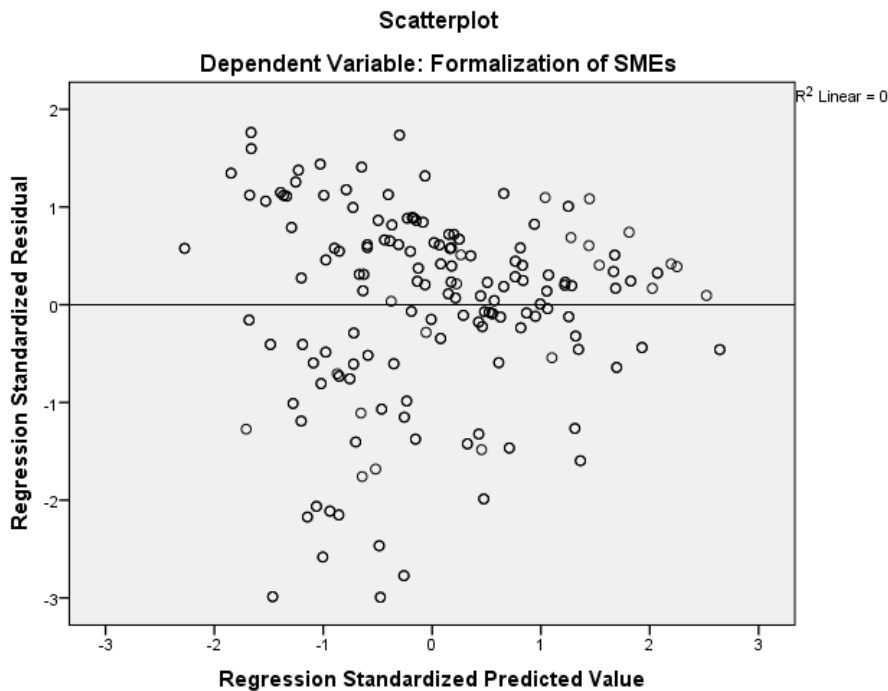
Figure 4. 2 Scatterplot of residuals against predicted values

To confirm that the residuals are not heteroscedastic, a Breusch-Pagan test was carried out on the residuals. The B-P statistic computed follows a chi-square distribution thus a chi-square test was done on the B-P statistic to confirm homoscedasticity of the residuals. The p-value of the B-P statistic was found to be greater than 0.05 implying that the residuals have a constant variance and are therefore homoscedastic.

Table 4. 17 Homoscedasticity Test Results

BP statistic	Df	Sig.
5.140	292	0.061

4.7.3 Autocorrelation

Autocorrelation of a variable also termed as serial correlation is a scenario where the variable can be predicted from an autoregressive process of itself. OLS estimation assumes that the residual term is not auto correlated. To confirm non-auto correlation of the residuals, a Durbin-Watson test was carried out on the residuals of the fitted multiple regression model. The calculated D-W statistic was then compared with tabulated D-W statistics. The calculated D-W statistic was found to be greater than the upper limit of the tabulated D-W value implying non-auto correlation of the residuals.

Table 4. 18 Durbin-Watson

Durbin-Watson statistic	Tabulated lower limit	Tabulated Upper limit
1.8516	1.78371	1.83773

4.8 Hypothesis testing

Having tested and found that the multiple regression model fitted well the assumptions of OLS as used for estimation, the study proceeded to use the results to test hypotheses and draw conclusions on the objectives.

$H_{04:}$ *There is no significant influence of tax compliance on formalization of small and medium enterprises in Kenya.*

From the model, the t-statistic for tax compliance was found to have a p-value of 0.000. With the p-value of 0.000 being less than 0.05, the null hypothesis is rejected and the alternative hypothesis accepted, hence a conclusion drawn that there is a significant influence of tax compliance on formalization of small and medium enterprises in Kenya.

The final model generated an equation given by;

$$Y = 0.728 + 0.092X1$$

5.0 Summary, Conclusions and Recommendations

5.1 Summary of the Study Findings

The study found that tax compliance requirement is an essential tool in fostering formalization of a business operations while enhancing its brand image. Secondly, the study revealed that tax compliance opens up the business to essential opportunities such as government tendering and public service provisions. It is also evident from the findings that tax compliance enables businesses to recoup the paid VAT thus enhancing business financial position. However, results indicated that payment of SME tax obligations has been hindered by rigid tax administration structures and high tax rates which contribute to tax evasion tendencies among SMEs.

Thus, according to the study findings, there is a strong positive and statistically significant correlation between tax compliance requirement and formalization of SMEs. As a result, the null hypothesis which stated that there is no positive significant influence of tax compliance on formalization of small and medium enterprises in Kenya was rejected and the alternative accepted. The regression test also revealed that tax compliance requirement is positively and significantly related to formalization of SMEs whereby an increase in tax compliance requirement would result to an increase in formalization of SMEs.

5.2 Conclusions

The study findings indicated that tax compliance is an essential tool that fosters business legitimacy and formal operations. Tax compliance was observed to be beneficial for it positions the firm to key business opportunities such as government tendering and other public services. The study results confirm that rigorous tax administration systems stimulate tax evasion among SMEs hence hindering the formalization process. Statistical tests found a significant relationship between

tax compliance requirement and formalization of SMEs meaning that consistent tax compliance requirement by financial institutions would lead to increased formalization of SMEs.

5.3 Recommendations

Based on the findings of the study and in line with the research objectives, the following recommendations were made;

There is need for further review of tax administration system to increase efficiency and hence support SMEs to comply. Further, credit access requirements imposed by government financing schemes such as the Youth and Women Enterprise Development Funds and the Government Procurement Opportunities (AGPO) have been observed to increase formalization of SMEs. It is therefore imperative that the government builds the capacity of such initiatives to increase their coverage so that as they increase accessibility to financing, the level of formalization of business will be enhanced. Professional bodies such as the Institute of Certified Public Accountants of Kenya could also collaborate with informal groups to offer training on basic book keeping skills and general compliance. These will also facilitate the formalization strategy as the members would be required to be formally registered as business operators and also comply with other credit access requirements for them to eliminate credit constraint.

The government need to institute a policy framework which would require financial institutions to peg credit selection criterion on business formalization. In return, both the county and national governments will realize economic growth, increase tax revenue, enhance job creation, reduced unemployment, improve social protection and significantly eradicate poverty. Further, there is a need to establish more business incubation centres to offer training to the entrepreneurs on basic book keeping concepts in order to reduce information asymmetry which is rated adversely by lenders. In such centres, SME operators should also be sensitized on the importance of formalizing their businesses in order to facilitate financial inclusion, growth and sustainability.

The government should review business formalization structures such as the tax administration system and business registration to encourage compliance. These reforms include; reasonable tax rates, subsidies, fewer and simple formalizing documents, accessible offices and reduced bureaucracies. The Huduma 'one stop shop' model should be devolved in all counties to ease registration and remittance of tax by SMEs. Moreover, the government should provide quality public services to SMEs who have complied with set laws and regulation in order to achieve a fair fiscal exchange. This will ensure a conducive environment for the SMEs' formalization and ultimate growth as well as inclusion of the SMEs into the tax net.

REFERENCES

Abdulsaleh, A., & Worthington, A. (2013). Small and Medium-Sized Enterprises Financing: A Review of Literature. *International Journal of Business and Management;* , Vol. 8(14) pg. 642-645 .

Aga, G. A., & Reilly, B. (2013). Access to credit and informality among micro and small enterprises in Ethiopia. *International Review of Applied Economics,* , Vol.25(3), pg.313–329.

Atieno, R. (2009). Linkages, access to finance and performance of small-scale enterprises in Kenya. . *UNU World Institute for Development Economics.*, Research paper No.2009/06.

Bongwa, A. (2009). Managing Ethiopian Cities II, Informality in Ethiopia: Taxing the hard to tax. *IHS Working Papers* .

Bruhn, M., & McKenzie, D. (2014). A helping hand or the long arm of the law? Experimental evidence on what governments can do to formalize firms. . *The World Bank Economic Review,* , lhu008.

Calice, P., Chando, V., & Sekioua, S. (2012). Bank Financing to Small and Medium Enterprises in East Africa: Findings of a Survey in Kenya, Tanzania, Uganda and Zambia. African Development Bank Group. *Working Paper* , No. 146 .

CBK. (2014). *CBK Annual Report.* Nairobi: Central Bank of Kenya.

Chepkorir, M., Osiemo, K. E., & Wambua, J. (2014). An Evaluation of Credit Appraisal Techniques Adopted by Commercial Banks in Kenya in Lending to Small and Medium-Sized Enterprises. . *European Journal of Business and Management,* , Vol.6 (1), pg. 36 .

Dowla, A. (2006). In credit we trust: Building social capital by Grameen Bank in Bangladesh. *The Journal of Socio-Economics,* , Vol. 35, Issue 1, pg 102–122.

Fatoki, O. (2014). Factors Influencing the Financing of Business Start-ups by Commercial Banks in South Africa. . *Mediterranean Journal of Social Sciences.* , Vol. 5 (20), pg 94.

Feakins, M. (2005). Commercial bank lending to SMEs in Poland. *Small Business Economics,* , 23(1), 51-70.

Gelb, A., Mengistae, T., Ramachandran, V., & Shah, M. (2009). To Formalize or Not to Formalize? Comparisons of Microenterprise Data from Southern and East Africa, . *Working Paper, Center for Global Development*.

Gichuki, C., Mutuku, M., & Kinuthia, N. (2014). Performance of Women Owned Enterprises Accessing Credit from Village Credit and Savings Associations in Kenya. . *Journal of Global Entrepreneurship Research.* , Vol.10 (1) pg. 14-16.

Gichuki, J., Njeru, A., & Tirimba, O. (2014). Challenges Facing Micro and Small Enterprises in Accessing Credit Facilities in Kangemi Harambee Market in Nairobi City County, Kenya. *International Journal of Scientific and Research Publications.*, Vol. 4, (12), pg. 2250-3153.

Howell, J. M., Shamir, & Brown. (2005). The role of followers in the charismatic leadership process: Relationships and their consequences. . *Academy of Management Review,* , 30(1), 96-112.

IEA. (2012). Informal sector and Taxation in Kenya . Budget Focus. . *www.ieakenya.or.ke.* .

IFC. (2007). Designing a Tax System for Micro and Small Businesses: Guide for Practitioners. *International Finance Corporation*.

ILO. (2002). Resolution Concerning Decent Work and the Informal Economy. *International Labour Organisation*.

ILO. (2007.). Women and Men in the Informal Economy: A Statistical Picture . ILO, Geneva. . *International Labour Organization*.

Institute Of Economic Affairs. (2006). Taxation and Tax Modernization in Kenya: A Diagnosis of Performance and Options for Further Reform. *www.ieakenya.or.ke*.

Joshi, A., Prichard, W., & Heady, C. (2012). Taxing the Informal Economy: Challenges, Possibilities and Remaining Questions. *ICTD Working Paper 4* .

Jütting, J., & de Laiglesia, J. R. (2009). Is informal normal?: towards more and better jobs in developing countries . *Development Centre of the Organisation for Economic Co-operation and Development.*

Kapoor, A. (2007). The SEWA way: shaping another future for informal labour. . *Futures,* , 39(5), 554-568.

Mwangi, A. K., Gachoka, J.K.,& Siagi. N. (2014). Analysis of Factors Influencing Access to Credit Services by Women Entrepreneurs in Kenya . *Research Journal of Finance and Accounting ,* , Vol.5, (11),pg 14-21 .

Kenya Economic Report, . (2013). Economic Outlook. *Kenya National bureau of Statistics*.

Kenyon, T. (2007). A Framework for Thinking about Enterprise Formalization Policies in Developing Countries. . *World Bank Policy Research Working Paper 4235*.

Kerr, W., & Nanda, R. (2009). Financing Constraints and Entrepreneurship. . *NBER Working Paper No. 15498*.

Kimaru, T., & Jagongo, A. (2014). Adoption of Turnover Tax in Kenya: A Snapshot of Small and Medium Enterprises in Gikomba Market, Nairobi Kenya. . *International Journal of Social Sciences and Entrepreneurship,* , Vol.3 (1), pg. 18-30. .

Kinyanjui, M. N. (2010). Social Relations and Associations in the Informal Sector in Kenya . . *Social Policy and Development Programme Paper Number 43*.

KIPPRA. (2007). Policy Brief; Improving Public Policy Making for Economic Growth and Poverty Reduction. *Kenya Institute for Public Policy Research and Analysis*, , No.2(7), .

KNBS. (2015). Economic Survey. . *Kenya National Bureau of Statistics. Government Printer. Nairobi.*

Koettl, J., & Weber, M. (2012). of LaborDoes Formal Work Pay? The Role of Labor Taxation and Social Benefit Design in the New EU Member States.

Maengwe, J. O. (2014). CHALLENGES FACING MICRO AND SMALL ENTERPRISE ACCESS TO PUBLIC SECTOR CONTRACTS IN KENYA: A SURVEY OF MICRO AND SMALL ENTERPRISES IN KISUMU CITY, KENYA. . *Scientific Conference Proceedings.*

Mage, F. W. (2012). The compliance and non compliance of Tanzania small and medium enterprises (SME's) to international financial reporting standards IFRS's) the survey made at Morogoro municipal. *Doctoral dissertation, Mzumbe University*.

Mativo, P., Muturi, W., & Nyang'au, A. (2015). Factors Affecting Utilization of Electronic Tax Registers (ETRs) in Small & Medium Enterprises in Kenya: A Case of Nairobi CBD. *International Journal of Economics, Commerce and Management United Kingdom,* , Vol. 3(3) pg.98-102.

Mead, D. C., & Liedholm, C. (1998). The dynamics of micro and small enterprises in developing countries. *World development*, , 26(1), 61-74.

Mead, D. C., & Liedholm, C. (1998). The dynamics of micro and small enterprises in developing countries. *World development,*, 26(1), 61-74.

Merima, A., Odd-Helge, F., & Ingrid, H. (2010). Factors affecting tax compliant attitude in Africa: Evidence from Kenya, Tanzania, Uganda and South Africa.

Morange, M. (2015). Street Trade, Neoliberalization and Control of Space: Nairobi Central District in the Era of Entrepreneurial Urbanism. Journal of East Africa Studies, 9(2) pg 247-269.

Mugenda, O., & Mugenda, A. G. (2003). Research Methods: Quantitative and Qualitative Approaches. *ACTIS Printers*.

Müller, R., & Turner, J. R. (2007). Matching the project manager's leadership style to project type. . *International journal of project management,* , 25(1), 21-32.

Musamali, M. M., & Tarus, D. K. (2013). Does Firm Profile Influence Financial Access among Small and Medium Enterprises in Kenya?. . *Asian Economic and Financial Review,* , 3(6), 714.

Mwangi, I. W., & Ouma, S. A. (2012). Social Capital and Access to Credit in Kenya. . *American Journal of Social and Management Sciences,* , Vol. 8 (12) pg. 2156-1540 .

Mwobobia, F. M. (2012). The Challenges Facing Small-Scale Women Entrepreneurs: A Case of Kenya. . *International Journal of Business Administration,*, Vol. 3,(2), pg. 112.

Myerson, R. (2012). A model of moral-hazard credit cycles. . *Journal of Political Economy,* , Vol. 5 (1) 847-878. .

Ndunda, J., Ngahu, S., & Wanyoike, D. (2015). Analysis of Factors Influencing Optimal Revenue Collection by County Governments in Kenya: A Case of Nakuru. . *United Nations Department of Economic and Social Affairs.*

Olufunso, O., Herbst, G., & Lombard, R. (2010). An Investigation into Impact of Usage of Debt on Profitability of Small and Medium Enterprises in the Buffalo city Municipality, South Africa. . *African Journal of Business Management.*, Vol. 4(4) pg. 123-127.

Organisation of Economic Development and Cooperation [OECD]. (2010). *Measuring Innovation: A New Perspective.* Ottawa: OECD Publications. Retrieved from http://www.oecd.org/site/innovationstrategy/measuringinnovationanewperspective-onlineversion.htm

Republic of Kenya. (2009). Economic Survey. . *Kenya National Bureau of Statistics*.

Sacerdoti, E. (2005). Access to bank credit in sub-Saharan Africa: key issues and reform strategies. *ssrn journals*.

Samreen, A., Zaidi, F., & Sarwar, A. (2013). Design and Development of Credit Scoring Model for the Commercial Banks in Pakistan: Forecasting Creditworthiness of Corporate Borrowers. . *International Journal of Business and Commerce,*, Vol. 2(5) pg 225-243.

Terungwa, A. (2012). Risk Management and Insurance of Small and Medium Scale Enterprises (Smes) in Nigeria. . *International Journal of Finance and Accounting.* , Vol. (1): pg 8-17.

UNIDO. (2008). Creating an enabling environment for private sector development in sub-Saharan Africa. . *United Nations Industrial Development Organization*.

Wallace, M., & Hoyle, E. (2005). *Education leadership ambiguity, professionals and managerialism.* London, UK: : Sage Publications.

World Bank. (2014). Facilitating SME financing through improved Credit Reporting. Report of the International Committee on Credit Reporting. Washington DC, USA. . *www.enterprisesurveys.org/Data/ExploreTopics/finance*.

www.ajpojournals.org

APPENDICES

APPENDIX I: FACTOR LOADINGS TABLE

	Components					
	1	**2**	**3**	**4**	**5**	**Status**
Lack of business maturity limits the business ability to signal financial institutions of their capacity	0.912					Retained
Lack of adequate formal collateral for SME increases their credit risk among financiers	0.631					Retained
Lack of formal identity of the document limits the information available on the specific business	0.809					Retained
Lack of abundant credit collateral among SME limit their access to security required by banks	0.742					Retained
Having the right collateral fosters the credibility of a business thus bridging the information asymmetry among SME	0.876					Retained
Joining up a group has enhanced the business ability to access credit		0.866				Retained
The joint liability of the group allows for the members to monitor each other easily thus enhancing loan repayment		0.578				Retained
Joining up as a group allows business to access better credit terms since the group acts as the guarantor		0.774				Retained
Joining up in groups allows the business to be screened fairly by financial institutions thus accessing better credit terms		0.653				Retained
Peer monitoring within the groups reduces moral hazard and fosters contract enforcement among business		0.805				Retained

Has enhanced access to credit	0.877		Retained
Has enhanced the formal credibility of the business	0.561		Retained
Has fostered the availability of guarantors for credit	0.787		Retained
Enhances the monitoring of borrowers and fund usage and repayment	0.660		Retained
Has supported more elaborate screening of would-be members and borrowers	0.809		Retained
Financial reporting enhances availability of business information thus better track recording		0.874	Retained
Availability of financial records eliminates information asymmetry thus allowing for better monitoring		0.613	Retained
Availability of quality credible financial information enhances business access to lending facilities		0.781	Retained
Financial reporting fosters the ability of the business to access better credit terms		0.605	Retained
Well audited financial records instil a better image of the going concern view of the firm		0.772	Retained
Elaborate financial reporting enables the business to be conscious of its liquidity levels		0.882	Retained
Having quality financial reporting mechanism enhances the firm's capacity to undertake seamlessly its tax obligations		0.609	Retained
Elaborate financial reporting opens up the business to opportunities such as government tendering		0.784	Retained

Tax compliance fosters the business brand image	0.875	Retained
Tax compliance is an essential tool of fostering the business legitimacy/formalizing operations	0.647	Retained
Tax compliance opens up the business to essential opportunities such as government tendering	0.715	Retained
Tax compliance enables the business to enjoy public service provisions	0.640	Retained
Tax compliance enable businesses to recoup the paid VAT thus enhancing business financial position	0.794	Retained
Payment of SME tax obligations has been hindered by rigid tax administration structures	0.897	Retained
High tax obligations contribute to tax evasion among SMEs	0.633	Retained
Benefits of formalization	0.017	Expunged
Business has a permit/license	0.723	Retained
Business is registered with line authorities	0.722	Retained
Business has a tax compliance certificate	0.728	Retained
Business has enacted formal structures to support financial information recording and reporting	0.814	Retained
Business is registered with statutory bodies i.e. NSSF/NHIF	0.787	Retained

APPENDIX II: DURBIN WATSON TABLES

Critical Values for the Durbin-Watson Test: 5% Significance Level

T=200,210,220,...,500, K=2 to 21

K includes intercept

T	K	dL	dU	T	K	dL	dU	T	K	dL	dU
290	7	1.76539	1.8498	300	15	1.71385	1.90885	320	3	1.80408	1.82922
290	8	1.75825	1.85704	300	16	1.70667	1.91623	320	4	1.79775	1.83559
290	9	1.75106	1.86434	300	17	1.69946	1.92365	320	5	1.79139	1.84199
290	10	1.74384	1.87169	300	18	1.69221	1.93111	320	6	1.785	1.84844
290	11	1.73659	1.87909	300	19	1.68494	1.93863	320	7	1.77857	1.85494
290	12	1.72929	1.88655	300	20	1.67764	1.94619	320	8	1.77211	1.86147
290	13	1.72196	1.89405	300	21	1.6703	1.95379	320	9	1.76563	1.86804
290	14	1.71459	1.90161	310	2	1.80725	1.82019	320	10	1.75911	1.87466
290	15	1.70718	1.90921	310	3	1.80076	1.82672	320	11	1.75256	1.88133
290	16	1.69975	1.91686	310	4	1.79422	1.83329	320	12	1.74598	1.88804
290	17	1.69227	1.92456	310	5	1.78766	1.83991	320	13	1.73937	1.89478
290	18	1.68477	1.93232	310	6	1.78105	1.84657	320	14	1.73272	1.90156
290	19	1.67722	1.94012	310	7	1.77441	1.85328	320	15	1.72605	1.9084
290	20	1.66964	1.94798	310	8	1.76774	1.86003	320	16	1.71935	1.91527
290	21	1.66204	1.95587	310	9	1.76104	1.86683	320	17	1.71262	1.92218
300	2	1.80398	1.81735	310	10	1.7543	1.87368	320	18	1.70585	1.92913
300	3	1.79726	1.8241	310	11	1.74753	1.88058	320	19	1.69906	1.93613
300	4	1.79051	1.83088	310	12	1.74072	1.88751	320	20	1.69225	1.94316
300	5	1.78371	1.83773	310	13	1.73389	1.89449	320	21	1.6854	1.95024
300	6	1.77689	1.84463	310	14	1.72703	1.90152	330	2	1.81335	1.8255
300	7	1.77003	1.85157	310	15	1.72012	1.90859	330	3	1.80724	1.83162
300	8	1.76313	1.85856	310	16	1.71319	1.91571	330	4	1.80111	1.83779
300	9	1.75619	1.8656	310	17	1.70622	1.92286	330	5	1.79495	1.844
300	10	1.74921	1.87269	310	18	1.69923	1.93006	330	6	1.78876	1.85024
300	11	1.74222	1.87983	310	19	1.69221	1.93731	330	7	1.78252	1.85653
300	12	1.73518	1.88702	310	20	1.68516	1.94459	330	8	1.77627	1.86286
300	13	1.7281	1.89425	310	21	1.67807	1.95192	330	9	1.76999	1.86923
300	14	1.72099	1.90152	320	2	1.81037	1.82291	330	10	1.76367	1.87563