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Original Research Article

The Effects of Personal Income Tax Evasion on Socio-Economic Development in Ghana

ABSTRACT

Revenues generated from taxes constitute a major source of income for governments. However, the epic display of tax evasion by individuals and firms in most countries has induced researches on the factors accounting for tax evasion in developing countries. Therefore, this study is conducted to investigate the effect of personal income tax evasion on economic growth in Ghana. The results of the study revealed that tax evasion in Ghana has an adverse influence on Socio-Economic Development. Furthermore, a liaison between tax rate and tax evasion was established. In other words, high tax rates amounts to high tax evasion tendency. The study further revealed that tax payers' relationship with tax authorities has no linkage to the evasion of taxes. Moreover, the existence of weak penalties towards tax evasion also do not contribute to the evasion of taxes. The study conclude with recommendations to policy makers to aide in curbing the high incidence of tax evasion in Ghana.

Keywords: Tax evasion, Tax authorities, Tax rates, Penalties, Ghana.

1. INTRODUCTION

Tax revenues for financing public services and infrastructure is a key factor for economic growth and development. In recent times, emerging economies fail to generate the required tax revenues to finance expenditures [1]. Tax evasion is a key challenge to the slow development of emerging economies. Surprisingly, studies analyzing tax payers' ethical reasons and the impacts of tax evasion on the economy are lacking [2]. The ability of governments in developing countries to provide adequate resources will dwindle with incessant tax evasion among its citizenry. Governments in most developing countries impose high taxes on its citizens as well as resorting to borrowings from developed countries to fund public expenditure hence over-crowding the underground economy and experiencing huge public debts. The factoring of economic element into government goal of imposing high tax rate is mostly as a result of taxpayers' social, cultural and moral characteristics. Tax evasion and avoidance are exploited by individuals and corporate firms to curtail taxes as well as employing fake techniques with the support of tax officials [3].

Tax evasion and avoidance impacts the socio-economic development of most nations especially developing countries. Governments mostly resort to taxes or other revenue making systems to fund public expenditures as well as improving the standard of living of its citizens. Therefore evasion and avoidance of tax negatively impacts governments funding whiles improving the standard of living of few individuals who evade or avoid taxes. Corporations or institutions prefer to satisfy their shareholders by avoiding or evading taxes in order to declare more profit for the success of their businesses. In most developing countries, tax evasion and avoidance pose serious threat to developing countries as compared to the developed countries.

In ensuring compliance to taxes, reforms have been ensured on Ghana's tax systems for the past three (3) decades. Fiscal adjustment program was designed in 1983 to re-instate

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Ghana's tax base but the constant over-valuation of Ghana's local currency was a major challenge to the tax base re-instatement. The tax base re-instatement was expected to reduce tax evasion, widen tax net and reduce tax burden. In view of the slack fiscal adjustment programme, Value Added Tax (VAT) was introduced in 1995 to minimize changes with respect to the conducts of economic agents. The administrative reform of 1985 focused on the improvement of tax equity as well as enhancing efficiency in the administration of taxes. With respect to improving taxes efficiency and enhancing tax payments, the Internal Revenue Service (IRS) and the Custom Exercise and Preventive Service (CEPS) was made autonomous and merged into the Ghana Revenue Authority (GRA) in 2009. In November 2011, the government of Ghana introduced the e-government project to electronically link directly the GRA to the Registrar General's Department (RGD) for easy tracking and collection of tax payments from registered businesses. In spite of the numerous tax reforms established in Ghana, tax evasion still poses a serious threat to the socio-economic development of the country. Therefore, this study investigates some of the factors which serve as incentive or motivation for tax evasion as well as the effect of tax evasion on the socio-economic development of Ghana.

2. RESEARCH OBJECTIVES

The broad objective of this paper is to analyse and pinpoint the effect of tax evasion on the socio-economic development in Ghana. Specifically, the study seeks to satisfy the following objectives:

1. To analyse the effects of weak penalties on tax evasion in Ghana.
2. To examine the bearing of taxpayer- tax authority relationship on tax evasion.
3. To determine the impact of tax rates on tax evasion.

3. HYPOTHESES

1. H1: There is significant relationship between tax evasion and weak penalties in Ghana.
2. H2: There is bearing between taxpayer- tax authority relationship and tax evasion.
3. H3: There is significant relationship between tax evasion and tax rates.

4. LITERATURE REVIEW

4.1 Taxation

The socio-economic development hinges on the generation of revenue for infrastructure development. The generation of revenue for providing these infrastructural development is through an efficient tax system adopted by countries. Efficient tax systems hands government extra revenue needed in discharging its obligations for the development of the country. Taxes are one of the most effective means in mobilization of the internal resources of a nation which in turn leads to the creation of a conducive environment to the promotion of economic growth. Tax constitute the main source of revenue to the federation account shared by the local governments and federal states [4]. Achievement of macroeconomic objectives such as high and sustainable economic growth, employment, stability of prices etc. has been every economy's priority. The achievement of these macroeconomic variables is not automatic but entails policy guidance. Fiscal policies (taxation and public expenditure) and monetary policies (reserve requirements, discount rates and open market operations) are the key instruments in achieving these objectives [5]. Taxes are levied to finance government spending. The government help finance certain infrastructure needs such as roads necessary for trade by defining and regulating the issuance of money from taxes. Tax

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policies are implemented either to: (i) finance a budget deficit, (ii) promote long run growth or (iii) counter other influences in the economy [6].

Taxes impacts on factor accumulation whiles total factor productivity can affect the growth of a country. Taxes distorts factor prices and induce efficiency loss in resource allocation [7]. High tax rates can discourage investments and reduces incentives to invest. However, providing tax incentives to some sectors of the economy can distort allocation of capital as well as reducing the productivity of overall investment. During the post-war period in the United States, information was gathered on legislative tax changes from narrative sources (presidential speeches) on changes in real Gross Domestic Product (GDP) from the year 1947-2007. The results depicted a 2.5% to 3% effect of tax changes on output. In addition, output effects was closely linked to changes in actual taxes than news on future changes on actual taxes [6]. A long run relationship between tax structures and economic growth within the Organisation of Economic Co-operation and Development (OECD) was analyzed by using an error correction model with annual panel data of 51 countries. Long run economic growth could be enhanced by steadily raising taxes on consumption and immovable property whiles improving the design of individual taxes [8]. An estimation of corporate taxes taking into consideration wage bargaining and reduction in investment in the German economy concluded that a 1 euro increment in the liability of corporate tax yields a 44 to 77 cent decrease in wage bill [9]. Taxation yields substantial revenues to government. It has a bearing on GDP which serves as an indicator to the socio-economic development of a nation. Taxes vary according to the economic policies adopted by governments. Taxes are instruments of social engineering to stimulate economic growth [10].

4.2 Tax Evasion

Tax evasion is a major concern across nations. In public economics, tax evasion is a fundamental issue. Tax reductions affects tax payers' public complaints and citizens incomes for public services rendered. Furthermore, evasion of taxes leads to misallocation of resources and affects the accuracy of macroeconomic statistics. Non-compliance of taxes alters the distribution of income in an arbitrary and unpredictable ways. High proportion of tax evasion connotes to government inability to provide adequate services to citizens. Therefore, an increment in tax revenues is a common objective to governments. However, taking into consideration economical elements, the chances of raising tax revenues might not be successful on the basis of social and cultural characteristics of societies as well as morale issues. Tax evasion is a challenge in most countries and it arises from sources such as lack of faith in the abilities of government, tax laws etc. Studies conducted by researches projected losses of tax revenues through the evasion of taxes. Loss of revenues due to tax evasion in the United States is estimated to be approximately $21 billion in the next five years [11]. In addition, another research conducted in the United Kingdom estimated a loss of $21 billion a year [12]. Also, an estimate made in Greece shows a $30 billion per year loss of tax revenues [13]. However, these estimations are tax save estimations of tax evaders. The burden of taxes on individuals is viewed empirically or theoretically as a determinant of tax evasion. In Italy, officials latest estimates generated a value added figure of €200 billion was estimated from the underground economy [14]. Worldwide revenue loss from tax evasion for all countries was estimated by the Tax Justice Network to be $225 billion by basically using a 7.5% return and a 30% tax rate [15]. Overall tax revenue lost estimation due to tax evasion in developing countries is equal to $285 billion per year [16]. In 2001, the United States personal income tax gap amounted to $345 billion– which is above 15% of the estimated actual (paid plus unpaid) tax liability [17].

The evasion of taxes generally affects the socio-economic development of every nation. Tax evasion increases entrepreneur's accumulated resources but lessens public services

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provided by governments thus leading to negative consequences of economic growth. Evasion of taxes impacts capital accumulation thus affecting economic growth and output in diverse ways. High evasion of taxes infers more capital accumulation and may lead to economic growth. Again, high tax evasion leads to lower tax revenues and less provision of public services from government and thus, low economic growth rate. Over the period of 1999 to 2007, the relative size of the shadow economy in 162 countries decreased whereas the unweight average of GDP per capita of the same countries within the same time frame also increased [18]. Countries displaying high rates of tax evasion may experience weak direct democratic rights or low quality institutions [19] and a further argument deployed on this subject matter describes these countries as typically developing countries with low per capita income [20].

States budget all over the world has experienced drastic reduction because of tax evasion practices by economic agent. In November 2011, report released by Tax Justice Network, Murphy Richard, tax experts and advisors on tax matters reported a worldwide value of taxes evaded to be in excess of US$3.1 trillion which is approximately 5.1% of Global GDP. The report exposed the ratio of undeclared dollars at global level as 1:6 whereas the ratio of undeclared dollars at European Level was 1:5 [21]. An abstract from the report showed tax evasion losses across the world in Table 1 and the top ten countries suffering most from tax evasion is adapted in Table 2.

Table 1. Tax Evasion Across Continents

Continent	GDP (Billion $)	Average Shadow Economy (%)	Tax Evasion (billion $)
Europe	18,974,416	20.50	1,511,714
Africa	1,383,070	34.80	79,235
Asia	19,338,826	17.70	665,930
North America	17,376,075	10.80	452,828
South America	3,632,841	36.80	376,298
Oceania	1,064,690	14.10	46,435

Adapted from [21]

Table 1 shows the evasion of taxes across continents. With respect to Table 1, Asia is the continent with the highest GDP of $19,338,826 billion whiles Ocenia recorded the lowest GDP of $1, 064690 billion. However, Europe recorded the highest rate of tax evasion of $1,511,714 whereas Oceania tax evasion was $46,435 billion which is the lowest recorded among all the continents.

Table 2. The Top Ten Economies Severely Affected By Tax Evasion

Country	GDP (Billion $)	Average Shadow Economy (%)	Tax Evasion (billion $)

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USA	14,582,400	8.60	337,349
Brazil	2,087,890	39.00	280,111
Italy	2,051,412	27.00	238,723
Russia	1,497,819	43.80	221,023
Germany	3,309,669	16.00	214,996
France	2,560,002	15.00	171,264
Japan	5,497,810	11.00	171,147
China	5,878,629	12.70	134,385
UK	2,246,079	12.50	109,216
Spain	1,407,405	22.50	107,350

Adapted from [21].

Top ten countries severely affected by Tax evasion is depicted in Table 2. The United States was the top most country affected by tax evasion followed by Brazil, Italy etc. Again, GDP in billion dollars, its corresponding tax evasions within the countries and the average shadow economy percentage rate are all shown in this table.

4.2.1 Population of Tax Evaders

Especially in Africa where religious and cultural sentiments are most dominant, the tendency of tax evasion may be rampant. Hostility to taxation and the propensity to evade taxes depends on cultural background of individuals and economic incentives. The success or failures of tax systems depends on tax enforcement and compliance. Taxes are evaded by individuals and corporate entities. In an attempt to evade taxes, individuals engage in numerous tax evasion and avoidance activities such as diversion of income; failure to register business; under reporting of incomes etc. In addition, abuse of debt financing and the engagement in tax fraud is another causative source of tax evasion in Africa. Tax evasion by corporate entities includes: failures to report fully the actual income earned; keeping two sets of accounts whereby one of the accounts shows very low profit; use of false names and false documents; attempt to reduce tax liabilities by splitting taxes among close associates together with the inclusion of overseas entity in a domestic transactions.

4.3 Tax Avoidance

Tax avoidance is currently an integral practice of modern businesses. Some institutions, businesses etc. express pride in tax avoidance irrespective of public criticism arrayed on the avoidance of taxes. Surprisingly, in maximizing shareholder value, shareholders may even require their companies to engage in such activities. Tax avoidance can probably harm businesses and shareholders by damaging reputation of businesses and impeding its brand efforts. Tax avoidance lessens funds for national infrastructures and skews burden of taxes to few category of persons thus affecting the development of nations. Tax avoidance accomplishes one of these scenarios: “payment of less taxes required by the law,” payment

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of taxes by corporations on “fictitious profits earned,” or the “later payment of taxes on profit earned”. Reliance of individuals on the doubts surrounding the applicability of tax laws helps in the engagement of tax avoidance as well as the wishes of tax professionals in exploiting this uncertainty. The movement of “Double Irish” and “Dutch Sandwich” by Google and Apple to Bermuda (a country without Corporate Income Tax) is an example of tax avoidance through the exploitation of tax loopholes. Google’s effective tax rate was reduced to 22.2% and its tax rate on income at oversees to 2.4% thereby enabling Google to lower its bill on taxes to $3.1 billion over the period of 2007-2009. Google stock price was estimated to be within the region of $100 lower per share if they had paid the 35% U.S. statutory rate [22]. Again in 2011, Apple reduced its U.S. federal tax bill by an estimated figure of $2.4 billion, resulting in worldwide payment for tax of 9.8% of profit. The payment of more taxes would have put Apple to a competitive disadvantage and it would have done disservice to shareholders [23]. Report in the New York Times indicated the payment of 20% or less tax rate by 115 firms in S&P 500 over the last five years conflicting with federal statutory rate of 35% as opposed in the United States [24]. However, other researches has proven tax avoidance to be incentivized and ongoing. Top executives influences their firm’s avoidance of taxes [25]. Equity risk incentives motivates tax avoidance [26]. Deferment of tax payments over long period of time [27].

Human capital cannot be overlooked in the linkage of tax avoidance to socio-economic development. Tax avoidance reduces government revenue and expenditure. Tax avoidance can affect an economy where there is a reliance of human capital on public expenditure. In spite of this, tax avoidance increase or diminish the growth of an economy depending on tax avoidance systems put in place as well as the worth of legal tax rate. Tax avoidance requires a level of educational background. The involvement of tax payers in intensive tax planning requires higher educational personnel than the educational background of tax payers from the general public [28]. An estimated figure of $4 billion in tax revenue was missing due to extensive involvement in mass marketed tax schemes in the 1990s by 42000 Australians [29]. The conceptual framework of this study is illustrated in Figure 1. According to the conceptual framework, penalties, tax authority bearing and tax rate are considered factors which lead to the evasion of taxes. This study seeks to analyze whether these factors lead to the evasion of taxes. Additionally, the study seeks to investigate whether tax evasion affects the socio-economic development of a country.

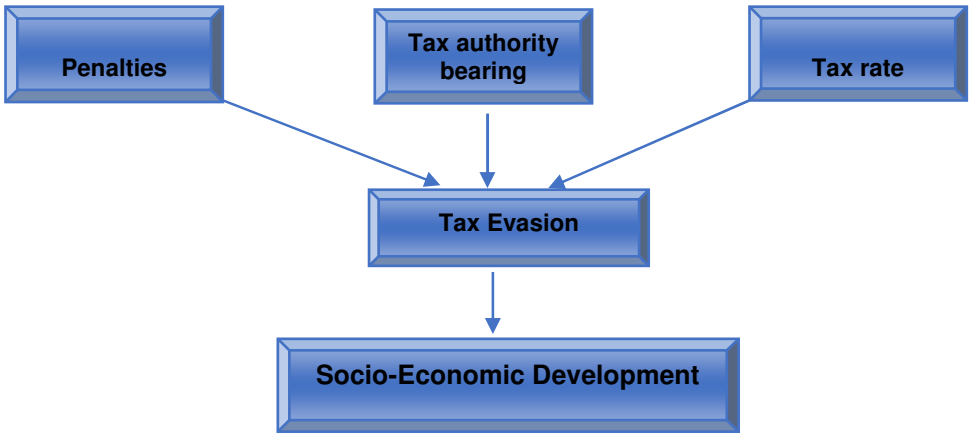

Figure 1: Conceptual framework
Source: Authors’ Construct

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5. METHODOLOGY

A survey was conducted in order to depict the effects of tax evasion on socio-economic development. A total of 200 questionnaires were submitted to respondents comprising 50 tax officials and 150 taxpayers' (self-employed business men, politicians, and corporate firms). A 5 point Likert-scale was employed with scales ranging from "Strongly Disagree" denoted by 1 to "Strongly Agree" represented by 5 with neutral scores amid the two extremes. Sample size of 44 tax officials and 109 taxpayers' were obtained from respondent by using the Yemane sample size determination technique to ensure the generation of accurate sample size.

Yemane Formula

n = N/ [1+N (e) ^2]

Where n= appropriate sample size

N= Number of population size

e= Margin of error

Tax officials = 50/ [1+50 (0.05) ^2]

= 50/1.125

= 44

Taxpayers = 150/ [1+150 (0.05) ^2]

= 150/1.375

= 109.

6. FINDINGS AND DISCUSSION

The following interpretations and discussions were based on the analysis and findings of the study.

Table 3 shows R-square value of 0.774 indicating that the predictors (penalties, tax authority bearing) depict a 77.4% of variability on socio-economic development. The R value of 0.880 indicates a strong positive correlation between penalties, tax authority bearing, tax rate and socio-economic development. This implies that the predictors of tax evasion has a strong relationship on socio-economic development.

Table 3. Model Summary

Model 1	R	R Square	Adjusted R Square	Std. Error of the Estimate

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1	0.880[a]	.774	.769	.52840

a. Predictors: Penalties, Tax authority bearing, Tax rate

Table 4 shows an ANOVA Table of regression model. At α = .05, *P* < .000 indicate statistically significant predictors for the dependent variable. Additionally, *P* = .05 suggests a good fit data for the regression model. As a result, there is enough evidence against the null hypothesis (There is no significant relationship between the predictors and socio-economic development).

Table 4. ANOVA[a]

Model		Sum of squares	Df	Mean Square	F	Sig
1	Regression	133.848	1	44.616	159.794	.000[b]
	Residual	39.089	142	0.279		
	Total	172.937	143			

a. Dependent Variable: Socio-Economic Development
b. Predictors: (Penalties, Tax authority bearing and Tax rate)

6.1 Determining the regression equation

It is obvious from Table 5 that only tax rate (high tax rate collapses most business) is significant at α = .05. The other predictors have *P* values above α = .05 which depicts penalties and tax authority bearing as insignificant. Penalties and tax authority bearing have *P* values of .638 and .438 respectively which is greater than α = .05 which depicts the irrelevance of these two predictor variables. Although the coefficient table has beta coefficients for all the predictor variables, it is important to disregard the beta coefficients of penalties and tax authority bearing. The coefficients table has the first column containing the beta coefficients β_0 = .161 and β_3 = .884. The regression model shows a simple linear equation of:

$$\mathbf{Y=0.161+ 0.884X_1.}$$

Accordingly, a unit change in socio-economic development depicts a corresponding improvement in tax rate by 0.884 holding all other variables constant. From the regression model, evidence of a positive correlation between socio-economic development and tax evasion (predictor variable: high tax rate) exist.

Table 5. Coefficients[a]

	Unstandardized Coefficients	Standardized Coefficients

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Model	B	Std. Error	Beta	t	Sig.
(Constant)	.161	.114		1.414	.159
Penalties	.032	.067	.031	.472	.638
Authority bearing	.064	.082	.061	.778	.438
High tax rate	.884	.062	.813	13.505	.000

a. Dependent Variable: Socio-economic Development
Significant at 0.05 level

7. CONCLUSION AND RECOMMENDATIONS

Taxpayers will be willing to pay their taxes in an ideal world. However, in a real world situation, no one enjoys paying taxes hence the existence of tax evasion and avoidance in the world of which Ghana is no exception. The study was conducted to depict whether personal income tax evasion has a significant effect on socio-economic development in Ghana. However, out of the 3 objectives, only one objective was proved significant whereas the two other objectives proved futile. From the hypotheses, only one predictor variable satisfy the regression model: $\mathbf{Y=0.161+ 0.884X_1}$. According to the study, the only contributing factor to evasion of taxes is high tax rates. Enough evidence is found against both H1 and H2. However, we fail to reject H3. The research portrayed high tax rates as the only predictor variable leading to the evasion of taxes which in turn has a negative significant impact on socio-economic development. It is very imperative for governments, policy makers and institutions in Ghana and the world at large to come out with pragmatic measures to help increase revenue mobilization in order to possess adequate resources to improve the standard of living of the citizens. Therefore, the following recommendations are made in order to minimize tax evasion to an appreciable level if not total eradication:

1. The study revealed strong correlation exists on the relationship between personal income tax evasion and tax rate. Government of Ghana should use media platforms to enlighten citizens on the effects of evasion of taxes on socio-economic development. Furthermore, tax rates should be reduced to enhance and boost revenue generation which will increase the tax net to capture many individuals and small businesses. Also, the insignificance of penalties and tax authority bearing should also be tackled. Appropriate checks on these two (2) factors will reduce if not eradicate the problem.

2. Appropriate review and evaluation processes should be integrated into the entire tax system to encourage taxpayers' compliance to taxes. Inflationary measures should also be wrestled aggressively since vast Ghanaian citizens are poor. Moreover, tax forms should be properly explained to taxpayers to reduce its complexity to less educated citizens.

3. Changes in tax legislations should also be communicated to citizens on time via any available media platforms. Qualified personnel should be recruited and trained to enhance the efficiency and effectiveness to tax operations. Also, tax authorities should engage in practices capable of attracting public confidence in eradicating corruption of taxes.

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4. Staff should be motivated to increase their morale in ensuring the insulation of fraud and corruption from tax operations. For example, good salary package should be designed for tax officials to desist them from corrupt practices. In so doing, evasion of taxes will be minimal to ensure the socio-economic development of Ghana.

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