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Effects of Tax Audits and Tax Penalties on Individual Income Revenue Compliance in Malaysia

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Abstract

This paper aims to determine the tax audit and penalty effects on personal income tax revenue compliance within the context of Malaysia. A quantitative research method has been employed, with validated secondary data that consist of individual income tax revenue and the number of the taxpayers penalised under subsection 112(3) and subsection 113(2), Income Tax Act 1967 (ITA 1967) have been analysed using EViews 9 tools. Results from the study indicate that an audit of individual taxpayers has a positive effect on income tax revenue. However, penalising individuals under subsection 112(3), ITA 1967 have contributed to a negative effect on the personal income tax revenue while penalising individuals under subsection 113(2), ITA 1967 has contributed to a positive effect on the individual income tax revenue in the context of Malaysia. Several theoretical and practical indications, as well as limitations of the study for future research, have been outlined.

Keywords

Tax audit, tax penalty, tax revenues, income tax compliance, Income Tax

Act 1967

JEL Classifications: J11, F43

Introduction

In this Covid 19 pandemic, income tax collection is very important and used by the government to provide incentives or assistance to the people. This study examines the factors that influence audit and penalty in individual income tax collection so that the government can focus on the important elements for the purpose of increasing tax collection as well as points.

Most past studies have measured taxation compliance through income tax revenue. An increase in tax compliance has been found to affect tax collection growth, which is crucial under the controlled market such as Malaysia. With high tax revenue, the government in Malaysia can provide various social service and public goods to benefit the community.

The purpose of this paper is to provide some empirical evidence on the relationship between tax enforcement, namely audits and penalties, and tax compliance. Our analysis used in times series data techniques, with the Pooled Ordinary Least Square (OLS) regression. The researchers use in the data sets that can describe tax audit probability and tax penalties as independent variables, obtained from the Inland Revenue Board of Malaysia (IRBM) starting during the Self-Assessment System for individuals introduced in Malaysia. We also use data taken from the Annual Report for data sets income tax collection published by IRBM as dependent variable.

Section 2 discusses the literature review in income tax compliance, tax audit and tax penalties. Section 3 discusses Research Background and Hypotheses Development. Section 4 specifies the data and estimated techniques that are employed. The findings in Section 5 while the Section 6 discusses the estimated results. Conclusion and recommendations are provided in Section 7.

Literature Reviews

Income Tax Revenue Compliance

Savitri (2016) had argued that tax compliance was the most crucial factor in achieving certain goals from the income tax revenue. The increasing income tax revenue would usually be affected by higher tax compliance. Thus, the government will always ensure adequate income tax compliance to increase income tax revenue while maintaining the maximum revenue level.

On the other hand, tax evasion would result in the reduction of income tax revenue in a country as the amount for tax evaders or evacuees would be challenging to assess. Tax evaders usually exceeded tax evasion activities, which were forgone by federal individual income tax revenue or tax expenditures (Alm,

1988). The effects on tax evaders can be varied, such as a significant decrease in government revenue, which would encourage a hidden economy, as well as an economic imbalance within a country (Palil, Malek & Jaguli, 2016). Alstadsæter, Johannesen & Zucman (2019) found that after voluntary admission to the reduction of tax evaders, tax evaders will avoid or evade taxes. Therefore, combating tax evasion was an effective way to collect extra tax revenue.

Research in Tax Compliance is still not famous among Malaysian researcher. Most of the tax references book in Malaysia are refer to latest tax laws and regulations, the way to fill the Form B or BE for individual, such as Fatt (2018), Kasipilai (2007). There is only a few of reference book regarding with the public economics research in tax and compliance.

According to the Annual Report 2016 published by IRBM, the increase in audit activity and penalty cases for some industries have increased by 19 percent to 1,150 percent from 2015 to 2016. Therefore, the levels of tax compliance in Malaysia are still low in terms of tax enforcement in Malaysia.

Table 1. Audit performance according to selected industries

Industries	Field Audit & Desk Audit 2016		Field Audit & Desk Audit 2015		% Increment
	No. of Solved Cases	Total Additional Tax and Penalties (RM)	No. of Solved Cases	Total Additional Tax and Penalties (RM)	
Factories	11,919	200,801,297.26	10,159	153,933,502.86	30%
water supply, sewerage and sewage management and treatment activities	635	11,726,070.72	592	7,046,367.80	66%
Repair of motor vehicles and motorcycle, wholesaler and retailer	30,270	274,451,494.06	25,834	231,604,527.04	19%
Communication and information	4,133	55,021,158.39	3,392	4,403,073.26	1,150%
Professional, technical and scientific activities	10, 473	72,790,674.63	9,677	51,786,895.85	41%

Sources: IRBM, Annual Report 2016.

In Malaysia, income tax non-compliance due to taxpayers deliberately fleeing taxes, tax agents who play a role in helping taxpayers escape taxes, taxpayers take advantage of loopholes in the Income Tax Legislation, taxpayers who do not care about income tax law and taxpayers flee taxes due to financial constraints (Abdul, 2001).

Audit Probability

Allingham and Sandmo (1972) Model had developed a simple enforcement static model when an individual taxpayer declared the actual income or less. In short, the taxpayer has the option of either reporting full income or tax evasion

with the possibility of being penalized if an audit is conducted and found to be underestimated income.

The taxpayer will choose X

$$E[U] = (1-\rho)\ U\ (W - \theta X) + \rho U(W - \theta X - \pi(W - X))\ \text{...Eq.} \quad (1)$$

For notational convenience,

$$Y = W - \theta X,$$

$$Z = W - \theta X - \pi(W - X).$$

...Eq. (2)

The first-order condition for an interior maximum of Eq. (1) can then be written as

$$-\theta(1-\rho)U'(Y) - (\theta - \pi)\rho U'(Z) = 0\ \text{...Eq.} \quad (3)$$

The second=order condition

$$D = \theta^2(1-\rho)U''(Y) + (\theta - \pi)^2\rho U''(Z)\text{...Eq.} \quad (4)$$

is satisfied by the assumption of concavity of the utility function.

Based on the model, the individual taxpayer would be in a challenging situation if audited or investigated by the tax authorities. In the first case, the income tax should be paid by him if the taxpayer chooses to report income in full. Secondly, the individual taxpayer will be better off if the taxpayer chooses not to report income and does not pay income tax and no audit is done on it. On the other hand, the third situation of individual taxpayers will be worst off if the taxpayer chooses not to report income and does not pay income tax as well as detected by audit and investigation. Worst situation off as individuals are required to pay full income tax plus a penalty as a result of tax evasion.

Webley, Cole, and Eidjar (2001) argued that people who evaded tax without getting caught had similar characteristics with the evaders who were detected for the crime. Hence, Chorvat (2007) found that the current positive value of a refund in tax would be valued at a higher level. Based on the exponential model, a lower level of compliance would be favoured because the chances of getting caught cheating had been reduced. The taxpayers, on the other hand, would only be aware of this situation when the same group of people who evaded tax were caught through audit probability.

Both audit probability and penalty rate were the primary criteria to be considered by a tax evader or non-compliance. Dhami and Al-Nowaihi (2003) had employed an alternative theoretical model based on Kahneman and Tversky's Cumulative Prospect Theory. The model explained that the behaviour of taxpayers significantly influenced the actual choice of risk-taking in evading tax. Results from Alm, Bahl, and Murray (1993) had also strongly indicated using a nonrandom audit strategy in catching tax evaders, which was supported by a game-theoretic approach.

Desk audits involved issues or tax adjustments, which would be easily dealt with via correspondence. Hence, desk audit entailed checking all information on income and expenses, as well as various types of claims made by a taxpayer in the

income tax return. A taxpayer might be called for an interview at the office in IRBM if further information was required. Specific desk audit cases can be referred for field audit action, whereby the taxpayer will be informed through a field audit notification letter under such circumstances, as part of the normal process in the field audit or investigation.

In contrast, a field audit would take place at the premise of a taxpayer, which involved an evaluation of business records. In the case of a sole-proprietorship or partnership, the examination of non-business records such as personal bank statements would be carried out if the business records of the taxpayer were found to be incomplete. Nonetheless, the taxpayer would be given notice before the field audit.

Tax Penalties

Tax penalties motivated taxpayers to comply with tax obligations. According to Mohdali, Isa, and Yusoff (2014), tax penalties were among the practical tools used for determining non-compliance behaviour of an individual taxpayer. Similarly, Doran (2009) asserted that tax penalties were instrumental in promoting tax compliance.

The concept of tax compliance in a self-assessment system required tax penalties that ensured taxpayers exert nothing less and nothing more than the best effort to assess their tax liabilities properly. A study by Carnes and Englebrecht (1995), however, found that low penal sanctions affected tax compliance behaviours, whereby even a small increase in the level of the sanctions had a noticeable impact on tax compliance behaviours. Devos (2014) also showed that increased penalties had positive effects on taxpayer compliance when relatively low (and realistic) penalties were used. Thus, tax penalties can encourage taxpayers to make informed decisions about the extent and potential of the circumstances that can influence the interpretation of a particular law in an obscure situation.

Logue (2007) argued that standard error-based tax penalties might be more acceptable for most individual taxpayers. Nonetheless, this form of penalties was found to be not possible to be implemented, even when the Congress and the Treasury Department in the United States tried to determine the appropriate tax treatment for every possible situation.

Welnreb (2009) had examined Tax Amnesty Programmes (TAP), and Voluntary Compliance Initiatives (VCI) in California, New Jersey and New York. These voluntary compliance programmes involved taxpayers who had entered incorrect returns could file the amended returns by disclosing their participation in exchange for a waiver of penalties. Taxpayers could, therefore, pay particular attention to the provisions that had taxpayers with eligible liabilities be penalised compared to those who did not participate in tax amnesty programmes. These penalties can be substantial, which in these economic times, were a cause of great concern.

In Malaysia, individual taxpayers who underestimate their income will be subject to penalty subsection 113 (2), Income Tax Act 1967. Generally, 45 percent of undercharged tax is levied on taxpayers who underestimate income or over claimed on expenses according to income tax law and regulations. Nevertheless, the Director General Inland Revenue (DGIR) may also exercise his discretion in accordance with subsection 124(3), ITA to reduce income tax penalties.

Penalty rate under subsection 112(3), Income Tax Act 1967 is imposed by 10 percent for voluntary disclosure cases within 60 days from the date of submission of Income Tax Return Form, 15.5 percent for a period exceeding 60 days but less than 6 months from the date of submission of ITRF, and 35 percent for more than 6 months from the date of submission of ITRF.

Research Background and Hypotheses Development

Overview of the income tax system in Malaysia

Numerous researches had shown that an increase in compliance would also increase tax collection, which would be essential to achieve (income) tax compliance for distribution of income and wealth. Personal (Income) tax was a tool in the distribution of income and wealth, whereby the general revenue of a country would increase when the personal income tax (PIT) rate is increased. Malaysia had implemented the progressive tax rate for personal income tax. Under this Malaysia Income Tax System, the higher-income group would contribute more under the Malaysian tax rate.

Tax reform in Malaysia began since 2000, with the government announced 1999 as a wavier year in the Budget Speech. Most of the personal income tax had been exempted, while business losses were allowed to bring forward to the following year. Besides, under the Self-Assessment System developed in Malaysia, a tax audit was placed under the primary interest of the Inland Revenue Board of Malaysia (IRBM), which aimed at enhancing voluntary compliance with the tax laws and regulations. Additional, efiling was first introduced in Malaysia in Year Assessment 2007. This system is the submission of Income Tax Return Form (ITRF) via online. efiling is used so that taxpayers can send ITRF anywhere and at any time within the stipulated period.

Although not necessarily meant that a taxpayer selected for an audit had committed an offence, any taxpayer can be selected for an audit at any time based on IRBM (2009) and the Tax Audit Framework (Amendment 2009). The purpose of a tax audit was to enable the income of the taxpayer to be reported in the correct amount and to claim proper tax relief per tax laws and regulations. The income taxpayer should ensure that the correct amount of income was stated, calculated and paid following the tax laws and regulations.

In this current age of modern technology, IRBM had developed various tools to strengthen tax audit work. Several of these tools, such as Information Collection Systems (eSMUP), the Revenue Management Systems (ReMS) and Debt

Management Analytic System DMAS, were created to enhance and strengthen the procedures of auditing through utilising the information and communication technology systems (IRBM, 2017). As stated in the Income Tax Act 1967, Section 78 had described the authority to request specific returns and taxation account books. Similarly, Section 79 from the same act described the authority to request a statement of bank accounts and other related financial credits. Section 80 allowed IRBM officers to access properties, buildings and documents. Section 81 described the authority to call for related information for all IRBM audit officer to examine records of the taxpayers in terms of income and expenses as stated in the income tax return form authorised under the Income Tax Act 1967.

Within the taxation system under the Income Tax Act 1967, penalties would also be enforced, with the most common charge by an officer from the Inland Revenue Board of Malaysia (IRBM) were under subsection 112(3) and subsection 113(2) of the Income Tax Act 1967 (ITA 1967). Subsection 112 (3) of the ITA 1967 was referred to as the failure to provide chargeable notice of a return or offer, while subsection 113(2) of the ITA 1967 addressed incorrect returns.

Generally, a taxpayer would submit the income tax return to declare the income tax payable and paid the tax within the timeframe given by the IRBM under the ITA 1967. However, those who failed to submit the income tax return form would be penalised under subsection 112(3) of the ITA 1967. Meanwhile, those who failed to declare the correct return would be penalised under subsection 113(2) of the ITA 1967. From the Year of Assessment (YA) 2013 to 2015, IRBM implemented a striking reduction in the penalty under subsection 112(3) to encourage more taxpayers to use the e-filing system. As stated in the Filing Programme for Income Tax Return Forms, the 5 per cent penalty reduction under subsection 112(3) of the ITA 1967 was applicable for taxpayers who used the e-filing system. As a result, penalties can be used as a tool in the submission system for the income tax return form.

Besides, Budget 2019 in Malaysia had introduced the Special Voluntary Disclosure Programme (SVDP) for penalty reduction to encourage taxpayers in voluntary compliance. A 15 per cent penalty was provided for the taxpayers who voluntarily declared the income from 3 November 2018 to 30 June 2019. Meanwhile, a 20 per cent penalty was given to those who voluntarily declared the income between 1 July 2019 to 30 September 2019. Hence, penalties were used as a practical approach in the income tax declaration system within Malaysia, which sought to increase tax compliance and to boost the national income. Various strategies associated with reducing penalties had been formulated to encourage voluntary compliance and to increase tax revenues. The question raised in this study was the effects of penalties towards individual ability in increasing tax compliance and tax revenue in Malaysia.

In Malaysia, the tax revenue components are categorized into direct and indirect taxes. Direct taxes include company income tax, petroleum income tax, and individual income tax, which are collected by the Federal Government ass the

primary source of revenue for the country. The Inland Revenue Board of Malaysia (IRBM) is enacted as the legal agent to collect these direct taxes under the Income Tax Act 1967, Petroleum (Income Tax) Act 1967, Real Estate Taxation Act 1976, Stamp Act 1949, Investment Promotion Act 1986, and the Labuan Business Activities Act 1990.

Among the income tax collection by IRBM, individual income tax revenue compliance has gradually increased from 2002 until 2017, as shown in Figure 1**.** The collection for corporate income tax by IRBM shows an increase of 152 per cent from RM27.3 billion in 2002 to RM68.8 billion in 2017. The individual income tax collections, on the other hand, has escalated by 349 per cent, from RM7.1 billion in 2002 to RM31.9 billion in 2017. Besides, collections from petroleum tax have also shown an upsurge by 53.9 per cent, from RM7.6 billion in 2002 to RM11.7 billion in 2017.

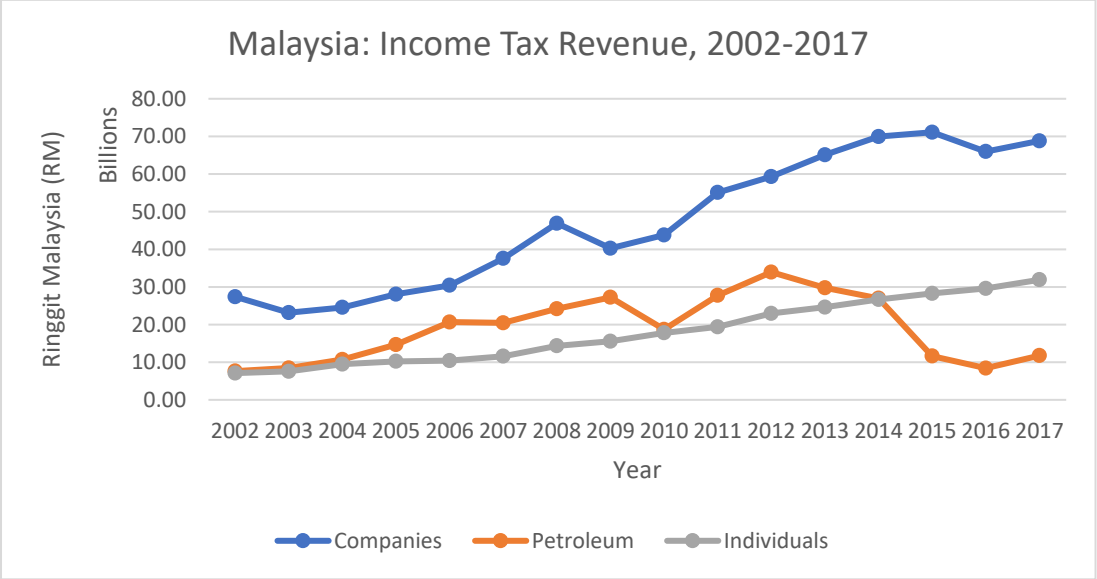


Figure 1. Income Tax Revenue in Malaysia

Source: IRBM Annual Report, various issues at http://www.hasil.gov.my

Therefore, individual income tax compliance plays a significant role in increasing the total tax revenue. The audit enforcement and penalties on individual income tax would, and be necessary for tax compliance under the Malaysian Income Tax Act 1967.

Hypotheses Development

The Allingham and Sandmo Model (1972) was adopted as the foundation of this study, which investigated the impact of probability of audit for Salary Group (SG) and Ordinary Group (OG), with penalties under subsection 112(3) and subsection 113(2) of the ITA 1967 on individual income tax compliance.

The following hypotheses were tested:

$H1_1$ = Tax audit was significantly related to personal income declaration (revenue) compliance in Malaysia context.

$H2_1$ = Tax penalty under Section 112(3) of the Income Tax Act 1967 was significantly related to personal income declaration (revenue) compliance in Malaysia context.

$H3_1$ = Tax penalty under Section 113(2) of the Income Tax Act 1967 was significantly related to personal income declaration (revenue) compliance in Malaysia context.

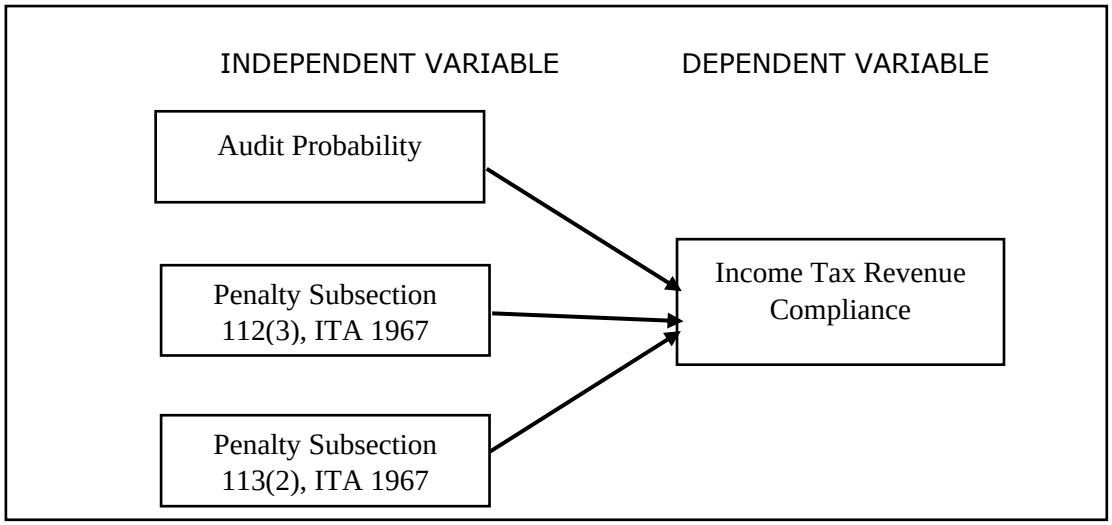


Figure 2: Research Model of Income Tax Revenue Compliance
Sources: Author

Figure 2 showed the research model on Income Tax Revenue Compliance in Malaysia. The independent variables were audit probability, penalty subsection 112(3) and 113(2) of the ITA 1967, while the dependent variable was income tax revenue compliance.

Research Methodology

The Data Analysis

The researcher applied times series data technique, with the Pooled Ordinary Least Square (OLS) regression. A time series dataset contains an audit conducted by an IRBM officer on taxpayers by combining individual taxpayers conducting business (OG) and individual taxpayers who do not conduct business (SG).

In addition, penalty subsection 112(3) and subsection 113(2) were also obtained from IRBM in this study for the year of assessment 2002 to 2017. The year of assessment for individuals according to the Income Tax Act 1967 is the calendar year, that is, from 1 January to 31 December. This study started in 2002 due to the Self-Assessment System was implemented in the year of assessment 2004. In addition, log transformation was used in this study and took into account the changes from the year of assessment 2002 to 2003.

To answer the proposed objectives, the researcher is using the past 16 years secondary data, 2002-2017. This is in fact, taxpayers were only to declare their tax once in a year, and same with the annual income tax revenue in Malaysia. A quantitative research method has been employed, with validated secondary data that consist of national income and household income, and have been analysed using EViews 9 tools.

Data collection

Several prior studies used a questionnaire as an instrument to measure income tax compliance. Kastlunger, Dressler, Kirchler, Mittone, and Voracek (2010) used the experimental method to investigate income tax compliance among students at a university in northern Italy. Similarly, a questionnaire was sent to both salaried and self-employed taxpayers in a study by Mohdali, Isa and Yusoff (2014) for tax compliance research. However, in this study, the researchers had employed a new method to measure personal income tax compliance within the context of Malaysia.

All the validated secondary data were obtained from the Department of Tax Operation of the IRBM Headquarters. The purpose of obtaining such information was stated in an official email to the department, which was for research purposes only. Hence, the obtained data were confidential. After receiving feedback and information from the IRBM officer, the data were keyed-in to an Excel worksheet and assessed using EViews 9 tools.

Data obtained included the number of non-business income taxpayers (SG) and business income (OG) taxpayers from the Year of Assessment between 2002 to 2017, and the total number of SG and OG taxpayers, as well as the total number of audit cases by IRBM. Besides data from audit probability, the study also obtained information on penalty subsection 112(3) of ITA 1967 and penalty subsection 113(2) of ITA 1967 from IRBM.

Since the audited taxpayers and collection of tax penalties will vary according to the strategies implemented from time to time, the number of collection proceeds may not reflect the increase or decrease in the income tax audits and penalties.

Besides, the resident status for an individual would be stated in Section 7 of the Income Tax Act 1967, which proved the person was in Malaysia within the basis year for a period or periods that amounted to hundred and eighty-two days in general. However, both individual audited resident and non-resident in Malaysia were selected and incorporated into the calculation of audit rates in this study. Both Malaysian resident and non-resident taxpayers who were penalised under subsection 112(3) or 113(2) we also included in this study as a contribution to the income tax revenue in Malaysia.

The percentage of taxpayers that had been audited, as well as the number of penalised taxpayers, were the independent variable to investigate the increase or decrease in tax compliance. Data on audited taxpayers and penalties imposed

on taxpayers were used based on this study of individuals regarding tax audits and penalties.

Research Model

The following regression model was tested to determine the significance of the penalty effect on tax revenue under the Malaysia Personal Income Taxation System. The proposed multiple regression equation was:

$$incometaxrevenue_{2002-2017} = c + \beta_1 auditrate_{2002-2017} + \beta_2 penaltys112_{2002-2017} + \beta_3 penaltys113_{2002-2017} + \varepsilon \text{ ...Eq.} \quad (5)$$

whereby:

incometaxrevenue = individual income tax collection in Malaysia
auditrate = individual audits rates in Malaysia
penalty112 = individual taxpayer penalised under subsection 112(3), ITA 1967 in Malaysia
lnpenalty113 = individual taxpayer penalised under subsection 113(2), ITA 1967 in Malaysia
ε = error term

Eq. (5) examined the percentage of individual audited cases, the number of taxpayers penalised under subsection 112(3) and subsection 113(2) of ITA 1967, as well as the effects of the income tax revenue between 2002 to 2017.

However, Eq (5) was transformed both sides (by taking natural logarithms of both dependent and independent variables) within this study, which resulted in a double-log form, as shown in the Eq. (6).

$$lnincometaxrevenue_{2002-2017} = c + \beta_1 lnauditrate_{2002-2017} + \beta_2 lnpenaltys112_{2002-2017} + \beta_3 lnpenaltys113_{2002-2017} + \varepsilon \text{ ...Eq.} \quad (6)$$

whereby:

lnincometaxrevenue = Log transformation of individual income tax collection in Malaysia
lnauditrate = Log transformation of individual audits rates in Malaysia
lnpenalty112 = Log transformation of the individual taxpayer penalised under subsection 112(3), ITA 1967 in Malaysia
lnpenalty113 = Log transformation of the individual taxpayer penalised under subsection 113(2), ITA 1967 in Malaysia
ε = error term

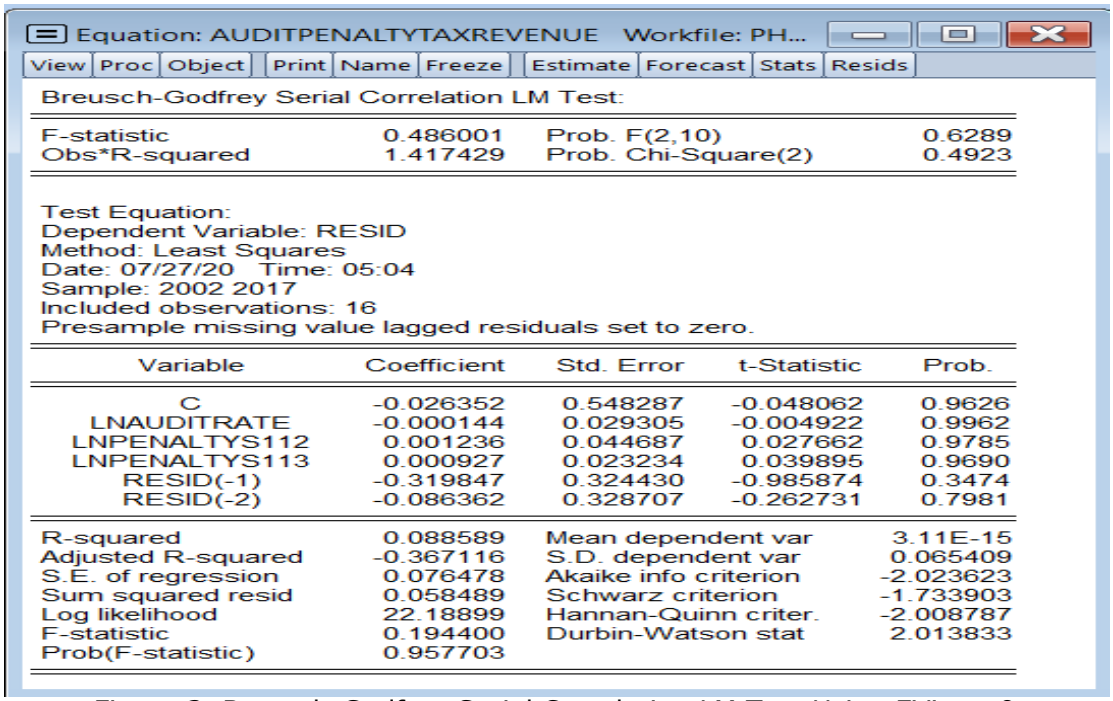
Findings

Residual Diagnostics Analysis

Before discussing the result of the regression model, a scatter plot of the residuals over time was examined to identify the behaviour towards audit and penalties in income tax revenue. The residual line (under Residual Plot) crossed the broken line in Assessment Year 2008, 2009 and 2012, which was considered as a sign of serial correlation problems.

Autocorrelation happened when there was a correlation between two consecutive observations of the residuals. If the residuals show no serial correlation, the autocorrelations and partial autocorrelations at all lags should be nearly zero. As a result, all Q-Statistics should be insignificant with large p-values. The findings demonstrated that the residuals were not auto-correlated.

Besides, the Breusch-Godfrey Serial Correlation Lagrange Multiplier (LM) Test was also examined. The Observed R-squared for corresponding probability in the Chi-Square value equalled to 0.4923 or 49.23 per cent, which suggested that the test was not significant for Serial Correlation (p>5%), as shown in Figure 3. Thus, the model had no serial correlation.



Equation: AUDITPENALTYTAXREVENUE Workfile: PH...

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Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.486001	Prob. F(2,10)	0.6289
Obs*R-squared	1.417429	Prob. Chi-Square(2)	0.4923

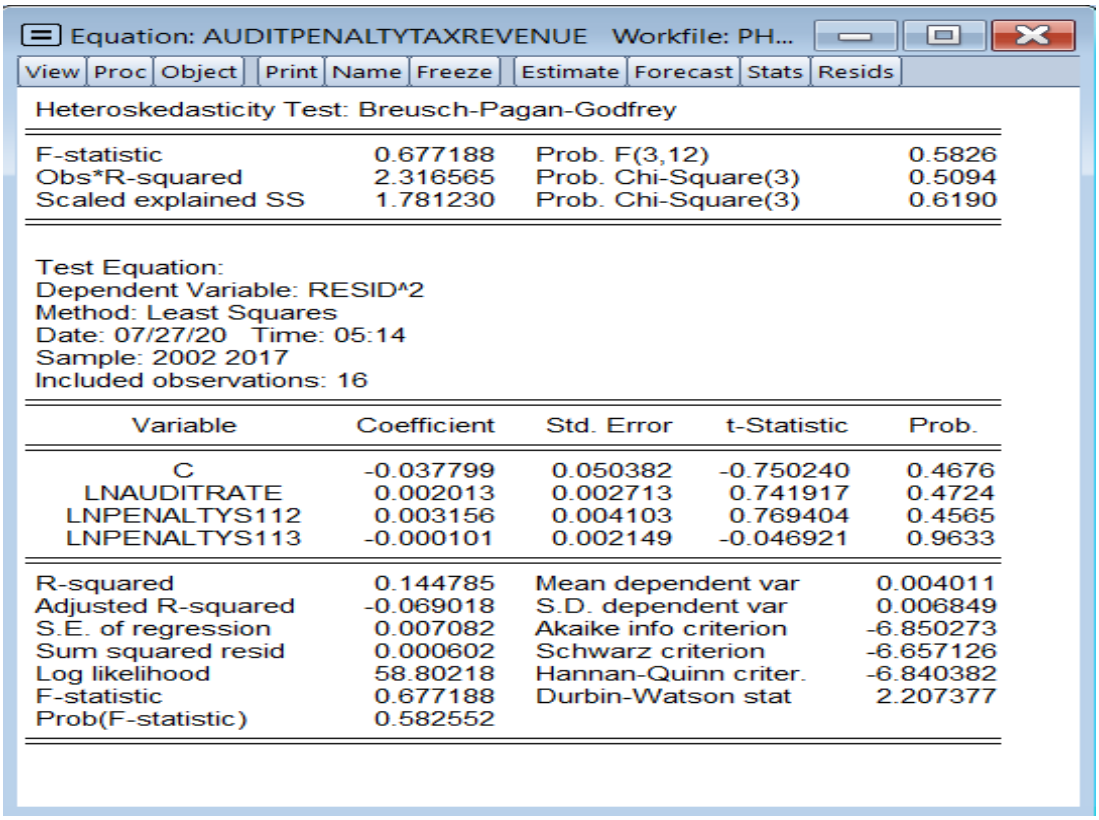
Test Equation:
Dependent Variable: RESID
Method: Least Squares
Date: 07/27/20 Time: 05:04
Sample: 2002 2017
Included observations: 16
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.026352	0.548287	-0.048062	0.9626
LNAUDITRATE	-0.000144	0.029305	-0.004922	0.9962
LNPENALTYS112	0.001236	0.044687	0.027662	0.9785
LNPENALTYS113	0.000927	0.023234	0.039895	0.9690
RESID(-1)	-0.319847	0.324430	-0.985874	0.3474
RESID(-2)	-0.086362	0.328707	-0.262731	0.7981

R-squared	0.088589	Mean dependent var	3.11E-15
Adjusted R-squared	-0.367116	S.D. dependent var	0.065409
S.E. of regression	0.076478	Akaike info criterion	-2.023623
Sum squared resid	0.058489	Schwarz criterion	-1.733903
Log likelihood	22.18899	Hannan-Quinn criter.	-2.008787
F-statistic	0.194400	Durbin-Watson stat	2.013833
Prob(F-statistic)	0.957703		

Figure 3. Breusch-Godfrey Serial Correlation LM Test Using EViews 9
Source: Author

The study had also examined the Heteroscedasticity through the use of EViews 9, as shown in Figure 4. The observed R-squared for the corresponding probability of the Chi-Square value was 0.5094 or 50.94 per cent, which indicated that the test was not significant for Heteroscedasticity (p>5%) and the variance of the residuals were constant. Thus, the model was homoscedasticity with no issues based on evidence.



Equation: AUDITPENALTYTAXREVENUE Workfile: PH...

View | Proc | Object | Print | Name | Freeze | Estimate | Forecast | Stats | Resids

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.677188	Prob. F(3,12)	0.5826
Obs*R-squared	2.316565	Prob. Chi-Square(3)	0.5094
Scaled explained SS	1.781230	Prob. Chi-Square(3)	0.6190

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 07/27/20 Time: 05:14
Sample: 2002 2017
Included observations: 16

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.037799	0.050382	-0.750240	0.4676
LNAUDITRATE	0.002013	0.002713	0.741917	0.4724
LNPENALTYS112	0.003156	0.004103	0.769404	0.4565
LNPENALTYS113	-0.000101	0.002149	-0.046921	0.9633

R-squared	0.144785	Mean dependent var	0.004011
Adjusted R-squared	-0.069018	S.D. dependent var	0.006849
S.E. of regression	0.007082	Akaike info criterion	-6.850273
Sum squared resid	0.000602	Schwarz criterion	-6.657126
Log likelihood	58.80218	Hannan-Quinn criter.	-6.840382
F-statistic	0.677188	Durbin-Watson stat	2.207377
Prob(F-statistic)	0.582552		

Figure 4. Heteroskedasticity Test Using EViews 9

Source: Author

Figure 5 showed The Jarque-Bera Test of Normality by using EViews 9. The results obtained a skewness of −0.308146, which was between −2, 0, and +2. Meanwhile, the kurtosis value was 3.733903, which was between −7, 0, and +7. The (Jarque_Bera) corresponding probability value was 0.736281 or 73.62 per cent, which indicated that the test was not significant (p>5%). Thus, based on the evidence, the residuals followed a normal distribution.

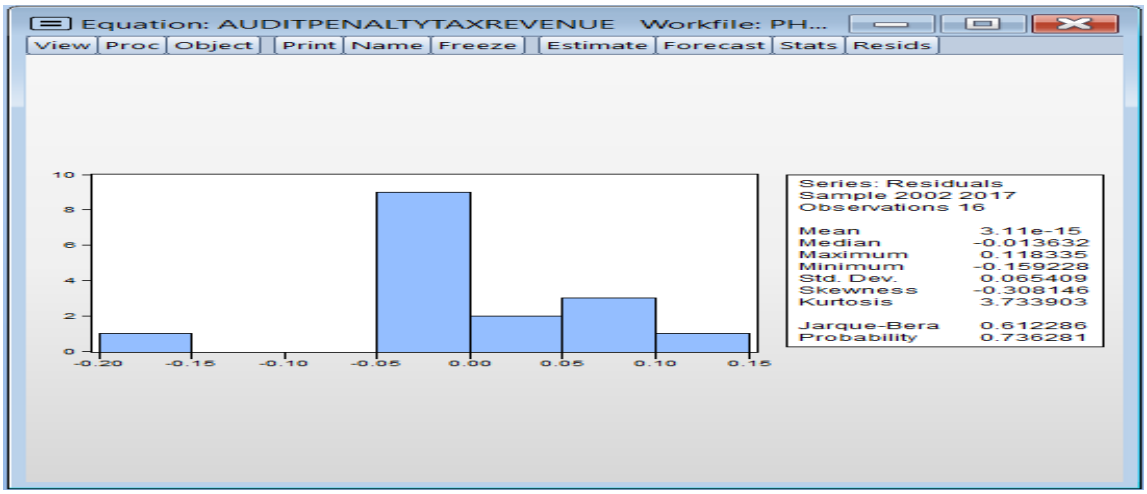


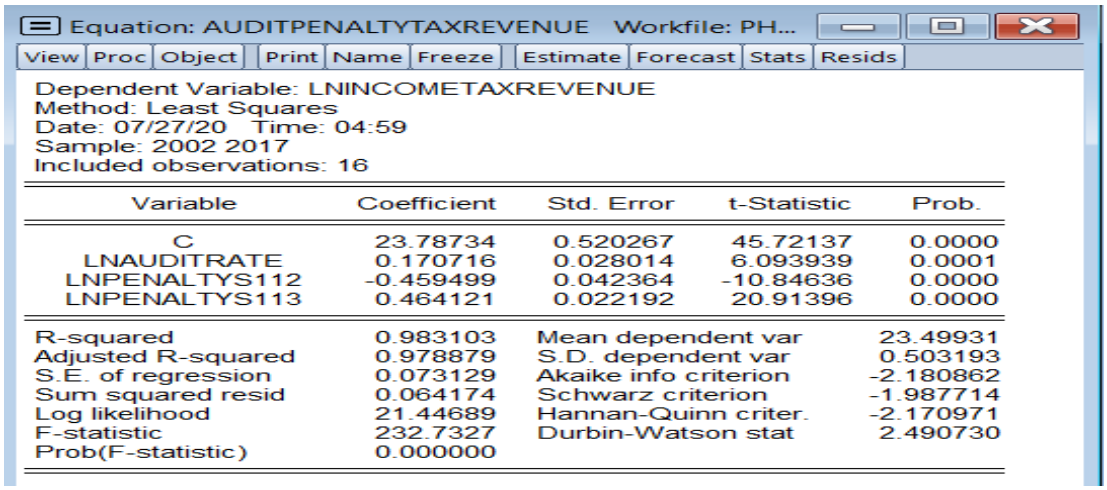
Figure 5: The Jarque-Bera Test of Normality Using EViews 9

Source: Author

Therefore, the regression model had no heteroscedasticity, no serial correlation and normal distribution. The study was able to carry on in determining the research hypothesis.

The least square method using EViews 9

To achieve the proposed objectives, the Least Square Method was employed. As noted, the *R*-squared value was 98.31 per cent in terms of the significant level. The probability of F-statistic was 0, which was less than 5 per cent of significance (Refer to Figure 6). The result of the coefficient for individual audit rate to income tax revenue was 0.170716, which suggested that both elements had positive relationships. Besides, the coefficient for the number of individuals penalised under subsection 112(3) to the income tax revenue was -0.459499, which suggested a negative relationship. However, the coefficient for the number of individuals penalised under subsection 113(2) to income tax revenue was 0.464121, which demonstrated a positive relationship. The t-statistic for individuals who had been audited by IRBM was 6.093939, with the p-value at 0.0001. Nonetheless, the t-statistic for the number of individuals penalised under subsection 112(3) was at 4.849621, and the t-statistic for the number of individuals penalised under subsection 113(2) was at 20.91396. All of the independent variables were also found to be greater than 1.96, which was significant in the regression model. Besides, the study found that the *p*-values for audit rate, penalties under subsection 112 and subsection 113 were less than 0.0001, which were lower than 0.05. These results were significant at the 95 per cent confidence level.


Equation: AUDITPENALTYTAXREVENUE Workfile: PH...

View | Proc | Object | Print | Name | Freeze | Estimate | Forecast | Stats | Resids

Dependent Variable: LNINCOMETAXREVENUE
Method: Least Squares
Date: 07/27/20 Time: 04:59
Sample: 2002 2017
Included observations: 16

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	23.78734	0.520267	45.72137	0.0000
LNAUDITRATE	0.170716	0.028014	6.093939	0.0001
LNPENALTYS112	-0.459499	0.042364	-10.84636	0.0000
LNPENALTYS113	0.464121	0.022192	20.91396	0.0000

R-squared	0.983103	Mean dependent var	23.49931
Adjusted R-squared	0.978879	S.D. dependent var	0.503193
S.E. of regression	0.073129	Akaike info criterion	-2.180862
Sum squared resid	0.064174	Schwarz criterion	-1.987714
Log likelihood	21.44689	Hannan-Quinn criter.	-2.170971
F-statistic	232.7327	Durbin-Watson stat	2.490730
Prob(F-statistic)	0.000000		

Figure 6. The Least Square Method Using EViews 9
Source: Author

Discussion

The responsibilities of tax audits and penalties for non-compliance individuals have been assigned to the Inland Revenue Board of Malaysia (IBRM).

Thus, the objective of this study has been to determine the tax audit and penalty effects on personal income tax revenue compliance within the context of Malaysian law. Specifically, this study has examined the key work of IRBM officers in terms of improving the tax compliance of individual taxpayers, which increases the income tax revenue in Malaysia. The overall results imply that approximately 98.31 per cent of the changes in income tax revenue within Malaysia depended on the changes in audit rates, penalties under subsection 112(3) and subsection 113(2) of the ITA 1967.

Results from the regression have shown that the effectiveness of individual audits rates, whereby an increase of 1 per cent will dramatically result in a 17.07 per cent increase for income tax revenue, with other variables remain at constant. The results also show the p-value is less than 0.05 per cent, and the t-statistic is at 6.093939, which is shows significance to the income tax revenue.

These results suggest that tax audit activities that are being carried out by the audit officers are practical. Audit activities have been intensified further after the introduction of the Self-Assessment System for individual by IRBM in the Assessment Year of 2004. Desk audit, field audit, and investigating officers will conduct audit reviews following the Tax Audit Framework that has been issued by IRBM to ensure that taxpayers comply with the Income Tax Act 1967 and Regulations. Thus, IRBM audit officers need to be trained, learn and innovate continually as tax auditors should have various knowledge in terms of advance technology to carry out more detailed audit work.

The finding also shows that a 1 unit increase in the number of individuals penalised under subsection 112(3) would result in a decrease in personal income tax revenue by 0.459499. This result indicates that a 1 per cent increase in the number of individuals penalised under subsection 112(3) would result in the reduction of personal income tax revenue by 45.94 per cent. This negative relationship is shown when other independent variables are fixed.

In terms of Act, subsection 112 (3), Income Tax Act 1967 is imposed due to late submission of Income Tax Return Form (ITRF). A person who does not submit the ITRF or is late in submitting the ITRF will be subject to subsection 112 (3) and will be greatly detrimental to the Malaysian government in terms of income tax. Although the estimated estimates apply, the actual or supposed income tax may be higher than the estimated estimates issued. Therefore, the increase in the subsection 112 (3) may result in a decrease in the income tax revenue collected by the IRBM.

Moreover, a 1 unit increase in the number of individuals penalised under subsection 113(2) would result in an increase in personal income tax revenue by 0.464121. This result indicates that an increase of penalty under subsection 113 by 1 per cent would increase the income tax revenue by 46.41 per cent. This positive relationship is obtained when other independent variables are fixed.

Section 113 (2), Income Tax Act 1967 is levied on under-reported income to IRBM or the Government of Malaysia. Individuals will be worse off and penalized

under subsection 113(2) if audited by the authorities or IRBM as described in Allingham and Sandmo Model 1972. Therefore, additional tax payable plus a penalty under subsection 113 (2) will increase income tax revenue countries claimed by IRBM.

Results from this study also indicate that penalties under subsection 112 and subsection 113 are significant to the income tax revenue, with a significance in t-Statistic and *p*-value for both independent variables.

The policies on income tax penalty reduction, which have been vastly promoted by the Malaysian Government or IRBM for all taxpayers, are adequate for the Malaysian context. These policies encourage the taxpayers to make a voluntary disclosure in declaring their full income to reduce the penalties, which increase the levels of tax compliance and income tax collection in Malaysia. Besides, the probability for F-statistic is 0, which suggests that all independent variables, which are the number of audits rate, the number of individuals penalised under subsection 112(3) and subsection 113(2), jointly explains or influence the dependent variable; income tax revenue. Therefore, the combination of the model is right in this study.

Using the effects of audit and penalties (Allingham & Sandmo, 1972; Titzhaki, 1974; Hemmer, Stinson, & Vaysman, 1994), both results on independent variables are found to comply with the Allingham and Sandmo Model. Every taxpayer that has submitted the correct returns on time reduces the number of penalties under subsection 112(3). On the other hand, the income tax revenue will increase if the IRBM officer finds an incorrect return during an audit or investigation, as an additional tax will be imposed, which is followed by a penalty under subsection 113(2). Thus, subsection 112(3) has a negative relationship to income tax revenue, and subsection 113(2) has a positive relationship to income tax revenue.

Malaysia is still in a modest country, which only requires a 1 per cent increase in individual audits rates to increase income tax revenue by 17.07 per cent. Moreover, an increase of 1 per cent in individual to be penalised under ITA 1967 would result in between 45 to 46 per cent of income tax revenue. Although tax audits and penalties increase the income tax revenue of a country, this situation is unfavourable to a country as all countries aim for higher tax compliance. A higher outcome in tax audits and penalties indicates lower non-compliance.

Tax audits officers only measure tax compliance per established income tax laws or regulations. Theoretically, income tax revenue will increase as tax compliance from taxpayers increase. Only taxpayers who are "hardcore" or aggressive to escape taxes should be punished accordingly (Abdul, 2001).

Thus, other measures such as tax education should be emphasised by IRBM or policymakers to increase tax compliance, and not only focused on auditing and fining enforcement activities. Tax education in terms of dialogues, seminars or cooperation with the Ministry of Education in introducing taxation among students in secondary schools as well as colleges or universities. Nevertheless, media

statements on tax refugee, which can be found in the IRBM website, regularly reminds the public that the effects of tax evasion are punishable by fines or imprisonment.

Conclusion and Recommendations

Conclusion

Within the knowledge of this study, this is the first research that has used secondary data on the number of audited and penalised taxpayers to investigate the income tax compliance in Malaysia. Audit data conducted on individual taxpayers and penalties under subsection 112(3) and 113(2) collected from IRBM.

Despite the theoretical implications, this study has contributed to the literature within the field of taxation by demonstrating the positive effect in auditing enforcement by IRBM based on the coefficient level results of 17.07 for individual audit rates to income tax revenue. Although the positive relationship between audit and individual income tax collection, but the increase is only 17 percent and consider moderate as well as with the condition ceteris paribus condition.

Meanwhile, the negative relationships of subsection 112(3), ITA 1967 and positive subsection 113(2) of ITA 1967 penalties have also contributed insight on individual income tax revenue. The level of coefficient in both penalties for tax compliance and consequently, individual taxable income is high for either a positive or a negative relationship, which is 46.41 per cent and 46.41 per cent, respectively.

As the relationship between penalty subsection 112(3) and individual income tax collection is negligible, 45.94 per cent. Thus, the Malaysian government should foster awareness of compliance so as not to delay in submitting the Income Tax Return Form. The positive relationship between the subsection 113(2) penalty and the individual income tax collection of 46.41 per cent is due to the penalty for reduced income reported by 45 per cent generally imposed by IRBM.

Although previous research has shown low fluctuation in tax penalties to income tax revenue (Carnes & Englebrecht, 1995; Devos, 2014), this study has found these aspects to be important in increasing income tax compliance at high levels within Malaysia. Tax penalties are still efficient as tools to be used by the Malaysian government or the IRBM to increase the income tax revenue compliance.

Recommendation

This study can be used within the same field in comparing the effectiveness of tax audits and penalties imposed on taxpayers in other countries for future research. Other methods can also be used for cross country research in income tax compliance. This study also hopes that more specified audit data may be applied in future research to find the effectiveness of audit in different categories, such as individual taxpayer without business income SG code or individual with business

income OG code. Also, international public finance researchers can compare the effectiveness of tax audits in the respective countries.

This study also recommends that the Government of Malaysia and the IRBM, in particular, use the existing data to conduct more specific and detailed tax audit or investigations to have a more effective tax system in the future. The existing data in IRBM can be used more effectively by academics or government researches. Moreover, future studies should also focus on other potential variables, such as audits and tax rates (Allingham & Sandmo, 1972).

Other tax compliance factors, besides the tax enforcement efforts also should be taken into account to enable the tax collection target to be achieved. Ser (2013) suggested the non-compliance factors in Malaysia included gender, age, marital status, education level, public governance quality, tax education and tax morale. Other researchers in the field, such as Yitzhaki (1974), Clotfelter (1983) and Torgler (2007) have suggested identifying other independent variables with higher levels of relationships to increase the level of tax compliance of individuals in boosting the collection of income tax in a country.

Ministry of Finance, Malaysia has set a target of 127 billion by 2020 to 143.9 billion by 2021. However, Pandemic Covid-19 is increasingly serious in Malaysia in early 2021 and Movement Control Order (MCO) has been implemented in almost all states in Malaysia. This situation will reduce or threaten economic development and subsequently a person's income either running a business or working with an employer. This situation, therefore, the uncertainty of tax enforcement in audit and penalties in the economic situation in this MCO will result in uncertainty over income tax collection.

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