

National Income and Household Income on Personal Income Tax Revenue Compliance in Malaysia

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Abstract

Individual taxpayers in Malaysia exhibit a high level of ethics, which is beneficial to compliance behaviour (Loo, Evans, & Mckerchar, 2012). The study attempts to examine the significant determinants of personal income tax compliance in Malaysia. A quantitative approach was taken with secondary data obtained from the headquarter of the Inland Revenue Board Malaysia (IRBM), the Department of Statistics, Malaysia (DOSM) and the Malaysian Economic Planning Unit (EPU). Malaysian data from the years 2002 to 2017 were used to generate the results. All proposed hypotheses were tested using the EViews software. The study proposed four hypotheses and the data supported that a positive correlation between mean monthly household gross income, and incidence of poverty on personal income revenue compliance with a significant of 5%. Unfortunately, Gross Domestic Product (GDP) and Gini Coefficient were not significant with personal income revenue compliance. Mean monthly household gross income was the most effective contributor to personal income tax revenue compliance. A 1% increase in mean household gross income results in a 2.84% increase in personal income tax collection, *ceteris paribus*. Followed by a 1% increase in incidence of poverty results in a 0.50% in personal income tax collection, *ceteris paribus*. The paper validated and expanded on prior research on the relationship between national income and household income and personal income tax revenue compliance. Additionally, it has significant implications for the Ministry of Finance (MOF) and other relevant local authorities in enhancing the personal income tax collection strategy. Theoretical and practical implications are highlighted.

Keywords: National Income, Household Income, Tax Revenues, Tax Compliance, Malaysia

Introduction

Taxation is a system used by the government to raise revenue (Manual & Ang, 2016). Malaysia's tax authority is the IRBM, which works to resolve compliance and non-compliance issues. To increase total personal income tax collection, the Malaysian government offered two types of tax incentives to domestic and international investors, namely income tax allowance and tax exemption. The primary objective of government is to collect taxes from a variety of sources because they are considered to be the country's revenue, a component of consumption, and/or the country's wealth. As previously stated, direct taxes are a significant source of revenue for

governments and are used to regulate economic and social policies (Ihendinihu & Ibanichuka, 2014). According to Ojo (2003), taxation is a mechanism for advancing civilization (Oluyombo & Olayinka, 2018). Additionally, correcting market imperfections benefits a country's allocation, distribution, regulation, and stabilization (Musgrave & Musgrave, 2004; Nzotta, 2007). Moreover, it can be used by the Malaysian government to finance the debts and support budgets (Christie & Holzner, 2006). As a result, Malaysian tax authorities implemented a Self Assessment System (SAS) to increase tax compliance (Hassan, Nawawi, & Salin, 2016).

Historically, scholars have investigated the effect of taxes on economic growth (Tosun & Abizadeh, 2005). Chakraborty's (1997) study indicated that increased income growth results in increased tax revenue. Changes in tax structure had an effect on economic development. According to the literature, tax revenue contributes significantly to the growth of the Nigerian economy using the Cointegration test and Engle Granger approach, the Augmented Dickey-Fuller technique, and the Error correction (ECM) model (Babalola & Aminu, 2011), and the Vector Autoregression and Error correction mechanism technique (Medee & Nembee, 2011). Government finances have deteriorated as a result of the economic crisis. Malaysia's government is constantly looking for ways to cut spending or increase tax revenue. Expenses for development have increased significantly from RM 0.035 billion in 2002 to RM 43.0 billion in 2017.

There are very few empirical studies that have examined compliance at the micro-level (Plumley, 1996). Numerous studies focused exclusively on primary data for tax compliance studies, with very little or no use of secondary data by previous scholars. As previously stated, many people in developing countries refused to pay taxes (Alm & Martinez-Vazquez, 2003) due to mismanagement of public funds (Amusa, Ikegwu, Bamidele, & Ojebiyi, 2019). Besides this, Alm, Bahl, and Murray (1993) discovered that an individual's evasion decision was influenced by economic factors after audit selection was controlled. Compliance is also influenced by the types of government services funded through taxation and how taxpayers view these services (Luttmer & Singhal, 2014). On the basis of the foregoing, this study will examine the relationship between household income and national income, as well as personal income tax compliance, in the context of Malaysia. Indeed, increased personal income tax compliance enables the IRBM to rethink their strategy in light of the current state of household income.

Literature Review

Personal Income Tax Compliance

Taxes are mandatory contributions made by citizens. In general, personal income tax refers to the total amount deducted from an individual's income on a monthly basis based on his or her salary (Israel & Barisua, 2019). Generally, personal income taxes are self-assessed (López-Laborda, Vallés-Giménez, & Zárate-Marco, 2020).

Tax compliance is a critical issue for tax authorities (Hassan et al., 2016). The tax compliance process entails several steps, including declaring income, filing a return, and timely payment of any tax due (Hamid et al., 2019). It is defined as taxpayers' capacity and willingness to adhere to tax laws, declare the correct income on a yearly basis, and pay the correct amount of taxes (Inland Revenue Board, 2009).

It is also demonstrated by an individual's willingness to comply with the "spirit" and "letter" of tax law and administration in the absence of enforcement (James & Alley, 2002). Saad

(2009) discovered that Malaysian taxpayers view the current tax system as fair (Faizal, Palil, Maelah, & Ramli, 2017). Belkaoui (2004) revealed that Singaporean taxpayers were the most compliant, followed by New Zealandan taxpayers; however, Malaysia was ranked eighth after the United States, and Italy was considered the least compliant (Saad, 2014). Taxpayers in Malaysia were found to be significantly more positive about their country's tax system than taxpayers in New Zealand.

Compliance with tax laws has long been a source of concern for both developed and developing countries (Alabede, Ariffin, & Idris, 2011). Tax compliance can be improved by having a well-managed tax system, strict enforcement, and the imposition of penalties on irresponsible taxpayers (Manual & Ang, 2016). Tax collection growth was influenced by an increase in tax compliance. Clearly, direct tax collection totalled RM 28.4 billion in 2015, accounting for 23.8% of total tax collection, while indirect tax collection totalled RM15.7 billion (56.2%) (Suffian, Shamsudin, Sanusi, & Hermawan, 2017). Additionally, as noted in the IRBM Annual Report, individual income tax collections increased 349% between 2002 and 2017 (RM 7.1 billion in 2002 to RM 31.9 billion in 2017) [<http://www.hasil.gov.my>]. Malaysia's government can provide better welfare, higher-quality social services, and public goods to benefit the community with increased tax revenue collection. In this case, a well-structured tax-system is critical for maximizing revenue collection (Ogbonna & Appah, 2012). Changes to the existing tax system have had a significant impact on household income. Budget planning for taxation on an annual basis will also affect tax relief or the change in tax collection on a yearly basis. These changes have an effect on the country's tax revenue collection.

Gross Domestic Product

Gross Domestic Product (GDP) growth is frequently used as a proxy indicator of Malaysia's economic growth (Murshidi & Aralas, 2017). It is one of the most widely used indicators of national income, output, and growth (Hameed & Ume-Amen, 2011). It is the total market value of the final goods and services produced in a given year expressed in the national currency of that country (Hussin, Kadir, Zaini, & Hamzah, 2017). GDP is used to calculate the value of a country's goods and services produced. GDP is calculated using national output, expenditure, and income. It is defined as a country's total value of goods and services produced. The following is a well-known formula for GDP:

$$GDP = C + I + G + X - M$$

Where C denotes consumption, I denotes investment, G denotes government expenditure, X denotes exports, and M denotes imports.

Furceri and Karras (2008) demonstrated that in OECD countries, there is a relationship between taxes and GDP. Similarly, Medee and Nenbee (2011) discovered a significant effect of tax revenue on GDP. In other words, when taxpayers earn a higher income and earn a higher rate of return on their investments, they (as taxpayers) may commit to higher tax payments and a greater willingness to pay tax as a result of the higher tax rates. According to the OECD Economic Survey (2019), Malaysia's real GDP has grown at an average annual rate of 6.1% on average from 1970 to 2018, significantly faster than the average growth rate of advanced economies (Ayob & Rohni, 2020).

Mean Monthly Household Cross Income

In the last five years, Malaysia’s Department of Statistics conducted the Household Income and Basic Amenities Survey twice. These two surveys will compile information on household income, poverty, and basic amenities. Its contents include Monthly Household Income, Gini Coefficient, and Poverty Incidences. As previously stated, household income was generated through paid employment, self-employment, property and investment, and current transfers. According to the Income Tax Act 1967 (Section 4), chargeable incomes include the following: “Gain or profits from a business, for whatever period of time carried on; Self-Employment”, “Gains or profits from an employment”, “Dividends, interest or discounts”, ‘Rents, royalties or premiums’, “Pensions, annuities or other periodical payments not falling under any of the preceding paragraphs”, and “Gains or profits not falling under any of the foregoing paragraphs”. Thus, chargeable incomes are the earnings of an individual over a specified period of time.

According to the Malaysian Department of Statistics, a household is defined as a person or group of siblings or non-siblings who live together and share food and other daily necessities. Households are typically involved in the production of goods and services through the provision of labour resources and as consumers of goods and services, depending on the magnitude of disposable income and taxpayers. In exchange, households may use the income collected for consumption, savings, and investment. In general, households prefer economic stability through employment and a stable income (Medee & Nenbee, 2011). Households make a sizable contribution to the national economy, as illustrated in Figure 1. The circular flow of economic activity serves as a visual representation of the fundamental economic relationships that exist within a market economy. Businesses provide goods and services that are consumed by the end-users or households. The money spent on production by businesses and the wages, rent, and dividends paid to households. From the perspective of businesses and consumers, the government amassed a variety of taxes paid by businesses and individuals in the marketplace.

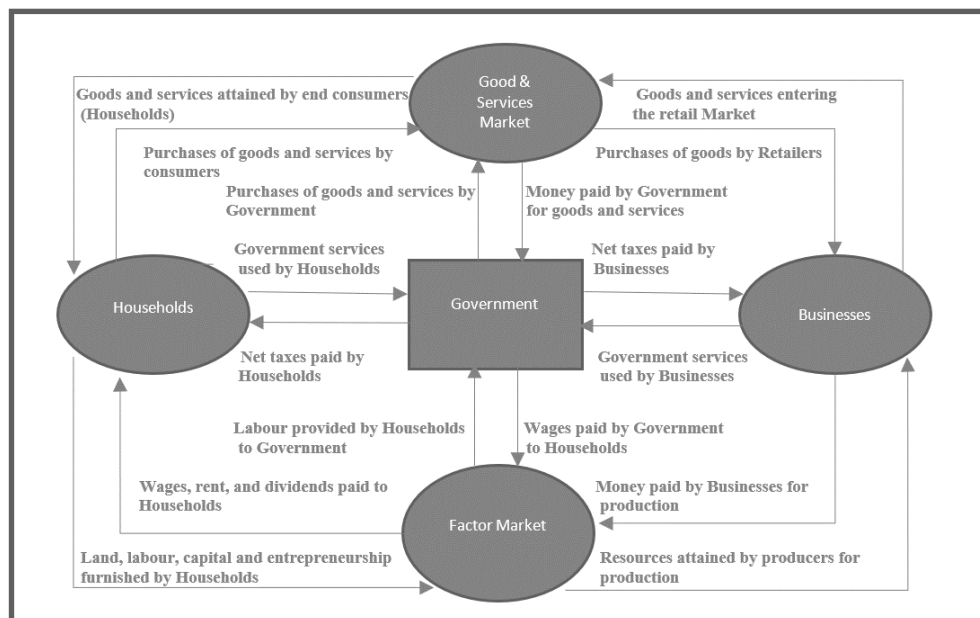


Figure 1: Model of Circular Flow with Government

Gini Coefficient

The Gini Coefficient (affectionately known as the Gini index or Gini Ratio) is a well-established conventional, ad hoc measure of income inequality (Dorfman, 1979) and income distribution. Morgan (1962) pointed out that the Gini Coefficient is the most accurate indicator of income inequality (Chen, Tsaur, & Rhai, 1982). Additionally, it is used to quantify income centralization using the Lorenz Curve, which is generated by plotting cumulative household permits on the X axis and the sum of cumulative household income on the Y-axis. The Lorenz curve is a straight sloping line that extends from the zero population and income point to the population and income point (Ibrahim, Muridan, Ali, & Jazid, 2020). According to Azielotta and Selvaratnam (2014) and Azielotta et al. (2015), the Gini Coefficient alone cannot accurately reflect the overall ethnic income distribution (Roshaniza & Selvaratnam, 2015).

Evidently, the Eleventh Malaysia Plan noted that in 2014, the Gini coefficient was 0.401, exceeding the target of 0.42 for 2015 (Malaysia, 2015). The Gini Coefficient increased by 0.008 index point in 2019 from 0.399 in 2016 to 0.407 in 2019 (Jaafar, 2020). A rise in total income inequality reflects both an increase average income and a decrease in relative income inequality (Ravallion, 2020). Safari, Masseran, and Ibrahim (2018) discovered that the income inequality decreased over time, indicating an improvement in Malaysia's income distribution. Figure 2 depicted the Gini Index's complete decomposition over time.

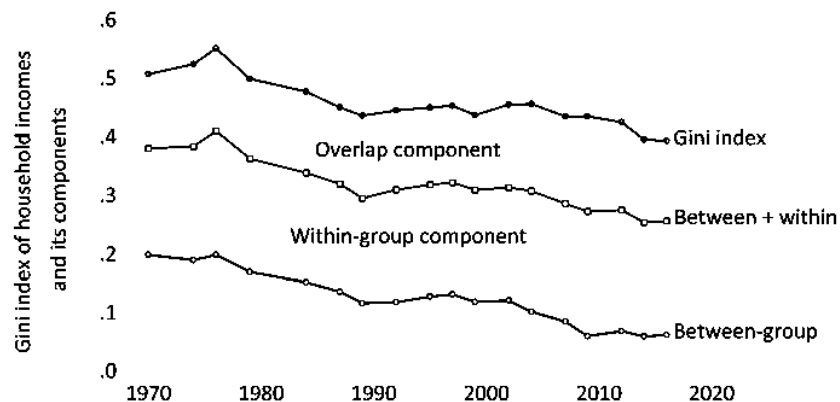


Figure 2: Components of the National Gini Index
 Sources: Ravallion (2020)

Incidence of Poverty

In Malaysia, poverty is frequently conceptualised and operationalized through a monetary lens (Rasool, Harun, Salleh, & Idris, 2011). According to the World Bank, poverty is defined as a failure to earn a “dollar-a-day” income (Hatta & Ali, 2013). Additionally, poverty is defined as the state of being extremely impoverished, which means that an individual is confronted with an insufficient financial resource (Islam et al., 2017). Thus, poverty incidence is critical for policy makers when developing strategic policies or programmes and poverty eradication programmes.

As noted in the literature reviewing, eradicating poverty from society is a universal dream; however, in practise, it is exceedingly difficult to accomplish (Ngun & Baharuddin, 2011). According to the Department of Statistics's Chief Statistician, the poverty rate decreased from

7.6% in 2016 to 5.6% in 2019 (Jaafar, 2020). Malaysia revised its national poverty line income (PLI) in 2019, increasing it from RM 980 to RM 2,208 (Hirschmann, 2021). It is critical to eradicate poverty because high concentrations of the poor may contribute to low economic growth (Kakwani, 1993). According to Mohamed and Xavier (2015), economic growth will result in the abolition of poverty in the country (Elhadary & Samat, 2015).

Underlying Model

This Allingham and Sandmo (A-S) Model (1972) was used in this study, which combines the economics crime and risk and uncertainty (López-Laborda et al., 2020). Generally, the A-S model is used to describe taxpayers during the income tax return filing process (Sandmo, 2004). Besides, as previously stated, an A-S model feature is that increasing the tax rate has an unexpected effect on tax evasion (Sandmo, 2004) or that decreasing risk aversion conceals less income (Traxler, 2006). Because the model is typically used in anticipation of a tax audit and the negative consequences of undeclared income, filling out a tax return is an uncertainty decision (Bătrâncea, Nichita, Bătrâncea, & Moldovan, 2012).

The model is used in this study because Allingham and Sandmo (1972) stated that taxpayers is either adhere to tax laws or attempt to evade them (Kogler, Olsen, Muller, & Kirchler, 2020). In other words, an individual's actual compliance with tax laws is entirely depended on his or her total income. As a result, under the A-S model, taxpayers must pay a penalty rate on unreported income (Yitzhaki, 1974).

Conceptual framework

The conceptual framework for this study is depicted in Figure 3. This framework is composed of two components: independent variables (IVs) and a dependent variable (DV).

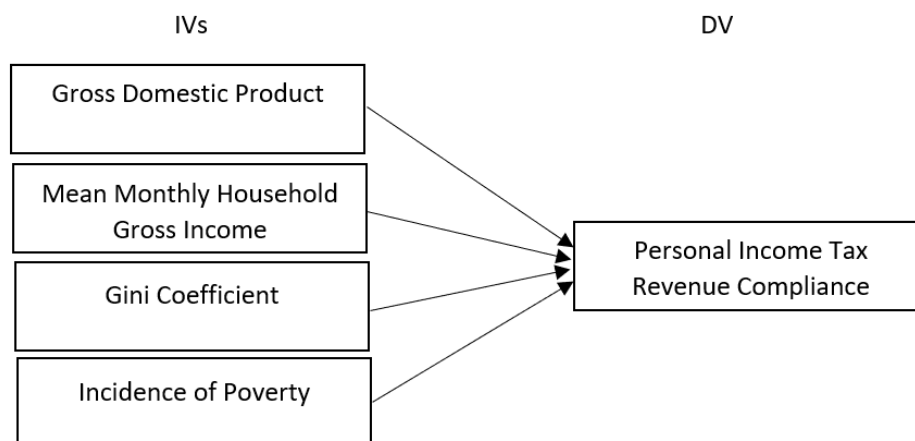


Figure 3: Conceptual Framework
Source: Author

Hypotheses Development

Individual taxpayers who maintain high level of tax compliance may assist the tax collector in reducing his or her monitoring and auditing responsibilities (Ali & Ahmad, 2014). Numerous studies have discovered that lower income individuals are more willing to pay taxes than higher-income individuals (Torgler & Friedricj, 2005; Ross & McGee, 2012; Sá, Martins, & Gomes, 2014). Ritsema, Thomas, and Ferrier (2003) assert that income level has a significant effect on the amount of tax owed (Chau & Leung, 2009). Loo (2006) revealed that higher income earners in Malaysia felt betrayed and treated unfairly. Palil (2010) discovered that income had a sizable impact on tax compliance (Tehulu & Dinberu, 2014). Additionally, Oluyombo and Olayinka (2018) demonstrated a positive correlation between tax compliance and tax revenue and that tax evasion contributed to the variation in government total revenue collection in the country of Nigeria. Simultaneously, Ogbonna and Appah (2016) discovered a strong correlation between income tax revenue and GDP (Oluyombo & Olayinka, 2018). Additionally, poverty and income inequality have a significant impact on economic growth (Islam et al., 2017), which may influence individual tax compliance behaviour. As a result of this, the research has generated the following hypotheses:

- H1: GDP is significantly related to personal income tax revenue compliance in Malaysia context.
- H2: Mean monthly household income is significantly related to personal income tax revenue compliance in Malaysia context.
- H3: Gini coefficient is significantly related to personal income tax revenue compliance in Malaysia context.
- H4: Incidence of poverty is significantly related to personal income tax revenue compliance in Malaysia context.

Methodology

This study used quantitative analysis to test hypotheses based on secondary data from IRBM, the DOSM, and the EPU, Malaysia. GDP (Table 1), mean monthly household gross income (Table 2), Gini Coefficient (Table 3), and Poverty Incidence (Table 4) are presented in table form. The data are representative of the entire population of value added tax collected in Malaysia and are not representative of a sample. To obtain a valid result, the researcher used secondary data spanning the years from 2002-2017 (16 years). It is a lengthy period that is ideal for conducting tax research; in fact, taxpayers reported and declared their taxes only once a year.

Table 1: Gross Domestic Product (GDP) in Malaysia, 2002-2017

Year	GDP (in constant 2010 prices)
2002	553,841,299,989.57
2003	584,178,924,437.56
2004	626,436,516,616.32
2005	659,838,983,301.32
2006	696,618,087,778.93
2007	740,558,800,059.11
2008	776,366,839,071.97
2009	764,592,670,311.81
2010	821,400,000,000.00
2011	864,900,000,000.00
2012	912,300,000,000.00
2013	955,100,000,000.00
2014	1,012,400,000,000.00
2015	1,064,000,000,000.00
2016	1,108,900,000,000.00
2017	1,174,300,000,000.00

Source: Department of Statistics, Malaysia

Table 2: Mean Monthly Household Gross Income

Year	Mean Monthly Household Gross Income
2002	3,011
2003	3,126
2004	3,249
2005	3,386
2006	3,533
2007	3,686
2008	3,845
2009	4,025
2010	4,252
2011	4,563
2012	5,000
2013	5,570
2014	6,141
2015	6,590
2016	6,958
2017	n.a.

Source: Department of Statistics, Malaysia

Table 3: Gini Coefficient

Year	Gini Coefficient
2002	0.46
2003	0.46
2004	0.46
2005	0.46
2006	0.45
2007	0.44
2008	0.44
2009	0.44
2010	0.44
2011	0.44
2012	0.43
2013	0.42
2014	0.40
2015	0.40
2016	0.40
2017	n.a

Source: Department of Statistics, Malaysia

Table 4: Incidences of Poverty

Year	Incidence of Poverty
2002	5.10
2003	5.62
2004	5.70
2005	5.09
2006	4.19
2007	3.60
2008	3.66
2009	3.80
2010	3.39
2011	2.58
2012	1.70
2013	1.02
2014	0.60
2015	0.43
2016	0.40
2017	n.a

Source: Department of Statistics, Malaysia

Researcher used the computer statistics packages Eviews 12 to perform an Ordinary Least Squares (OLS) analysis. It includes a number of features for viewing residues in real time and determining serial correlations. Prior to the discussion, the regression model, residual diagnostics analysis, which were Breusch-Godfrey Serial Correlation LM Test, Heteroskedasticity Test, and Jarque-Bera Test of Normality were all performed. The researcher used a Multiple Regression Model to ascertain the factors that influence personal income tax compliance. The dependent variable (personal income tax revenue compliance) is expressed in this regression equation as the

sum of the modelled components. After estimating the regression coefficient, the dependent variable is divided into the portion explained by the regression and the portion that remains unexplained. The explained portion is referred to as the value appropriate portion, while the unexplained portion is referred to as the residue.

Research Model

The regression model (Eq. (1)) is intended to quantify the effect of national and household income on tax revenue under Malaysia's Personal Income Taxation System. The following equation was proposed for multiple regression:

$$\begin{aligned} & \text{incometaxrevenue}_{2002-2017} \\ & = c + \beta_1 \text{gdp}_{2002-2017} + \beta_3 \text{meanincomecubic}_{2002-2017} + \beta_4 \text{ginicubic}_{(2002 - 2017)} + \\ & \beta_5 \text{povertycubic}_{(2002 - 2017)} + \varepsilon \end{aligned} \quad \text{Eq. (1)}$$

where, $\text{incometaxrevenue}_{2002-2017}$ denotes individual income tax collection in Malaysia from year 2002 to 2017, $\text{gdp}_{2002-2017}$ denotes Gross Domestic Products in Malaysia from year 2002 to 2017 (in constant 2010 prices), $\text{meanincome}_{2002-2017}$ denotes mean monthly household income in Malaysia from year 2002 to 2017, $\text{gini}_{2002-2017}$ denotes Gini coefficient in Malaysia from year 2002 to 2017, $\text{poverty}_{2002-2017}$ denotes incidence of poverty in Malaysia from year 2002 to 2017, and lastly ε denotes error term.

Eq. (1) examined the national income in gross domestic income and gross national income in Malaysia, household income in mean monthly household income, Gini coefficient, and incidence of poverty in Malaysia between 2002 to 2017. Household income data is comprised of mean monthly income, Gini Coefficient, and incidence of poverty which are limited. This is in fact the data were collected once in every two or three years. In this case, cubic spline interpolation (as global interpolation method) was used to obtain the value for lost years. The equation was transformed in this study by computing the natural logarithms of the dependent and independent variables, resulting in the log transformation form shown in Eq. (2).

$$\begin{aligned} & \ln \text{incometaxrevenue}_{2002-2017} \\ & = c + \beta_1 \ln \text{gdp}_{2002-2017} + \beta_3 \ln \text{meanincomecubic}_{2002-2017} \\ & + \beta_4 \ln \text{ginicubic}_{(2002 - 2017)} + \beta_5 \ln \text{povertycubic}_{(2002 - 2017)} + \varepsilon \end{aligned} \quad \text{Eq. (2)}$$

where, $\ln \text{incometaxrevenue}_{2002-2017}$ denotes log transformation of individual income tax collection in Malaysia from year 2002 to 2017, $\ln \text{gdp}_{2002-2017}$ denotes log transformation of Gross Domestic Products in Malaysia from year 2002 to 2017 (in constant 2010 prices), $\ln \text{meanincomecubic}_{2002-2017}$ denotes log transformation of mean monthly household income in Malaysia from year 2002 to 2017, $\ln \text{ginicubic}_{2002-2017}$ denotes log transformation of Gini coefficient in Malaysia from year 2002 to 2017, $\ln \text{povertycubic}_{2002-2017}$ denotes log transformation of incidence of poverty in Malaysia from year 2002 to 2017, and ε denotes error term.

Findings

Residual Diagnostics Analysis

To determine how income tax revenue responds to national income and household income on personal income tax revenue compliance in Malaysia, the researcher examined the Breusch-Godfrey (BG) Serial Correlation Lagrange Multiplier (LM) Test. Indeed, Breusch-Godfrey (as demonstrated in Figure 6) is the most appropriate test when stochastic regressors are present (Rois, Basak, Rahman, & Majumder, 2012) because it allows for r^{th} order autocorrelation. The observed R-squared for the corresponding probability in the Chi-Square value was 0.0866 (8.66%), indicating that the finding was significant ($p > 5\%$), as illustrated in Figure 4. As a result, the model had no serial correlation problem.

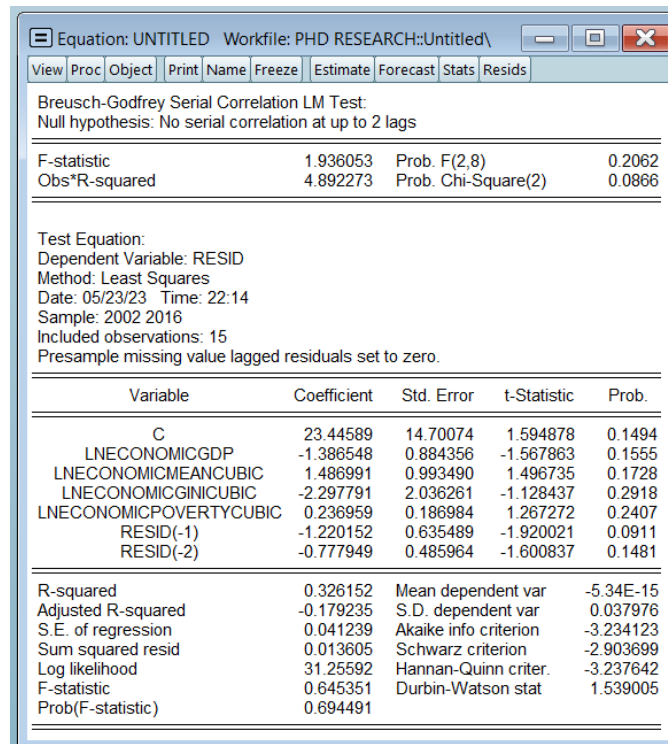


Figure 4: Breusch-Godfrey Serial Correlation LM Test

Source: Authors

Additionally, the study examined Heteroscedasticity, as illustrated in Figure 5. The observed R-squared value for the probability associated with the Chi-Square value was 0.3142 (31.42%). This demonstrates that the finding was not significant for Heteroscedasticity ($p > 5\%$) and that the residual variance was constant. The model in this case was homoscedasticity with no problem of heteroskedasticity.

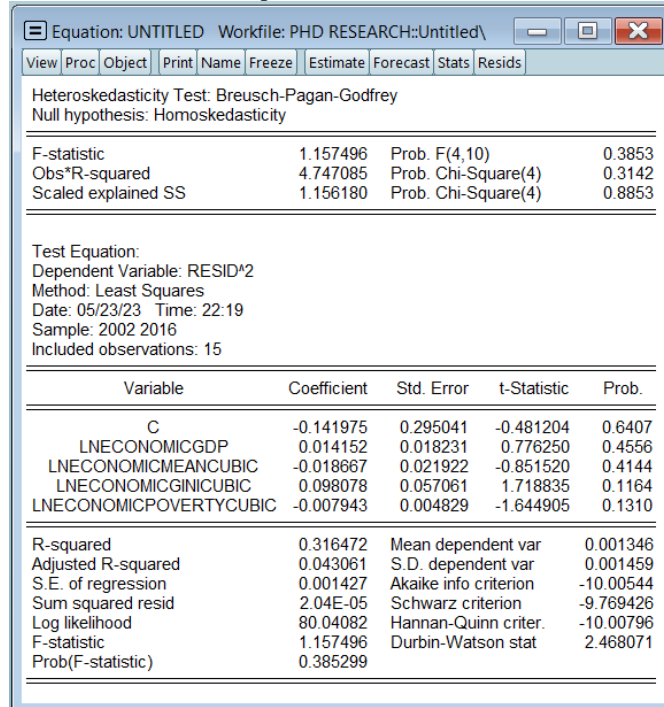


Figure 5: Heteroskedasticity Test

Source: Authors

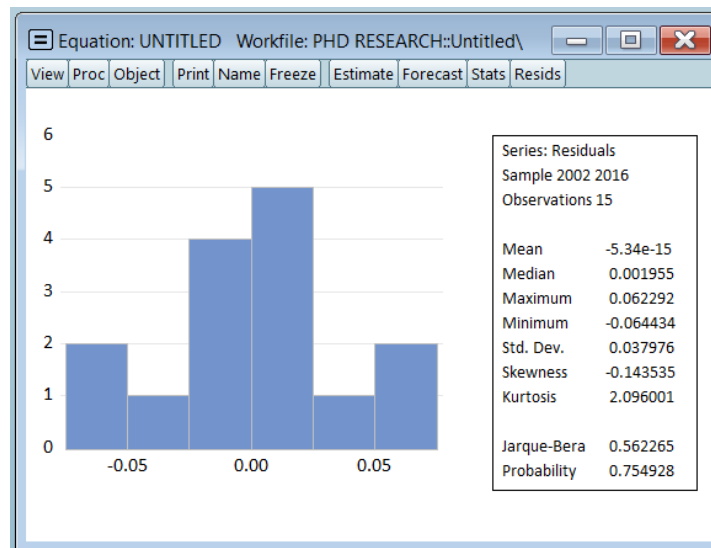


Figure 6: The Normality Test

Source: Authors

The Normality Test in Figure 6 was used to determine the distribution's normality. The result revealed a skewness of 0.562265, which was between -2 , 0 , and $+2$. In the meantime, the

kurtosis value was 2.096001, which was between -7 , 0 , and $+7$. The corresponding probability value for Jarque-Bera was 0.754928 (75.49%). It means that the results were not statistically significant ($p > 5\%$) and the residuals followed a normal distribution. In summary, there was no heteroscedasticity, no serial correlation, and a normal distribution in the regression model.

The ordinary least square method using EViews

The proposed hypotheses were tested and validated using the Ordinary Least Squares (OLS) Method. This study examined five direct association hypotheses in total. R^2 is used to determine the model's predictive power. The R-squared value was 99.38% in this study. In this sense, interactions accounted for 99.74% of the variance in personal income tax revenue compliance. As illustrated in Figure 7, the probability of F-statistic was 0, which was less than 5% of the significance level.

The result revealed that the coefficient for GDP to income tax revenue was 0.380616, indicating a positive relationship. GDP's t-statistic was 0.662950, which below the recommended value of 1.96 (< 0.05) and the p-value was 0.5223 ($P > 0.05$). At a 95% confidence level, the results were insignificant. In short, H11 was not accepted.

Furthermore, the coefficient for the mean household monthly income to income tax revenue was 2.840001, indicating a positive association. The t-statistic for mean monthly household income was 4.113819, which was higher than the suggested value of 1.96 (< 0.05). In short, H21 was accepted because it concluded that mean household monthly income was significantly related to personal tax revenue compliance.

Contrary to expectations, the Gini Coefficient's correlation with income tax revenue was -1.230685, indicating a negative association. The Gini Coefficient's t-statistic was -0.684892, with a p-value of 0.5090 ($P > 0.05$). These findings were non-significant at a 95% level of confidence. As a result, it was determined that H31 was not accepted in this study.

Finally, the coefficient for the relationship between poverty incidence and income tax revenue was 0.502398, indicating a positive association. The t-statistic for poverty incidence was 3.303683, greater than the concept standard value of 1.96 (< 0.05) and the p-value was 0.0080 ($P < 0.05$). These findings were statistically significant at the 95% confidence level. As a result, H41 was accepted.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-12.17829	9.291140	-1.310743	0.2192
LNECONOMICGDP	0.380616	0.574125	0.662950	0.5223
LNECONOMICMEANCUBIC	2.840001	0.690356	4.113819	0.0021
LNECONOMICGINICUBIC	-1.230685	1.796903	-0.684892	0.5090
LNECONOMICPOVERTYCUBIC	0.502398	0.152072	3.303683	0.0080

R-squared	0.993873	Mean dependent var	23.45353
Adjusted R-squared	0.991422	S.D. dependent var	0.485149
S.E. of regression	0.044934	Akaike info criterion	-3.106039
Sum squared resid	0.020191	Schwarz criterion	-2.870023
Log likelihood	28.29529	Hannan-Quinn criter.	-3.108553
F-statistic	405.5068	Durbin-Watson stat	2.072407
Prob(F-statistic)	0.000000		

Figure 7: Results using Least Squares Method

Source: Authors

Discussion

The issue of tax compliance has been extensively discussed. The analysis's findings have generated several significant points for discussion in this section. As expected, mean monthly household gross income, and poverty incidence were contributed to personal income tax compliance in Malaysia.

While mean monthly household income is not a significant predictor of income inequality, an increase in monthly household income motivates individuals to contribute to income collection. This study established that a 1% increase in mean household monthly gross income results in a 2.84% increase in the country's individual income tax collection, *ceteris paribus*. As previously stated, individual income tax collection increased from RM 29 billion in 2016 to RM 31 billion in 2017 and continued to grow in 2019. Additionally, income inequality increased slightly from 0.391 in 2016 to 0.393 in 2019. Evidently, income inequality continues to widen in Malaysia, despite the fact that the mean household income increased to RM 5,873 in 2019 (Ida, 2020). Safari and Masseran's (2019) study also found that income distribution for low-income groups increased from 14.25% in 2017 to 16.28% in 2014 after appropriating economic pie from higher-income groups, while the middle class remained unchanged. Indeed, it is difficult for taxpayers to avoid paying taxes in Malaysia, which has a progressive income tax system.

Proposing an income disparity among Malaysians, this study discovered that a 1% increase in poverty incidence results in a 0.50% in national income tax collection, *ceteris paribus*. According to this view, the rich will be taxed more and increased the income tax collection. Therefore, Shared Prosperity Vision 2030 will be achieved with sustainable growth along with fair and equitable distribution (Ridzuan et al., 2022).

We cannot deny that GDP is a critical indicator of a country's economic development. GNI is a substitute for GDP in determining a country's wealth. It is regarded as additional foreign

sources revenue to the GDP. However, Paragraph 28, Schedule 6, ITA 1967 exempted income of any person, other than a resident company carrying on the business of banking, insurance or sea or air transport, for the basis year for a year of assessment derived from sources outside Malaysia and received in Malaysia. Therefore, the researcher used only GDP in this research to find out the effectiveness on income tax compliance in Malaysia. Surprisingly, a 1% increase in GDP results in a 0.38%, increase in tax collection, *ceteris paribus*, with the insignificant result.

The Gini Coefficient is one of the components used to determine household income and distribution of income. Interestingly, this study discovered a negative correlation between the Gini Coefficient and income tax revenue compliance. A 1 percent increase in the Gini Index resulted in a 1.23% decrease in individual income tax collection. Indeed, an individual taxpayer is considered a heterogeneous group of individuals who have varying preferences and perspectives on issues such as trust in government authorities, attitudes, and fairness (Kogler et al., 2020).

Conclusion

The findings lead us to conclude that mean monthly household gross income and poverty incidence were significant factors in increasing national income tax collection in Malaysia. Malaysian still a developing country, GDP and Gini Coefficient were insignificant in increasing national income tax collection in Malaysia, The findings of this study contribute to the body of knowledge on tax compliance by identifying significant determinants that are likely to affect personal income tax compliance among self-employed taxpayers. The current study contributes sound ideas and lays the groundwork for future research on tax revenue and economic development. Furthermore, this study will assist the Malaysian government in formulating strategic policies and making critical tax revenue collection decision, rather than simply expecting the IRBM to exert effort or take action. Indeed, this had an effect on revenue collection and the government's ability to meets its fiscal and social goals. Along with theoretical implications, the current study's findings provided several critical practical insights to policymakers, the MOF, the respective Malaysia government departments, and the IRBM. Additionally, the study's findings can serve as the ultimate guideline for the MOF's annual budget planning. The personal income tax collection from IRBM will also contribute to social welfare and economic growth, thereby boosting both the domestic and international economies.

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