The Influence of Taxation and Economic Growth on Consumers' Burden in Malaysia

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ABSTRACT

The tax reformation and economic development in Malaysia have sparked the motivation of this study to understand the influence of such reform on consumers' burden. An investigation into these relationships is important due to the current increase on consumers burden which had become a popular issue since the introduction of GST in 2015, and the comeback of SST in 2018 to replace the GST. This study intends to provide evidence concerning Malaysian tax reform and economic growth on consumers burden by examining the influence on price level. It employs the Autoregressive Distributed Lag Error Correction Model (ARDL-ECM) estimation to analyze quarterly data for the period 1996-2020. The findings reveal that indirect taxes have negative relationship both in the short and long run while economic growth is positively related with consumers' burden. This outcome rules out the public accusation that the tax reform would cause the price level to increase hence worsen the consumer's burden. Nevertheless, it is the economic growth that consumers need to take advantage of as it positively influences the demand for goods and services hence increase the price. The study shed further direction for the government in formulating taxation and economic policies so as not to compromising the burden of consumers.

1. INTRODUCTION

Consumers' burden is a serious issue as it affects the financial strength of families and hence the quality of life. In the past decades, Malaysian consumers have experienced a growing financial burden due to vast changes in the value of money and a rise in the cost of living. Malaysian consumers are generally concerned that the price of goods and services may increase due to various reasons and that their salary increment cannot keep pace with the increasing cost of living (Lo, 2017). Historically, the Consumers Price Index (CPI) in Malaysia increased for the past decades. For example, Figure 1 depicts that there was a steady increase in the CPI from the first quarter of 1996 to the fourth quarter of 2020.

The apprehension about consumers' burden that may intensify in Malaysia was more pronounced when the government introduced some changes in the taxation system. In addition to the revision to the tax rate, the most recent major reform was the implementation of the GST since April 2015, and again the comeback with the SST to replace the GST in September 2018. Despite taxpayers' growing worry that GST placed a larger burden on consumers, the previous government insisted on employing the system.

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This was mainly attributed to the fact that the country needed to earn more revenues without raising any debts to finance its deficit; otherwise, the nation would fall into a debt trap (Palil & Ibrahim, 2011). Furthermore, the government's budget was in deficit for fifteen years (Singh, 2012). The government's fixed fiscal deficit and shrinking revenue forced its top management to introduce the GST as a mean of generating more national revenues. Although the GST only lasted for 36 months before being zero-rated effective June 2018 administered by the newly elected government, the impact on the cost of living and consumers' burden had already been felt by Malaysians.
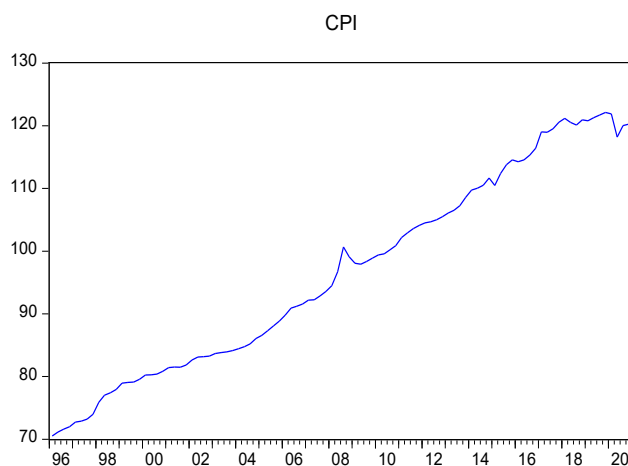

Figure 1. The increase in the CPI level, 1996-2020

Source: Department of Statistics Malaysia (2020)

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Being enforced as a consumption tax, Malaysian consumers were concerned that the GST would affect their living standards and inflict more consumers' burdens. The official website of Malaysia's GST supervised by the Royal Malaysian Customs Department declared that consumers might need to bear a modest additional tax burden which varied according to their consumption pattern and the GST rate. Therefore, the previously implemented GST stirred public concern where the majority of Malaysians perceived that this new tax system would cause inflation in the country hence put more burden on their daily expenses (Palil & Ibrahim, 2011; Mansor & Ilias, 2013). For this reason, it is believed that any tax or subsidy reform if implemented may lead to some shock among consumers and thus affects households' expenditure. Consumers may also change their spending habits and are worried about loosening their purse strings due to the perception of rising price levels after the tax reform.

Nevertheless, the previous government affirmed that the additional burden was very minimal or might not necessarily happen as the concern of lower-income groups had been considered before implementing the GST. Besides, many essentials such as basic food items, education, healthcare, and public transportation were not subjected to the GST. This exclusion was also a strategy that ensured low-income earners would not be extremely burdened after the implementation of the GST (Ministry of Finance, 2013). Additionally, the removal of sales (10%) and services tax (6%) during the GST implementation might also help the government to console people on the price increase rumor. This was supported by Palil and Ibrahim (2011) who pointed that the Malaysian government anticipated the price of goods and services would decrease when the GST replaced the sales and services tax as the rate was lower than the sales and services tax. Nonetheless, the government must bear in mind that this would only be realized if sellers were willing to lower their prices after deducting the sales and services tax on certain products. Furthermore, the previous experience revealed that most sellers were less likely to cut down their prices despite rules enforcement and reminders from the government (Moomal, 2015). This issue is worth an investigation into whether tax reforms have short- and long-run effects on consumers' burden.

As an emerging country, the Malaysian economy has undergone some fluctuations in the past decades which may exert some pressure on the general price level. As economic growth is closely associated with an increase in output, a rise in aggregate demand due to various factors may lead to rapid growth which subsequently triggers the price of goods and services to skyrocket. Furthermore, an increase in the price level as a result of higher economic activity will raise the cost of production, thus affecting purchasing power and expenses. In 2015, a growth rate of 5 percent was recorded in Malaysia's economy with a high consumer expenditure despite the expectation that the GST implementation would impede the national economy. The dynamic economic growth demonstrated a corresponding relationship with the inflation rate which registered an increase from 3 percent in 2010 to 4.75 percent in 2018. However, it has fueled a debate on whether economic growth can either ease or increase consumers' burden.

With major tax reform being implemented in the country as well as continuous development in the Malaysian economy, this study is imperative as it can contribute to the body of literature in the context of consumers' burden, and determine whether taxation and economic growth can have an impact on the price level. Besides, the results of this study will shed light on whether GST can provide benefits. Since the main role of the government is to ease the burden and improve the wellbeing of people, it must choose the best policies. This study employs the ARDL approach and ARDL-ECM to test the specification model between the three nexuses. The rest of the article is organized as follows. The next sections present a literature review, research methodology, results and finally conclusions.

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2. LITERATURE REVIEW

The theory of excess burden as proposed by Dupuit (1844) may partly explain why the former GST implementation in Malaysia was not favored. Auerbech (1985) posit that excess burden will arise from taxation and creates a deadweight loss which is the loss in economic efficiency in excess of what the governments collect. For example, excess burden emerges when the government enforce taxes on goods and services. The tax imposed shall be borne by the consumers who need to pay higher prices of goods and services supplied. Neog and Gaur (2020) further support that tax collection and structure may lead to tax burden hence creating distortionary impacts in the economy. In contrast, Husman and Brezeanu (2021) posit that a country's taxation system has the characteristic of passing immediate effects to the economy and thus can be utilized to spur economic growth. The positive or negative impact of taxation made

the tax-growth relationship rather complicated yet certainly has a role in the development process of an economy thus influence the consumer's burden.

Empirical evidence from other countries has documented various findings on the relationship between taxes and price level of good and services. Karras (2019) who investigated the macroeconomic effects of tax changes on seventeen OECD countries found that an increase in the tax rate appears to raise the price level permanently and the inflation rate temporarily. The study revealed that changes in the tax rate have temporary effects on the real growth rate but permanent effects on the level of output. This also implies that the effects of aggregate supply are stronger than aggregate demand. In India, Singh and Benjamin (2017) analysed the price level changes due to the introduction of GST in India. The results supported that the overall price level only increase marginally as a result of the tax changes. Consistent finding also was established in Australia (see Warren et al., 1999; Johnson et al., 1999; Valadkhani & Layton, 2004; Valadkhani, 2005). Additionally, a newly introduced tax on sugar sweetened beverages (SSBs) also led to an increasing trend in the price growth. Alvarado et al. (2017) in their study in Barbados affirmed that the SSB price growth expanded around 3 percent in the quarter which the tax was implemented while that of non-SSBs decreased marginally. From another viewpoint, Qin et al. (2020) who investigated the distributional effects of the coal taxes before and after the introduction of coal taxes in China found that household's burden increased due to the tax reform. In particular, the results established that around 30 percent of rural households and six percent of urban households are directly affected by the coal taxes, and unfortunately the directly affected households tend to be poor. The study further revealed that the taxes affected provinces differently which provinces that have lower household income were more affected.

On another perspective, there is evidence that the pass-through of tax rate to prices is more powerful in case of increasing tax rate than a rate reduction. Gabriel and Reiff (2010) and Benkovskis and Fadejeva (2014) for instance confirmed such finding in Hungary and Latvia respectively in their studies on the effect of VAT rate changes towards CPI. More interestingly both studies found that a higher pass through (almost complete pass through for Hungary case) of tax to prices was observed for food items. Similarly, Gautier and Lalliard (2014) reported that more or less 80 percent of VAT changes are passed on to consumer prices one quarter after the implementation takes place. They further noted that indirect taxation such as the VAT contributed around 0.5 percentage point to Euro area inflation in 2012 and 2013. Finally, it is worth to note that the price adjustment resulting from the changes in tax rates usually is smooth and speedy and will last in a few months' time thus do not expose to any major risk of price instability or rocketing.

On the other hand, there is also evidence that in some cases taxation leads no effect or a reduction in the price level. Murrell and Yu (2000) documented that the implementation of Harmonised Sales Taxes (HST) in Atlantic Canada led to a slim decrease in the CPI in the first two years of introduction, although the change in the CPI components differs substantially from one category to another. In another study of VAT and inflation in the UK and Canada, Gelardi (2014) found that the introduction of a VAT in the UK showed no significant effect on the rate of change of CPI. Furthermore, the study also revealed that while inflation was affected when there was considerable revision in the tax rates, modest changes in the tax rates did not have an impact on the price level.

Since taxation system has the characteristic of transmitting immediate impact to the economy, the tax reformation and implementation of a tax system to stimulate economic growth might as well affecting consumers' burden. Empirical evidence conveys that there is vast literature on the link between economic growth and the price level which have concluded various results. A review study by Wollie (2018) posited that price level of a country will have a serious negative effect on the growth if the inflation rate portrayed double digit of an annual growth. The reason is that very high inflation increases the uncertainty of both consumers and producers. The study further

concludes that a positive impact on the economy will be triggered if the inflation rate is single digit as the increase in price of goods and services encourage the producers to produce more hence maximizing the welfare of the consumers by expanding their consumption habit. This is also supported by Cuaresma and Silgoner (2014) who studied the impact of inflation on long term growth of fourteen European Union (EU) countries disclosed that the relationship between inflation and growth is positive for very low inflation rates (that is, below an estimate of 1.6 percent), insignificant thereafter and negative for high, two-digit inflation levels. Similar finding was reported by Behera (2014) who conducted a study on six South Asian countries that discovers the existence of high positive correlation between inflation and economic growth. However, the cointegration result of the study found no long run relationship between the variables.

Furthermore, Murshed and Nakibullah (2015) noted economic growth as an important element of domestic components that can influence the price level. The study explores determinants of the price level in GCC countries and found that Kuwait is the only country that can established long run relationship between real GDP and the price level. In addition, from a Malaysian context, Munir et al. (2009) examined the presence of threshold effects in the relationship between inflation and GDP growth. The empirical analysis uses annual data for 36 years which is from 1970 to 2005. The results show that one inflation threshold value or in other words a structural break point exists for Malaysia. Furthermore, the estimated threshold regression model suggests 3.89 per cent as the threshold value of inflation rate above which inflation significantly decelerates growth rate of GDP. In contrast, there is a statistically significant positive relationship between inflation rate and growth for rate below the threshold level. Similarly, Risso and Carrera (2009) who estimate the long run relationship and threshold effects between inflation and growth in Mexico found the structural break at 9 percent level. Thus, inflation above the threshold level will lead to detrimental effect on growth and vice versa. This is also supported by Eggoh and Khan (2014) who provide new evidence on the nonlinearity relationship between inflation and growth, as well as the existence of a certain threshold value above which inflation is unhealthy and below which it embellishes growth. The study which has used a broad data sample of 102 developed and developing countries also affirms some country-specific characteristics that can possibly affect the degree of sensitivity between inflation and growth.

Additionally, a number of studies have observed the relationship from Malaysian context. Akalpler and Duhok (2018) found a positive relationship between economic growth and price level. Specifically, the study noted that a 1 percent change in inflation led to a 77 percent increase in the level of economic growth. Nevertheless, Cheng and Tan (2002) who researched on factors affecting inflation in Malaysia found that income which proxied by GDP or IPI did not show neither direct nor indirect relationship with the general price level. This finding is supported by Ramlan and Suhaimi (2017) who found no significant relationship between these two variables.

Based on the empirical findings from other countries, it is believed that economic growth asserts some influence on the level of consumers' burden. Although a few studies have examined Malaysian sample data on the growth-inflation relationship, the literature still lacks a unique empirical study for Malaysia on the consumers' burden-taxation-growth nexus considering the recent taxation reforms and levels of economic development that has taken place in recent years. Thus, this study is relevant and crucial in the sense that it will provide answers whether the tax reforms implemented and the changes in economic development in the country has had any influence on consumers' burden. Although general data reveals that the price of goods and services has risen in the quarter after GST took place, specific analysis is desired to confirm the association between taxation and growth and their impact towards consumers' burden both in the short and long run.

3. METHODOLOGY

This study uses secondary data collected from Thomson Reuter Datastream (2018) which covers the period from the first quarter of 1996 to the fourth quarter of 2020 (1996:1 – 2020:4). Although initially, monthly data is preferable as it has more observations and thus richer, due to the unavailability of some data on monthly basis the study adopts quarter data. The period 1996-2020 is selected to cover the period of important tax reforms implemented in Malaysia in the past two decades as well as the experience of dynamic growth with some ups and downs in the economic cycle. Most importantly, the major tax reform such as the previous introduction of the GST is included during this time frame. The relationship between the proxies is specified as follows:

Consumers' Burdent = f (DTt, IDTt, GDPt) (1)

Where, Consumers' Burden is the total non-adjusted Consumers Price Index (CPI) that has 2010 as the base year, DT denotes the total of direct taxes, IDT is the total collection of indirect taxes and GDP is the Gross Domestic Production that represents per capita gross domestic product of Malaysia respectively. Previous literature has often used CPI as a measurement for inflation (eg. Adu & Marbuah, 2011; Ahmed et al., 2014; Baltar, 2015; Benkovskis & Fadejeva, 2014; Cheng & Tan, 2002; Dreger & Zhang, 2013; Nguyen et al., 2012; Qin & He, 2013; Valadkhani, 2014). CPI is used as a proxy for consumers' burden as it is also known as the cost-of-living index which includes only consumer goods and services that can determine how rising prices affect the income of consumers (Tucker, 2014). This is supported by Bryan (2014) who noted that when the cost of living rises, it will be difficult to maintain a given standard of living with the same amount of income. The higher standard of living will force people to either be satisfied with fewer goods and services, save less or work harder. In any of these choices, consumers' burden has risen as well.

Meanwhile, taxation proxy is represented by both direct taxes and indirect taxes. Direct tax is the total revenue collection from income taxes as well as other direct taxes, while indirect tax is the total collection from import and export duties, excise taxes, sales and services tax, and goods and services tax. Previous studies that have used either direct tax or indirect tax collection as a proxy for taxation among others are by Ahmed et al. (2014), Fricke and Sussmuth (2014), and Taha et al. (2013). Finally, GDP is used to measure the economic growth of the nation as it takes into account the whole economic output produced in the country both for domestic and foreign markets. Past literature has widely adopted GDP as their measurement for economic growth including Malaysian studies as in Taha et al. (2018) and Mun et al. (2008). Besides, GDP is frequently used as measures for national income which also symbolizes the economic condition of a country at a particular time (eg. Cheng & Tan, 2002; Siregar & Rajaguru, 2005).

All variables are being converted into natural logarithms to ease interpretation of coefficient and as such, the proposed log-linear form of specification of the model is illustrated as follow:

$\ln CB\ t = \beta_0 + \beta_1 \ln DT\ t + \beta_2 \ln IDT\ t + \beta_3 \ln GDP\ t + \mu\ t$ (2)

where, μ is the error term. When time-series data are used, the preliminary statistical step necessary is to test the stationarity of each individual series. The study will use the conventional Augmented Dickey-Fuller (ADF) and the Philips Perron (PP) tests. Next, the ARDL bounds test will be run if the examined variables are stationary at I (0) or I (1). The ARDL bounds testing method as recommended by Pesaran et al. (2001) which can determine the long-run cointegration is preferable to the basic cointegration approach for two reasons; it is flexible for both I(0) and I(1), or mixed stationarity between I(0) and I(1), and secondly it can produce consistent and precise cointegration results even for small sample (Pesaran et al., 2001). In determining the existence of long-run cointegration between the variables, the study refers to

Pesaran et al. (2001) lower and upper critical bounds. If the calculated F-statistic exceeds the upper critical bound then the long-run cointegration is confirmed to exist between the variables. In the second part of the ARDL framework, the study delves into the short-run relationship with the error correction term (ECT) which signifies the speed of adjustment in the ARDL-ECM framework analysis. The reliability of the ARDL estimation model is also tested in the diagnostic and goodness of fit tests besides the CUSUM diagram.

4. RESULTS AND DISCUSSIONS

In order to obtain useful analysis, it is necessary to discern the properties of the variables being used in the study. This study uses Consumer Price Index to represent consumers' burden, Direct Tax and Indirect Tax as a proxy for taxation while Gross Domestic Product (GDP) representing the economic growth. All variables are transformed into natural logarithms prior to analysis. Table 1 reports the descriptive statistics of the variables in the study. The analysis for this study started with the unit root testing using the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) test for all variables in the model. The results reported in Table 1 confirm the stationarity of the variables at I (1) thus satisfying the criteria to continue the analysis with the ARDL approach.

Table 1 Results of ADF and PP Unit Root test

Variables	ADF Intercept	*Trend and Intercept*	PP Intercept	*Trend and Intercept*
At level				
lnCB	-1.715 (0)	-1.556 (0)	-1.771 (5)	-1.774 (2)
lnDT	-1.496 (11)	-0.5 57 (11)	-1.501 (22)	-5.962 (4)***
lnIDT	-2.265 (8)	-3.444 (9)*	-3.201 (9)**	-4.070 (6)***
lnGDP	-1.912 (10)	0.2669 (10)	-2.055 (54)	-3.290 (7)*
At first difference				
lnCB	-8.781 (0)***	-8.928 (0)***	-8.723 (5)***	-8.884 (6)***
lnDT	-4.305 (10)***	-4.536 (10)***	-26.238 (26)***	-29.026 (25)***
lnIDT	-2.921 (7)**	-2.930 (7)	-15.814 (9)***	-15.868 (9)***
lnGDP	-5.769 (5)***	-4.421 (9)***	-15.817 (86)***	-19.775 (56)***

*Note: *, ** and *** indicates the significance at 1%, 5% and 10% respectively.*
Source: The critical values are based on MacKinnon (1996

Table 2 exhibits the results of the ARDL bound test. The F-statistic for the model is 4.219 which is higher than the upper (I) critical value for k=3 and significant at 10 percent level hence justifies the existence of a long-run relationship.

Table 2 Results of ARDL Bounds F-test for Cointegration

	F statistic	k	Null hypothesis	Long run cointegration
ARDL (3,0,2,2)	4.219*	3	H_0 rejected	√
Significance levels:			Lower bound	Upper bound
10%			2.72	3.77
5%			3.23	4.35
1%			4.29	5.61

Note: Statistically significant at 1% (*), 5% (**) and 10% (***) level
Source: The critical values are based on Pesaran et al. (2001)

Having established the existence of a long-run relationship, Table 3 shows the analysis of ARDL-ECM long run and short run estimation. The long-run results show that LnGDP or economic growth proxy has a positive and significant influence on consumers' burden at 1 percent level. In detail, the coefficient reveals that a 1 percent increase in GDP will trigger a rise in consumers' burden as much as 0.30 percent. The result also affirms the finding of previous literature (eg. Murshed & Nakibullah, 2015 in the case of Kuwait; Mallik & Chowdhury, 2001) that economic growth has a long-run impact on the price level. A country's growth which largely will contribute to the nation's income or wealth is significant to dominate any possible changes in domestic demand and cost of production. As Murshed and Nakibullah (2015) argued, higher income and growth of a country would upsurge the demand for imported goods which might lead to a hike in the price of those goods. Consequently, this would similarly affect the domestic price. With Malaysia's current development projects and dynamic economy, healthy growth in GDP is expected as recorded in the last five years which showed a minimum expansion of four percent (Department of Statistics Malaysia, 2017). Additionally, excellent economic growth may also lead to higher employment and higher wages which expand the spending power of consumers thus causing the price levels to go up. Nevertheless, consumers' burden will worsen off for those who cannot take advantage of the nation's economic development especially the unemployed, employed workers with static salary and those who work on their own but with no expansion in their income.

Notwithstanding, the long-run estimation also reveals that indirect taxation has a negative relationship with consumers' burden at the 1 percent level. Specifically, the coefficient finds that a 1 percent increase in indirect taxation will reduce consumers' burden by 0.04 percent. This is consistent with the discovery of Murrell and Yu (2000) who documented a negative relationship between indirect tax and price level in Canada. Further, Gale and Harris (2011) pointed out that there is little evidence that indirect taxes led to an increase in the price level in the long run. These results hence support the government's intention that the implementation of GST in Malaysia will not lead to an extra burden on consumers. The changes in the indirect taxation structure may minimize the 'black economy' and allow the government to give more assistance to the rakyat. Besides, the previous government has affirmed that the changes in the indirect tax structure in the country would lead to lower prices of goods and services as the existing sales and services tax was abolished during the implementation phase of GST (Narayanan, 2014).

Table 3 Results of Long Run and Short Run Estimation with Stability Test

Long run estimates				Short run estimates			
Regressor	Coefficient	T statistics	Std error	Regressor	Coefficient	T statistics	Std error
LnDT	0.0047	0.2198	0.0213	Δ(LnDT)	0.0009	0.2209	0.0042
LnIDT	-0.0409***	0.0139	0.0139	Δ(LnIDT)	-0.0080***	-2.8131	0.0028
LnGDP	0.3030***	14.3177	0.0211	Δ(LnGDP)	0.0598***	5.5248	0.0108
				ECT t-1	-0.1975***		
Diagnostic test							
	x^2 statistic	p-value			x^2 statistic	p-value	
x^2 serial	0.9525	0.3895		x^2 hetero	0.9291	0.4556	
x^2 reset	1.1057	0.2957		x^2 normal	57.9116***	0.0000	

Note: *** indicates the significance at 1%

Moving to the short-run analysis, indirect tax (LnIDT) has a negative effect on the price level at the 1 percent significant level. The coefficient demonstrates that a 1 percent increase in indirect tax will decrease the CPI by 0.008 percent. The result confirms the government's claim that the

previously introduced GST would not increase the burden of citizens even for a short-term period. The finding is consistent with Murrell and Yu (2000) who documented that the implementation of Harmonised Sales Taxes (HST) in Atlantic Canada led to a slim decrease in the CPI in the first two years of introduction, although the change in the CPI components differs substantially from one category to another. The result can be due to the changes in household spending patterns as a result of transformation in the indirect taxation structure in the country through the implementation of consumption taxes occurred within a short period only (Bank Negara Malaysia, 2015). The result may suggest that when a consumption tax was introduced, individuals seem to increase their savings and reduce consumption which leads to an increase in supply hence retailers lowering the prices. In addition, such a scenario supports the claim that inflationary effects from changes in indirect taxation only last for a few months and thus do not expose to major risk of a price increase and price stability (Gautier & Lalliard, 2014).

The output in Table 3 also presents the value of ECT t-1 of the model which holds the correct negative sign and significant at 1 percent level. Accordingly, any changes or deviation from the short-run equilibrium between the variables in the model will be corrected as fast as the 19.75 percent level in every period to maintain the long-run equilibrium. Furthermore, results of the diagnostic test support that the model has passed all stability tests thus the long- and short-term estimation is producing reliable results. The results affirm that the model has no evidence of serial correlation. Besides, the model is free from the heteroscedasticity effect in disturbances and misspecification problems. Although the model does not satisfy the Jarque-Bera normality test, this is not an issue for high-frequency data such as being used in this study. Pallant (2007) stated that with a large enough sample size, for example, more than 30 or 40 samples, the violation of the normality assumption should not lead to a significant problem. In this case, the study used 83 observations for a period of 21 years of study thus normality assumption should be justified. Finally, the result of the cumulative sum of recursive residuals (CUSUM) and square of the cumulative sum of recursive residuals (CUSUM SQ) based on Figure 2 is well located within the 5 percent critical boundaries which reveal that the proposed model is in a stable mode.
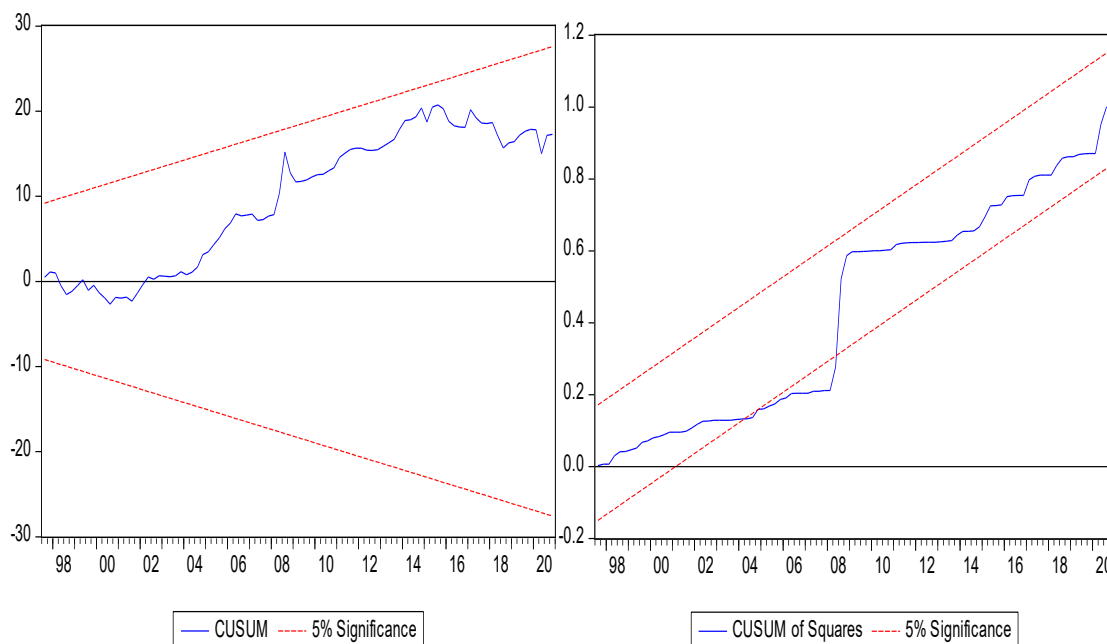

Figure 2. Model Stability Test

5. RESEARCH CONTRIBUTIONS

Overall, the study contributes to the present literature in several ways. Firstly, from the theoretical view's perspective, the study contributes to the existing literature by proving that indirect taxation reform implemented in Malaysia influences the level of consumers burden in Malaysia together with economic growth. Secondly, the study also noted that the impact of these factors towards consumers burden not only happen in the short run but also in the long run. To the best of author's knowledge, no empirical study has been performed to analyses the impact of taxation and economic growth on consumers burden using the same methodology for the period of same period in Malaysia.

With regards to methodological contributions, this study has adopted an advanced econometric analysis in exploring the estimated relationship of the variables. The unit root tests comprise of both traditional and conventional methods help to improve the reliability of the result while the combine cointegration method for testing long run relationship is a powerful analysis that can provide more accurate findings. Furthermore, the ARDL-ECM estimations which enable the study to obtain results for both short term and long-term period substantially contribute to the significant findings of this study.

With regards to the contribution to the body of knowledge, this research remarkably contributes to the lawmakers and general citizen as a whole that taxation and economic growth do affects consumers' burden. Most importantly it evidences that the indirect taxes do not cause the price level to increase, but the level of economic growth has positive association with the price. This new empirical evidence may answer some of the questions of why cost of living in Malaysia has risen in the past few decades. Hence, the policymakers should continue to monitor the effects of any tax reform on consumers' burden and adjust the tax policies accordingly to ensure that they are fair and equitable. Additionally, it is recommended for the government to prioritize policies which promote inclusive and sustainable economic growth such as investment in human capital, infrastructure and innovation. Finally, the finding of this research can be used as a reference for other countries especially those very similar to Malaysia in introducing any fiscal reforms with the current level of growth condition.

6. CONCLUSIONS

Investigating the role of taxation and growth on consumers' burden, this study affirms the existence of long run cointegration between the three nexuses. Detail findings reveal that indirect taxes have negative relationship with consumers burden both in the short and long run. This reveals that apart from improving the overall tax collection for the country, the implementation of the GST did not lead to increase in consumers burden in Malaysia. Another outcome of this study is the significance of both short run and long run association between economic growth and the price level. This signifies that price levels also increase with the improvement in the GDP in short- and longer-term period. Such scenario affirms the important role of economic growth in changing the domestic demand as well as influencing the cost of production which affects the price level of goods and services. Finally, progressive economic growth also creates more employment and possibly with higher wages. This will increase the buying power of consumers and hike the prices up. To conclude, both taxation and economic growth have significant influence on consumers' burden in the country.

However, the worry among Malaysian consumers that the previously implemented GST would cause the price to go up is not supported as the reformation in indirect tax policies decreases the price level. On the other hand, dynamic improvement in economic growth seems to inject influence on increasing consumers' burden in both short and long period. As the improvement in tax collection may have saved the government to continue govern the economy and inject steady

growth, consumers need to take advantage on the benefit of growth so as they can improve their life. Consumers' burden will be better off if the nation can improve their productivity, increase supply and purchasing power as well as contributes to the long-term fiscal growth of the country. From the government's side, consumers will be beneficial if the government can use the tax revenue collection wisely and creates balanced economy without compromising the inflation level thus ensuring the wellbeing of the people. This research is not without its limitations. Due to unavailability of monthly data for certain variables, the study uses quarterly data. The focus on direct and indirect taxes may not capture the full impact of tax reform on consumers' burden as the study do not analyses according to each type of taxes under the two groups. Finally, as the study does not address the distributional effects of tax reform which may affect consumers group differently, future research can do further analysis to fulfill this.

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