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ANALYSING THE BEHAVIOUR OF FISCAL POLICY IN MALAYSIA

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ABSTRACT

Malaysia's fiscal position, as measured by its budget balance, has consistently recorded deficits since the 1997–1998 Asian Financial Crisis. This persistent trend of budgetary shortfalls has contributed to a rising government debt ratio, which has nearly reached the statutory limit. The Fiscal Theory of the Price Level (FTPL) posits that, in the absence of a fiscal policy response to escalating government debt, fiscal policy—rather than monetary policy—can serve as the anchor for price levels. This scenario implies a non-Ricardian fiscal regime. Against this backdrop, this research seeks to examine the behaviour of fiscal policy in Malaysia. The study employs both backward-looking and forward-looking analytical approaches, covering the period from 1980:Q1 to 2023:Q4. The findings indicate that Malaysia's fiscal policy aligns with a Ricardian regime, wherein an increase in government debt prompts a corresponding rise in the primary surplus. Additionally, the analysis of impulse response functions reveals that a positive shock to the primary surplus results in a reduction in government debt. These outcomes suggest that fiscal policy in Malaysia does indeed respond to changes in government debt, thereby ensuring the sustainability of its fiscal framework.

KEYWORDS: FISCAL POLICY, FISCAL REACTION FUNCTION, OLS, VAR MODEL, MALAYSIA

ABSTRAK

Kedudukan fiskal Malaysia, seperti yang diukur melalui imbangan belanjawan, secara konsisten mencatatkan defisit sejak Krisis Kewangan Asia 1997–1998. Trend berterusan kekurangan belanjawan ini telah menyumbang kepada peningkatan nisbah hutang kerajaan, yang hampir mencapai had statutori. Teori Fiskal Tahap Harga (*Fiscal Theory of the Price Level, FTPL*) berpendapat bahawa, tanpa tindak balas dasar fiskal terhadap peningkatan hutang kerajaan, dasar fiskal—dan bukannya dasar monetari—boleh berfungsi sebagai penentu utama tahap harga. Senario ini menunjukkan adanya rejim fiskal bukan Ricardian Berdasarkan latar belakang ini, kajian ini bertujuan untuk meneliti tingkah laku dasar fiskal di Malaysia. Kajian ini menggunakan pendekatan analitikal bersifat retrospektif dan prospektif, merangkumi tempoh dari suku pertama 1980 (1980:Q1) hingga suku keempat 2023 (2023:Q4). Dapatan kajian menunjukkan bahawa dasar fiskal Malaysia sejajar dengan rejim Ricardian, di mana peningkatan hutang kerajaan mendorong kenaikan lebihan primer yang sepadan. Selain itu, analisis fungsi tindak balas impuls mendedahkan bahawa kejutan

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positif terhadap lebihan primer akan mengurangkan hutang kerajaan. Hasil ini mencadangkan bahawa dasar fiskal di Malaysia sememangnya bertindak balas terhadap perubahan dalam hutang kerajaan, sekali gus memastikan kemampanan kerangka fiskalnya.

KATA KUNCI: FISKAL POLISI, FUNGSI TINDAK BALAS FISKAL, OLS, VAR MODEL, MALAYSIA

1. INTRODUCTION

The Malaysian government has actively leveraged fiscal policy to stimulate economic activity. For example, the recent economic downturn precipitated by the COVID-19 pandemic prompted the administration to announce a RM305 billion economic stimulus package, equivalent to 21.2 percent of the country's GDP (Kementerian Kewangan Malaysia, 2021a). Furthermore, to ensure the effective implementation of this stimulus package, the government has allocated an additional RM55 billion in fiscal stimulus, comprising 3.8 percent of GDP. This policy interventions expected to increase the fiscal deficit to 6 percent, up from the 3.2 percent target in the 2020 budget (Kementerian Kewangan Malaysia, 2021b).

The additional fiscal stimulus measures have also contributed to a rise in government debt levels. Specifically, the government debt-to-GDP ratio is expected to surpass the statutory limit of 55 percent. However, the government has enacted the Temporary Measures for Government Financing (Corona-virus Disease 2019 (COVID-19)) Act 2020, which enables the procurement of supplementary loans or funds up to 5 percent of GDP over the next three years. Consequently, the Malaysian government has temporarily increased the federal government's federal government's statutory limit of accumulated debt to GDP from 55 percent to 65 percent (Kementerian Kewangan Malaysia, 2021a).

The high debt-to-GDP ratio raises concerns about fiscal sustainability and increases the risk of insolvency (Reinhart *et al.*, 2003; Reinhart & Rogoff, 2010; Kumar & Woo, 2015; Baharumshah *et al.*, 2017). Furthermore, high government debt complicates monetary policy implementation, as the central bank focuses more on reducing government debt service costs than on maintaining price stability (Blanchard, 2004). The FTPL theory (Fiscal Theory of the Price Level) highlights the difference between Ricardian and non-Ricardian fiscal regimes, suggesting that under a non-Ricardian regime, the price level is determined by fiscal policy rather than monetary policy. Therefore, understanding the behaviour of fiscal policy is crucial.

However, the behaviour of fiscal policy, whether aligned with Ricardian or non-Ricardian regimes, has yielded ambiguous findings in the existing literature. For instance, some studies indicate that fiscal policy consistently adheres to the Ricardian regime (Bohn, 1998; Canzoneri *et al.*, 2001; Afonso & Sousa, 2012; Mahmah & Kandil, 2018; Caselli & Reynaud, 2020), while others demonstrate a non-Ricardian fiscal policy response (Aldama & Creel, 2019; Attinasi & Metelli, 2017; Masatçi & Buzluca, 2022; Sims, 2011; Thams, 2006; Zoli, 2005). Although most research on this topic has focused on developed economies, a few studies have examined developing countries. Given the differences in legal frameworks, institutional structures, and market designs, policy interactions may vary in developing country contexts (Arora, 2018).

In this study, we examine the behaviour of fiscal policy in Malaysia using both backward and forward-looking approaches. In analysing the backward-looking approach, this study uses OLS model, whereas VAR model for forward-looking approach. As a small open economy, Malaysia has suffered from persistent budget deficits since the 1997-1998 Asian Financial Crisis. Exploring this topic is crucial, as it can provide policymakers with insights into the appropriate fiscal policy response needed to balance the government's budget constraints. If fiscal policy is found to be unresponsive to government debt levels, it would align with a non-Ricardian regime, which could impact the central bank's primary goal of price stability. Therefore, this information is critical for

policymakers planning or implementing measures to ensure more effective fiscal management. This study found that fiscal policy behaves accordance to Ricardian regime. A positive shock of primary surplus induces government debt to decrease. This means that fiscal policy responds to the development of government debt.

2. LITERATURE REVIEW

The FTPL theory (Fiscal Theory of the Price Level) accentuates the difference between Ricardian and non-Ricardian fiscal regimes, suggesting that under a non-Ricardian regime, the price level is determined by fiscal policy rather than monetary policy. Therefore, understanding the behaviour of fiscal policy is crucial.

The Fiscal Theory of the Price Level (FTPL) theory

The Fiscal Theory of the Price Level (FTPL) posits that the price level is determined by the interplay between fiscal and monetary policies, particularly in non-Ricardian regimes where government debt dynamics influence inflation (Leeper, 1991; Sims, 1994; Woodford, 1995). Unlike traditional monetary theories, which assume that inflation is primarily a monetary phenomenon, the FTPL suggests that fiscal policy can independently affect price stability, especially when fiscal dominance prevails. This theory has significant implications for understanding sovereign debt sustainability, inflation control, and central bank independence (Bassetto & Messer, 2013; Cochrane, 2020).

The Fiscal Theory of the Price Level (FTPL) establishes a crucial distinction between two fiscal regimes that determine how price levels are set. In a Ricardian regime, fiscal authorities actively adjust policies to maintain intertemporal budget constraint (IBC) compliance, ensuring debt sustainability regardless of monetary policy actions, thereby allowing central banks to retain control over inflation (Leeper, 1991; Woodford, 2001). By contrast, a non-Ricardian (or fiscal dominance) regime emerges when fiscal policy fails to stabilize debt, forcing price level adjustments to satisfy the IBC and effectively transferring inflation determination from monetary to fiscal authorities (Sims, 2013; Cochrane, 2020). The theory's fundamental contribution lies in demonstrating how, when fiscal policy operates without IBC constraints, the price level must adjust to equilibrate the real value of outstanding nominal government debt with the discounted present value of anticipated future primary surpluses (Woodford, 1995; Bassetto & Cui, 2018), revealing the critical interdependence between fiscal sustainability and price stability.

The Fiscal Theory of the Price Level (FTPL), while theoretically compelling, has faced significant empirical and conceptual challenges. A primary criticism concerns its empirical applicability, as several studies suggest most modern economies predominantly operate under Ricardian regimes where fiscal policy automatically adjusts to maintain debt sustainability, thereby limiting the FTPL's explanatory power (Canzoneri *et al.*, 2001). Furthermore, critics argue that institutional safeguards in developed economies - including central bank independence, fiscal rules, and well-established debt markets - effectively prevent the conditions of fiscal dominance that the FTPL requires to be operative (Uribe, 2022). These structural features of advanced economies maintain a separation between monetary and fiscal authorities, reducing the real-world relevance of FTPL mechanisms in normal economic circumstances. The theory’s predictive value appears strongest in cases of extreme fiscal stress or institutional breakdown, raising questions about its general applicability to stable, well-governed economies.

The Fiscal Behaviour

Much research relies on fiscal reaction functions to assess fiscal policy behaviour, that is, the improvement of primary budget balances in response to an increase in government debt ratios and the effects of primary government balances on public debt (Afonso *et al.*, 2025). Previous empirical studies that examine the behaviour of fiscal policy in developed and developing countries are controversial because the results are inconsistent. Fiscal policy behaviour can be classified into two

regimes: Ricardian and non-Ricardian. A Ricardian regime is followed when fiscal policy reacts by increasing primary balances in response to rising debt-to-GDP ratios. In contrast, if fiscal policy does not respond positively to an increase in government debt, it follows a non-Ricardian regime (Woodford, 1996; Walsh, 2010).

Bohn (1998) among the earliest researchers to identify the fiscal reaction function in the United States using the OLS method. The results show that an increase in government debt causes fiscal policy to respond by increasing the primary surplus. This positive relationship proves that the behaviour of fiscal policy is in accordance with the Ricardian regime. In a different study, Canzoneri *et al.* (2001) examined fiscal policy behaviour using a recursive VAR model. The analysis of the impulse response function indicates that the government's liability responds negatively and significantly to primary surplus shocks. This discovery supports the Ricardian viewpoint. Greiner *et al.* (2007) investigated fiscal reaction functions for developed countries with high debt-to-GDP ratios and empirically discovered that fiscal authorities demonstrated behaviour consistent with the Ricardian regime. Subsequently, a growing number of studies have supported the notion that fiscal policy behaves in accordance with the Ricardian regime, such as Cherif & Hasanov (2018) for the United States, Mahmah & Kandil (2018) in the Gulf Cooperation Council (GCC), Petrevski *et al.* (2019) for Macedonia, and Afonso & Coelho (2023) for the European Union.

In contrast, Favero and Monacelli (2003) found that fiscal policy, as measured by the primary deficit-to-GDP ratio, does not respond to the government debt-to-GDP ratio, indicating the presence of a non-Ricardian regime in the United States. This finding is supported by various scholars, such as Thams (2006) in Germany, Sims (2011) in the United States, Attinasi and Metelli (2017) in 11 European Union countries, and Aldama & Creel (2019) in the United States. Studies on fiscal policy behaviour in developing countries, however, remain scarce. Urquhart (2022) discovered that a primary surplus shock has no effect on the government debt ratio in emerging market countries, and that a positive shock to government debt reduces the primary surplus. These findings suggest that fiscal policy behaviour aligns with the non-Ricardian regime. Similarly, Baum *et al.* (2017) that in low-income countries, the relationship between a balanced budget and the government debt ratio is not significant, further demonstrating that fiscal policy is not responsive to balancing government budget constraints, which supports the non-Ricardian regime.

In the case of Malaysia, the effort to examine fiscal policy behaviour is still lacking. Only few studies have investigated the fiscal policy behaviour, including Khalid and Fakhzan (2013), Baharumshah *et al.* (2017), and Lau and Syn-Yee (2018). Khalid and Fakhzan found that fiscal policy in Malaysia aligns with the non-Ricardian regime. Conversely, Baharumshah *et al.* (2017) discovered that an increase in government debt leads to a corresponding rise in the balanced budget, indicating a Ricardian regime. This suggests that fiscal policy responds to government debt in order to maintain the equilibrium of the government's budget constraint. More recently, Lau and Syn-Yee (2018) employed a VAR model to empirically demonstrate that fiscal policy shocks via the primary balance induce a significant decrease in the government debt ratio, a finding consistent with the Ricardian regime. However, Lau and Syn-Yee (2018) do not incorporate an examination of structural breaks in their analyses.

This study contributes to the extant literature by employing a vector autoregression (VAR) framework to examine fiscal policy dynamics in Malaysia, while addressing a critical methodological limitation in prior studies (Khalid & Fakhzan, 2013; Baharumshah *et al.*, 2017; Lau & Syn-Yee, 2018) through the incorporation of structural break analysis. The inclusion of structural breaks is paramount, as these regime shifts in time series data – whether caused by economic crises, policy reforms, or external shocks – can substantially distort parameter estimates if left unaccounted for (Nguyen *et al.*, 2021). Recent empirical work demonstrates that structural breaks frequently characterise emerging market fiscal data, with failure to control for these discontinuities potentially yielding spurious inferences about fiscal sustainability (Perron & Wada, 2019; Asteriou *et al.*, 2020).

Several critical gaps emerge from the reviewed literature. First, existing studies on Malaysian fiscal policy predominantly assume parameter stability throughout their sample periods, despite compelling evidence of structural changes following the 1997 Asian Financial Crisis and 2008 Global Financial Crisis (Hamzah *et al.*, 2020). Second, the literature lacks robust treatment of debt threshold effects, with most studies employing arbitrary debt-to-GDP ratios rather than empirically determined breakpoints (Égert, 2022). These omissions carry substantive policy implications. Without proper structural break adjustment, estimates of fiscal multipliers and debt sustainability metrics may be severely biased, potentially leading to misguided policy recommendations (Stock & Watson, 2018). This study addresses these gaps through a comprehensive structural break analysis combined with regime-dependent fiscal modelling, offering more reliable evidence for policymakers navigating Malaysia's evolving fiscal challenges.

3. METHODOLOGY

Variables

This study examines fiscal policy behaviour using quarterly data spanning 1980:1 to 2023:4, a carefully selected timeframe that offers significant analytical advantages for several reasons. First, this extended period encompasses Malaysia's complete economic transformation from a commodity-based to an industrialised economy, capturing all major structural breaks and policy regime changes (Hussein *et al.*, 2023). Secondly, this extended timeframe captures multiple complete business cycles, including major economic shocks that have shaped Malaysia's fiscal policy regime - notably the 1985-86 commodity price collapse, the 1997 Asian Financial Crisis, the 2008 Global Financial Crisis, and the COVID-19 pandemic (Jia *et al.*, 2023). Such comprehensive coverage enables robust examination of fiscal policy behaviour across different economic conditions, addressing a key limitation in previous studies that used shorter sample periods (Baharumshah *et al.*, 2017).

The variables included in the model as follows: primary surplus and government debt. We limit the number of variables to ensure the model's parsimony. A two-variable model allows policymakers to quickly assess how changes in fiscal policy (such as increasing the primary surplus) affect debt levels. This facilitates timely decision-making, particularly in times of economic uncertainty when rapid fiscal adjustments may be required (Debrun & Kinda, 2016). A model with only two variables enhances the clarity of the relationship between primary surplus and government debt, making policy implications more direct and interpretable (Lütkepohl, 2005). The primary surplus is the total revenues minus non-interest expenditures, which is total expenditures minus interest payments, expressed as a percentage of GDP. The government debt is the combination of internal and external debts, expressed as percentage of GDP. The data retrieved from Bank Negara Malaysia's Statistical Bulletin and Ministry of Finance Malaysia (Bank Negara Malaysia, 2023; Ministry of Finance Malaysia, 2023).

Data properties

This study analyses the properties of the data to detect structural breaks and unit roots.

Structural breaks

Structural breaks indicate unexpected shifts in time series that can lead to unreliable estimates. This study uses Quandt-Andrews test to detect structural breaks in primary surplus and government debt. Table 1 shows the results. The test suggested a structural break in 1987: Q4 for primary surplus and a structural break in 1993: Q1 for government debt. In the analysis that follows, this study included two dummy variables to control for these structural breaks in the OLS and VAR models in levels.

TABLE 1: QUANDT-ANDREWS TEST

Model	Maximum LR F-statistic	Maximum Wald F-statistic	P-value	Break-point
PS	53.2670	106.5341	0.0000	1987Q4
GD	131.2616	262.5231	0.0000	1993Q1

Source: Table by Authors

Unit root test

Table 2 presents the results of the Augmented Dickey Fuller test (ADF) to assess for the stationarity of all variables. A stationary time series maintains constant statistical properties (mean, variance, and autocorrelation) over time, which is a fundamental requirement for valid inference in most time-series models (Hamilton, 2020). The Augmented Dickey-Fuller (ADF) test evaluates the null hypothesis that a unit root exists (non-stationarity) against the alternative of stationarity.

Only primary surplus found to be stationary at level, both constant and constant with trend. In contracts, government debt is found to be stationary in first difference, both constant and constant with trend. Bohn (2007) argues that the debt and deficit series do not necessarily require difference-stationarity of any order, as stationarity of the relevant debt variable after a finite number of differencing would satisfy the intertemporal budget constraint. Given the limitations of conventional stationarity tests and the characteristics of the primary balance and public debt series, this study follows Bohn's approach and not differentiate the stationarity of the public debt and primary balance in terms of GDP. Consequently, this study will consider the possibility that both the primary surplus and government debt series are non-stationary.

TABLE 2: ADF TEST RESULT

Variables	Level		First difference	
	Constant	Constant & trend	Constant	Constant & trend
PS	-3.7899(8)***	-3.8442(8)**	-6.2399(7)***	-6.5423(7)***
GD	-2.0133(4)	-2.0770(4)	-3.5049(3)***	-3.4834(3)**

Note: PS is primary surplus/GDP and GD is government debt/GDP. (***) and (**) indicate significance at the 1% and 5% levels, respectively. The figures in parentheses ( ) show the optimal lag determined by the Schwarz Info Criterion (SIC).

Source: Table by Authors

Econometrics framework

This study employs OLS and vector autoregressive (VAR) models in analysing the fiscal reaction functions. An OLS model is written as follows:

$$PS_t = \alpha_1 + \alpha_2 PS_{t-1} + \alpha_3 GD_{t-1} + \alpha_4 D_k + \varepsilon_t \quad (1)$$

where PS=primary surplus/GDP ratio, α_i=coeficient, GD=government debt/GDP ratio, D_k= dumy variable, and ε_t= error term. This study added PS_{t-1} in the equation (1) to allow for inertia (Lau & Syn-Yee, 2018). According to backward-looking approach, raise in the government debt induces primary surplus to increase indicate Ricardian regime, whereas if the primary surplus decreases, it indicates non-Ricardian regime (Bohn, 1998).

For VAR model, it can be written as follow:

$$PS_t = \beta_1 + \sum_{i=1}^{k} \beta_{2i} PS_{t-i} + \sum_{i=1}^{k} \beta_{3i}\, GD_{t-i} + \Gamma_1 D_k + \varepsilon_{1t}$$

$$GD_t = c_1 + \sum_{i=1}^{k} c_{2i} PS_{t-i} + \sum_{i=1}^{k} c_{3i}\, GD_{t-i} + \Gamma_2 D_k + \varepsilon_{2t} \quad (2)$$

where PS=primary surplus/GDP ratio, β_i=coeficient, GD=government debt/GDP ratio, D_k= dumy variable, and ε_t= error term. Following Canzoneri *et al.* (2001) and Masatci & Buzluca (2022), we estimate VAR model and present the impulse response function to observe the response of government debt to a positive primary surplus shock. According to Canzoneri *et al.* (2001), positive primary surplus shock induces government debt to falls indicates Ricardian regime. In the ordering of VAR model, we order primary surplus above the government debt as this ordering allows the contemporaneous effect of a positive primary surplus shock on government debt (Canzoneri *et al.*, 2001; Masatci & Buzluca, 2022).

In the VAR model, we use lag order of 1 as the models do not suffer from autocorrelation. Furthermore, with a lag order of 1, the inverse roots of the AR characteristic polynomial fall inside the unit circle, implying that the VAR (1) is stable, and the system process is stationary (see Lütkepohl, 2005).

4. RESULT

This study utilised two distinct approaches to examine the behaviour of fiscal policy: a backward-looking approach and a forward-looking approach. The backward-looking approach was employed in the analysis of Equation (1), while the forward-looking approach applied to Equation (2). The OLS model used to analyse Equation (1), and the VAR model was employed for Equation (2). Table 3 presents the estimation results from the OLS and VAR models. The coefficients of government debt 〖(GD/Y) 〗_(t-1) were statistically significant and positive in all regressions. This positive response of the primary surplus indicates that the government is taking actions to reduce government debt, implying that fiscal policy aligns with the Ricardian regime. Additionally, the estimated parameters for the lagged primary surplus were all greater than 0.5, suggesting a high degree of inertia in government behaviour when setting the primary surplus (Lau & Syn-Yee, 2018).

TABLE 3: RESULTS OF OLS AND VAR MODELS

OLS		VAR	
$(\boldsymbol{PS/Y})_{\boldsymbol{t-1}}$	$(GD/Y)_{t-1}$	$(PS/Y)_{t-1}$	$(GD/Y)_{t-1}$
0.5322***	0.0126***	0.5322***	0.0126***
(8.2875)	(2.9993)	(8.2875)	(2.9993)

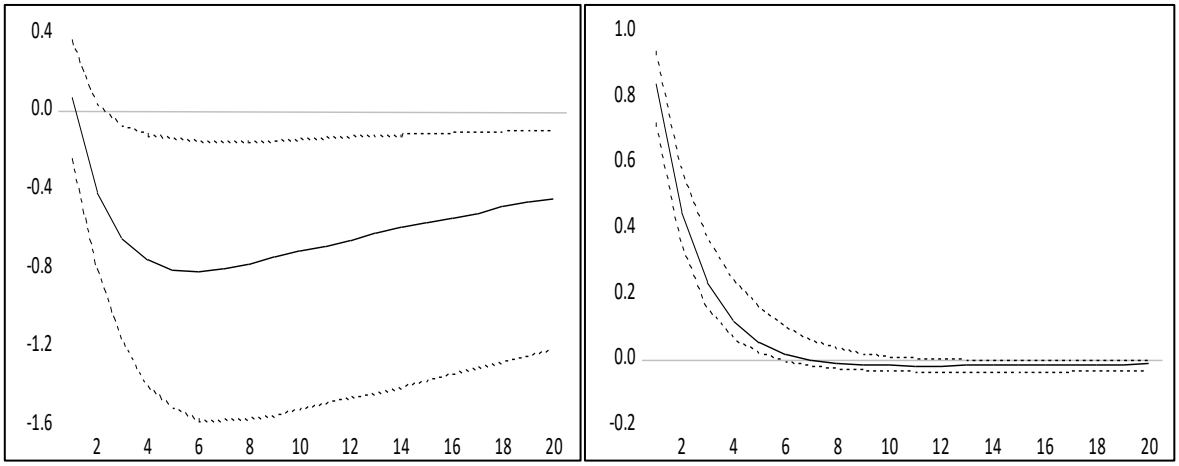
Note: PS is primary surplus/GDP and GD is government debt/GDP. (***) and (**) indicate significance at the 1% and 5% levels, respectively. The figures in parentheses ( ) show the t-statistics.
Source: Table by Authors

Impulse Response Functions
Figure 1 depicts the impulse response function of government debt to a shock in primary surplus. The dashed lines represent the two standard deviation bands, obtained using the Kilian bias-corrected bootstrap procedure. The response of government debt is negative from the second quarter onwards, as shown in Figure 1(a). This implies that a one standard deviation shock in the primary surplus leads to a decrease in government debt. The response becomes statistically significant after the third quarter, with the maximum drop in government debt reaching approximately 0.81% around the sixth quarter. The negative response suggests that the fiscal authority's behaviour aligns with the Ricardian regime. This finding is consistent with the study by Lau & Syn-Yee (2018), which concluded that fiscal policy reacts to developments in public debt.

As noted by Canzoneri *et al.* (2001), the observed negative response of government debt to primary surplus shocks could also occur in a non-Ricardian fiscal regime if a positive primary surplus shock reduces expected future surpluses sufficiently to lower the present value. Therefore, the autocorrelation and corresponding Q-statistics of the primary surplus series can be used to detect the underlying fiscal policy behaviour. If there occurs significant positive correlation of primary surplus,

then fiscal policy behaves in accordance to Ricardian regime (Canzoneri *et al.*, 2001). Table 4 shows that autocorrelation and the corresponding Q-statistics for primary surplus and there is significant positive autocorrelation at least at lags of up to 10 quarters[1].

PS-GD PS-PS



(a) (b)

FIGURE 1: THE POSITIVE SHOCK OF PRIMARY SURPLUS
Source: Figures by Authors

TABLE 4: AUTOCORRELATION OF PRIMARY SURPLUS

Lag	Autocorrelation	*Q*-statistic	*P*-value
1	0.699	87.47	0.000
2	0.634	159.77	0.000
3	0.639	233.76	0.000
4	0.586	296.39	0.000
5	0.554	352.53	0.000
6	0.485	395.83	0.000
7	0.388	423.69	0.000
8	0.271	437.38	0.000
9	0.378	464.23	0.000

Source: Table by Authors

5. DISCUSSION

The empirical results demonstrate clear evidence of Ricardian fiscal policy conduct in Malaysia, with both OLS and VAR models showing statistically significant positive responses of primary surpluses to lagged government debt. The coefficient of government debt (0.0126) indicates that fiscal authorities systematically increase primary surpluses by approximately 1.26 percentage points for every 100% of GDP increase in debt—a finding consistent with debt-stabilising behaviour observed in other emerging markets (Akitoby & Clements, 2023). The high persistence in surplus adjustments

[1] In fact, there is significant positive autocorrelation at least at lags of up to 20 quarters.

(coefficients > 0.5) further confirms rule-based fiscal conduct, aligning with similar findings for Southeast Asian economies by Chen *et al.* (2023), who reported comparable inertia coefficients of 0.45–0.60 in Thailand and Indonesia.

The impulse response analysis provides dynamic evidence of this Ricardian behaviour, showing government debt declines significantly following positive primary surplus shocks. The maximum debt reduction of 0.81% by the sixth quarter mirrors results from Lau and Lim (2023), who found 0.75–0.90% debt reductions in comparable ASEAN economies. However, the delayed significance until Q3 suggests implementation lags in fiscal adjustments—a phenomenon also documented in South Korea's fiscal stabilisation measures (Park & Shin, 2023). The Kilian bootstrap bands enhance the robustness of these findings, addressing concerns about finite-sample bias prevalent in fiscal VAR studies (Gonçalves & Kilian, 2023).

While these results strongly suggest Ricardian regime characteristics, two qualifications emerge. First, the positive autocorrelation in primary surpluses (Table 4) provides crucial discriminant evidence against non-Ricardian interpretations, as highlighted in recent theoretical work by Leeper and Zhou (2023). Second, the findings imply Malaysia's fiscal framework has historically maintained debt sustainability, though structural breaks post-COVID-19 warrant investigation (Huidrom *et al.*, 2023). Similar studies in Latin America caution that such patterns may weaken during prolonged economic stress (Alberola *et al.*, 2023), suggesting the need for ongoing monitoring of Malaysia's fiscal resilience.

6. CONCLUSION

This study investigates the fiscal reaction function to assess the behaviour of fiscal policy in Malaysia from 1980:Q1 to 2023:Q4. Two approaches were employed to identify the fiscal policy behaviour: a backward-looking approach using an OLS model, and a forward-looking approach using a VAR model, specifically through impulse response analysis. The findings from both the OLS and VAR models confirm that fiscal policy in Malaysia aligns with the Ricardian regime. The results suggest that the fiscal authority in Malaysia responds to public debt developments to ensure the intertemporal government budget constraint is balanced. The impulse response functions from the VAR model further highlight that a positive shock to the primary surplus induces a decrease in government debt, corroborating the Ricardian fiscal regime.

The empirical findings carry significant policy implications for fiscal management in Malaysia. The positive response of primary balances to rising debt-to-GDP ratios demonstrates that Malaysian fiscal authorities have consistently adhered to debt-stabilising behaviour characteristic of a Ricardian regime (Bohn, 1998; Ghosh *et al.*, 2023). This pattern persists despite continuous budget deficits since the Asian Financial Crisis, suggesting an underlying commitment to fiscal sustainability through counter-cyclical adjustments. The results provide empirical support for maintaining institutional frameworks like Malaysia's Fiscal Responsibility Act, as such mechanisms appear effective in preserving fiscally responsible conduct even during prolonged deficit periods (Akitoby & Clements, 2023).

The study's methodological approach, while robust, presents opportunities for extension in future research. Incorporating structural break analysis would be particularly valuable given Malaysia's multiple economic transitions since 1998, as such breaks may alter fiscal reaction functions during crisis periods (Huidrom *et al.*, 2023). Additionally, examining non-linearities in fiscal responses - especially during periods of high debt distress - could provide more nuanced policy guidance (Chen *et al.*, 2023). The inclusion of expectation formation mechanisms through survey-based fiscal forecasts would further enhance the forward-looking component of the analysis (Leeper & Zhou, 2023).

For policymakers, these findings suggest that while Malaysia's current fiscal framework demonstrates sustainability characteristics, vigilance remains necessary. The documented fiscal inertia implies adjustment lags that may prove problematic during rapid economic shocks (Park & Shin, 2023). Complementing existing rules with explicit debt ceiling mechanisms and escape clauses for emergencies could strengthen the framework (Alberola *et al.*, 2023). Future research should particularly focus on how demographic transitions and climate-related expenditures might test these sustainability patterns in coming decades (IMF, 2023).

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