



MALAYSIA

SELECTED ISSUES

March 2019

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MALAYSIA

SELECTED ISSUES

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Approved By
**Asia and Pacific
Department**

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CORPORATE SAVING IN MALAYSIA

A. Introduction

1. IMF analysis suggests that Malaysia's current account (CA) surplus is higher than warranted by medium-term fundamentals and desired policies. National income account data up to 2015 suggest that private non-financial corporations could be a significant contributor to the CA surplus, followed by private financial firms. Given the importance of private non-financial corporations in Malaysia's national saving, staff undertook an analysis of saving to understand the history and identify the drivers.

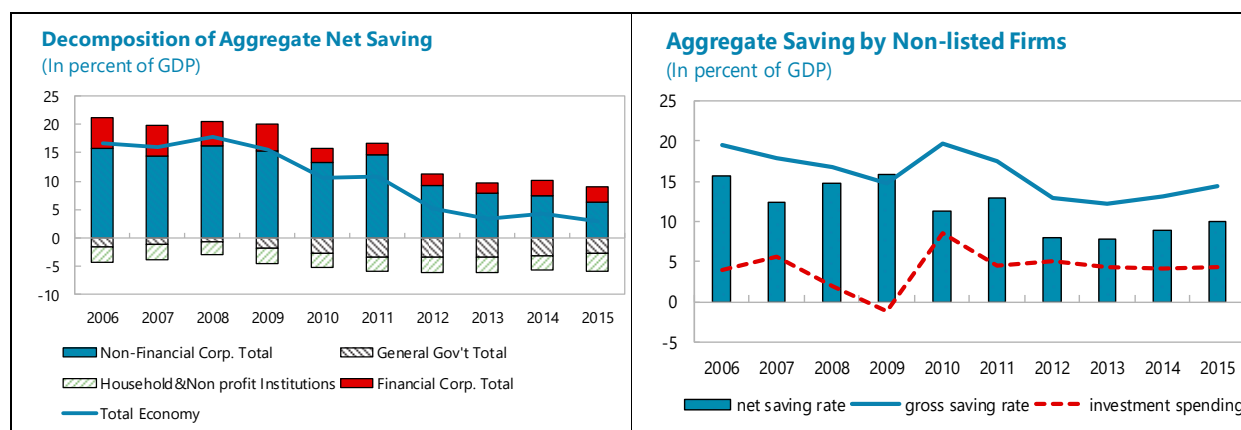
2. Leveraging firm-level data for listed firms, we focus on the contribution to the CA surplus of private non-financial corporations. Specifically, we aim to understand:

- Which categories of corporations are contributing most to national saving? How have corporate saving evolved over time?
- From an accounting perspective, what factors explain the change in corporate saving behavior?
- From an economic perspective, what are the underlying drivers of corporate saving? Is saving excessive?

B. Stylized Facts Based on National Income Account Data

3. From a global perspective, the corporate sector has shifted from a net borrower to a net saver (Chen et al., 2017; Dao and Maggi, 2018). This rise in gross saving does not seem to have led to an increase in capital investment, but instead a larger holding of liquid financial assets (cash).

4. In Malaysia, aggregate net saving has been on a declining trend since 2006, with non-financial corporations being the largest contributor. The contributions of the corporate sector to the CA surplus are partially offset by dissaving by the public sector, households¹, and non-profit institutions. Listed firms tend to invest more than non-listed firms, possibly reflecting their easier access to external financing.



¹ Nonetheless, it is important to note that households in Malaysia hold significant net financial assets (about 95 percent of GDP as of 2017), part of which may reflect precautionary motives.

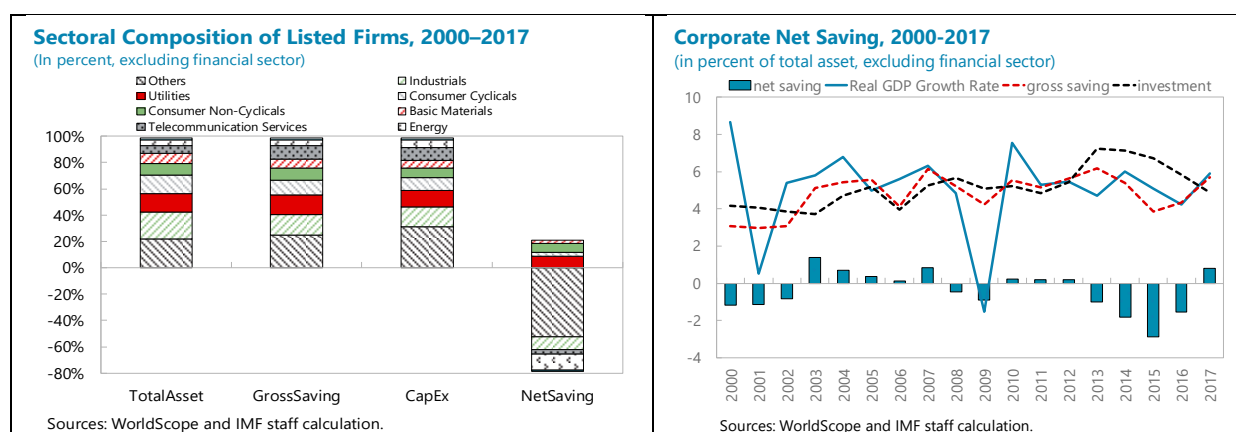
C. Firm Level Analysis

5. We employ balance sheet and income statement data for 1400 publicly listed firms over the period of 2000–2017 (currently about 940 active, total assets about 170 percent of GDP), drawing from the Thompson WorldScope Database. As the interpretation of cash and investment flows for financial corporations is different from that for non-financial corporations, this study focuses only on the financing decisions of non-financial corporations (see Fama and French, 2001; and DeAngelo et al., 2004). An important drawback is that the WorldScope database does not include information on non-listed firms, which might have different motives for saving from listed-firms. Key variables of interest are defined as follows:

- $Profit = Gross\ Operating\ Surplus - Taxes\ on\ Profits - Interest$;
- $Gross\ Saving = Profit - Net\ Dividends$;
- $Net\ Saving = Gross\ Saving - Investment$.

6. In the study period of 2000–2017, the following overall patterns are worth noting:

- **Most sectors were dissaving² over the period of 2000-2017.** Among all non-financial corporations, industrials, utilities, and consumer cyclicals are the largest net savers and they share similar saving/investment behaviors. Firms in the energy sector, telecommunications, and other non-categorized firms show significant negative net saving rates as gross saving is more than offset by large scale investments.
- **Gross saving exhibit cyclical fluctuations and investment was positively correlated with gross saving up to 2012.** Capital expenditure surged during 2013 and 2014, becoming a main engine of GDP growth, and began to decline thereafter. As a result, the net corporate saving rate remained largely stable around zero up to 2012 and entered the negative domain since 2013. It began to pick up since 2015 due to an upswing of gross saving and the continued decline of investment.



² Gross or and net saving rates are defined as shares of total asset, as opposed to profit, because profit can be either positive or negative.

7. The changes in the corporate saving rate almost entirely reflect the changes within each group of firms of similar size or age. We divide firms into groups $i = 1, 2, \dots, I$ by quartiles of size or age, and then employ a standard decomposition method to quantify the contributions of the within- and between-group components to the cumulative changes in the corporate saving rate from 2000 to 2017. Specifically, the changes in the aggregate saving rates from period $t - 1$ to t can be decomposed as follows:

$$\Delta s_t = \frac{1}{2} \sum_i (\omega_{i,t} + \omega_{i,t-1}) \Delta s_{i,t} + \frac{1}{2} \sum_i (s_{i,t} + s_{i,t-1}) \Delta \omega_{i,t},$$

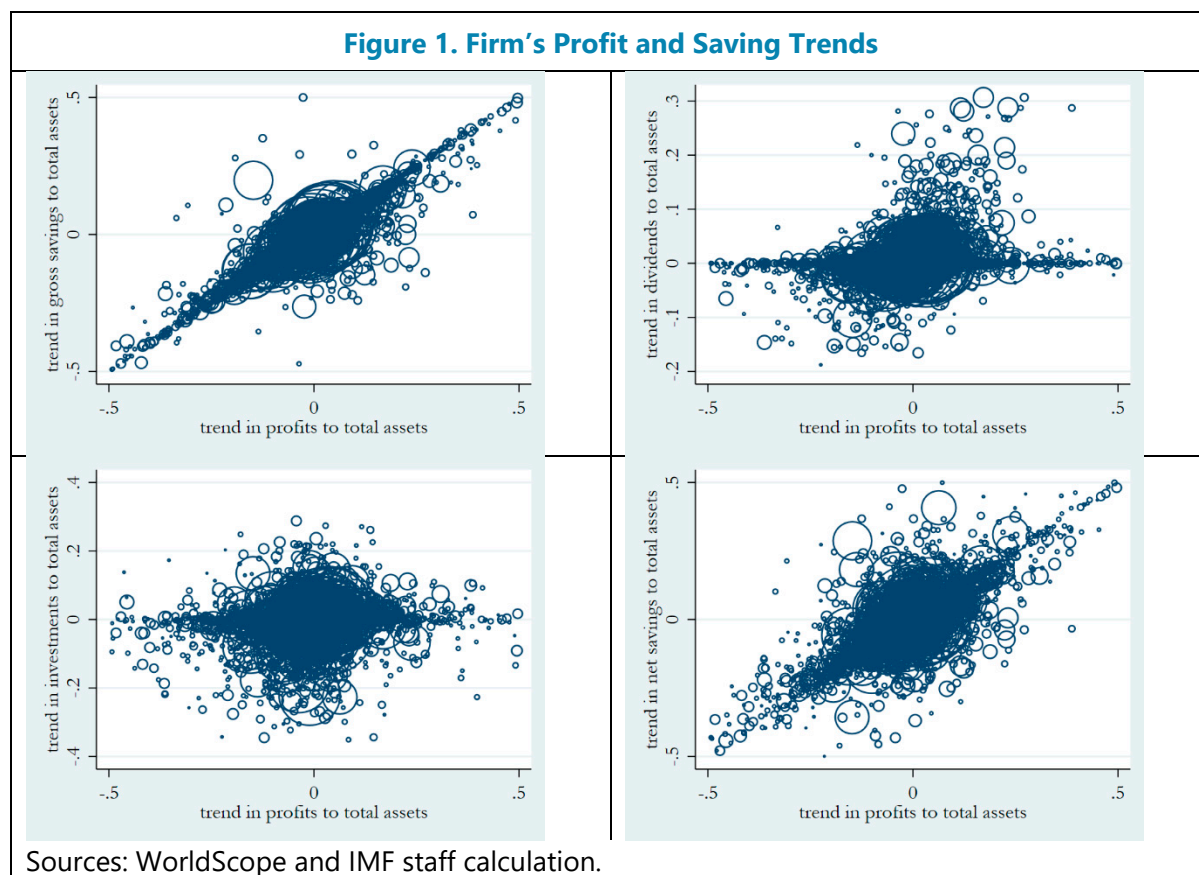
where $\Delta s_{i,t} = s_{i,t} - s_{i,t-1}$ is the change in the gross (or net) saving rate of group i in period t and $\omega_{i,t}$ denotes the share of group i in total asset in period t . The first component in the above equation is the within-group effect; whereas the second component the between-group effect. As is shown in Table 1, the cumulative changes in the aggregate gross saving rate is entirely driven by the within-age group component. While part of the changes in the aggregate gross saving rate is due to the between-size group component, most of the changes is accounted for by changes in the within-size group component. In other words, the change in the aggregate saving rate is not mainly driven by the change in the share of old firms or large firms, relative to 2000; instead, it reflects that firms of similar age or size are behaving differently today compared to 2000. Similar trends are found in the changes in the net saving rate.

Table 1. Malaysia: Within-between Decomposition of Changes in Saving Rate
(2000–2017, percent contribution)

	gross savings		net savings	
	within	between	within	between
age	102.0	-2.0	117.2	-17.2
size	92.1	7.9	97.0	3.0

Notes: The table presents results from the within-between decomposition for groups of firms i defined by quartiles of age and quartiles of size.

8. Firm-level data confirm that in case of large profits (or, equivalently, cash flows), non-financial firms in Malaysia tend to increase their net saving, as opposed to paying more dividends or increasing investment. The four panels below plot the 10-year trend in percentage point in firm profit against the trends in the main components of it. The area of each circle corresponds to a firm's average size over the sample period. The top panels show a strong cross-sectional relationship between trends in gross saving rate and trends in profit relative to total asset, partly because of a weak correlation between profit and dividends. The bottom panels show that trends in investment are uncorrelated with trends in profit, leading to a meaningful positive relationship between profit and net saving rate. These conclusions are robust if the 10-year trend is replaced with a 5-year trend.



D. External Financing Dependence and Excess Net Saving by Firms

9. Industries have different dependence on external funds, depending on the technological characteristics of the industry. We define the external financing dependence (EFD) at the industrial level following a two-step process developed by Rajan and Zingales (1998). First, we derive a firm's EFD by summing the firm's use of external finance (borrowings and equity issues, which equals total capital expenditure less cash flows from operations) over a 10-year period and then divide it by the sum of capital expenditure over the same period, i.e., $(CapEx - Opt. CashFlow)/CapEx$.³ Then, to summarize the EFDs across all firms in an industry, we use the industry median.⁴

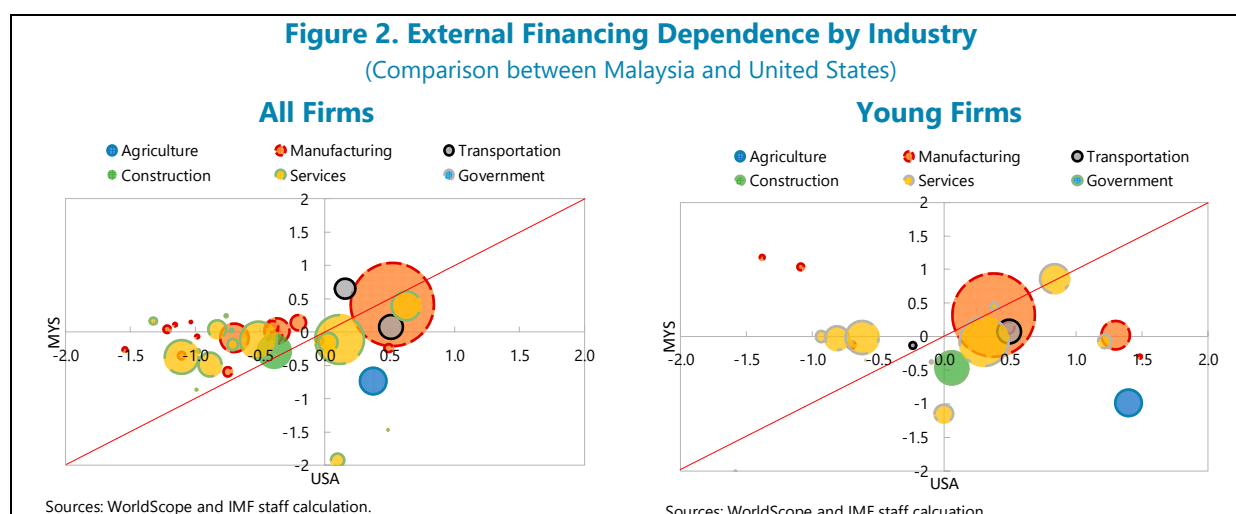
10. While an industry's actual dependence on external financing may differ significantly across countries, its desired dependence on external funds is identified using the data on

³ The sum of cash flows over a period of 10 years could be a good approximation of cumulative cash stock, unless the firm had a large initial cash stock in the beginning of the period (e.g., mature firms).

⁴ Similar to Rajan and Zingales (1998), we treat large and small firms equally, which allows us to prevent large, mature firms from swamping the information of small firms (e.g., Apple's large free cash flow should mask the possible constraint faced by smaller IT firms).

firms in the United States and applied to other countries. This approach is reasonable because: (i) the production functions⁵ of the same industry are similar across different countries—particularly, the same industry in the manufacturing sector is more likely to use similar technologies across different countries than the services sector does; and (ii) capital markets in the United States are relatively frictionless—as a result, the actual amount of external funds raised by a firm in the United States reflects the technological demand for financing, as opposed to supply constraints.

11. The trend analysis above indicates a high dependence of listed firms in Malaysia on internal funds (savings) to finance their investments or, equivalently, a lower dependence on external funds. This is particularly true when we compare the actual external financing dependence of firms in Malaysia with firms in the same industries in the United States. The top panels in the figure below show that across a variety of industries, there are significant gaps, in terms of use of external funds, between Malaysia and the United States,⁶ particularly among young firms (i.e., less than ten years from listing).⁷ This is perhaps because firms tend to depend more on external funds at early stage, as is shown by the declining median EFD of firms in the United States in the bottom panels below. In addition, the EFD gaps between Malaysia and the United States are largely attributable to the difference in industries with high desired EFDs.⁸



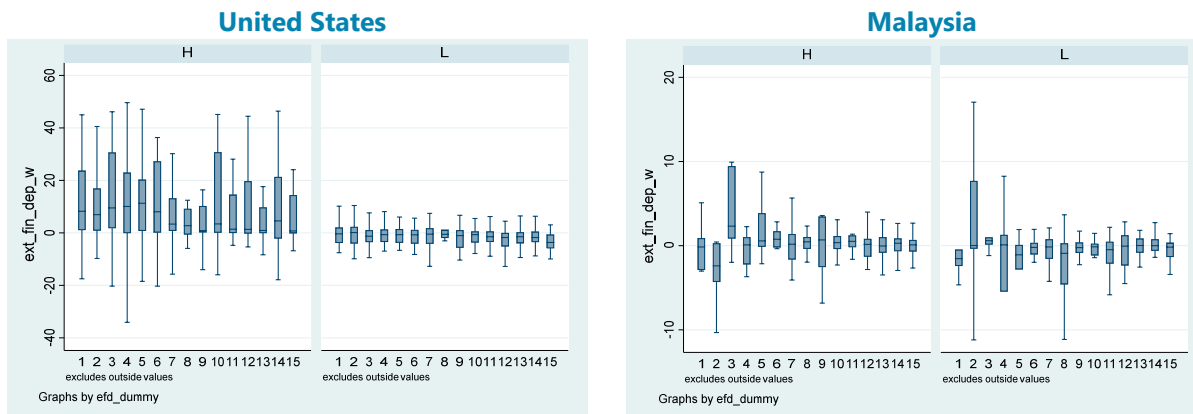
⁵ Production function is used to represent the investment cycle of an industry driven by the technological characteristics associated with the industry, such as size of initial investment, implementation period, cash harvest period, and follow-up investment.

⁶ The 45-degree line (red solid line) represents industries with identical EFD in Malaysia as in the United States. The size of each bubble is proportional to the total asset size of the corresponding industry. The bubbles below the 45-degree line designate industries that depict lower external financial dependence in Malaysia compared to the US. In addition, the chart does not show industries with large X-values and small Y-values (i.e., industries with large EFD in the United States). These outliers include transportation by air, chemicals and allied products, etc.

⁷ The interquartile range of Malaysian industries' EFDs is 1.1 (75th percentile: 0.7; 25th percentile: -0.4); whereas it is 2.1 (75th percentile: 1.4; 25th percentile: -0.7) for American industries.

⁸ We define an industry is of high EFD if its desired EFD is above the median EFD across all industries. The headers H and L in the bottom panels below correspond to industries with high and low EFD, respectively.

Figure 3. External Financing Dependence by Age
(Number of years since IPO)



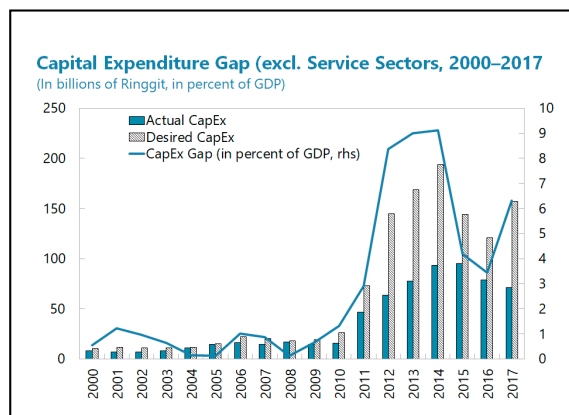
Sources: WorldScope and IMF staff calculation.
Note: The header H and L refer to industries with high and low external financing dependence, respectively. We define an industry is of high EFD if its desired EFD is above the median EFD across all industries.

12. Capital expenditure (CapEx) shortfall could be used as a proxy for excess net saving by firms.

Taking the cash flow of a firm as given, the firm can generate excess net saving through under-investment. While paying less dividends could lead to over-saving (gross), it is more reasonable to assume that the investment channel plays a more significant role in understanding excess saving by firms. Specifically, the *CapEx gap* of a firm *j* in industry *i*, $CapEx\ Gap_{ij}$, is defined as the amount of investment required to restore its actual capital expenditure, over a 10-year period, to the desired dependence of external financing of industry *i*, $EFD_i^{desired}$. That is,

$$CapEx\ Gap_{ij} = CapEx_{ij}^{desired} - CapEx_{ij}^{actual},$$

where $CapEx_{ij}^{desired} = Opt.CashFlow_{ij} / (1 - EFD_i^{desired})$.⁹ To make this approach more plausible, we also make a distinction between the $EFD_i^{desired}$ for young and old firms in industry *i*, respectively. Preliminary calculation shows that the total CapEx gap of all listed firms (excluding the services sector) accounts for 2.8 percent of GDP on average from 2000 to 2017.



⁹ Some caveats are worth mentioning. First, the identification of the desired EFDs for Malaysian firms hinges on the assumption that firms in the same industry share similar technologies and investment cycles across countries. This assumption would be challenged, for example, by the distinct roles that firms in different countries play in the global value chain. Second, this is only a partial equilibrium result, in the sense that it does not consider the counterfactual effect of increased capital expenditure on future cash flows (i.e., operational cash flows are taken as given).

E. Determinants of Net Saving by Firms

13. Many drivers could help explain why firms tend to generate excess net savings in the form of liquid financial assets. Following the literature, a firm's saving behavior can be rationalized by the following motives: (i) reducing future transaction costs when the costs of raising external funds are high (Almeida et al., 2004); (ii) the precautionary demand for cash to manage a potential liquidity shortfall when external financing is not available (Han and Qiu, 2007); (iii) the misalignment between managers' and shareholders' propensity to save, which could be exacerbated by weak corporate governance (Opler et al., 1999; Aoyagi and Giovanni, 2014; Sher, 2014); and (iv) avoiding higher tax on repatriated profits by holding excess cash balances abroad. In addition, this paper suggests that the desired external financing dependence, which reflects the technological features of an industry, be an important determinant of corporate saving.

14. Random effect panel data regressions are employed to test the above theories. We will focus empirical tests on the first two hypotheses above (namely, the transaction cost theory and the precautionary demand theory) and the role of external financing dependence, as well as the interaction between them. Specifically, we estimate the following equation:

$$s_{ijt} = \alpha \cdot EFD_i^{desired} + \gamma \cdot \overline{profit}_{it} + x'_{ijt}\beta + \theta_t + \epsilon_{ij} + u_{ijt}$$

where $EFD_i^{desired}$ is industry i 's desired external financing dependence, \overline{profit}_{it} is industry i 's average profit as a share of total asset in period t , x_{ijt} is a vector of firm-specific variables for firm j in industry i in period t , and θ_t is year dummies. The firm-specific vector, x_{ijt} , includes $size_{ijt}$, age_group_{ijt} , I_gov_{ijt} , $I_foreign_{ijt}$, Q_{ijt} , and $cash_vol_{ijt}$. Specifically, $size_{ijt}$ is the natural logarithm of total asset and age_group_{ijt} is the quartile of firm age since incorporation. I_gov_{ijt} and $I_foreign_{ijt}$ are ownership dummies, with $I_gov_{ijt} = 1$ if government is the largest stakeholder of firm j and $I_foreign_{ijt} = 1$ if firm j is a foreign company.¹⁰ Q_{ijt} is Tobin's Q, measured by the ratio of the sum of market capitalization and total debt to total assets. $cash_vol_{ijt}$ measures the cash flow volatility over the past 5 years. In alternative specifications, x_{ijt} also includes some interaction terms between firm-specific characteristics and the desired external financing dependence. Estimation results are presented in Table 2. Column (1) to (6) run the baseline specification with only one firm-specific variable included at a time. Column (7) shows the results for the full regression with both industry- and firm-specific variables.¹¹

15. For both industry- and firm-specific variables, signs of the statistically significant coefficients support the transaction cost and precautionary saving theories and the role of external financing dependence.

- *On industry-specific variables:* the negative relationship between net saving and industry-specific desired external financing dependence is intuitive. This is because when averaging over time, industries that rely more heavily on external finance for technological reasons should invest

¹⁰ Ownership data is obtained from Orbis and matched to the WorldScope database using industry category, incorporation year, and firm size.

¹¹ Coefficients on the year dummies are not shown in the table to save space.

more than other industries. The positive coefficient on industry-specific average profit reflects the propensity of firms to save part of cash flow for either transaction cost or precautionary demand motives. The negative coefficient on the square of industry-specific average profit implies that firms in more profitable industries tend to invest a larger share of cash flow and thus save less.

- *On firm-specific variables:* consistent with the empirical literature, firm size is negatively correlated with the net saving rate, possibly because larger firms can access external funds at lower cost or because they have accumulated ample savings in the past. The coefficient on firm age quartile is negative after controlling for firm size, consistent with our finding that young firms are more dependent on external funds than mature firms, which could explain why they tend to save more. Government-linked companies (GLCs) save less than private firms, partly because—as data is shown—they are paying more dividends to shareholders and invest more than private firms. There is no statistically significant difference in the net saving rate between domestic and foreign firms. The negative relationship between the net saving rate and Tobin's Q seems inconsistent with either theory of transaction cost or precautionary demand—as it implies that firms with more future investment opportunities do not want to save more in the current period to hedge against possible liquidity shortfalls in the future. Nevertheless, after interacting Tobin's Q with the desired external financing dependence, the coefficient on the interaction term turns positive. That is, promising firms in industries with larger EFD have an incentive to save more, consistent with both transaction cost and precautionary saving motives. The coefficient on cash flow volatility is insignificant in the full regression.

F. Policy Implications

16. While preliminary, the above results suggest that relaxing firms' external financing constraints and lifting productivity growth could help encourage investment and reduce excess corporate saving. On one hand, the low external fund utilization relative to the U.S., as well as the higher propensity to save among promising firms in external financing dependent industries, all suggest that some firms in Malaysia could be financially constrained. This conclusion is complemented by RAM Business Confidence Index for 2018Q3-Q4, which indicates that SMEs are pessimistic about access to bank financing. Therefore, reforms that aim at relaxing the financial constraints faced by some firms in Malaysia (e.g., financial deepening measures) could help unleash investment demand by these firms. On the other hand, while we showed that firms in more profitable industries tend to invest more, the number of profitable investment opportunities could be increased by further encouraging total factor productivity growth. Policies that aim at lifting productivity growth (e.g., improving education and encouraging innovation, technology adoption, and a move up the value chain) could be expected to lead to an increase in new investment opportunities over the medium term, which would help with rebalancing.

Table 2. Malaysia: Regressions on Corporate Net Saving

	Specifications						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Industry-specific features</i>							
EFD ^{desired}	-0.026 (0.005)***	-0.021 (0.005)***	-0.022 (0.005)***	-0.020 (0.004)***	-0.021 (0.004)***	-0.026 (0.005)***	-0.015 (0.004)***
average profit	0.291 (0.029)***	0.288 (0.029)***	0.288 (0.029)***	0.290 (0.028)***	0.289 (0.028)***	0.293 (0.029)***	0.285 (0.028)***
average profit ²	-0.292 (0.044)***	-0.289 (0.044)***	-0.289 (0.044)***	-0.304 (0.042)***	-0.304 (0.042)***	-0.294 (0.044)***	-0.298 (0.042)***
<i>Firm-specific variables</i>							
size	0.046 (0.002)***	0.047 (0.002)***	0.047 (0.002)***	0.038 (0.002)***	0.038 (0.002)***	0.046 (0.002)***	0.040 (0.002)***
age quartile	-0.023 (0.003)***	-0.021 (0.003)***	-0.021 (0.003)***	-0.018 (0.003)***	-0.018 (0.003)***	-0.023 (0.003)***	-0.014 (0.003)***
I _{gov}		-0.065 (0.026)**					-0.074 (0.021)***
I _{foreign}			-0.029 (0.019)				-0.025 (0.017)
Tobin's Q				-0.0011 (0.0002)***			- -
Tobin's Q*EFD ^{desired}					0.0008 (0.0002)***		0.0007 (0.0002)***
cash flow vol.						-0.005 (0.002)**	-0.002 (0.002)**
Obs.	11,495	11,495	11,495	10,847	10,847	11,472	10,845
No. of Firms	953	953	953	927	927	948	925
R ²	0.047	0.068	0.066	0.047	0.046	0.049	0.070

Note: Standard errors are reported in parentheses. *** p<1%, ** p<5%, * p<10%.

G. Conclusions

17. In the past two decades, Malaysian companies have maintained high net saving rates, contributing to relatively large national saving. Micro firm level data suggest that corporate gross saving is procyclical due to procyclical profits and acyclical dividend payments. Increases in gross saving does not lead to higher investment, but rather to a larger holding of liquid financial assets (net saving). In external-financing dependent industries, there is evidence of gaps between the actual and desired level of external financing, particularly among young firms. Using CapEx gap as a proxy, our calculation suggests that industrial firms contribute positively to the current account surplus. Moreover, regression results show that the transaction cost and precautionary saving motives, as well as their interaction with external financing dependence, could play an important role in explaining corporate net saving. To reduce excess corporate saving, policies could aim at relaxing firms' financial constraints and lifting productivity growth.

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MEDIUM-TERM FISCAL FRAMEWORK IN MALAYSIA

A. Introduction

1. Malaysia's government is considering options to strengthen the medium-term fiscal framework. The authorities are considering steps to achieve fiscal consolidation and improve public financial management. Most notably, the new administration has announced the intention to table a Fiscal Responsibility Act (FRA) by 2021. The formulation of a FRA will not only offer a legal basis for fiscal discipline, but also provide an opportunity to review and strengthen the medium-term fiscal framework in a comprehensive manner. In fact, the recent evolution of fiscal rules across countries highlights the importance of a holistic approach, striking a balance among three properties of such rules – simplicity, flexibility, and enforceability. Against this backdrop, this paper reviews Malaysia's fiscal framework in light of international best practice and discusses potential reform options.

B. Overview of Malaysia's Fiscal Framework

2. Malaysia's fiscal policy is currently anchored by a commitment to keep total federal government debt within 55 percent of GDP. Malaysia's government has multiple legal limits on debt instruments. MGS (Malaysian Government Securities), MGII (Malaysian Government Investment Issues) and MITB (Islamic Treasury Bills) can only be issued up to a total of 55 percent of GDP under the Loan (Local) Act 1959 and the Government Funding Act 1983. Moreover, the External Loans Act 1963 restricts offshore borrowing within MYR 35 billion. The Treasury Bills Act 1946 limits short-term MTB (Malaysian Treasury Bills) at MYR 10 billion. Overarching these legal limits on debt instruments, fiscal policy is currently guided by a commitment to keep the overall federal government debt within 55 percent of GDP (see Table 1).

3. A medium-term fiscal deficit target of 2 percent of GDP is a key operational guideline. The overall balance has been the authorities' main operational tool to observe the debt anchor. Although the authorities reset their medium-term consolidation path in the 2019 budget given a higher deficit outcome in 2018, the revised consolidation path is expected to maintain the debt-to-GDP ratio within 55 percent. The government also has a so-called "golden rule"—borrowings are only allowed to finance development expenditure. In addition, there is an administrative guideline that debt service charges should remain below 15 percent of revenue or operating expenditure.

Table 1. Malaysia: Debt and Administrative Guidelines

Rules	Statutory	Administrative	Data
Borrowings are only to finance development expenditure	Loan (Local) Act 1959	Current balance always in surplus to ensure operating expenditure is financed by revenue	
Domestic debt ceiling (MGS, MGII, MITB)	Not exceeding 55 percent of GDP Statute Paper 76 of 2009, Loan (Local) Act 1959 and Government Funding Act 1983	Self imposed limit of 55% of GDP	As of June 2018, in percent of GDP Total: 50.7 Domestic debt: 49.2 Offshore borrowings: 1.5 (RM 21 billion)
Offshore borrowing ceiling	Not exceeding RM35 billion Statute Paper 77 of 2009, External Loans Act 1963		
Issuances of conventional Treasury bills	Not exceeding RM10 billion Treasury Bills (Local) Act 1946		
Limit of debt service charges (DSC)	Allocation for debt service charges are charged items and not required to be tabled to Parliament Federal Constitution Article 98 (1)(b)	DSC \leq 15% of revenue or operating expenditure	2018 estimate: 13.1 percent of GDP

Source: Ministry of Finance, Malaysia

4. Public financial management reforms are in progress. A strong public financial management system is an integral part of a credible medium-term fiscal framework, especially in the context of compliance with fiscal rules. The authorities have made substantial progress on this front. In 2013, the government established the Fiscal Policy Committee (FPC) chaired by the Prime Minister and the Fiscal Policy Office (FPO) within the Ministry of Finance. The FPO supports the FPC through technical and analytical work on medium-term fiscal issues. In addition, the 2016 budget adopted a Medium-Term Fiscal Framework (MTFF), which provides a multiyear projection of the government fiscal position together with underlying macroeconomic assumptions.¹ The MTFF is updated annually on a rolling basis. These reforms have strengthened the capacity of public financial management and helped fiscal policy formulation. For example, the 2019 Fiscal Outlook, published together with the 2019 budget, provides a fuller discussion of the 2018 fiscal outturn, including the underlying factors explaining the deviation from the previous fiscal consolidation path. The 2019 Fiscal Outlook also enhances the analysis of fiscal risks and liabilities.

C. Remaining Challenges

Guiding Principles from International Best Practice

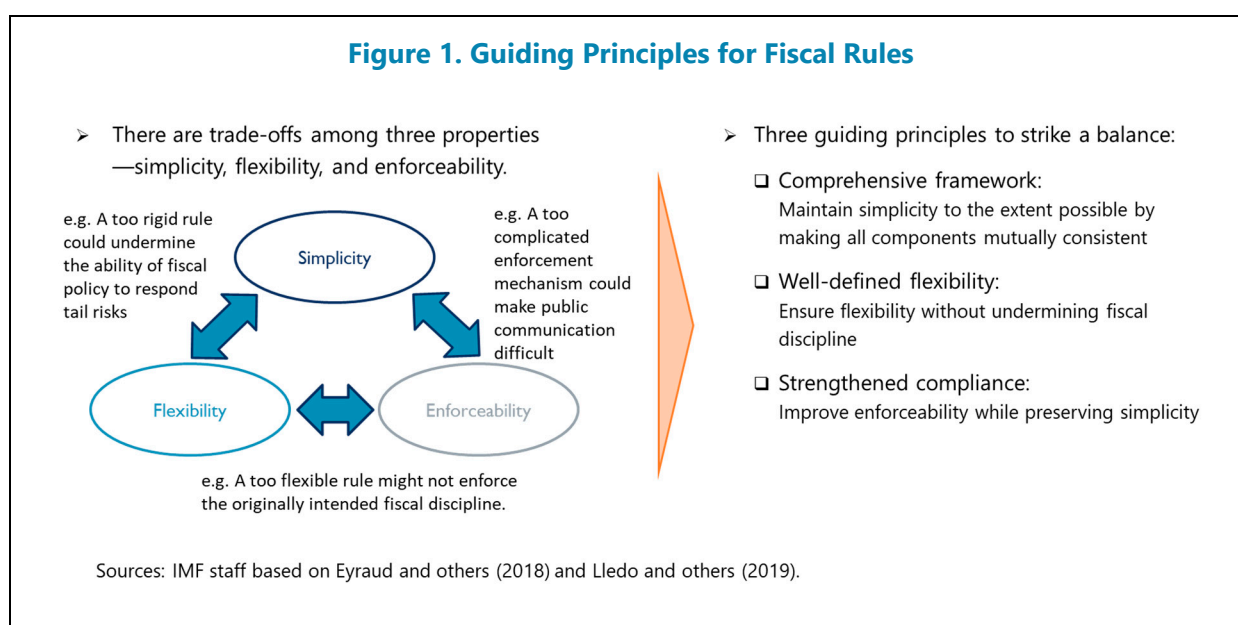
5. The recent evolution of rule-based frameworks across countries highlights the importance of striking a balance among three properties – simplicity, flexibility, and enforceability. Each property is desirable for effective fiscal rules. But it is challenging to satisfy these three properties at the same time, as there are clear trade-offs among them. For example, a too simple rule could be easy to enforce, but could lack flexibility to respond to severe economic shocks. By contrast, a too flexible rule might not help enforce the originally-intended fiscal discipline as it risks allowing the government to easily deviate from principles. Building on international

¹ See Economic Report 2013/2014 and 2015/2016.

experiences, Eyraud and others (2018) propose the following guiding principles to address these trade-offs:

- *Comprehensive framework*: The fiscal framework should include a debt anchor to ensure medium-term debt sustainability and a limited number of operational rules. The fiscal anchor (typically debt-to-GDP ratio) and operational rules (such as fiscal balance rules and expenditure rules) need to be mutually consistent.
- *Well-defined flexibility*: Flexibility should be stipulated in a simple and transparent manner, for example by a clear escape clause. Complicated mechanisms should be avoided as they could undermine the ability to guide expectations and be subject to manipulation.
- *Strengthened compliance*: Enforceability should be secured by enhancing compliance mechanisms and raising accountability costs for noncompliers.

The following subsection gives an assessment of Malaysia's current fiscal framework with focus on these three guiding principles.



Assessment of Malaysia's Framework

6. The authorities' debt anchor seems to have played a critical role in fiscal discipline.

After the Global Financial Crisis (GFC), the federal government deficit surged from 3.1 percent in 2007 to 6.7 percent in 2009. The federal government debt increased from 40.1 percent in 2007 to 50.8 percent in 2009 and peaked at 54.4 percent in 2015 (see text chart). However, over the post-GFC period, the debt anchor of 55 percent of GDP has never been breached, and may have helped the gradual fiscal consolidation. In addition, the authorities' clear commitment to keep the overall

federal government debt within 55 percent of GDP has facilitated communication to the public, compared to legal limits on respective debt instruments.

7. The authorities' fiscal deficit target is simple, closely linked to debt dynamics, but not fully operationalized in the annual budget process.

Fund staff simulations suggest that, under the status quo scenario without fiscal consolidation, there is a 15-20 percent probability that the debt trajectory will exceed the debt-to-GDP ceiling of 55 percent.² To contain the

probability of breaching the anchor at a prudent level (within 10 percent), the debt level in normal times should be lowered to 46 percent of GDP (see Figure 2). Against this backdrop, the authorities' fiscal consolidation path appears broadly consistent with the debt anchor, as it would reduce the debt-to-GDP ratio to 47 percent of GDP by 2024. These simulations demonstrate the advantages of fiscal deficit targets in terms of simplicity and direct linkage with debt dynamics. This also helps the authorities' communication to the public and markets. However, in the absence of a full-fledged medium term macro-framework, the authorities' medium-term deficit target is not fully operationalized in the annual budget process, which could weaken its enforceability.

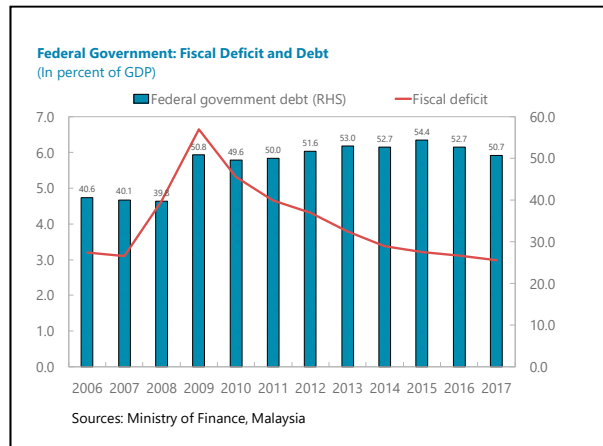
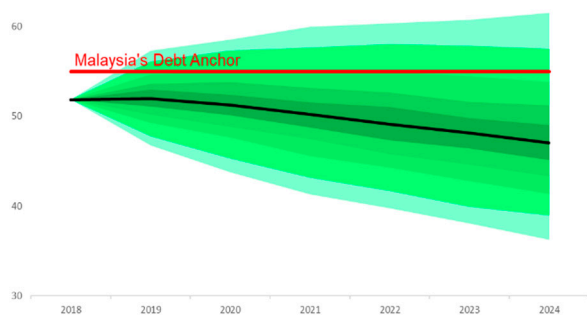


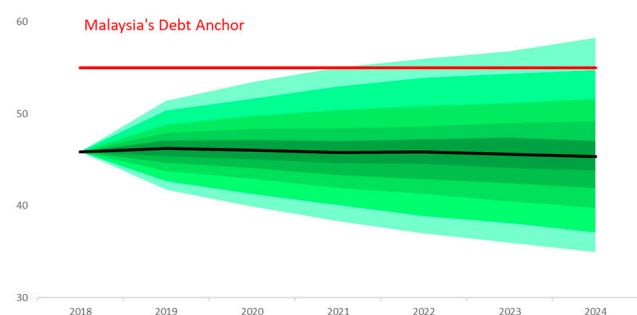
Figure 2. Risks of Breaching Debt Anchor

Status Quo Scenario



Source: IMF staff calculations.

Debt-to-GDP Reduced to 46 Percent



Source: IMF staff calculations.

8. It is also important to be mindful of the procyclical nature of an overall fiscal balance commitment. In general, nominal fiscal deficit targets do not consider the cyclical position of the economy. Hence, during periods of economic downturn, meeting the target could require undesirable expenditure cuts to offset the decline in tax revenue. In addition, the overall fiscal balance is affected by debt service payments, which cannot be fully controlled by the government.

² See IMF 2018b for the methodology.

In the case of Malaysia, the procyclical nature of fiscal deficit targets is further exacerbated by the dependence of oil-related revenues on the economic cycle. The authorities could calibrate the fiscal stance by taking into account the underlying economic conditions. However, structural changes and exogenous shocks would render this exercise difficult, adding complexity to public communication. This underscores the importance of well-defined escape clauses to guide expectations about fiscal stance.

9. There is scope for further improvement in public financial management. The adoption of the MTFF in the 2016 budget was an important first step to embed the debt anchor and fiscal deficit target in a medium-term framework. However, the publication of multi-year fiscal projections is still limited to aggregate numbers with only a few macro assumptions. At the same time, the three-year projection period may not be fully consistent with the authorities' medium-term deficit target (as the achievement of a 2 percent deficit target could take longer than 3 years). Underlying macroeconomic assumptions seem to be in a realistic range (Table 2). But the credibility of official projections could benefit from regular and independent realism assessments. The deficit target could be enhanced by specification of consolidation measures.

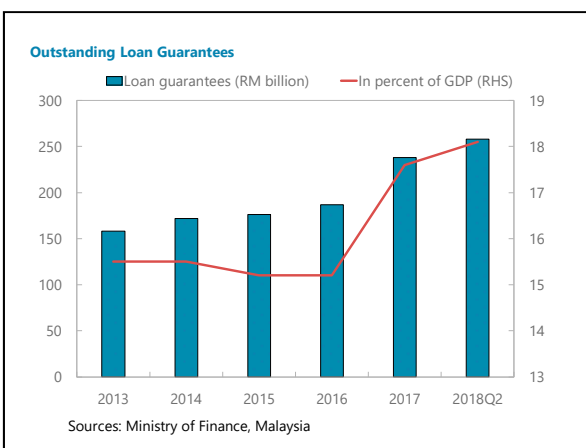
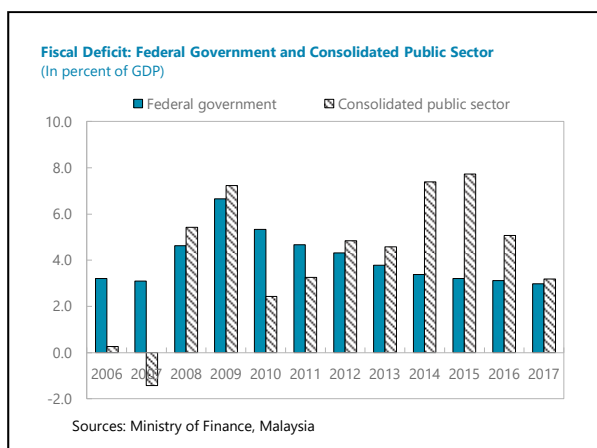
Table 2. Malaysia: Macroeconomic Assumptions in MTFF

	Assumptions for 2019-2021 (Fiscal Outlook 2019)	Assumptions for 2016-2018 (Economic Report 2015/2016)	Average			Average (2016-2018)
			2016	2017	2018 1/	
Real GDP growth	4.5-5.5	4.5-5.5	4.2	5.9	4.7	4.9
Nominal GDP growth	6.8-8.2	7.0-8.0	6.3	9.9	5.4	7.2

1/ IMF staff estimates.

Sources: Ministry of Finance, Malaysia; CEIC Data; and staff estimates.

10. Institutional coverage is also an issue for consideration. Currently, the MTFF is centered on the federal government budget. However, the consolidated public-sector balance shows different dynamics compared to the federal government balance. Anchoring the MTFF on federal government fiscal outcomes risks missing an important dimension of the public sector. In fact, the new administration has taken steps to bring on budget identified off-budget spending. The 2019 Fiscal Outlook extended the analysis of local and state governments and statutory bodies, including the related government guarantees and possible future payment obligations related to Public-Private-Partnerships (PPPs) projects. These efforts could be explicitly framed into the MTFF because the limitation of coverage could create loopholes and undermine the enforceability of fiscal rules.



D. Reform Options

11. The FRA should be the center of an overall reform strategy and should stipulate key features of the fiscal framework to ensure a long-lasting impact. Defining key features of the fiscal framework in high-level legislation will help increase the credibility and durability of reforms. Specifically, the FRA should clearly stipulate fiscal objectives, the fiscal anchor, and the key components of the medium-term fiscal framework including operational rules and the institutional set-up. Well-defined escape clauses should be included in the FRA to secure needed flexibility while limiting discretionary deviation from operational rules. In addition, the FRA should also include reporting requirements, as timely reporting and publication of fiscal outcomes are critical to increase accountability and compliance.

12. The Medium-Term Fiscal Framework should be further elaborated under the FRA. The MTFF needs to be consistent with the fiscal objectives and key features specified in the FRA. Technical details could be further developed in lower-level legislation or government decrees. Potential options include:

- Providing more detailed annual fiscal projections and macroeconomic assumptions
- Extending the projection period (5-10 years) in line with the time-horizon of medium-term fiscal targets
- Incorporating a multi-year budgeting process with the aim of guiding line ministries
- Specifying policy measures to deliver needed fiscal consolidation over the medium-term
- Periodically monitoring the realism of macroeconomic assumptions
- Providing annual fiscal risk statements
- Expanding the institutional coverage

13. Introducing an expenditure rule could strengthen the fiscal framework. Expenditure rules can help avoid procyclicality and are generally easy to communicate and implement, and compliance can be relatively easily monitored. There are potential alternatives including targeting the non-oil primary balance or the structural balance. Non-oil primary balance rules would help protect fiscal policy formulation from oil-price fluctuations. Nonetheless, these rules would not fully address the issue of procyclicality associated with non-oil business cycles. Structural balance rules take into account the business cycle and one-off factors. However, compared to expenditure rules, structural balance rules could be difficult to compute, monitor, and communicate.

14. An expenditure rule should be designed to secure debt sustainability, support countercyclical policy, and meet government spending needs. Specifically, the proposed expenditure rule would include the following key features:

- *The expenditure rule would cap the growth rate of primary expenditure.* This allows automatic stabilizers to operate by helping contain expenditure growth in an economic upturn while preventing large expenditure cuts in a downturn. Expenditure rules in percent of GDP should be avoided as they tend to be procyclical.

- *The growth rate of expenditure would need to be consistent with the authorities' debt anchor.* The expenditure rule should achieve the debt anchor under realistic assumptions on GDP growth, revenue, and financing costs and be resilient to cyclical fluctuations. Nonetheless, since primary expenditure has only partial implications on debt dynamics, there is a risk that the implementation of an expenditure rule would not deliver intended debt dynamics due to, for example, a permanent shift in trend growth. To address this concern, a feedback mechanism is warranted to adjust the growth rate of expenditure when the projected debt trajectory deviates from the anchor.
- *The growth rate of expenditure would be calibrated to meet the government's strategic objectives.* Given Malaysia's relatively low tax revenue and the need to raise spending to meet social and development objectives, revenue mobilization is a priority, as the expenditure rule also needs to be based on realistic and achievable revenue projections. Therefore, the growth rate of expenditure should not be constrained by current revenue mobilization capacity. Rather, specific revenue mobilization measures would need to be developed to meet the needs specified by the spending rule and ensure its consistency with planned revenues.³

15. Illustrative scenarios: Table 3 illustrates the application of expenditure rules based on staff's macro-fiscal projection (trend nominal GDP growth at 7 percent). Without additional revenue mobilization, the growth rate of expenditure would need to be 5 percent—below the trend nominal GDP growth—to achieve a fiscal deficit of 2 percent of GDP by 2024 (in line with the authorities' consolidation plan). However, this would lower the non-interest expenditure in percent GDP from 15.9 percent in 2020 to 14.5 percent in 2024 and undermine the authorities' ability to meet social and development objectives. On the other hand, as shown in the Staff Report (main text, paragraph 14), staff recommends that the primary expenditure broadly remain at the same level in percent of GDP to accommodate additional spending needs. In this case, revenue mobilization measures need to be specified to allow non-interest expenditure to grow at the trend nominal GDP growth rate while achieving a fiscal deficit of 2 percent by 2024. To this end, revenue in percent of GDP should increase from 15.0 percent in 2020 to 16.1 percent in 2024.

³ For example, the European expenditure benchmark takes into account the revenue side by capping the growth rate of expenditure net of new revenue mobilization measures.

Table 3. Malaysia: Illustrative Scenarios**Assumptions**

Trend nominal GDP growth: 7 percent

Consolidation path: Achieving fiscal deficit of 2 percent of GDP by 2024 (in line with the authorities' plan)

Scenarios

		2020	2021	2022	2023	2024
Status quo (without consolidation)	Revenue	15.0%	14.9%	14.8%	14.7%	14.7%
	Non-interest expenditure	15.9%	15.7%	15.6%	15.4%	15.4%
	Fiscal balance	-3.0%	-3.0%	-2.9%	-2.9%	-2.9%
Consolidation without revenue mobilization (Expenditure growth: 5 percent every year)	Revenue	15.0%	14.9%	14.8%	14.7%	14.7%
	Non-interest expenditure	15.9%	15.5%	15.2%	14.8%	14.5%
	Fiscal balance	-3.0%	-2.8%	-2.5%	-2.3%	-2.0%
Consolidation with revenue mobilization (Expenditure growth in line with trend nominal GDP growth)	Revenue	15.0%	15.2%	15.5%	15.7%	16.1%
	Non-interest expenditure	15.9%	15.9%	15.9%	15.9%	15.9%
	Fiscal balance	-3.0%	-2.8%	-2.5%	-2.3%	-2.0%

Sources: IMF staff calculations based on Public Debt Sustainability Analysis.

16. Well-defined escape clauses will support the rule-based framework. Fiscal rules need to be resilient to the ordinary business cycle fluctuations. Expenditure rules have advantages in terms of flexibility, as automatic stabilizers operate properly by allowing tax revenue to fluctuate along with the business cycle. At the same time, a well-defined escape clause is needed to allow flexibility in response to tail risk events. The escape clause should define: (i) a limited set of events triggering the operation of the clause, (ii) for how long fiscal policy can deviate from the targets, and (iii) a correction mechanism to the targets after the operation of the escape clause.

17. Effectiveness of fiscal rules hinges on strong compliance. Political incentives to comply with fiscal rules are indispensable for making the rules effective. But, political incentives could deteriorate over time if there are no costs for breaching the rules. Recent efforts by the authorities to increase the accountability and transparency of fiscal outcomes should help increase political incentives by raising the reputational costs associated with noncompliance. Greater fiscal transparency through obligations to publicly explain deviations from the fiscal rule can further enhance compliance. An independent fiscal institution could be useful to analyze fiscal policy developments and alert to the risk of breaching fiscal rules.

E. Conclusions

18. Malaysia's debt anchor plays an important role in maintaining market confidence. However, the overall fiscal framework should be further upgraded in a holistic manner under the FRA to be tabled by 2021. The FRA should clearly stipulate fiscal objectives, the fiscal anchor, and the key components of the medium-term fiscal framework. The strengthened medium-term fiscal framework should include: longer fiscal projections (5-10-years) building on realistic economic assumptions; a multi-year budgeting process; and concrete consolidation measures over the medium-term. To avoid procyclical fiscal policy, introducing an expenditure rule could be considered. Well-defined escape clauses and a formal accountability mechanism will support the effectiveness of the rules-based framework.

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