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# Public Financing and Domestic Borrowing in Fiji: A Rising Concern in the Pandemic

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***Abstract****: A deficit budget is highly favored for economic progress thus, many at times the consequences of funding the deficits are ignored. Fiji government's budget shortfall is mostly sourced by domestic borrowing. Furthermore, Non-Banking Financial Institutions dominate domestic debt markets. This study validates domestic debts as statistically significant. However, in this pandemic exhausting domestic borrowing will be a challenge given the adverse outcomes related to slowdown in economic activities. Policy makers will need to deliberate on tradeoff between internal and external borrowing while dwelling on the requirements of the new normal.*

**Keywords:** Domestic Debts, Economics Progress, Pandemic and Debt Management Policy.

## 1.0 Introduction

The national budget provides insights into the government's planned activities for the respective fiscal year. A surplus budget outlines contraction in government spending and is deemed unfavorable by citizens however; a deficit budget favors increased government spending over revenue generation. The dilemma for policy makers is how to sustain the shortfall in the budget estimates. The two avenues for meeting the shortfalls are external or domestic borrowing. Panniza (2008) justified external borrowing as increasing a country's access to resources unlike domestic borrowing that involves transferring resources within the country. However, external borrowing is associated with vulnerabilities that may lead to debt crisis. As countries switch from external to domestic borrowing few rising issues are; (1) trading a currency mismatch for a maturity mismatch, (2) pressure on institutional investors and local banks to absorb too much of government debts thus, financial instability and (3) crowding out private investment (Panniza, 2008).

Thus, most policy makers are guided by the debt management policy in proportionally domestic and external financing. Fiji's debt mix is pegged at 70:30 (domestic to external). The two main components of operating revenue for Fiji government are direct and indirect taxes. The ADB (2014) reported that Fiji government through improved tax compliance, better tax administration, mandatory reporting, adoption of tax identification numbers and simplification of tax administration system aspire to increase direct tax collection. However, indirect taxes consistently make up the largest proportion of government operating revenue and on average constitute more than 60% of total revenue collected. The government expenditure was forecasted to FJ$2 billion in 2012 (first time expenditure was in billion). Furthermore, the expenditure was estimated to be FJ$4.651 billion for 2018-2019 however, the 2019–2020 fiscal year noted a decline in expenditure allocation by FJ$807,617,000 to FJ$3,841,928,900.

This study explores the significance of domestic financing. Furthermore, the research contributes by raising potential challenges of domestic debts in light of liquidity and the pandemic. The article is organized as follows. Section 2 discusses the existing literature on domestic financing. Section 3 describes the empirical model and data for significance testing. Section 4 discusses the results with policy implications while concluding remarks are provided in section 5.

## 2.0 Review of Literature

The debate on domestic financing has attracted proponents and critics justifying their schools of thought. The proponents validate domestic financing to evade foreign exchange risk while boosting economy. On the other hand, critics dispute domestic debt as burdening future generation and contracting potential private investment.

Checherita and Rother (2010) acknowledged that public debt was generally accompanied by an expansion in the size of the government. They found that prior to the 20$^{th}$ century, accumulation of debt was slow and war related while in the 20$^{th}$ century (industrialized countries) government expenditure was enormous. Furthermore, economic and financial crisis also contributed to building up of government debts. Modigliani (1961), refining contributions by Buchanan (1958) and Meade (1958), claimed that the national debt is a burden for next generation, which comes in the form of a condensed flow of income from a minor stock of private capital. He argued that in the long run, national debt also influenced interest rates apart from instigating crowing out.

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According to Karazijienė and Saboniene (2009) public borrowing is inevitable and not reprehensible phenomenon of economic growth. It is a way to stimulate economic growth by injecting money from foreign investors (external debt) into it as well as distributing asset (internal debt) among those who has more than they can use at the moment and those who lack assets for developing economic initiative or other needs. The public debt issuance is a powerful instrument to balance monetary expansion. In this manner the negative impact of the inflows of foreign currencies could be impeded through the placement of public debt (Foncerrada, 2005). Ribeiro, Vaicekauskas and Lakštutienė (2012) cautioned that public finance must be handled with care as too high debts level contracts the Gross Domestic Product. Moreover, Ismihan & Ozkan (2012) elaborated on the negative effect of public debt on financial development especially if the country has limited financial depth and financial development. Kellermann (2007) also added on the unfavorable outcome of long-term public borrowing.

Krugman (1988) and Cohen (1993) as cited in Checherita and Rother (2010) identified negative impact of external borrowing that is up to certain threshold, foreign debt accumulation can promote investment while beyond such a point the debt overhang will start adding negative pressure on investors willingness to provide capital. External debt is more risker given it is difficult to negotiate with foreign investors for better terms in case of debt crisis (Ribeiro, Vaicekauskas and Lakštutienė, 2012). Furthermore, Alshara, Khateeb and Majd (1991) as cited in Matiti (2013) concluded that external loans positively affect consumption, investment, imports and Gross National Product. Alfredo (2004) in the empirically explored paper found that for developing countries lower external debts are associated with higher growth rates and the negative relationship is a consequence of incidence of public debts and not by private externa debts.

A study by Fry (1997) on alternative deficit financing strategies on economic growth for sixty-six low-income and emerging countries revealed that market based domestic debt issuance is the least cost method of financing deficit as contrasting with external debts. On the other hand, Christensen (2005) used cross-country survey of 27 sub-Saharan African countries during the 20-year period (1980-2000) and found that domestic markets are small, highly short term with narrower investor base. Furthermore, domestic interest rates payments are burden and significantly crowd out private investment. The findings on Nigeria (1986 – 2005) suggested that domestic debts have negatively affected the economic growth and that domestic debt is highly discouraged (Adofu and Abula, 2010).

High dependency on domestic financing may constraint economic conditions in absence of sufficient liquidity and stable growth. Thus, in pre-pandemic conditions central governments have adopted a high mix of domestic borrowing to external. This research dwells on the importance of domestic debts and potential challenges in relying on domestic debt financing during COVID-19. The pandemic has compromised economic activities and sorting to either internal or external borrowing will be a challenging task especially for Small Island governments. The central authorities will need to balance present goals with future goals. Thus, managing debts for small governments will require greater deliberation given the pandemic has existed longer than anticipated.

## 3.0 Data and Empirical Model

In ascertaining the importance and significance of domestic debts, the regression model is specified in equation (1) as follows:

$$Total\ \ National\ Debts = \beta_0 + \beta_1 Domestic\ Debts + \beta_2 External\ Debts + \mu \text{ ---------- (1)}$$

The data is sourced from Fiji Bureau of Statistics and National Budget Supplementary. In addition, time series data from 2001 – 2019 has been adopted for this study. Total National Debt represents net accumulation of central government's annual budget deficits. Domestic debts is the proportion of national debt financed via domestic borrowing (within the economy) while external debts signify off-shore borrowing to finance deficit obligations. It is highly anticipated that both domestic and external debts will have a positive sign.

## 4.0 Empirical Results and Analysis

This section presents findings in two sub-sections: sub-section 4.1 displays graphical measures while sub-section 4.2 presents regression analysis.

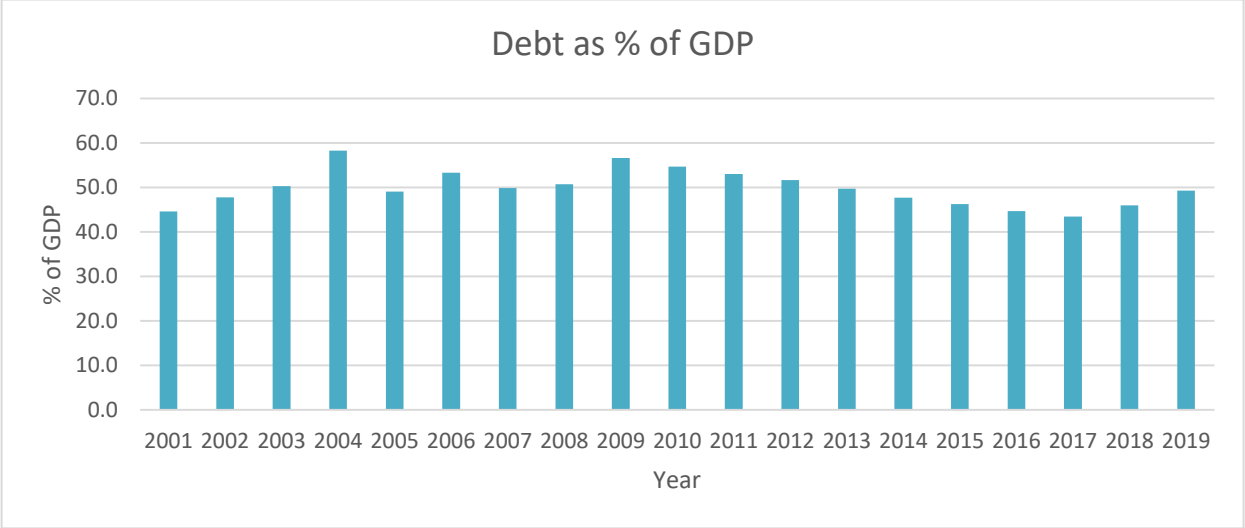
### 4.1 Graphical Measures

The government's debt stock stood at FJ$5.732 billion at the end of 2019 (Figure 1). The debt-to-GDP ratio increased by three percentage points in 2019 compared to 2018. The debt-to-GDP ratio has declined from 2010 till 2018. The steady decline reflects robust growing Fijian economy and prudent financial management of the government, with deficits maintained on average below 3 percent (Ministry of Economy, 2018). Furthermore, multilateral agencies like World Bank, International Monetary Fund and Asian Development Banks have acknowledged the efforts of the government in managing debts. According to the central government

debt management policy, the debt mix (domestic borrowing: foreign borrowing) is pegged at a mix of 70:30 (+/- 5 percent). This supports to sustain domestic debt markets and hedge foreign exchange risks (Ministry of Economy, 2018).

The domestic capital market remains the major source of government borrowing with institutional investors like Fiji National Provident Fund, insurance companies, commercial banks and other non-banking financial institutions. Furthermore, the major domestic debt instruments are; Fiji Infrastructure Bonds, Fiji Green Bonds, Viti Bonds and Treasury Bills (Table 1). As at 31st December 2015, the government bond holders were as follows: Non-Banking Financial Institutions held 90.5 percent, Commercial Banks 4.9 percent and the Reserve Bank of Fiji 2.9 percent respectively. The individual investors held 2 percent of the bond share.

**Figure 1: Fiji's Debt as Percentage of Gross Domestic Product, 2001 - 2019**




*Source: Trading Economics (2020)*

The Treasury bill market is dominated by the Commercial Banks with 73.5 percent of the share while the Reserve Bank holds 25.7 percent. Furthermore, the loan balance of 3.2 million of the Fiji Sugar Growers Council held with the Fiji Development Bank was settled in January 2015(Ministry of Economy, 2018).

**Table 1: Government Domestic Debt Stock ($M)**

| | **July-14** | **July-15** | **July-16** | **July-17** | **July-18** | **July -19** |
|---|---|---|---|---|---|---|
| Bonds | 2761.8 | 2831.8 | 3079.8 | 3204.4 | 3546.1 | 3971.0 |
| Treasury Bills | 82.6 | 165.7 | 165.2 | 96.4 | 145.5 | 307.5 |
| Loans | 3.2 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Domestic | 2847.6 | 2997.5 | 3245.0 | 3300.8 | 3691.6 | 4278.5 |
| Domestic Debt to GDP %) | 35.0% | 33.8% | 34.1% | 32.1% | 33.6% | 36.8 |

*Source: Ministry of Economy (2018-2020)*

Refinancing risk (rollover risk) is an important consideration in the process of public debt management. The inability to meet debt obligations on maturity makes central governments vulnerable to unfavourable terms and conditions (interest rates will be high). Thus, persistent rollover risk exposes central authorities to potential financial crisis. Moreover, poor debt paying ability will fuel future issues in borrowing new debts. In addition, Uryszek (2011) argued that refinancing risk is closely connected with budget liquidity. He acknowledged that a synthetic measure of risk refinancing is Average Time to Maturity (ATM), time period after which issued debts will need to be redeemed. The longer period to maturity exposes to lower refinancing risk (the need to raise funds to repay earlier debts is relatively frequently) hence, high ATM indicate low refinancing risk (Uryszek, 2011).

**Table 2: Risk Indicators as at Fiscal Year End 2015**

| | | External | Domestic | Total |
|---|---|---|---|---|

| | | Debt | Debt | Debt |
|---|---|---|---|---|
| Refinancing Risk | ATM (years) | 7.3 | 8.2 | 8.0 |
| | Debt maturing in 1 year (% of total) | 5.0 | 7.9 | 7.1 |
| Interest Rate Risk | ATR (year) | 5.5 | 8.2 | 7.4 |
| | Debt refixing on 1 year (% of total) | 26.3 | 7.9 | 13.3 |
| | Fixed rate debt (% of total) | 76.7 | 95.1 | 89.7 |
| Foreign Exchange Risk | Foreign Exchange debt (% of total debt) | | | 29.5 |

*Source: Ministry of Economy (2016)*

The refinancing risk for Fijian government in terms of ATM is; 8.2 years for domestic debts whilst 7.3 years for external debt. Thus, the Ministry of Economy (2016) concluded that the refinancing risk is low. In assessing the interest rate risk, the Ministry used Average Time to Refixing (ATR) that describes the time taken (in years) to fix interest rate. A shorter ATR implies that the portfolio is more exposed to refinancing shocks. The ATR of 7.4 years (total debt) is favourable for the existing portfolio (Ministry of Economy, 2016). Furthermore, the Ministry of Economy (2016) reported that the foreign exchange risk (percent of total debt portfolio exposed to exchange rate volatility) of 30.7 percent in 2014 declined to 29.5 percent in 2015.

### 4.2 Regression Analysis

Table 3 presents results of the linear regression model specified in Eq. (1) with total national debts as the dependent variable using Ordinary Least Squares. As anticipated, domestic debts and external debts are positive determinants. Furthermore, the output below substantiate that domestic debts is a highly significant predictor in financing total national debts. The findings reveal high dependency of the central government in sourcing deficits via domestic borrowing. It has been argued that domestic borrowing is likely to induce crowding out of private investment (internal borrowing will contract money supply thus, raising cost of borrowing and hindering private borrowing). However, Jayaraman (2013) favored domestic financing given liquidity in banks are normal (domestic interest rates are sustained and no crowding out effect). He argued that domestic borrowing is like 'we owe it to ourselves' debt whereby if the domestic debts are injected to productive activities that stimulate growth and public revenue then the raising tax collection will ease the debt-financed expenditure.

**Table 3: Linear Regression - Total National Debts**

| **Variable** | **Coefficient** | **Std. Error** | **t-Statistic** | **Prob.** |
|---|---|---|---|---|
| Domestic Debts | 0.876306*** | 0.123533 | 7.093672 | 0.0000 |
| External Debts | 0.140362*** | 0.035449 | 3.959573 | 0.0013 |
| C | 0.373067 | 0.779558 | 0.478562 | 0.6392 |
| | *Model Statistics* | | | |
| R-squared | 0.970910 | Mean dependent variable | | 8.119352 |
| Adjusted R-squared | 0.967031 | S.D. dependent variable | | 0.314681 |
| S.E. of regression | 0.057138 | Akaike info criterion | | -2.735698 |
| Sum squared residual | 0.048971 | Schwarz criterion | | -2.587303 |
| Log likelihood | 27.62128 | Hannan-Quinn criterion | | -2.715236 |
| F-statistic | 250.3191 | Durbin-Watson statistics | | 2.036943 |
| Prob (F-statistic) | 0.000000 | | | |

*Notes:* ***, **, and * indicate statistical significance at the 1, 5, and 10 percent levels, respectively.
*Source:* Authors' estimation in Eviews version 9.

Table 4 outlines various residual diagnostic test results. The model generally satisfies the various diagnostic criteria such as the residuals being free of autocorrelation based on the Breusch-Godfrey serial correlation LM test. In addition, the residuals were normally distributed based on the Jarque-Bera test. Furthermore, the model is desirable (constant error variance) based on Breusch-Pagan-Godfrey test. The parameters of the estimated models are also generally stable evidenced by the CUSUM of squares recursive residual plots (Figure 2).

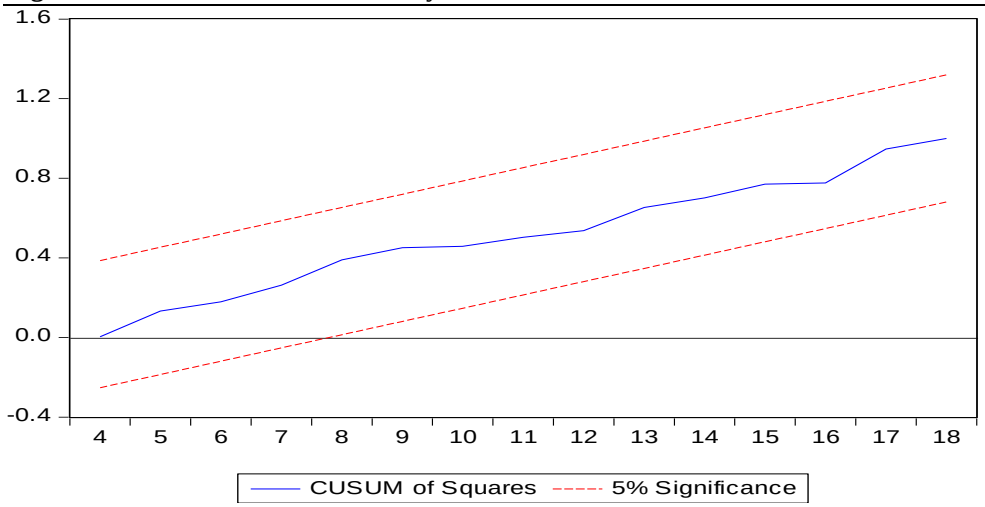
| **Test** | **Chi-squared Statistic** | **P Value** |
|---|---|---|

**Table 4: Diagnostics Tests**

| | | |
|---|---|---|
| Serial correlation | 0.9792 (DF=2) | 0.9714 |
| Heteroscedasticity | 0.428 (DF=2) | 0.3750 |
| Residual Normality | 2.391 | 0.3024 |

*Source:* Authors' estimation in Eviews version 9.

**Figure 2: Recursive Residual Stability Plots**




*Source:* Authors' estimation in Eviews version 9.

The dilemma with domestic financing arises when there exists liquidity crisis or when the economies are slowly down (COVID-19 pandemic). The level of liquidity in Fiji was all time high of approximately $800 million in February of 2018 however, bank liquidity declined to $317.2 million in early 2019 (Pratibha, 2019). The Reserve Bank of Fiji reported that as at 27th September 2019 the liquidity stood at $628.2 million as a consequence of increase in foreign reserve, strengthening of Fijian dollar against Australian and New Zealand dollar and rising exports (Narayan, 2019). Thus, with improved liquidity conditions, domestic debts are manageable without inflationary pressure on cost of borrowing.

Secondly, in light of the global pandemic the government debt is estimated to be approximately $6,705.4 million or 65.6 percent of GDP as a result of substantial borrowing and massive contraction in the economic activity (Ministry of Economy, 2020). Furthermore, the domestic debt to total debt is 74% with external debt ratio of 26%. In addition, the forecast is for domestic debts to reach $4,955.1 million by July of 2020, equivalent to 48.5% of GDP (Ministry of Economy, 2020). It is evident that the central government rely highly on domestic financing given the pandemic.

Few potential concerns with domestic financing in light of the pandemic may be: (1) the slowdown in economic activities may not instigate the much needed boost to raise tax collection to ease debt-financed expenditure as recommended by Jayaraman (2013), (2) liquidity may be high and impose cost to banks as borrowing will be low given the uncertainty (banks profit by borrowing short and lending long), (3) rationalizing borrowed funds to value adding activities (spending should be geared towards long term strategized rebuilding rather than short term recouping) and (4) decrease in the number of investors willing to secure government bonds.

The intriguing thoughts are (1) the pandemic has existed longer than anticipated and central authorities have opted to use loan facilities available via international agencies like IMF, World Bank and Asian Development Bank. Thus, can the central government continue to rely on external funding? (2) to what extent are central governments willing to exhaust domestic financing? (3) If in the short run government's exhaust both internal and external funding, what option is available if the economies do not recovery and the pandemic continues. The scope of this research paper is to validate the importance of domestic debts and future research may dwell on above research questions.

## 5.0 Conclusion

Fiji is a Small Island Developing States and the role of central authority is very decisive for economic progress. The government through deficit budget aims to achieve equality and ensure accessibility across the islands. The Fijian government favors domestic debt in the mix of 70:30 as stipulated in the debt management policy. The major domestic borrowing tools utilized are; Fiji Infrastructure Bonds, Fiji Green Bonds, Viti Bonds and Treasury Bills. Furthermore, domestic funding is highly dominated by Non-Banking Financial Institutions in particular Fiji National Provident Fund. Fiji issued its first International bond of US$150 million at 6.875 percent interest in 2006. To honor the maturing obligation of the 2006 borrowing, the government engaged in second bond of US$250 million at 9 percent in 2011. Moreover, in 2016 the Fijian government issued US$200 million bond to repay maturing bonds of 2011 while US$50 million was sourced form sinking fund.

Fiji government has opted for domestic financing to hedge foreign exchange risk and avoid unnecessary pressure from foreign investors. In addition, relevant internal authorities have reported current domestic borrowing as manageable. The liquidity issue of 2018 was addressed by 2019 with very little implications on domestic borrowing. Moreover, using OLS it was found that domestic borrowing is statistically significant. The government in light of the global pandemic has relied on domestic borrowing whereby domestic debt to total debt is 74%. Few pre-existing conditions for effectively managing domestic debts are sufficient liquidity and growing economy. However, the current pandemic is not favorable to both the necessary conditions.

The government may need to explore other avenues for funding deficit budget and COVID-19 supplementary budgets if the pandemic persists longer than expected. The international agencies have provided borrowing facilities however, the authorities may be cautious. Nevertheless, the dilemma exists in proportionally the debt mix. Can the small governments continue to exhaust domestic borrowing with indefinite time frame for economic recovery? If the central authorities switch to external borrowing, what are few consequences for future generation and future borrowing credibility? This study has validated domestic borrowing as statistically significant and identified potential challenges of domestic debts in the New Normal. As the pandemic continues, future research may empirically evaluate the borrowing patterns of central authorities and policy adjustments.

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