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Fiscal vulnerability, financial stress, and macroeconomic policies in Sri Lanka

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Abstract

Fiscal policies play a critical role in achieving sustainable development goals, supporting domestic resource mobilization, and improving the effectiveness of public spending. Such policies also promote investment and facilitate fiscal reforms, aligning with SDG target 17.1, which emphasized strengthening financial options and domestic resource mobilization. Hence, fiscal risks are required to be identified in order to improve macroeconomic policies. This research was aimed at evaluating the current state of public finance in Sri Lanka to identify its structural weaknesses that led to bankruptcy, with the objective of making recommendations for economic reform through the most appropriate form of macroeconomic policy. A quantitative data analysis was adopted using statistical data for different indicators for the period 1960-2020. The study developed three indexes: fiscal vulnerability, financial stress, and macroeconomic policies, all of which were obtained based on certain indicators. For establishing the causal effect of the variables, the study used the auto regressive distributed lag (ARDL) model which allows the consideration of long-run and short-run impacts. By using co-integration tests, the research virtually pointed to directional causality and proved the existence of long-run links between the variables. Another finding of the research was the need to adopt a capacity mechanism appropriate for Sri Lanka. Previous work insisted that there was a need for the compliance of capacity mechanisms employed by developing countries to abide by the standards set out by the International Monetary Fund (IMF). Moreover, the study focused on the practical aspects in controlling the fiscal state and called for attention on refinancing risks of public liabilities. In conclusion, the work called for a more integrated fiscal balance needed for the betterment of the macroeconomic framework in Sri Lanka needed to achieve sustainable development goals.

Keywords: Fiscal vulnerability, financial stress, macroeconomic policy, sustainable development goals, Sri Lankan economy

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Introduction

Sri Lanka is an island nation that has been going through a critical and long-lasting economic crisis that started in 2019. This contraction in economy is deemed the worst and most demanding one since the country became independent in 1948. Its consequences have been of wide range, marked by steep inflation rates, near exhaustion of forex, shortage of crucial commodities including medicines, and higher prices of necessities. The 2019 Easter bombing tragedy in Sri Lanka together with the economically damaging measures taken in the year 2020 for prevention of the spread of COVID-19 has been catastrophic to the nation's economy. In addition, the reduction of taxes had an influence on the decline of the economy and the excessive use of monetary policy options, such as money creation, have aggravated the already worsening situation. The government at the time embarked on measures to practice organic or biological farming and those initiatives too contributed to the economic shock that was taking place. As a consequence of those multiple factors, Sri Lanka experienced mass protests in 2022, which were primarily triggered by difficulties and instability of the economic climate. The country's financial predicament was compounded by its substantial foreign debt amounting to $4 billion per annum, juxtaposed against a meager $1.9 billion in foreign exchange reserves as of March 2022 (World Bank, 2022). The repayment of a $1 billion International Sovereign Bond, which was due in July 2022, added to the mounting financial pressure. Finally, in April 2022, unable to meet its debt obligations, the Sri Lankan government preemptively declared a default status, marking the nation's first sovereign default since independence and the first sovereign default of the twenty-first century in the Asia-Pacific region (World Bank, 2022). Given the gravity of the situation, Sri Lanka faced an arduous journey toward economic recovery and stability. Urgent and comprehensive measures, along with well-structured policies and reforms, were imperative to address the economic challenges, manage the debt burden, and provide relief to the affected population. As for fiscal risks leading to such economic crisis seen in some nations, including developing nations like Sri Lanka, insufficiency of appropriate fiscal settings and structural flaws were behind the crisis. With regard to the sustainability of public finances of the developing countries in the context of their medium- and long-term economic prospects, the deteriorating patterns in fiscal dynamics have raised severe worries and doubt (Popova et al., 2017). It is important to recognize the scale and nature of refinancing risks as refinancing problems in public debt are often associated with fiscal crisis and problems with fiscal adjustments. When there is financial market stress, the impact of fiscal policy on the economy may differ from that in normal periods. Fiscal vulnerability, therefore, does not only refer to the fiscal and economic conditions typical of the economy, and it emerges when the government and the fiscal authorities adopt inappropriate macroeconomic strategies and fiscal policies.

When policies are inadequately designed and executed with limited effectiveness, warning signs of vulnerability inevitably emerge (Hemming & Petrie, (2021). Chandia et al. (2022) pointed out that when problems arise first, governments may not be aware that they are vulnerable on two fronts: first, problems that may not affect the actual fiscal bottom line but which might pose problems for the government in the attainment of its fiscal policy objectives; and second, such issues and weaknesses may be construed to mean places that the government cannot readily address emerging problems for the fiscal position.

Finally, the study seeked to contribute to fiscal reforms by examining the imbalance in Sri Lanka's public finance system and suggest implementation of suitable macroeconomic policies. The conclusions made during the study made on the events occurred in the last five years in Sri Lanka made it possible to calculate the fiscal vulnerability index, the financial stress index (FSI), and the index of macroeconomic policies. Fiscal vulnerability, financial stress, and macroeconomic policy indicators provided sufficient evidence that by correcting all these parameters, authorities may accomplish sustainable development goal number 17.1, which places an emphasis on financial options boosting domestic resource mobilization improving macroeconomic policy.

Methodology

A mechanism has been applied to compare fiscal vulnerability, financial stress, and macroeconomic policies in the long run. The research design was designed in an orderly manner where all components of the study are put together to enable the researcher to address the research problem. The research design (William, 2006) provided the blueprint for data collection, measurement, and analysis. This study explained the economic reality in Sri Lanka and produced results similar to those produced by prior studies. To be objective with little or no personal interpretation of the data, the study applied a structured methodology using secondary quantitative data, which were replicable and subjected to statistical analysis. This study was aimed at establishing the correlation between or relationship among those variables with hypotheses testing and the testability measurement of the independent variables to the dependent variable. ARDL analysis was a type of Ordinary Least Squares (OLS) analysis and was used in both, non-stationary time series and in time series with mixed order of integration (R. Bhattab, 2018). This model used sufficient lags of the lagged variables and characterized the data-gathering process in an autoregressive distributed lag model in a general-to-specific approach (Bhattab & Pasha, 2018). Thus, the study could be evaluated in terms of the ARDL which was among the long-run regression models. Besides, their combination could be applied to get to know the relationship between the above-mentioned variables in the long run. Therefore, the current study could be analyzed using the ARDL model to measure the hypotheses to examine the relationship between two independent variables on one dependent variable. Since the study focused on secondary data from 1960 to 2021, the study used the time series technique to analyze these data, and the ARDL model was meant under the time-series technique. Time series data means a sequence of observations of the well-defined variable at a uniform interval over a period in consecutive order. The most common series was in annual, quarterly, monthly, weekly, and daily frequencies (R.Bhattab, 2018) and the current study was in annual frequency. Economic time series data often possesses unique features such as a clear trend, a high degree of persistence on shocks, higher volatility over time, and meandering, and sharing co-movements with other series (R.Bhattab, 2018). In the time series analysis, it was significant to recognize the behavior of variables, their interactions, and integrations over time. If major characteristics of time series data were understood and addressed accurately, a simple regression analysis using such data could also express the pattern of relationships among variables (R.Bhattab, 2018). Therefore, ARDL was the most appropriate tool to analyze the data, which were relevant to the period from 1960 to 2021.

Fiscal vulnerability

An effective monetary framework was developed by Balacci et al. (2011) to analyze the fiscal vulnerability in developing countries. This has emerged as a sound mechanism of signaling fiscal fragility and indicating the susceptibility to rollover and re-financing issues. According to the framework, three main factors have been identified to measure fiscal vulnerability as follows. If debt dynamics are based on present and anticipated medium-term policies are consistent with debt solvency, fundamental fiscal variables explain how long-term economic and demographic challenges alter fiscal factors expected in the future, and how it affects fiscal stability. Furthermore, given the country's fiscal solvency, it would explain whether the arrangement of government assets and liabilities subjects it to significant rollover requirements and whether it increases or decreases rollover risks.

$$Z_t = (x_t - \mu) / \delta \quad (1)$$

Each variable, xt, has been standardized into a score, zt. μ denotes the independently computed average for the indicator xt, xt, and δ are the corresponding standard deviation. This equation has been applied in the study to calculate the index of fiscal vulnerability hereinafter referred to as FV. Each xt has been used to transform the variable into a standardized score as followed by the mechanism applied in the study of Baldacci et. al (2011).

Basic fiscal variables

The core fiscal variables consist of three primary indicators: interest rate growth differential (r-g), primary budget balance (PBB), and public debt (PD). The variable r-g measures the impact of the interest rate-growth rate disparity on the economy's fiscal creditworthiness. PBB denotes the primary budget balance, which can be either negative or positive. Finally, PD indicates the economic burden of liabilities.

Long-term fiscal tendency

Total fertility rate (TFL) and OAOR are two variables evaluated in the context of long-term fiscal trends. The TFL serves as a gauge of the country's demographic momentum. The Old age dependency ratio (OAOR), on the other hand, indicates the old-age dependency ratio, which gauges the economic burden borne by the elderly.

Assets and liability management

Four variables are examined in the section on asset and liability management. Gross funding requirements (Borrowing Needs) assesses the financing needs of the fiscal deficit and reflects borrowing requirements. Short-term loan (STL) proportion in total debt assesses the vulnerability to changes or extensions in the debt burden by indicating the proportion of short-term loans in total debt. External debt burden (ED) assesses the exchange rate risk posed by external debt. Short-Term Foreign Liabilities (STFL) relate to calls of demand over and on foreign exchange and work as an index of short-term foreign liabilities.

Three important features are utilized to determine fiscal vulnerability: They are the level of strain on the budgetary condition of the economy, long-term demographic patterns that place a strain on the country's economy which is established by taking into account the country's fertility rate as well as the funding needs to solve social security concerns, and the country's financial needs.

Accordingly, five factors which have been derived from the study published by Baldacci et al (2011) and customized to suit the Sri Lankan economy were used in the indices of the study. One of these variables is the difference between the rate of government debt payment and the growth rate of the country's economy. The capacity of an economy with a high level of debt mainly depends on the level of economic growth. Three variables have been included in the study, all expressed as percentages of the country's GDP: The abovementioned indicators include General Government Structural Balance which refers to the cyclically adjusted balance of the general government which contains all temporary appropriations and revenues; General Government Net Debt calculated by deducting relevant financial assets related to debt instruments from the Gross Debt; Long-Term Budgetary Trends concerns with two main aspects related to the long-term budgetary sustainability as total fertility and dependency ratio. Total Fertility Rate represents the number of births per woman and aids in forecasting the government's future tax base; b. The old-age dependency ratio compares the number of older individuals to the working-age population. It is critical because it aids in evaluating the possible contributions of the people to the healthcare and pension systems, which have an impact on the country's budgetary sustainability. These indicators, when considered together, provide insights into the economy's fiscal health and sustainability, considering both short-term debt servicing capabilities and long-term demographic trends.

$$FV = (r-g) + PBB + PD + TFL + OAOR + BN + STL + ED + STLF \quad (2)$$

Financial stress

The FSI was compiled using the equal-variance concept proposed by Cardarelli et al. (2011). The FSI in this technique is another composite variable that enters the analysis with the standardized value of each signal. To accomplish this, the average value from each indicator was removed and the result was divided by the standard deviation of that indicator. This procedure guarantees that the indicators are consistently measured and that their responsibilities and contributions are based on departures from their respective average values. The composite indicator or aggregate index, which measures total financial stress, was constructed by allocating equal weights to each item. While numerous index-creation strategies are available in the literature, the equal-variance technique has been shown to be successful and beneficial in properly capturing financial stress events or phases. Based on the combination of many variables, it provides an accurate depiction of the level of financial stress experienced in an economy.

$$FSI = TED + ITS + SMR + SMV + ERV \quad (3)$$

Total External Debt (TED) is obtained by the difference between the interest rates on secured and unsecured interbank loans. The inverted term spread (ITS) is used to determine the liquidity in the financial market, and this is calculated as the difference between the rate of return on long-

term investment. Stock market returns and stock market volatility have been used to further elaborate financial stress.

This study analyzed the Exchange Rate Volatility (ERV), which gives the coefficient of variation of the Sri Lankan rupee exchange rate versus the US dollar, to reflect stress in the foreign exchange market. The study showed that each of the contributors received an equal proportion for the calculation of equal weights to each contributor when calculating the aggregate index, implying that all factors have an equal influence on the total index. While there are several approaches for index aggregation found in the theoretical and empirical literature, the equal-variance approach stands out as an efficient and effective way for accurately portraying financial stress situations. Thus, by summing up several indices which are of equal value, it provided an accurate reflection of the shares of financial pressure experienced in the economy.

Macroeconomic policy index

Burnside and Dollar's investigations in 1997, 2000, and 2004 influenced the establishment of the Macroeconomic Policy Index (MPI). To reflect the entire cumulative influence of macroeconomic policies, the current analysis included three different policies, namely the monetary policy, the fiscal policy, and the trade policy. The study applied the Principal Component Analysis (PCA) method to compute the MPI. PCA is used to reduce the dimensionality of a matrix of variables that have significant correlations. The main objective of PCA is to reduce the number of dimensions in the data while maintaining as much useful information as possible. The MPI formula incorporates the three policy variables (inflation (INF), fiscal deficit (FD), and trade openness (TO)) as well as PCA to generate the composite index expressing the overall macroeconomic policy stance. The specific formula and mathematical representation of MPI was included in the study for additional reference and details. The influence of monetary policy is represented by inflation, whereas the effect of fiscal policy is reflected by the budget deficit. Finally, TO was used to assess the impact of trade policies.

$$MPI = INF + FD + TO \quad (4)$$

The current study employed the theoretical model which was developed by Magkonis and Tsopanakis (2014) with an extension on Magkonis and Tsopanakis (2016) to assess the effects of fiscal vulnerability and financial stress on macroeconomic policies in relation to the Sri Lankan economy. The study employed the following linear model to investigate this association:

$$MPI_t = a_0 + a_1FVI + a_2FSI + \mu \quad (5)$$

In this model:

The Fiscal Vulnerability Index (FVI) measures the fiscal vulnerability of the economy.
The FSI is a measure of the level of stress in the financial market.

The MPI assesses the effectiveness and impact of macroeconomic policies on the economy.

The current work tested the relationship between MPI, FVI, and FSI through the application of Pesaran, Shin, and Smith's (2001) auto-regressive distributive lag (ARDL) test of cointegration. As depicted in the above equation, this method allowed the study to identify the long-run as well as the short-run causal associations between Sri Lanka's indices. The ARDL approach was recommended because it solves the drawbacks of other co-integration strategies. It is thought to be more resilient and versatile, particularly when dealing with small sample sizes or mixed-order integration of variables. The ARDL model enabled the study to incorporate an adequate amount of lag terms into the model, resulting in an accurate and effective modeling framework for the investigation. Using the ARDL cointegration test, the study intended to acquire insights into the dynamic interactions between MPI, FVI, and FSI in Sri Lanka, both in the short and long run, to better understand their interplay and economic implications.

Data

The annual time series data for variables incorporated in the above model were used in the study as explained previously in this paper. The data ranged from 1960 to 2021, provided considerable historical context for the analysis. The study made an effort to obtain macroeconomic information from a variety of sources such as the Central Bank, Department of Census and Statistics, Colombo Stock Exchange, IMF database, and World Bank database. This method ensured data accuracy and reduced potential biases that could result from depending entirely on a single data source. The study attempted to maintain data quality and integrity by cross-checking and validating the figures, making the research conclusions more robust and credible. The study illustrated a systematic approach to dataset compilation, confirming the validity of the data and dependability. To do this, statistics collected from one source were cross-checked against data obtained from other independent sources. This cross-verification procedure helped to reduce any errors or biases in individual data sources, making the dataset more accurate and dependable. The study used the econometric software EViews 12 for econometric estimations and data analysis. Using EViews 12, the study could run complex econometric modelling, regression analysis, and statistical testing on the dataset to draw meaningful findings and to determine the correlations between the variables.

Results and discussion

One of the primary benefits of constructing the above mentioned three indicators was their ability to include a wide range of factors that contribute to economic volatility and instability. The integration of the numerous sources of fiscal pressure and financial chaos with single FVI and FSI variables gives the study a more rounded and accurate picture of the macroeconomic and financial environment. Moreover, the calculated indices properly revealed the impact of fiscal vulnerability and financial stress on the macroeconomic policy. This made the research an empirical investigation on how fiscal vulnerability and financial stress affected the effectiveness of Sri Lanka's macroeconomic policies.

By employing this method, the current study gave new insights into how fiscal and financial dynamics interact with macroeconomic policy, boosting our knowledge of the overall economic performance of Sri Lankan economy and difficulties it faces. The results of the research helped

the advancement of knowledge on the linkage between fiscal vulnerability, financial stress, and overall macro environment, thus facilitating informed policymaking and decision-making.

However, before starting the first phase of data testing, and as a preliminary step, it was necessary to review the basic characteristics of the variables included in the empirical model applied in the present study. FVI had a positive mean value, whereas FSI and MPI showed negative values. Apart from FSI, all the other variables, showed a negative skewness score, thus implying that the present distribution was skewed towards the left with higher observation on the right side. The statistical characteristics of the given sample are provided in the table below which shows that both of those variables had a negative mean value. In terms of the data normality, the Jarque-Bera test indicates that the data is normal if the value of the standard deviation obtained for each variable is close to the pseudo standard deviation. The null hypothesis to this test was that the sample data was normally distributed whilst the research hypothesis was that the sample data was not normally distributed. The first stage in the econometric estimating procedure was to examine the time series data for stationarity.

Table 1: Descriptive Statistics

	FVI	**FSI**	**MPI**
Mean	5.45	-2.87	-1.28
Median	0.43	-0.01	0.16
Standard deviation	1.012	1.011	0.01
Sample variance	1.02	1.021	1.02
Kurtosis	-1.14	-1.1	1.88
Skewness	-0.37	0.31	-0.41
Jarque-Bera	3.85	2.28	2.16
Probability	0.15	0.32	0.33

Augmented Dickey-Fuller (ADF test) also has been used in the current study. The analysis of the variables using the unit root test indicated that all empirical model variables were not integrated at the I (2) level. Table 2 provides the ADF and PP results, in which the two chosen F-test statistics, FVI and FSI, were established to possess the first integration at a 1% significance level. However, the third variable, MPI showed zero order integration with a significance level of 1 %. By presenting the results of unit root tests, it was possible to meet the primary condition that allowed using the ARDL technique to analyze the long-run relationship between the three variables included in the empirical model. With this confirmation, it was possible to move to the bound test that made up the second step in the process of econometric estimation.

Table 2: Unit root test

Methods	**Statistics**	**Prob. ****
ADF- Fisher Chi-square	111.12	0.00
ADF- Choi Z-stat	-9.70	0.00

Intermediate ADF test results D (UNTITLED)				
Series	**Prob.**	**Lag**	**Max Lag**	**Obs**
D(X1)	0.00	1	10	59
D(X2)	0.00	0	10	60
D(Y)	0.00	0	10	60
Method	**Statistics**		**Prob. ****	
PP- Fisher Chi-square	105.19		0.00	
PP- Choi Z-stat	-9.02		0.00	
Intermediate Phillips-Perron test results D (UNTITLED)				
Series	**Prob.**	**Bandwidth**	**Obs**	
D(X1)	0.00	15.0	60	
D(X2)	0.00	2.0	60	
D(Y)	0.00	18.0	60	

The next step in ARDL model estimation is an estimate short run test and the long run & bound test, which looks at the short-run and long-run relationship between the indicators in the empirical model. The Hannan-Quinn (HQ) was used to select the lag duration for estimating the ARDL technique. Table 3 shows the results of the limits test for an approximated equation, the probability of the short-run and if the p-value was less than or equal 0.05, then the hypotheses could be accepted in the short-run. Here, the p-value (F-statistic) showed zero (0), which was significant for the whole model. The model summary table reported the strength of the relationship between the model and the dependent variable. As shown above, the R-value was identified as the multiple correlation coefficient that measured the strength and direction of a linear relationship between variables.

Table 3: Short-run Relationship

Variable	**Coefficient**	**Std. Error**	**t-Statistics**	**Prob. ***
Y(-1)	0.54	0.11	4.91	0.00
X1	-0.05	0.12	-0.46	0.65
X1(-1)	0.35	0.20	1.79	0.08
X1(-2)	-0.42	0.15	-2.86	0.01
X2	0.04	0.13	0.31	0.76
C	0.00	0.15	0.02	0.99
R-squared	0.51	Mean dependent var		0.03
Adjusted R-squared	0.46	S.D. dependent var		1.58
S.E. of regression	1.16	Akaike info criterion		3.22
Sum squared resid	72.26	Schwarz criterion		3.43
Log likelihood	-90.72	Hannan-Quinn criter.		3.31
F-statistic	11.16	Durbin-Watson stat		2.02
Prob(F-statistic)	0.00			

The results revealed that the estimated F-statistic value surpassed the upper threshold of the critical value, signifying the existence of a long-run relationship among the variables. In Table 4, in the outbound test, F-statistic of the study was 6.23, which was higher than the I(0) value, which was 3.17. It rejected the null hypotheses and complied with the alternative hypothesis, which denoted the levels of relationship. The long-run coefficients for the specified model were presented, following the confirmation of the long-run association among the indicators within the estimated model.

Table 4: Outbound test

F-Bounds Test		**Null Hypothesis: No levels relationship**		
Test Statistic	Value	Significant	I (0)	I (1)
		Asymptotic: n= 1000		
F-statistic	6.23	10%	3.17	4.14
k	2	5%	3.79	4.85
		2.5%	4.41	5.52
		1%	5.15	6.36
Actual Sample Size	60	Finite Sample: n=60		
		10%	3.27	4.26
		5%	4	5.06
		1%	5.70	7.00
t-Bound Test		**Null Hypothesis: No levels relationship**		
Test Statistic	Value	Significant	I (0)	I (1)
t-statistic	-4.25	10.0%	-2.57	-3.21
		5.0%	-2.86	-3.53
		2.5%	-3.13	-3.80
		1.0%	-3.43	-4.10

Table 5 summarizes the results of ECT which were statistically significant and negative in value. The value of Coefficient also embodied the following: Coefficient = -0. 46 with 0. 00 for the dependent variable (MPI), and -0. 18 with 0. 03 indications of the first independent variable, that is Fiscal vulnerability. However, the second independent variable, which is financial stress, was not significant in the model.

Table 5: Error Correction Estimates

Conditional Error Correction Regression				
Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	0.00	0.15	0.02	0.99
Y(-1)*	-0.46	0.11	-4.25	0.00
X1(-1)	-0.12	0.06	-2.11	0.04
X2**	0.04	0.13	0.31	0.76
D(X1)	-0.05	0.12	-0.46	0.65
D(X1(-1))	0.42	0.15	2.86	0.01
Levels Equation				

Case 3: Unrestricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1	-0.25	0.12	-2.19	0.03
X2	0.08	0.27	0.31	0.76
EC = Y – (-0.2543*X1 + 0.0842*X2)				

The model used two lags for the Granger Causality. In the first case, the null hypothesis was less than 0.05 and it rejected the null hypothesis and implied FSI did Granger Cause FVI. Likewise, XI(FVI) Granger Cause Y (MPI) hypothesis was accepted owing to P-value being less than 0.05.

Table 6: Causality Test

Null Hypothesis	Obs	F-Statistic	Prob.
X2 does not Granger Cause X1	60	3.38	0.04
X1 does not Granger Cause X2		2.73	0.07
Y does not Granger Cause X1	60	1.51	0.23
X1 does not Granger Cause Y		5.56	0.01
Y does not Granger Cause X2	60	1.44	0.25
X2 does not Granger Cause Y		0.60	0.55

Macroeconomic policies are formulated with a view to avoiding weaker fiscal stockings. Monetary authorities, fiscal authorities as well as governments set policies on money, finance, and trade to boost the economy and safeguard it from threats. The causal link going from the macroeconomic performance index to the FVI indicates an inability of the government to avert a vulnerable position through adequate macroeconomic policy. The findings pointed to unidirectional causation between FVI and FSI. This meant that fiscal fragility was causing financial stress to Sri Lanka's economy. The susceptibility of the fiscal sector causes stress periods in the banking sector. Based on the results of the Granger causality test, it showed that the FSI had no causal effect on the MPI. However, despite the lack of causality between these variables, Sri Lanka's economy had been grappling with significant budget deficits and mounting state debt. Such chronic deficits and debts are signs of budgetary irresponsibility and as a result, inflation, balance of payment difficulties and a general decline in macroeconomic performance become inevitable (Chaudhary, Anjum & Ali, 1996). The constant rise in the fiscal deficit opened the possibility of foreign lending organizations suggesting and defending the structural adjustment programs. Sri Lanka's revenue-expenditure system was rigid and became a 'sin' that was difficult to recognize, assess, and change for a variety of economic, political, and social reasons. The fiscal instability in Sri Lanka materialized from an absolute enhancement in the recurring governmental expenses combined with rigid collection approaches. Over the years and across each of the different administrations, efforts have been made to improve the budget deficit as a percentage of GDP, but seldom had it achieved this goal. Thus, constant fiscal deficits not only restrained economic growth but also led to the rising of the state debt load. As per Eisner's level deficit spending also helped the government to borrow money and thus every dollar of government deficit added a dollar of debt. As the debt of load was increasing the budget deficit, Sri Lankan economy has devalued the exchange rate, which in turn made worse the monetary indiscipline. Total domestic and international obligations were around 88% of GDP at the time, posing issues in debt payment. Following the findings of Chaudhary et al. (1996), governments and fiscal authorities at the time

were warned forcing fiscal authorities and policymakers to act swiftly to prevent any disastrous consequences. Political developments in Sri Lanka shaped macroeconomic policies over time. Ideological and institutional divergences produced different approaches in determining the appropriate role of government interferences over market forces and the relative contribution of the public and private domains. Such political economic changes appeared to have a considerable impact on the country's economic development, savings and investment gaps, fiscal developments, balance of payments situation, and monetary framework and pricing. The country maintained a mixed economy, and successive governments with varying political ideologies/philosophies resisted any significant reforms in the relevant sectors.

Conclusions

The current analysis supported Easterly's (2002) claim that, more than the private sector and creditor economies, governments of debtor economies prefer current consumption. Governments of debtor economies usually have weak policies, plans, and tactics for taxing the private sector. As a result of those weak macroeconomic policies, public debt accumulates increasing an economy's vulnerability. The negative impact of fiscal fragility and financial stress was a consequence of the country's macroeconomic performance. As a result, it could be justified that healthier policies, such as lower fiscal deficits, lower inflation rates, and higher trade openness improve the likelihood that an economy's degree of vulnerability will not be able to damage its macroeconomic performance. The findings implied that Sri Lanka's weak and shifting macroeconomic policies were to blame for the country's fiscal fragility. The findings emphasized the significance of addressing fiscal vulnerability and financial stress in Sri Lanka, as it is a developing country. The adverse impact of those indicators on macroeconomic performance highlighted the need to prioritize methods and policies that could understand and mitigate their effects. The lack of appropriate macro-fiscal plans and the failure to implement fiscal rules indicated a lack of recognition of the intricate relationship between fiscal, financial, and macroeconomic policies by Sri Lanka's fiscal authorities and government. Those outcomes underscored the importance of exercising budgetary prudence and making necessary adjustments to achieve a stable fiscal position. This approach could effectively regulate budget deficits, inflation, and debt reduction, and could provide room for improvement during challenging macroeconomic periods, where fiscal policy expansions may be required to mitigate the impact of financial market failures on long-term economic activity.

Conflicts of Interest

All authors declare no conflicts of interest.

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