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Investigative Study of Economic Crisis in Sri Lanka

Pratik Someshwar Waghmode

Abstract: ***This paper analyses the reasons and scenario of the current economic crisis in Sri Lanka. The study examines the possible reasons for the crisis, its ongoing impact on GDP, tourism industry, and on Sri Lankan rupee against other major currencies in the world. The paper shows that Forex reserves of Sri Lanka mainly depend on Tourism revenue, thus underscoring the importance of the tourism industry. But due to current circumstances of the Covid-19 and its severe impacts leads to a high decline in tourism revenue which ultimately affects the country's reserves. This resulted in the high depreciation in the value of the Sri Lankan rupee against other major currencies in the world. To assess if the country has enough reserves, we have used the Guidotti - Greenspan rule and we found that since the Covid pandemic has begun, Sri Lanka has been unable to follow this rule and the ratio of reserves to short term debt is continuously decreasing. The external sector of Sri Lanka is also not performing well due to the sharp decline in exports. The IMF has approved a bailout package through its Special Drawing Rights to get over this crisis. Therefore, appropriate actions must be undertaken to overcome the crisis and revive the economy.***
Keywords: COVID-19, Foreign reserves, Economic Impacts, Sri Lanka, Debt-GDP ratio, Exchange rates, Tourist Arrivals, Bailout Package, Trade, Guidotti - Greenspan rule

I. INTRODUCTION

Sri Lanka opened its economy in the 1970s. The country is blessed with nature. The land is fertile and suitable for growing a variety of crops mainly tea, rubber, etc. It has abundant natural resources and fishing resources. The climate generally is like an equatorial climate with high average rainfall. The main source of electricity in Sri Lanka is considered to be hydropower which is generated from rivers falling from high hills. The country has various types of mineral resources such as titanium ore, graphite, kaolin, and gemstones. The country also has large deposits of unexploited iron ore. Sri Lanka has a population of 21,528,578. Its per capita GDP is near around 3682 USD in 2020. As the world knows, Sri Lanka is known for the country's great performance in various programs such as raising living standards of people and reducing poverty, but the COVID19 crisis has led the country to destructive losses in livelihoods and economically in a recession which affects many lives and has widened the economic gap. Sri Lanka's Gross Domestic Product i.e., GDP has declined by **3.6%** while forex reserves got a massive hit of reduction which is an important factor leading to the crisis. Public debt is increasing continuously and upon that the value of the Sri Lankan rupee is depreciating continuously. Due to this, as we are moving towards 2022, many international rating agencies have downgraded the outlook on Sri Lanka producing concerns about whether Sri Lanka will be able to pay its external debts. There isn't enough availability of foreign exchange available to meet Sri Lanka's import needs which hurts the situation.

II. OBJECTIVES

The following are the objectives of our study-

1) For analysis of the reasons behind the current economic crisis in Sri Lanka
2) To examine reserves - short term debt condition of Sri Lanka with the help of Guidotti - Greenspan rule
3) To assess the impact of declining tourism revenue on the declining forex reserves of Sri Lanka
4) To examine trends in various economic indicators such as GDP, FDI, Debt-GDP ratio, etc.

III. STUDY AREA[1]

Sri Lanka is an island country situated in the Indian ocean. Sri Lanka, formerly known as 'Ceylon', and officially the Democratic Socialist Republic of Sri Lanka, is an island country in South Asia. It lies in the Indian Ocean, southwest of the Bay of Bengal, and southeast of the Arabian Sea; it is separated from the Indian subcontinent by the Gulf of Manner and the

[1] From Google arts and culture

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Palk Strait. It extends from 5°55′ and 9°51′ North Latitude and 79°41′ and 81°53′ East Longitude with a Geographical area of 65,612 Sq. Km. It has a maximum length of 432 km and a maximum width of 224 km. Sri Lanka borders two countries, India and Maldives by sea.

IV. LITERATURE REVIEW

In the paper 'Economic Impacts of COVID-19 Macro and Microeconomics Evidences from Sri Lanka (2021)'[2], the author's (N.P. Ravindra Deyshappriya) analysis reveals how the Coronavirus pandemic creates adverse impacts on both economic indicators such as GDP and employment concerning Sri Lanka. Also, the author shows that the magnitude of the impacts of this pandemic on Sri Lanka is significantly lower than that of the South Asian average. According to the author, apart from that, 'panic buying', interrupted domestic production and distribution, and restriction on imports has created an inflationary pressure on the economy which leads to headline inflation. Reduction in exports and tourism receipts affects the performance of the external sector which created an adverse impact on the Sri Lankan economy. This overall affecting the Sri Lankan rupee which is sharply depreciated against major currencies in the world. In addition to these major macroeconomic impacts of COVID-19, the author also observed some microeconomic impacts of COVID-19. He projected poverty dynamics under a four-way poverty classification. The author made some predictions based on the study which reveals that there is a greater potential of increasing poverty incidence related to all poverty types (Extreme Poor, Poor, and Vulnerable Nonpoor) under present pandemic situations.

According to Ravindran C. in his study entitled 'An economic analysis of foreign exchange reserve management in India'[3], argues that if we consider the problem of holding forex reserves from a country's perspective, the objective of holding reserves to support monetary policy is common in the most countries and the reasons behind holding reserves are to maintain international confidence on the country for its short-term payment obligations as well as confidence in monetary and financial policies of that respective country.

According to Greenspan[4], countries that choose to follow the Guidotti-Greenspan rule may reduce their vulnerability to financial crises. According to him, at a minimum, this framework can highlight signs of vulnerability. For example, Korea's short-term debts, including those of Korean banks, were more than three times its foreign exchange reserves in December of 1996.

In his study of 'Economic Crisis in Sri Lanka due to the COVID - 19 Epidemic'[5], A S De Silva shows how the COVID - 19 pandemic has been the worst epidemic in recent history. As we saw, many countries around the world are currently affected by the covid-19. Sri Lanka is also hardly suffering from the epidemic. The author shows the effects of the epidemic on the economy of Sri Lanka in many ways. With the help of data, he showed how the epidemic has affected Sri Lanka's economy, employment, GDP, tourism, and poverty. The author argues that due to the effect of the pandemic on household income and working hours, the poverty reduction progress has been reduced. He suggests further steps must be undertaken to control the spread of the epidemic and restore the economy.

In the paper entitled 'Factors Affecting International Reserves: With Special Reference to Sri Lanka'[6], Dr. Mohammad Kashif argues that the declining forex reserves are an important reason behind the current economic crisis. The author here tries to find the factors affecting international reserves concerning Sri Lanka. According to the author, international reserves holdings by central banks have augmented sharply in recent years. Economies usually hold international reserves to have a favourable level of the exchange rate. Hence maintaining international reserves is an important policy undertaken by many countries for stable and favourable exchange rates, and specifically to stabilize it and maintenance of financial imbalances. The author argues that there has been a continuous debate whether there is a need to beef the level up of countries' international reserves or trim them back, and this debate is becoming more interesting especially in South Asian economies. The author mainly focuses on identifying empirically some macroeconomic factors that may lay impact on international reserves with special reference to Sri Lanka. The author used various theories The study employed an econometric model to analyse time-series data sourced from International Financial Statistics of the International Monetary Fund (IMF) and World Development Indicators of the World Bank.

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[2] Economic Impacts of COVID-19 Macro and Microeconomics Evidences from Sri Lanka: N.P. Ravindra Deyshappriya (2021)

[3] An economic analysis of foreign exchange reserve management in India: Ravindran C.

[4] Currency reserves and debt (1991): Remarks by Chairman Alan Greenspan Before the World Bank Conference on Recent Trends in Reserves Management,

[5] Economic Crisis in Sri Lanka due to the COVID - 19 Epidemic (2021): A S De Silva

[6] Factors Affecting International Reserves: With Special Reference to Sri Lanka - Dr. Mohammad Kashif

The results from the econometric analyses show that there is a long-run relationship between international reserves and selected macroeconomic variables with some of the accounting for the increasing level of the reserves.

In the article on 'COVID-19, Fiscal Policy and Public Debt in Emerging Economies'[7], the writer Harini Weerasekera discusses fiscal policies of emerging economies during Covid-19 and public debt. According to the author, Sri Lanka's fiscal landscape left much to be desired even before the repercussions of the COVID-19 pandemic were felt. Even before the pandemic begins, the country's fiscal space has tightened.

One year into the pandemic, the country's already tight fiscal space has become further constricted, leaving some tough decisions to be made in the pandemic recovery period. The country is currently dealing with the third wave of COVID-19, which will further delay recovery efforts. Despite the inclusion of various fiscal tools in Sri Lanka's COVID-19 recovery plan, there is widespread agreement that the country's fiscal stimulus package was insufficient in comparison to the severity of the crisis. Developed countries, on the other hand, have been implementing some of the greatest fiscal stimulus packages in history. This blog examines the worldwide shift toward fiscal policy dependence in the wake of the pandemic, as well as the extent to which the developing world can follow a similar strategy.

Here for analysing reserves condition, we are using reserves-short term debt ratio. There was a study on reserves to short-term external debt, conducted by (Javier Guzmán Calafell Rodolfo Padilla Del Bosque)[8] argues that interest in using the international reserves/shortterm external debt ratio as a vulnerability indicator titled became even more pronounced as a result of the importance attached to it by several distinguished economists (see A. Greenspan, 1999).

Thus, additional empirical support emerged for the ratio's role in the Asian crisis and crisis episodes in other emerging markets (see Rodrik and Velasco, 1999;

Bussière and Mulder, 1999; and De Beaufort Wijnholds and Kapteyn, 2001). These studies support the superiority of the international reserves/short-term external debt ratio over other coefficients (such as monetary aggregate/reserves ratios and ratios based on import coverage) as an indicator of an economy's liquidity position under present circumstances. In addition, the IMF has incorporated this variable into the series of indicators used in its early warning systems (see Berg et al., 1999 and IMF 2002), and the BIS has also begun to pay more attention to this ratio (see Hawkins and Klau, 2000).

The tourism industry is important for the economy of Sri Lanka. In his research 'The Effect of COVID 19 pandemic to the Tourism Industry in Sri Lanka', the authors Y. Thilini Thushanga and Ranjana U K Piyadasa primarily focus on the tourism industry's fluctuation during the post-World War II period. Due to the impact of the COVID 19 pandemic, more emphasis is placed on the years 2019-2020.

The author, with the help of data and charts, shows how covid-19 has affected the tourism sector of Sri Lanka. With the help of the history of the tourism industry in Sri Lanka, the author has revealed that it is an important sector that can contribute a significant portion of the revenue income towards the development of the country. Here the author suggests some measures such as, if Sri Lanka can manage and operate by mitigating or eliminating any war experiences, ethnic conflicts, crises or pandemics then Sri Lanka can develop the tourism industry in such a way that it will boost the development of the country.

V. METHODOLOGY

A. Data and Information

The entire study is based on secondary data taken from various sources such as World bank, Asian development bank, International monetary fund, Central bank of Sri Lanka, Sri Lanka Tourism Development Authority, Department of External Resources of Sri Lanka and from other recognized websites.

B. Analytical Scenario

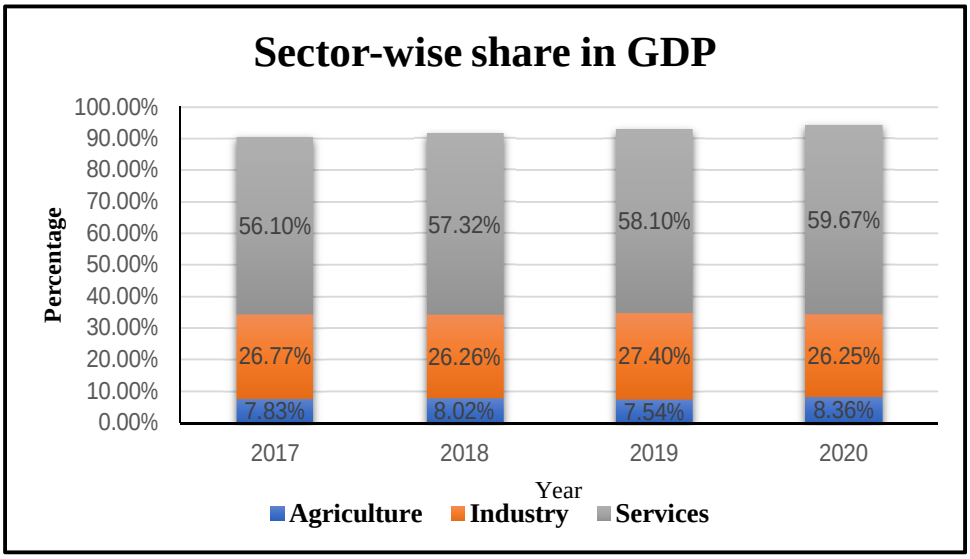
This study mainly depicts a descriptive analysis and uses some rules such as the **GuidottiGreenspan rule** which utilizes some tables, charts, and graphs to complete the objectives of the study. The collected secondary data has been processed and analysed by using excel with different quantitative, statistical techniques such as Correlation to find the relationship between two variables. The tabulated data has been presented by various graphs and charts.

[7] COVID-19, Fiscal Policy and Public Debt in Emerging Economies on June 14,2021 by Harini Weerasekera [8] The ratio of international reserves to short-term external debt as an indicator of external vulnerability: some lessons from the experience of Mexico and other emerging economies

VI. OVERVIEW OF SRI LANKAN ECONOMY:

Sri Lanka is considered to be a lower-middle-income country with a GDP per capita of USD 3,852 (2019) and a total population of 21.8 million. Sri Lanka is a developing economy that is mostly based on the agriculture sector, tourism sector, services, and light industry. Sri Lankan economy is a mixed type of economy where both the sectors i.e., the Private sector and the public sector are involved in the process of production. Sri Lanka is the largest exporter of Black tea in the world. Sri Lanka mainly imports petroleum, consumables, textile fabrics, foodstuffs, and machinery and transportation equipment, and other manufactured goods while it exports products like Black tea, rubber, gems, etc. Garments and textiles are major export products of Sri Lanka comprising 52% of total exports.

Chart no.1 – Sector-wise share in GDP[8]



Source: Statista

During 1950, the agriculture sector comprised nearly 40% of GDP while Services accounts for the same as Agriculture. The contribution of the industry sector in GDP rose from 15% in 1950 to 27.4% in 2019. For Agri contribution in GDP decreases from 40% to 7.4 % and for Services, the contribution increases from 40% to 58.2%. This is enough to explain the importance of services in the Sri Lankan economy. The sector is dominated by wholesale and retail trade, transport and communication, banking and finance, and hotels and restaurants sectors. Of course, services respond to domestic demand whether it comes from the government or the private sector. If the growth of the service is too much driven by the expansionary fiscal and monetary policies, such services growth will not be sustainable. The domestic demand generated services growth should be more driven from the private sector and less from expansionary government policy.

A. Variables Chosen

1) Debt-GDP ratio
2) Reserves to short-term debt ratio (Guidotti-Greenspan rule)
3) Exchange rates
4) Exports and Imports
5) Inflation

VII. RESULTS AND IMPACTS ON VARIOUS ECONOMIC VARIABLES

A. Gross Domestic Product (GDP)

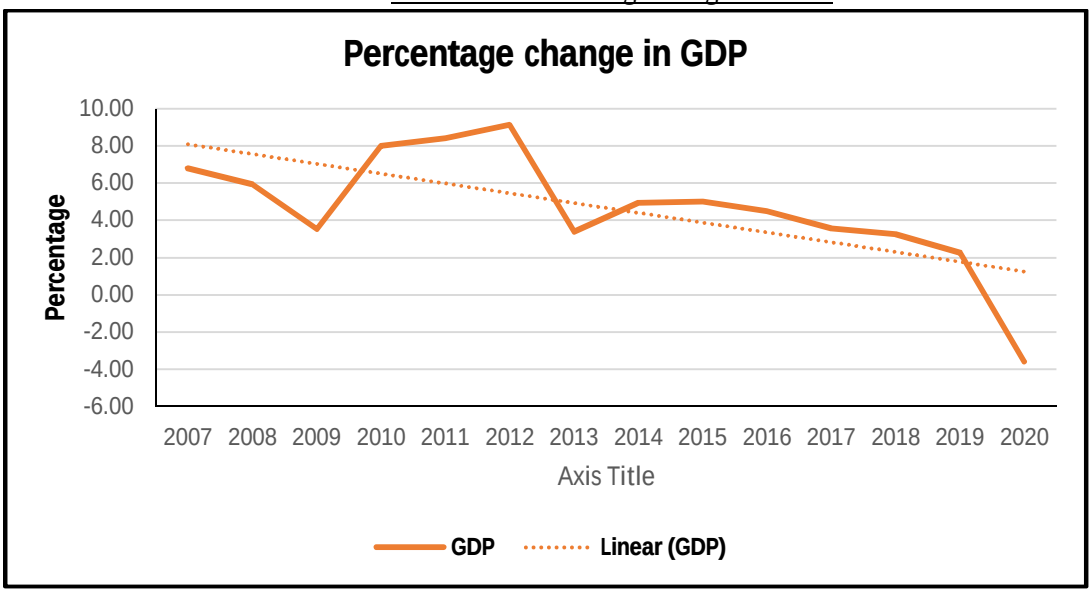
Gross domestic product is a monetary measure of the market value of all the final goods and services produced in a specific period. The GDP is considered to be the most important macroeconomic variable while measuring the condition of an economy and it is an important indicator for the same.

[8] We have represented sector wise composition in GDP

The GDP per capita income is calculated using two variables which are the overall GDP of the country and its total population. When we divide a country's GDP by its total population over a specific period, probably for one year. It is considered to be an important indicator of standard of living and also used for comparison between countries. Here we took the percentage change in GDP to check the impacts of the economic crisis over certain economic indicators.

This study uses real GDP per capita income calculated based on 2010 price level and included as the dependent variable to the model. If we consider the percentage change in GDP from 2007 to 2020, we found that there is a continuous decline in the % change in GDP of the Sri Lankan economy except for two years 2010 and 2011.

Chart no.2 – Percentage change in GDP [9]



Source: Department of External resources

The linear trendline is downwardly projected. The reasons behind this could be decreasing revenues from the tourism industry. If we consider the above chart, According to estimates, the tourism industry represents over 10% of the country's Gross Domestic Product and is considered to be the largest source that brings in foreign exchange. Due to the covid pandemic, the tourism industry has been hit hard by the coronavirus pandemic.

The economy suffered a series of shocks in the form of a currency crisis which brought an International Monetary Fund program in 2016, political instability in 2018 combined with a second currency crisis followed by a covid pandemic which makes the situation worse.

B. Foreign Direct Investment (FDI)

The island nation is ripe for investment in the sectors such as tourism, logistics, information technology-enabled services, and high-value-added food processing and apparel, thanks to its many advantages such as a rich natural resource base, strategic geographic location, highly literate workforce, and fascinating culture.

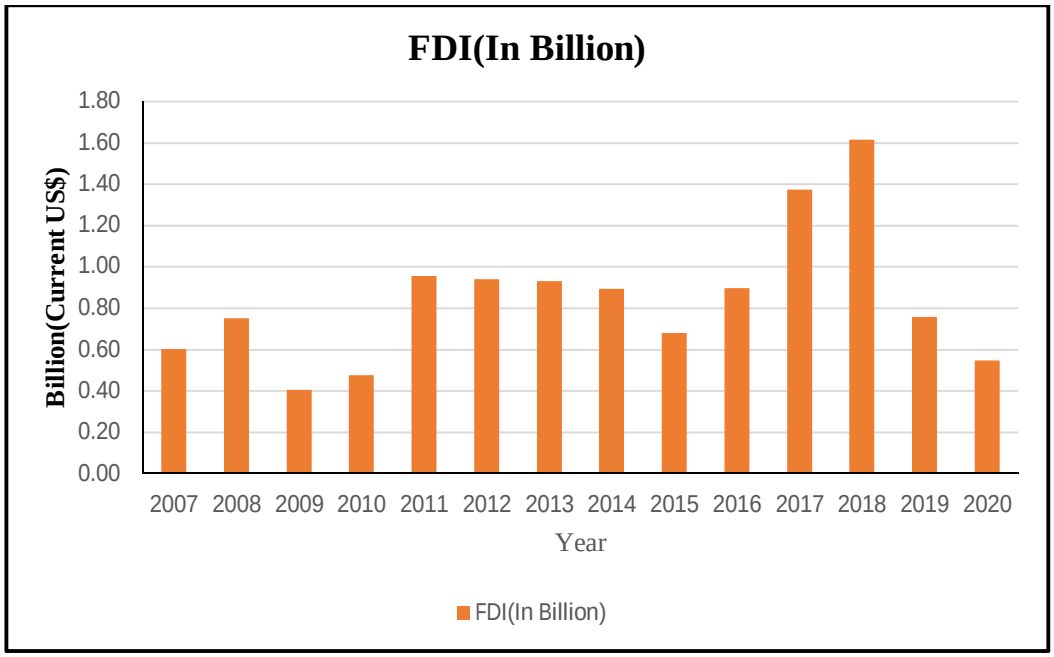
Attracting more FDI will help in achieving the following goals:

1) FDI will help in boosting economic growth
2) Sri Lanka desperately needs foreign investment to foster its economic growth.
3) FDI leads to innovations and technological development
4) FDI will help in more diversified exports and maintain a trade balance
5) It will strengthen the domestic currency

[9] Data is taken from world Bank site in the form of percentage change

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Chart no.3 – Foreign Direct investment [10]



Source: World Bank

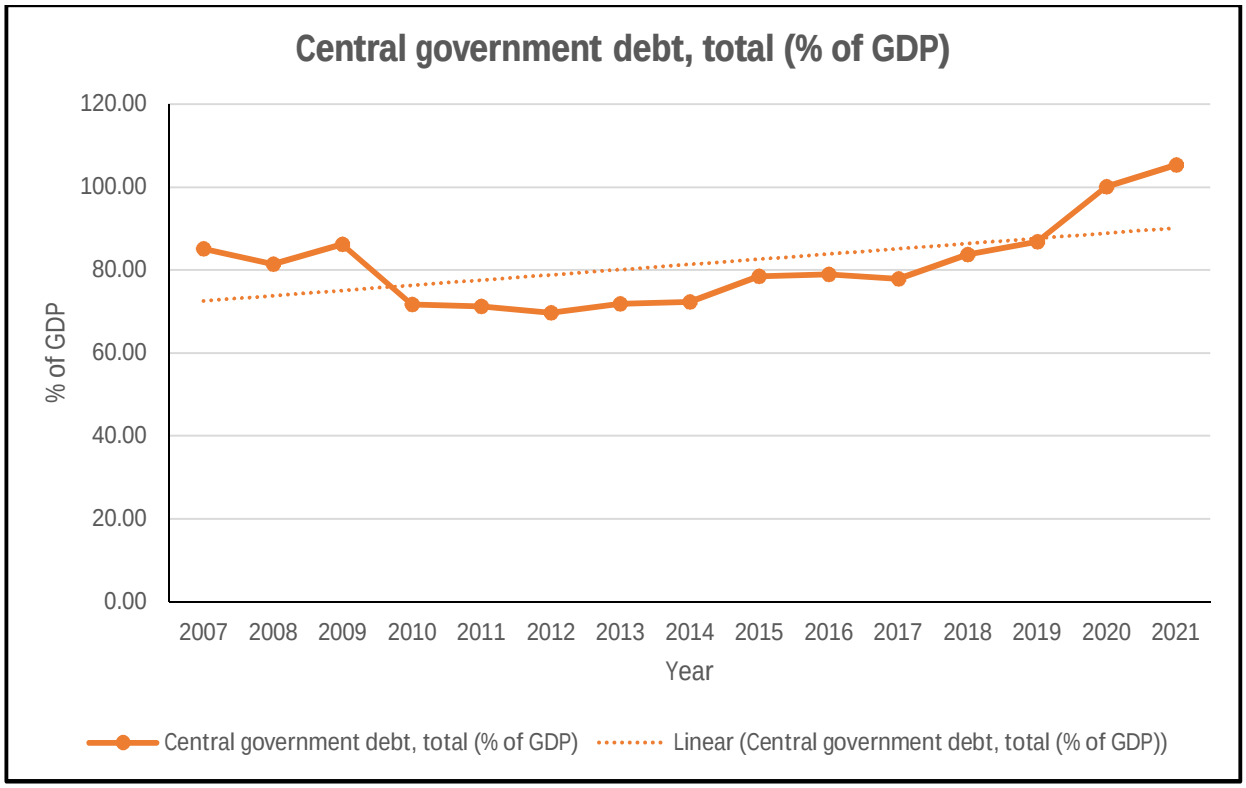
We know that higher levels of FDI will result in the economy by strengthening exports, higher growth rate, etc. The recent outbreak of the COVID-19 crisis can be seen as an opportunity for Sri Lanka to work on and push forward policies that will enable the country to build back better with stronger measures to attract much-needed Foreign
Direct Investment (FDI). If we see trends in FDI from 2007 to 2011, there is less foreign investment due to internal armed conflicts as high risks associated with uncertainties affect FDI. Sri Lanka's foreign direct investment (FDI) fell to $0.55 billion in 2020, down from $0.76 billion in 2019 and $1.61 billion in 2018.
In comparison to other countries in South Asia, Sri Lanka receives a small amount of foreign direct investment. Increased FDI inflows will result in additional job possibilities, help in larger tax collection and it will strengthen the domestic currency. As a result, rather than focusing on some specific areas, economic policy should focus on establishing easy procedures and different facilities to attract FDI. Making effective attempts towards attracting Foreign Direct Investment will strengthen the economy.

C. Increasing Debt-GDP Ratio

The debt-GDP ratio is the ratio of a country's public debt to its gross domestic product (GDP). It is often expressed as a percentage. The ratio can be used for interpreting the number of years needed to pay back debt. As a rule, the higher a country's debt-to-GDP ratio climbs, the higher its risk of default becomes.
The debt-GDP ratio for the year 2021 rises to 106% for Sri Lanka. The rupee has depreciated against the US dollar as foreign exchange reserves have decreased, making it increasingly difficult to service foreign currency debt. When a country defaults on its debt, it often triggers financial panic in domestic and international markets alike. As a rule, the higher a country's debt-to-GDP ratio climbs, the higher its risk of default becomes**.** Although governments attempt to reduce their debt-to-GDP ratios, this can be difficult during times of turmoil, such as war or economic hardship. In such difficult circumstances, governments are more likely to expand borrowing to encourage the economy and enhance aggregate demand. This macroeconomic strategy is a chief ideal in Keynesian economics.[11]

[10] The FDI is in Billion (Current US$)
[11] Keynesian economics is a macroeconomic economic theory of total spending in the economy and its effects on output, employment, and inflation. Based on his theory, Keynes advocated for increased government expenditures and lower taxes to stimulate demand and pull the global economy out of the depression.

Chart no.4 – Central Government Debt as a percentage of GDP



Source: World Bank

If we see Sri Lanka's central government debt, we can see that since 2014 the country has witnessed a sharp rise in debt. The COVID-19 pandemic has adversely affected the country which makes the situation worse. If we check figures, we can see that by 2021 the foreign debt rose to 106% of the nation's GDP causing an economic collapse. If we consider the period after the global crisis of 2008, Sri Lanka's debt lies about 85% compared to 106% during the covid period which is sufficient to explain how hard covid has deeply hurt the Sri Lankan economy.

As the years passed, Sri Lanka with the help of rapid economic growth, transferred itself from being a low-income country to a middle-income country. When a country progresses in such a way, then the country doesn't access loans provided by various institutions and donors such as loans given on a concessionary basis.

With the continuous economic growth and the change in status from a low-income country to a middle-income country, there is an opening of new opportunities for foreign investors such as foreign exchange currency trading. This helps the country in many ways and encourages the outflow of that currency.

Sri Lanka would have to look for alternative foreign financing sources to tackle such problems in the future.

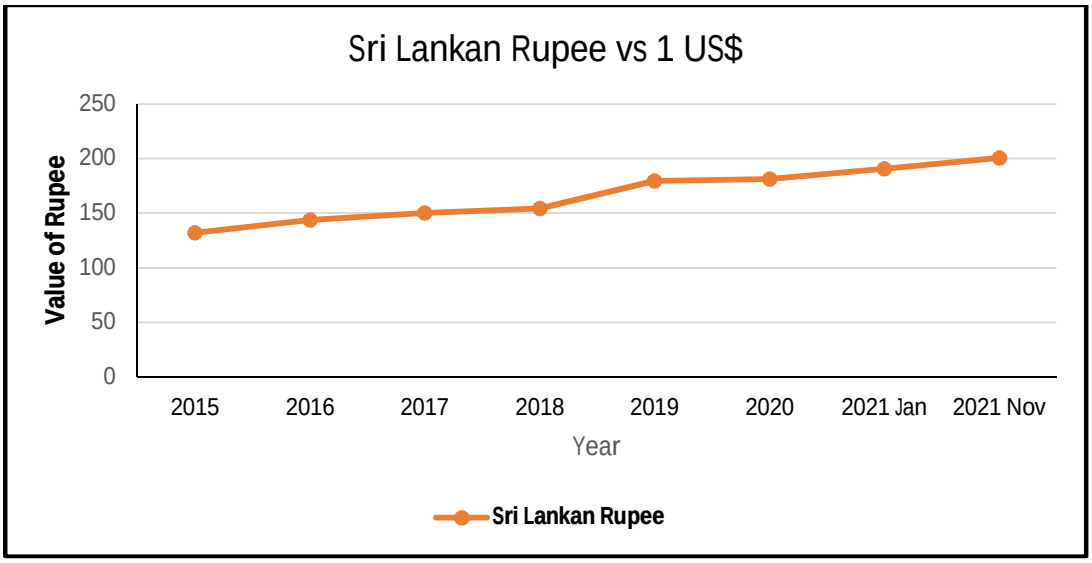
Sri Lanka's foreign debt crisis is more than only its large borrowing from various international sources, which often leads to a major balance of payment (BOP) concerns. The underlying causes of the current crisis are structural flaws in policies such as trade contraction, low revenue generation from taxes, and a lack of foreign direct investment (FDI). Failure to find comprehensive, consistent, long-term solutions to tackle such structural weaknesses has resulted in the country experiencing severe BOP crises every few years.

D. Declining value of Sri Lankan Rupee

According to the Central bank of Sri Lanka, Sri Lanka has adopted a floating exchange rate system since 2001 which allowed the independent adjustment of the exchange rate according to the market forces of demand and supply. However, there could be interventions in the market to curb excess volatility in the exchange rate. The belowgiven graph depicts the value of the Sri Lankan rupee against the USD.

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Chart no.5 - Value of Sri Lankan rupee against 1 US$



Source: Trading economics

Due to the depleting foreign exchange reserves, the Sri Lankan rupee is putting pressure on the balance of payments[12]. The country is on the edge of a serious balance-ofpayments (BOP) crisis. The sad reality is that these debt problems cannot be remedied with short-term remedies, which the government appears seems to ignore. The only longterm option is to address the economy's structural flaws. These problems won't go away in a year or two, either. Sri Lanka will have to spend a substantial proportion of foreign currency revenues to repay commercial loans because it will have outstanding sovereign debts maturing every year until 2030. That is not going to be a pleasant experience.

VIII. BLUEPRINT OF REASONS

A. *Declining reserves to short-term debt ratio*

The international reserves/short-term external debt ratio is used as a vulnerability indicator. The study on this ratio done by (Javier Guzmán Calafell and Rodolfo Padilla del Bosque) gives the reasons underlying the importance of the ratio: [13]

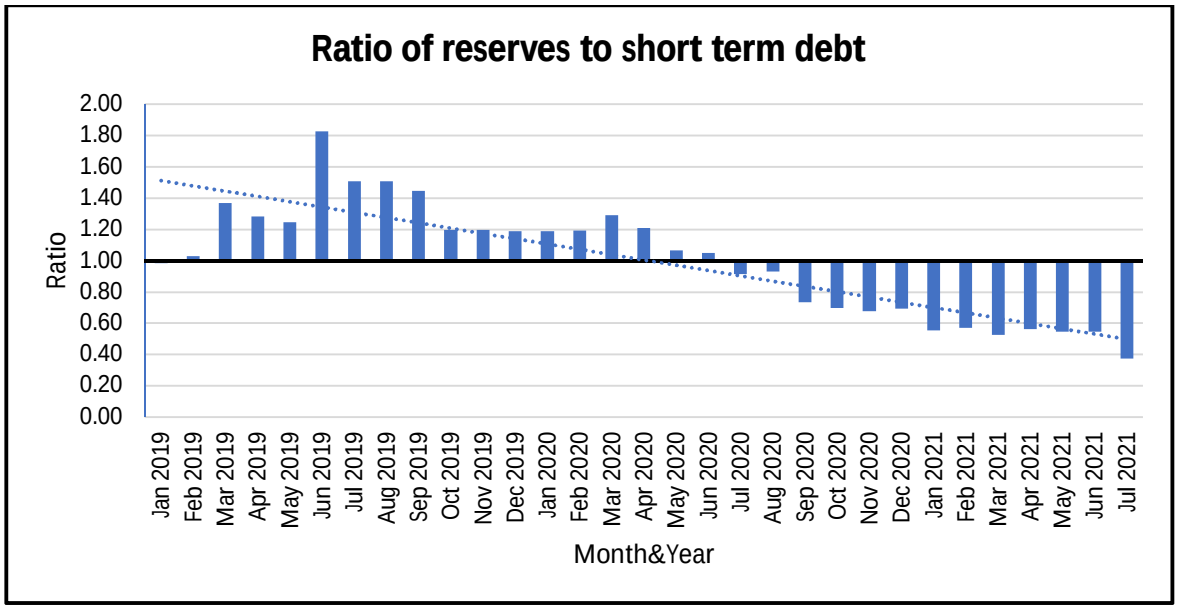
1) Due to the limited availability of foreign reserves, a country with a low international reserves/short-term external debt ratio is more exposed to speculative attacks or external shocks.
2) A low reserves/short-term external debt ratio could indicate that the government is pursuing risky macroeconomic policies.
3) When the ratio is low, the current account and exchange rate adjustments required to balance the macroeconomic accounts are magnified, making an economic crisis more severe.
4) Appropriate level for this ratio could give significant benefits to the worldwide community. This would limit the size of international aid packages for countries in crisis, as the size of these aid packages is heavily influenced by a country's short-term liabilities relative to its foreign reserves.

As suggested in reason (4), there was a baseline decided based on the Greenspan-Guidotti rule. The rule emerged in the late 90s based on empirical evidence. It was known as the Greenspan- Guidotti rule named after the deputy finance minister of Argentina, Pablo Guidotti, and Fed Chief, Alan Greenspan. The Guidotti–Greenspan rule states that a country's reserves should equal short-term external debt (one-year or less maturity), implying a ratio of reserves-to-short term debt of 1. The rationale behind this is that countries should have enough reserves to resist a massive withdrawal of shortterm foreign capital.

[12] The balance of payments (BOP) is an accounting of a country's international transactions for a particular time period. Any transaction that causes money to flow into a country is a credit to its BOP account, and any transaction that causes money to flow out is a debit.

[13] Reference no 9

Chart no.6 - Ratio of reserves to short-term debt



Source: IMF Data When we studied the ratio of reserves-to-short term debt in the case of Sri Lanka, we found some insights into it. If we look at the graph given below, we can see how the ratio of reserves to short-term debt of Sri Lanka is decreasing.

When we look at data, from March 2020 the value starts falling and in July 2020, finally, it came down below 1. The reason behind this is the covid-19 outbreak. During the corona pandemic, Tourism revenue which is the main source of foreign reserves has declined

Table no. 1 – Tourism Data

Year	No of tourist arrivals (In thousands)	Tourism Revenue (In USD Mn)
2009	447.89	349.58
2010	654.48	575.94
2011	855.98	830.30
2012	1005.61	1038.74
2013	1274.59	1715.47
2014	1527.15	2431.11
2015	1798.38	2980.65
2016	2050.83	3518.49
2017	2116.41	3924.93
2018	2333.80	4380.63
2019	1913.70	3606.93
2020	509.00	682.41
2021[14]	24.38	32.77

Source: Central bank of Sri Lanka

[14] for 2021 data is taken up to August 2021

There is a significant drop in no of tourist arrivals since the covid pandemic has begun which ultimately affects tourism revenue. Only 24.38 thousand tourists have visited Sri Lanka compared to 1913.70 thousand in 2019 while 509 thousand in 2020. Tourism revenue also got declined to 32.77 Mn USD in 2021 compared to 3606.93 Mn USD in 2019 while 682.41 Mn USD in 2020.
This figure tells us how badly, the pandemic has affected the Sri Lankan economy. Here we try to analyse the relationship between Tourist arrivals and Tourism revenue by using statistical method correlation. We found the correlation coefficient to be **0.98** which indicates a strong positive relationship between these two variables. This means revenue getting from tourism is highly dependent on the number of tourist arrivals i.e., international tourists.
The below-given table represents revenue earned from tourism and forex reserves of the country. Here we have done a correlation for a better understanding of the relationship between these two variables. The correlation coefficient was near around **0.82** which depicts a strong positive relationship between these two variables.

Table no. 2 – Tourism revenue vs Forex reserves[15]

Year	Tourism Revenue (In USD Mn)	Forex reserves (In USD Mn)
2016	3518.49	5,188.55
2017	3924.93	7,030.70
2018	4380.63	6,100.10
2019	3606.93	6,689.82
2020	682.41	5,256.67
2021*	32.77	2,954.23

Source: Central bank of Sri Lanka

Foreign exchange reserves, according to the IMF (2009), are foreign currency deposits held by central banks or other monetary authorities. They are assets held by central banks in various reserve currencies such as the dollar, the pound sterling, the euro, the yen, and so on. These reserve currencies are used to back the liabilities of the central bank, such as the local currency issued, the reserves deposits of various deposit money banks (DMBs), the government, and other financial organisations. International reserves are used to support monetary and foreign exchange policies to achieve the goals of currency stability and normal domestic and international payment system functions. Significant reduction in tourist arrivals deeply hurts the revenue generated which ultimately affects forex reserves. Here Sri Lanka should find other sources of foreign exchange to tackle unpredicted conditions such as the covid pandemic. Diversifying export markets and export industries, as well as increasing foreign direct investment (FDI), can help to alleviate Sri Lanka's foreign exchange situation and increasing debt-GDP ratio.

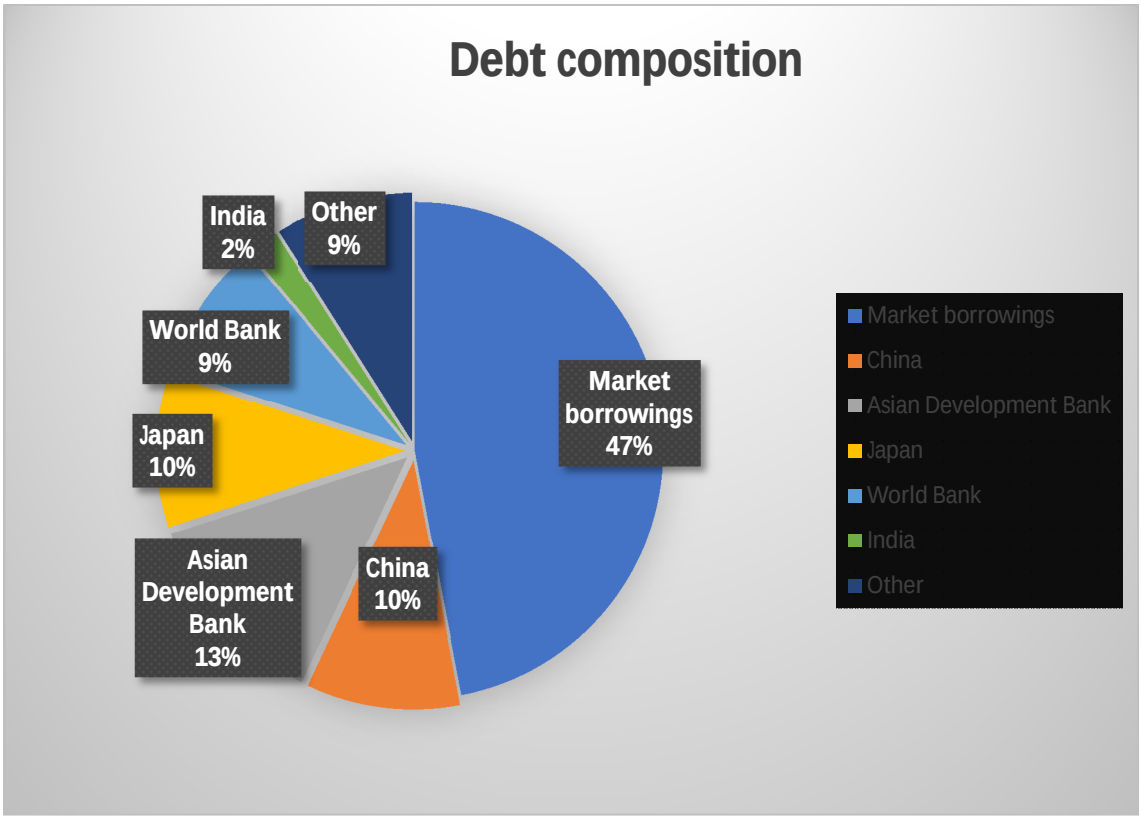
B. Debt Trap

It is perhaps no surprise that this is one of the important reasons behind the crisis. There are concerns over Sri Lanka’s debt sustainability. As per IMF, Debt sustainability, generally refers to the economic condition of a government to fulfil its current and future demand of debt obligations without being a defaulter and any external exceptional financial support. This economic disaster is the result of Sri Lanka's decades-long economic growth model. Due to the extended civil war and political instability, Sri Lanka was unable to attract considerable amounts of foreign direct investment (FDI) despite its transformation into a middle-income country.

[15] Here for the year 2021, data is up to August-2021

The below pie chart shows the composition of Sri Lanka's debt.

Chart no.7 – External debt composition Of Sri Lanka



Source: Ministry of finance

It kept its economy afloat by borrowing through sovereign bonds and international bilateral commercial loans, all of which came with high-interest rates and short payback periods (see Chart no 7), forcing the government to spend its income and foreign reserves to repay the loans and keep the economy afloat. This external debt amounted to $49.2 billion by Dec 2020.[16]

Sri Lanka's foreign debt, as of April 2021, stands at US$ 35.1 billion, of which China's lending stood at US$ 3388.2 million (~ 10%), lending from the Asian Development Bank stood at US$ 4415.7 (~13%), while lending from India stood at US$ 859.3 million (~2%).[17] The debt of government comprises mainly of 47% market borrowings followed by Asian development bank (13%). The Asian Development Bank (ADB) has been a major development partner to Sri Lanka since 1966 and is today the country's largest source of multilateral development assistance. In 2020, ADB disbursed $745 million to Sri Lanka, the highest ever annual total for disbursements. The Asian development bank's financial investments and knowledge work is useful for Sri Lanka in many ways. It will seek to strengthen the drivers of growth by promoting diversification of economic activities, supporting human capital development, driving productivity enhancements, and improving the quality of growth by fostering inclusiveness.[18]

C. Trade Scenario

Sri Lanka exports textiles, clothes, tea, spices, jewels, coconut goods, rubber, and fish. The United States, the United Kingdom, Germany, Belgium, and Italy are the primary destinations for exports. Petroleum, textile fabrics, foodstuffs, machinery, and transportation equipment are all imported by Sri Lanka. India, China, Iran, and Singapore are the country's biggest import partners. In 1998, Sri Lanka and India signed the world's first bilateral free trade agreement. It is a member of the WTO and the South Asian Association for Regional Cooperation (SAARC).

[16] Central bank of Sri Lanka on external debt
[17] By Ministry of External Affairs, India
[18] Asian development Bank about Sri Lanka

Chart no.8 – Export vs Import Representation



Source: World Bank Sri Lanka is a country with a trade deficit. For years, the country's financial problems have been exacerbated due to such large trade deficit. As we can see, Sri Lanka is an import dependent economy. In September 2020, Sri Lanka's economy started recovering from the lockdown. Imports dropped after April 2020 due to lockdowns and a decrease in private credit, but policies like import regulations plays a major rule. Therefore, the nation last year banned or licensed hundreds of foreign-made goods, including toothbrush handles, Venetian blinds, strawberries, vinegar, wet wipes, sugar and even a staple spice turmeric, to save on the remaining forex reserves. The nation has been under the worst import controls since the 1970s.

Imports then surged as private credit expanded, fuelled in part by printed money[19]. Sri Lankan imports were greater in August than they were in January of this year, when the country was generating revenue from tourists but not printing much money. Increased trade will result in additional job possibilities and it will help in larger tax collection and will strengthen the economy. As a result, rather of focusing on some specific areas, economic policy should focus on establishing comparative advantage across a wider range of industries. Making trade agreements with other countries can also help.

D. Food Crisis

Sri Lankan economy is an import dependent economy which heavily depends on considerable volumes of food imports every year. Sri Lanka, which imports the majority of its necessities, such as sugar and milk powder, has been particularly hard hit. The below given reasons have created an extra pressure on the economy which is leading towards inflation.

1) Panic buying due to restrictions
2) Interrupted domestic production and distribution
3) Some policies of government like putting restrictions on imports

The Sri Lankan rupee's depreciation due to inflation has further declined the country's foreign exchange reserves as stated above, which were already dwindling due to a reduction in tourism and exports, the two main sources of US dollars. The reserves declined from $7.5 billion in Nov 2019 to $2.8 billion in July 2021, making the case worst. In August 2020 Sri Lanka's import volumes for food mainly includes cereals, dairy, vegetables, and sugar stood at $228.6 million, a sharp decrease from the $332.1 million in 2019. Aside from structural issues, the Sri Lankan government recently declared plans to convert the country's agriculture sector to 100% organic. The introduction of a prohibition on the use of chemical fertilizers in the country accelerated this trend, resulting in relatively poor agricultural production and contributing to the food crisis. The decision of complete organic farming has affected the agriculture sector. Tea, the country's most famous commodity, may have aided in the healing process. However, the commodity, which brought in $1.2 billion last year, is now facing its own crisis as a result of the government's abrupt decision to phase out chemical fertilizers.

[19] The Sri Lanka has been printing money at a high rate partly to offset a fall in the tax

Three scientifically thorough meta-analyses of organic-conventional crop production comparisons, according to experts, show that the average yield drop in organic agriculture in Sri Lanka is roughly 19-25 percent across all crops[20]. This demonstrates that switching to organic farming overnight poses a clear and immediate threat to the country's food security. According to one study[21], Organic farming currently accounts for only 1% of global agricultural land, is lower yielding on average. Widespread upscaling of organic agriculture would cause additional loss of natural habitats and also entail output price increases, making food less affordable for poor consumers in developing countries. The industry won't be able to attract enough new clients for niche organic tea to cover a threefold increase in production costs. To deal with the growing crisis, the administration proposed a food price cap and the deployment of the army to help rationalise food supplies and prevent hoarding of key foodstuffs. Sri Lanka's central bank has also prohibited forward contracts and spot trading of rupees valued at more than 200 rupees to the US dollar. That's exactly happens in Sri Lanka which is leading towards the food crisis.

IX. POLICY RESPONSE

Till now, Sri Lanka has reacted to these difficulties by implementing capital controls, restricting imports, and utilising currency swaps. Import restrictions have resulted in a scarcity of vital items. Short-term solutions include currency swaps and capital controls.

A. Currency Swapping

Recently Sri Lanka swapped its currency with China worth of 1.5 billion US$ while with India worth of 400 million US$ and $150 million from Bangladesh Central Bank. The demand for dollars remains high in the open market due to its universal acceptance. There is less demand for Yuan as no country is dealing with such currency. So, the $400 million currency swap with India has helped to maintain the rupee stable for even a small period. Since the swapping of currency with China is in Yuan, the government can only use that money to pay import bills due to less universal acceptance as stated above. This method is at least useful since China is one of the biggest import destinations. Sri Lanka is regularly importing about USD 3.5-4 billion in goods from China. But this move will not help in building reserves and that is what Sri Lanka really needs to understand and build upon. Even if Sri Lanka decides to alter course and seek IMF assistance, the country's poor financial situation will almost definitely necessitate reorganization.

X. CONCLUSION

As world knows, Sri Lanka is known for the country's great performance in various programmes such as raising living standards of people and reducing poverty, but the COVID19 crisis has led the country to destructive losses in livelihoods and economically in recession which affects many lives and has widened the economic gap. After emerging from the current crisis, the first preference of country should be to help the poor and vulnerable people who got hardly affected get back on their feet and prevent any long-term effects—for example, widespread school closures resulted in considerable learning losses and expanded human capital inequities, which could undermine long-term growth and social mobility. The presence of social institutions and networks should ensure that everyone from the bottom up is involved in the development process and its outcomes.

The study depicts a number of factors have led to the current economic crisis in Sri Lanka, including:

1) The decline in revenue of tourism industry
2) The economy hit hardly by the coronavirus pandemic
3) Increasing debt-GDP ratio
4) The decrease in foreign reserves
5) Depreciation of Sri Lankan rupee

To tackle the crisis, Sri Lanka has recently received help of worth $787 million from the International Monetary Fund's (IMF) special drawing rights (SDR)[22] allocation. It will boost the Sri Lanka's depleting foreign exchange reserves which were struggling to recover due to the sharp decrease in tourism revenue amid the coronavirus pandemic.

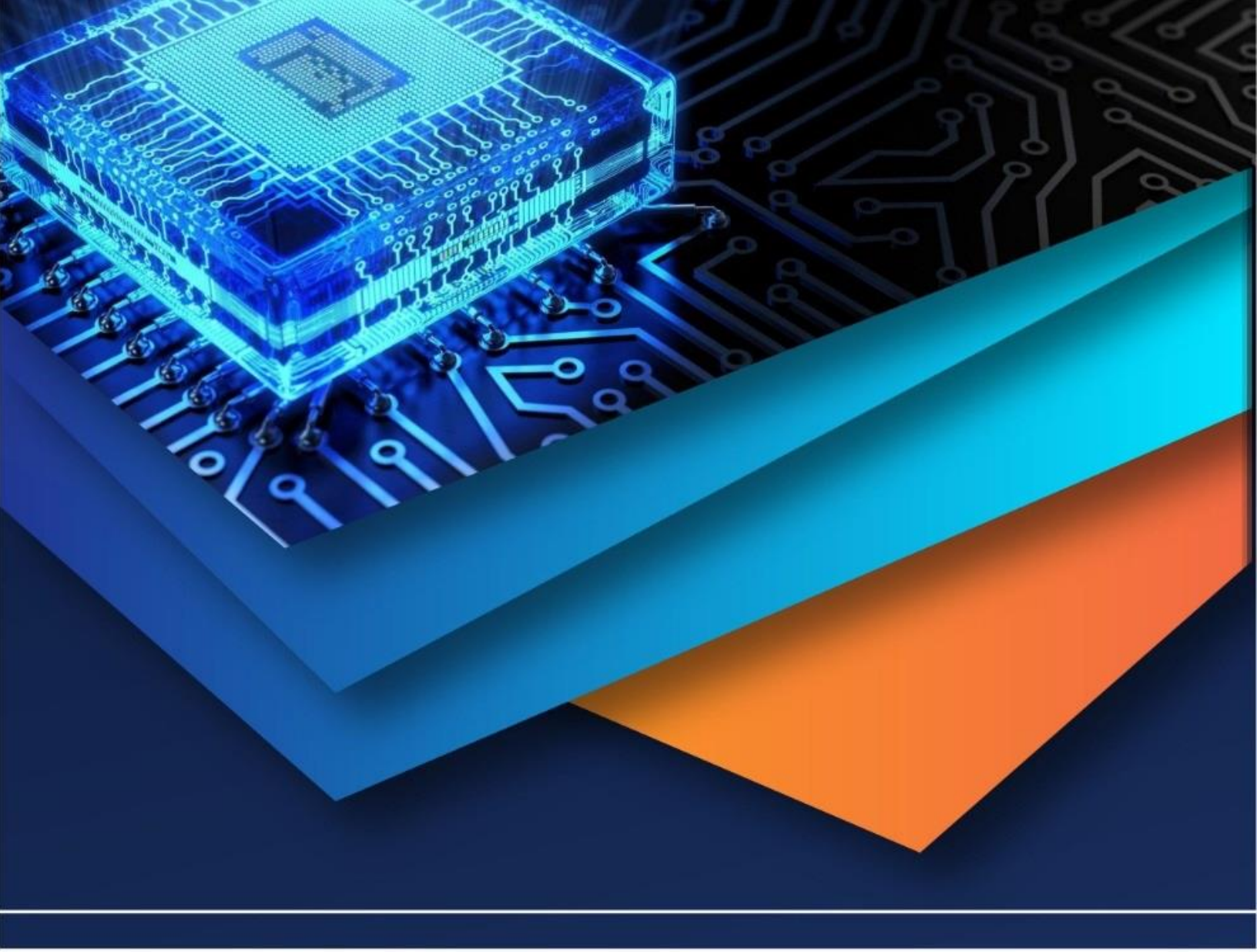
[20] Article in the print
[21] Organic Agriculture, Food Security, and the Environment. Eva-Marie Meemken and Matin Qaim. Annual Review of Resource Economics, 2018
[22] Special Drawing Rights, often referred to as SDRs, are an interest-bearing international reserve asset used by the

After the covid pandemic, many countries in the world, especially countries from developing world, are going to face policy challenges to maintain balance between maintaining fiscal sustainability and jump-starting economic recovery. In the short term, Sri Lanka, like many other developing countries throughout the world, will have to maintain a difficult balance between fiscal sustainability and reviving the economy. To recover stability and trust, Sri Lanka needs a credible fiscal plan and monetary policy.

REFERENCES

[1] Bussière and Mulder, 1999. Political Instability and Economic Vulnerability. Crossref
[2] Colombo Telegraph, September 29, 2021. What are The Reasons Beyond Sri Lanka's Economic Crisis? Crossref
[3] Colombo Telegraph. Sri Lanka's foreign debt crisis forecast for 2021. Crossref
[4] De Beaufort Wijnholds and Kapteyn, 2001. Reserve Adequacy in Emerging Market Economies. Crossref
[5] De Silva, Ashani, Economic Crisis in Sri Lanka Due to the COVID-19 Epidemic (August 27, 2021). Crossref
[6] Department of External resources, Sri Lanka. Debt Stock (by Major Lenders, US$ million). Crossref
[7] Google arts and culture. Sri Lanka. Crossref
[8] Harini Weerasekera. COVID-19, Fiscal Policy and Public Debt in Emerging Economies. Crossref
[9] Hawkins and Klau, 2000. Measuring Potential Vulnerabilities in Emerging Market Economies. Crossref
[10] IMF Data template on international reserves and foreign currency liquidity. Crossref XDR, which it may also be referred to by. The SDR serves as the unit of account for the IMF for internal accounting purposes.
[11] Javier Guzmán Calafell, Rodolfo Padilla del Bosque (2003). The ratio of international reserves to short-term external debt as an indicator of external vulnerability: some lessons from the experience of Mexico and other emerging economies. Crossref
[12] Jeevethan Selvachandran (2021). "A surging crisis in Sri Lanka", Policy Forum. Crossref
[13] Kashif, M., Sridharan, P. Factors Affecting International Reserves with Special Reference to Sri Lanka. Crossref
[14] Ministry of finance, Sri Lanka.
[15] Monthly tourist data report 2021: Ministry of Finance – Sri Lanka.
[16] Nations encyclopedia. Sri Lanka - Overview of economy. Crossref
[17] Note on special drawing rights by Corporate Finance institute. Crossref
[18] NP Deyshappriya (2020). Economic Impacts of COVID-19 Macro and Microeconomics Evidences from Sri Lanka: Research Gate Crossref
[19] Organic Agriculture, Food Security, and the Environment. Eva-Marie Meemken and Matin Qaim. Annual Review of Resource Economics, 2018. Crossref
[20] Overview about Sri Lanka: World Bank
[21] Public Debt Management: Central Bank of Sri Lanka
[22] Rodrik and Velasco, 1999. Short-Term Capital Flows. Crossref
[23] Sri Lanka: Share of economic sectors in the gross domestic product (GDP) from 2010 to 2020. Statista. Crossref
[24] Sri Lanka Declares Food Emergency as Country Runs Out of Forex Reserves to Finance Imports: The wire. Crossref
[25] Sri Lanka receives $787 million SDR from IMF and $150 million swap from Bangladesh: The Hindu, Sep 2021. Crossref
[26] Sri Lanka economy in crisis as debt mounts, reserves dwindle: The Hindu, July 2021. Crossref
[27] Sri Lanka's Economic and Food Emergency- Impact on the Indian Economy: Ministry of External affairs India. Crossref
[28] Sri-lankas-foreign-debt-crisis-could-get-critical-in-2021: The Diplomat. Crossref
[29] Wikipedia: The 2021 Sri Lankan economic crisis. Crossref
[30] World Bank, (2021): Four Priorities to Accelerate Economic Transformation and Poverty Reduction in Sri Lanka
[31] Y. Thilini Thushanga, Ranjana U K Piyadasa. (2021). The Effect of COVID 19 pandemic to the Tourism Industry in Sri Lanka. Crossref

International Monetary Fund (IMF). The SDR is based on a basket of currencies and comes with the currency code,



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