Diagnosis of Sri Lanka’s Current Economic Crisis and Potential Solutions

Murtaza Jafferjee  CFA
Poll 1
How old are you?

- Between 40 and 50 years: 27.5%
- Between 30 and 40 years: 33.8%
- Between 20 and 30 years: 20.8%
- Above 50 years: 18.0%

Total respondents: 400
We have had decades of Macro Economic Instability
USD/LKR rate since 1950

Average annual exchange rate

220
Sri Lanka has spent 42% of the last 70 years under an IMF facility

It is currently in its 16th IMF program

*Width of the line denotes length of the arrangement in years*

Source: CBSL, Advocata Research
Some countries have repeat IMF programs

🔗 https://youtu.be/vnn66yUJHiO
Sri Lanka’s Current account balances – 70 years

% of GDP
External Sector – Inflows are growing but outflows are growing faster

Source: Harvard Economic Atlas, Advocata Research
Is the problem due to trade or excess spending

- **Absorption** can also be defined as **spending**
- Spending is a function of disposable income ($income - taxes$) and **credit**
- Taxes are determined by **Fiscal Policy**
- Credit is determined by **Monetary Policy**
Is Monetary Policy the Problem - Real interest rates

Real AWPLR

Real 1Y G-sec yield
Is Fiscal Policy the problem? The problem of twin deficits

<table>
<thead>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Government dis-savings</td>
<td>-102.9</td>
<td>-41.9</td>
<td>-63.5</td>
<td>-51.9</td>
<td>-118.3</td>
<td>-240.8</td>
<td>-64.2</td>
<td>-88.1</td>
<td>-157.3</td>
<td>-525.8</td>
<td>-1,175.1</td>
</tr>
<tr>
<td>Current Account balance</td>
<td>-119.3</td>
<td>-525.7</td>
<td>-506.3</td>
<td>-332.2</td>
<td>-260.5</td>
<td>-271.2</td>
<td>-261.0</td>
<td>-352.9</td>
<td>-511.5</td>
<td>-334.8</td>
<td>-201.9</td>
</tr>
<tr>
<td>Dis savings % of current account balance</td>
<td>86.3%</td>
<td>8.0%</td>
<td>12.5%</td>
<td>15.6%</td>
<td>45.4%</td>
<td>88.8%</td>
<td>24.6%</td>
<td>25.0%</td>
<td>30.7%</td>
<td>157.0%</td>
<td>582.0%</td>
</tr>
<tr>
<td>CA balance % of GDP</td>
<td>-1.6%</td>
<td>-0.6%</td>
<td>-0.7%</td>
<td>-0.5%</td>
<td>-1.1%</td>
<td>-2.2%</td>
<td>-0.5%</td>
<td>-0.7%</td>
<td>-1.1%</td>
<td>-3.5%</td>
<td>-7.8%</td>
</tr>
<tr>
<td>Dis-savings % of GDP</td>
<td>-1.9%</td>
<td>-7.3%</td>
<td>-5.8%</td>
<td>-3.5%</td>
<td>-2.5%</td>
<td>-2.5%</td>
<td>-2.2%</td>
<td>-2.6%</td>
<td>-3.6%</td>
<td>-2.2%</td>
<td>-1.3%</td>
</tr>
</tbody>
</table>
Primary and Overall Balance

**Primary Balance** (PB) is the difference between Government Revenue (R) and non-interest Government expenditure (G)

\[ PB = Revenue - Primary Expenditure \]

The primary balance is an indication of fiscal performance in each year, interest (I) is on debt that is inherited which is excluded. The PB illustrates how resources raised each year have been used.
Except for 4 years we have been posting primary balance deficits since the 1950s.

Source: CBSL, Advocata Research
The problem is a revenue shortfall
Tax revenue has not kept pace with nominal GDP growth

Tax revenue Primary expenditure and nominal GDP indexed to 2000

Nominal GDP
Tax revenue
Primary expenditure

www.advocata.org
Sri Lankas revenue to GDP is considerably lower than regional peers

% of GDP

Note: 2020 figures for Bangladesh Malaysia and Vietnam are estimates
Source: IMF World Economic Outlook April 2021, Advocata Research
Tax revenue has fallen due to Covid19 and policy changes.

Source: CBSL, Advocata Research
Indirect taxes make up a bulk of the tax revenue
Recurrent expenditure composition

Interest remains the largest portion

LKR Bn

- Interest remains the largest portion
- Other transfers to households
- Other G&S
- Salaries and Wages
- Other

Source: CBSL, Advocata Research
Comparison to regional peers

Total expenditure was lower than most peers even when adjusted for arrers

% GDP

Note: 2020 figures for Bangladesh Malaysia and Vietnam are estimates
Source: IMF World Economic Outlook April 2021, Advocata Research
Salaries and wages are a significant portion of recurrent expenditure

Within which teachers and healthcare workers are a large component

Public sector cadre composition, '000

<table>
<thead>
<tr>
<th>Component</th>
<th>2019</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>238.0</td>
<td>17.3%</td>
</tr>
<tr>
<td>Health care workers</td>
<td>150.0</td>
<td>10.9%</td>
</tr>
<tr>
<td>Tri forces</td>
<td>250.9</td>
<td>18.2%</td>
</tr>
<tr>
<td>Provincial Councils</td>
<td>444.3</td>
<td>32.3%</td>
</tr>
<tr>
<td>State Owned Enterprises</td>
<td>251.4</td>
<td>18.2%</td>
</tr>
<tr>
<td>Other public sector (mostly ministries, departments and special spending units)</td>
<td>43.1</td>
<td>3.1%</td>
</tr>
<tr>
<td><strong>Total public sector</strong></td>
<td>1,377.8</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: CBSL, MoF Annual report, Advocata Research
Comparison to regional peers

Balance
\% GDP

Original 2019 MoF 2019
Bangladesh Malaysia Philippines India Thailand Vietnam

-3.6% -4.6%
-5.3% -9.6%

-3.4% -3.3% -3.5%
-5.5% -5.1%

-6.8%
-5.5%

12.3%

-4.0%
-4.2%

-4.6% -4.6%
-11.1% -11.2%

Note: 2020 figures for Bangladesh Malaysia and Vietnam are estimates
Source: IMF World Economic Outlook April 2021, Advocata Research
Why is the tax collection so low
Poll 2
How much is the total taxes on an iPhone?

Total respondents: 440
Poll 3
How much is the total taxes on a restaurant bill?

Total respondents: 451

VAT revenues have increased

Corporate income tax receipts have been robust

Personal income tax is modest and flat

... and trade tax receipts are in decline

Source: IMF: Revenue mobilization in developing countries (2011), Advocata Research
“Taxes are what we pay for a civilized society.” In some respects, a “civilized society” is the rationale for government in the first place.

- Oliver Wendell Holmes

“Societies in which its citizens pay taxes enjoy better governance”.

- Prof. Mick Moor
Corporate tax rates have been declining over the years

Business with revenues starting at LKR 100 million

Business with revenues starting at LKR 50 million
The case for tax incentives

Relative importance of tax packages in investor location survey

Relative rank (LHS), Change in Rank since 2007

<table>
<thead>
<tr>
<th>Factor</th>
<th>Relative Rank</th>
<th>Change in Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic stability</td>
<td>3.8</td>
<td>0.3</td>
</tr>
<tr>
<td>Political stability</td>
<td>3.8</td>
<td>0.3</td>
</tr>
<tr>
<td>Costs of raw materials</td>
<td>3.7</td>
<td>0.2</td>
</tr>
<tr>
<td>Local markets</td>
<td>3.6</td>
<td>0.2</td>
</tr>
<tr>
<td>Transparency of legal framework</td>
<td>3.5</td>
<td>0.1</td>
</tr>
<tr>
<td>Availability of skilled labour</td>
<td>3.5</td>
<td>0.1</td>
</tr>
<tr>
<td>Labour costs</td>
<td>3.5</td>
<td>0.1</td>
</tr>
<tr>
<td>Quality of life</td>
<td>3.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Availability of local suppliers</td>
<td>3.2</td>
<td>0.0</td>
</tr>
<tr>
<td>Incentives package</td>
<td>3.1</td>
<td>-0.2</td>
</tr>
<tr>
<td>Export market</td>
<td>2.9</td>
<td>-0.3</td>
</tr>
<tr>
<td>Political stability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local markets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of skilled labour</td>
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<td></td>
</tr>
<tr>
<td>Economic stability</td>
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<tr>
<td>Costs of raw materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incentives package</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Strategic Development Projects Act, No. 14 of 2008

Under this act, projects identified by the BOI in accordance with outlines in consultation with relevant line ministries may be granted exemptions from specified enactments. The period of exemptions cannot exceed 25 years.

Did these projects justify tax holidays? In some cases 20 years?

- Shangri La
- SAGT
- Wind
- Cinnamon Life
- CICT
- Solar
Effective personal tax rates have been on a declining trend

Scenario 1: Starting salary – LKR 1.2 mn, Starting Fixed Deposit – LKR 5 mn

Scenario 2: Starting salary LKR 2.4 mn, Starting Fixed Deposit – LKR 10 mn

Scenario 3: Starting salary – None, Starting Fixed Deposit – LKR 400 mn
Effective personal tax rates have been on a declining trend.
# Details of Taxpayer Registration (2019)

**Number of Registered Taxpayers as at 31.12.2019**

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income Tax</strong></td>
<td></td>
</tr>
<tr>
<td>Corporate</td>
<td></td>
</tr>
<tr>
<td>Resident Co./ Non – Resident Co.</td>
<td>56,460</td>
</tr>
<tr>
<td><strong>Non-corporate</strong></td>
<td></td>
</tr>
<tr>
<td>Individuals</td>
<td>281,105</td>
</tr>
<tr>
<td>Partnerships</td>
<td>17,300</td>
</tr>
<tr>
<td>Bodies of Persons</td>
<td>804</td>
</tr>
<tr>
<td>Employees paying Income Tax under PAYE</td>
<td>1,149,883</td>
</tr>
<tr>
<td><strong>Total Income Taxpayers</strong></td>
<td>1,505,552</td>
</tr>
<tr>
<td><strong>Other Taxpayers</strong></td>
<td></td>
</tr>
<tr>
<td>Persons and Partnerships registered for ESC</td>
<td>17,359</td>
</tr>
<tr>
<td>Persons registered for VAT</td>
<td>28,914</td>
</tr>
<tr>
<td>Persons registered for VAT on Financial Services</td>
<td>237</td>
</tr>
<tr>
<td>Persons registered for NBT</td>
<td>92,028</td>
</tr>
<tr>
<td>Persons registered for NBT on Financial Services</td>
<td>237</td>
</tr>
<tr>
<td>Persons registered for Betting Levy Taxpayers</td>
<td>631</td>
</tr>
<tr>
<td>Persons registered for Gaming Levy Taxpayers</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total Other Taxpayers</strong></td>
<td>139,410</td>
</tr>
</tbody>
</table>

**Total of All Taxpayers as at 31.12.2019**

1,644,962

**Total Number of Tax Files/ Taxpayers as at 31.12.2019**

1,705,233

*Source: Inland Revenue Department, Advocata Research*
Changes to the VAT system in the last decade

Recent VAT tax amendments in end 2019

- Rate reduced from 15% to 8%
- Base increased from LKR 12 mn to LKR 300 mn
- Exemptions increased including hotels and restaurants

VAT represents 25% to 30% of the revenue base, what is the merit of making such drastic changes that will have relatively modest tax elasticities and growth multipliers.
VAT/GDP ratio lowest amongst our Peers

VAT Revenue to GDP Ratio, %

Vietnam: 11.1%
Thailand: 9.5%
Malaysia: 3.2%
Bangladesh: 3.9%
India: 5.4%
Sri Lanka: 2019

2013: 2.6%
2014: 2.7%
2015: 2.0%
2016: 2.4%
2017: 3.3%
2018: 3.2%
2019: 3.0%
2020: 1.6%
Level of indirect taxation on a selection of goods...

### Very High Taxes
Total Tax Value as a % of CIF

<table>
<thead>
<tr>
<th>Product</th>
<th>Tax Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol (330mL beer can)</td>
<td>350%</td>
</tr>
<tr>
<td>Cigarette (83mm)</td>
<td>300%</td>
</tr>
<tr>
<td>Motor car (1490cc)</td>
<td>200%</td>
</tr>
<tr>
<td>Motor car (800cc)</td>
<td>150%</td>
</tr>
</tbody>
</table>

### High Taxes
Total Tax Value as a % of CIF

<table>
<thead>
<tr>
<th>Product</th>
<th>Tax Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imported Chocolate</td>
<td>100%</td>
</tr>
<tr>
<td>Ceramic Tile</td>
<td>90%</td>
</tr>
<tr>
<td>Petrol</td>
<td>70%</td>
</tr>
<tr>
<td>Steel</td>
<td>50%</td>
</tr>
<tr>
<td>Auto Diesel</td>
<td>20%</td>
</tr>
</tbody>
</table>
Tax subsidies on Diesel when there is a case for corrective taxes

Petrol taxes, LKR (RHS); Taxes % of Selling price (LHS)

Diesel taxes, LKR (RHS); Taxes % of Selling price (LHS)
Regional comparison – Sri Lanka is the cheapest by far

<table>
<thead>
<tr>
<th>Per Capita GDP USD 2020</th>
<th>Absolute (Prices are as of 8th Sep 2021)</th>
<th>Relative</th>
<th>Relative price of Petrol/Diesel</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,679 Sri Lanka</td>
<td>157</td>
<td>111</td>
<td>77</td>
</tr>
<tr>
<td>1,965 India (Delhi)</td>
<td>276</td>
<td>242</td>
<td>112</td>
</tr>
<tr>
<td>1,260 Pakistan</td>
<td>140</td>
<td>138</td>
<td>104</td>
</tr>
<tr>
<td>1,998 Bangladesh</td>
<td>204</td>
<td>154</td>
<td>154</td>
</tr>
<tr>
<td>1,196 Nepal</td>
<td>224</td>
<td>194</td>
<td>194</td>
</tr>
</tbody>
</table>

Note: Prices as of 8th Sep 2021; rounded up to nearest whole number
Source: Ceylon Petroleum Corporation, Indian Oil Corporation, Pakistan State Oil, Bangladesh Petroleum Corporation, Nepal Oil Corporation, CBSL, IMF-World Economic Outlook April 2021, Advocata Research
The Rich are benefitting from the tax subsidies on fuel

Share of Households with Fuel
X axis - Expenditure 1 (poorest) to 10 (richest)

% of fuel expenditure, direct and indirect subsidies as a share of total consumption
X axis - 1 (poorest) to 10 (richest)

Distribution of the subsidy budget
X axis - 1 (poorest) to 10 (richest)
We need a full time Finance Minister to be the bad cop
The President or the Prime Minister has been holding the post for 61% of the last 26 years
The need for a social compact

🔗 https://youtu.be/DTMcc8c4pHs
Cash transfers… a better way to redistribute

Samurdhi payments % of primary expenditure

<table>
<thead>
<tr>
<th>Year</th>
<th>Samurdhi LKR bn</th>
<th>Samurdhi % of p.exp</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>9.7</td>
<td>3.7%</td>
</tr>
<tr>
<td>2001</td>
<td>12.6</td>
<td>4.3%</td>
</tr>
<tr>
<td>2002</td>
<td>9.9</td>
<td>3.5%</td>
</tr>
<tr>
<td>2003</td>
<td>8.7</td>
<td>3.0%</td>
</tr>
<tr>
<td>2004</td>
<td>8.5</td>
<td>2.4%</td>
</tr>
<tr>
<td>2005</td>
<td>9.2</td>
<td>2.0%</td>
</tr>
<tr>
<td>2006</td>
<td>10.8</td>
<td>1.9%</td>
</tr>
<tr>
<td>2007</td>
<td>9.2</td>
<td>1.4%</td>
</tr>
<tr>
<td>2008</td>
<td>10.0</td>
<td>1.3%</td>
</tr>
<tr>
<td>2009</td>
<td>9.3</td>
<td>1.0%</td>
</tr>
<tr>
<td>2010</td>
<td>9.2</td>
<td>1.0%</td>
</tr>
<tr>
<td>2011</td>
<td>10.6</td>
<td>0.8%</td>
</tr>
<tr>
<td>2012</td>
<td>9.0</td>
<td>0.9%</td>
</tr>
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<td>2013</td>
<td>15.3</td>
<td>1.2%</td>
</tr>
<tr>
<td>2014</td>
<td>15.0</td>
<td>1.1%</td>
</tr>
<tr>
<td>2015</td>
<td>40.0</td>
<td>2.2%</td>
</tr>
<tr>
<td>2016</td>
<td>40.7</td>
<td>2.4%</td>
</tr>
<tr>
<td>2017</td>
<td>39.7</td>
<td>2.2%</td>
</tr>
<tr>
<td>2018</td>
<td>39.2</td>
<td>2.1%</td>
</tr>
<tr>
<td>2019</td>
<td>44.7</td>
<td>1.8%</td>
</tr>
<tr>
<td>2020</td>
<td>52.4</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Source: CBSL, Advocata Research
What is going on with the country’s public debt
Except for 4 years we have been posting primary balance deficits since the 1950s.

Source: CBSL, Advocata Research

www.advocata.org
Outstanding Central Govt. Debt reached LKR 15 Tn by end 2020

Source: CBSL, Advocata Research

www.advocata.org
Debt Attribution Analysis - Absolute

Interest expense and Exchange rate variation account for 75% of the Debt increase since 1999

Change in Debt, LKR Bn

- Exchange Rate Variation
- Interest Paid
- Financing the Primary Balance

Source: CBSL, Advocata Research

www.advocata.org
Breakdown of change in debt

\[ \text{Change in Debt} = \text{Real Interest rate effect} - \text{Growth effect} + \text{Exchange rate effect} - \text{Primary Balance} + \text{Residual} \]

\[ d_t - d_{t-1} = \frac{i^w_t - \pi(1 + g_t)}{(1 + g_t)(1 + \pi_t)} - \frac{g_t}{(1 + g_t)(1 + \pi_t)} + \frac{\alpha\varepsilon(1 + i^f_t)}{(1 + g_t)(1 + \pi_t)} - pb + \text{residual} \]

Source: IMF, Advocata Research
Debt Attribution Analysis for Sri Lanka

Source: CBSL, IMF-Word Economic Outlook Database October 2019, Advocata Research

www.advocata.org
Domestic debt by ownership

% of total domestic debt

Source: CBSL, Advocata Research
www.advocata.org
Foreign debt by type

% of total foreign debt

Source: CBSL, Advocata Research

www.advocata.org
Sri Lanka’s Foreign Liabilities

USD Mn

Source: CBSL, Advocata Research
Debt Securities in External Liabilities

USD Mn

<table>
<thead>
<tr>
<th>Year</th>
<th>ISB (face value)</th>
<th>Treasury Bills and Bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>0</td>
<td>2,000</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
<td>4,000</td>
</tr>
<tr>
<td>2014</td>
<td>0</td>
<td>6,000</td>
</tr>
<tr>
<td>2015</td>
<td>0</td>
<td>8,000</td>
</tr>
<tr>
<td>2016</td>
<td>0</td>
<td>10,000</td>
</tr>
<tr>
<td>2017</td>
<td>0</td>
<td>12,000</td>
</tr>
<tr>
<td>2018</td>
<td>0</td>
<td>14,000</td>
</tr>
<tr>
<td>2019</td>
<td>11,937</td>
<td>2,000</td>
</tr>
</tbody>
</table>

Source: CBSL, Advocata Research
42% Chance of Selective Default within one year of downgrade…

…Based on S&P Global Ratings Transition study.

Source: CBSL, Advocata Research
The January 2022 Bond is trading at 87 cents to the dollar

Source: Bloomberg, Advocata Research
Warning from Prof. Ricardo Hausmann about debt crisis

https://youtu.be/hlaTH0AYd6Y
Gross Financing Needs highly elevated

Gross Financing Needs LKR Bn (LHS); % GDP (RHS)

Note: Gross Financing Needs is calculated as sum of budget deficit + Amortisation of Debt. Data from 2021 - Sri Lanka: In house Estimates, Malaysia and Thailand; IMF Estimates
Source: CBSL, Advocata Research
Debt to GPD Ratio trajectory

Note: Data from 2021 onwards are in house estimates.
Source: CBSL, Advocata Research
Domestic debt is a larger proportion of government debt service obligation

Debt securities maturity profile

Yearly principal and Interest for total traded debt, LKR bn, USD bn

Note: *as at 24th September 2020;
Source: Bloomberg, CBSL, Advocata Research
Reserves have been falling

Gross Official Reserves, USD Bn (LHS); Months of Imports, Ratio(RHS)

Predetermined drains on foreign currency end-July, USD Mn

<table>
<thead>
<tr>
<th></th>
<th>Maturity breakdown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Up to 1 month</td>
<td>More than 1 month and up to 3 months</td>
</tr>
<tr>
<td>Foreign currency loans, securities, and deposits</td>
<td>-261</td>
<td>-1,447</td>
</tr>
<tr>
<td>outflows (–)</td>
<td>Principal</td>
<td>-227</td>
</tr>
<tr>
<td></td>
<td>Interest</td>
<td>-34</td>
</tr>
</tbody>
</table>

Shortfall: 3,434
How the Korean people responded when their country was in crisis

https://www.youtube.com/watch?v=h_TcP73_nmE
Poll 4
One way to raise our foreign reserves is for our citizens to sell their gold to the Central Bank for rupees. I will:

- Sell my gold to the Central Bank to help them build their foreign reserves: 27.8%
- Do neither: 50.1%
- Buy more gold if I can for the Central Bank is debasing the rupee: 22.0%

Total respondents: 395
Is The Big Bad Wolf On The Way?
Definitions

**Liquidity crisis** – when a country’s liquid assets and available financing is insufficient to meet or roll-over maturing liabilities

**Solvency crisis** – when a country’s capacity to meet long term financial commitments is compromised and financial obligations cannot be met without renegotiating terms of debt, an implausibly large fiscal adjustment, or simply defaulting
Poll 5
What kind of crisis are we facing?

- I don’t know: 2.7%
- Liquidity crisis: 35.0%
- No crisis: 0.4%
- Solvency crisis: 61.9%

Total respondents: 395
What about the banks?
Deposit growth outpacing loan growth …

From March 2020 to June 2021

Source: CBSL, Advocata Research
Loan to Deposit Ratios falling...less reliance on wholesale funding

Source: Interim reports, Advocata Research
Prudential liquidity coverage well above norms…

Statutory Liquid Asset Ratio

Liquidity Coverage Ratio

Source: Interim reports, Advocata Research
The increase in credit to government was largely through commercial banks.
Reported capital adequacy ratios are at healthy levels...

30 June 2021

Source: Interim Reports
But the bank leverages are still high…

Source: Interim reports, Advocata Research

30 June 2021
Large investment portfolio is g-secs require zero risk weighting...

Risk-weighted assets to Total assets – Bank-wise

Source: Annual Reports, Advocata Research
www.advocata.org
High exposure to dollar denominated sovereign debt...

LKR Billions

<table>
<thead>
<tr>
<th>Bank</th>
<th>30 June 2021</th>
<th>31 December 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOC*</td>
<td>203 ($1Bn)</td>
<td>154</td>
</tr>
<tr>
<td>PB*</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>COMB</td>
<td>143 ($711Mn)</td>
<td>57</td>
</tr>
<tr>
<td>HNB</td>
<td>86</td>
<td>73</td>
</tr>
<tr>
<td>SAMP</td>
<td>70</td>
<td>6.1%</td>
</tr>
<tr>
<td>NDB</td>
<td>17</td>
<td>11.8%</td>
</tr>
<tr>
<td>SEYB</td>
<td>12</td>
<td>7.0%</td>
</tr>
<tr>
<td>DFCC*</td>
<td>15</td>
<td>7.4%</td>
</tr>
<tr>
<td>NTB</td>
<td>16</td>
<td>4.2%</td>
</tr>
<tr>
<td>UBC</td>
<td>5</td>
<td>95 ($472Mn)</td>
</tr>
<tr>
<td>PABC*</td>
<td>15</td>
<td>8.1%</td>
</tr>
</tbody>
</table>

As a percentage of Total Assets

- Total 11.8%
- ISB 7.0%
- SLDB 4.4%

* As of 31 December 2020

Source: Annual Reports, Advocata Research

www.advocata.org
Have these instruments been adequately provided for?

CBSL guidance on PD and LGD

Probability of Default – 10%
Loss Given Default – 20%

Total Provision = 10% x 20% = 2%

ISB prices as of 09 Sept 2021

Source: Bloomberg, Advocata Research

www.advocata.org
Where did the credit flow …
Commercial Bank Loans and Advances to the Private Sector

LKR Billions
7,000.0

Wholesale & retail trade
Tea
Construction
Food & beverages
Textile & apparel
Tourism
Financial & business services
Consumer durables
Other agriculture
Pawning
Other personal loans
Other services
Other industries
Rubber
Paddy
Equipment
Textile & apparel
Food & beverages
Tourism
Wholesale & retail trade
Equipment
Textile & apparel
Food & beverages
Construction
Paddy
Rubber
Tea

Source: CBSL, Advocata Research
www.advocata.org
A significant portion of private sector credit has been flowing to the construction sector...
Colombo District Land Prices have gone up by 222% since December 2009

Source: CBSL, Advocata Research
Moratorium loans...big numbers...how much more needs to be impaired?

<table>
<thead>
<tr>
<th>Bank</th>
<th>Value of Loans under moratorium (LKR Billions)</th>
<th>As a percentage of gross loans</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOC</td>
<td>200</td>
<td>9%</td>
</tr>
<tr>
<td>PB</td>
<td>n/a</td>
<td>12%</td>
</tr>
<tr>
<td>COMB</td>
<td>124</td>
<td>12%</td>
</tr>
<tr>
<td>HNB</td>
<td>101</td>
<td>12%</td>
</tr>
<tr>
<td>SAMP</td>
<td>214</td>
<td>27%</td>
</tr>
<tr>
<td>NDB</td>
<td>83</td>
<td>17%</td>
</tr>
<tr>
<td>PABC</td>
<td>n/a</td>
<td>17%</td>
</tr>
<tr>
<td>DFCC</td>
<td>n/a</td>
<td>17%</td>
</tr>
<tr>
<td>NTB</td>
<td>30</td>
<td>12%</td>
</tr>
<tr>
<td>UBC</td>
<td>15</td>
<td>20%</td>
</tr>
<tr>
<td>SEYB</td>
<td>39</td>
<td>9%</td>
</tr>
</tbody>
</table>

30 June 2021

Source: Advocata Research
www.advocata.org
Stock market seems to be anticipating significant capital erosion...

Price to Book Value as of 07 September 2021

BOC: 60.4%
PB: 44.7%
COMB: 49.3%
HNB: 44.9%
SAMP: 47.9%
NDB: 36.2%
SEYB: 41.9%
DFCC: 67.5%
NTB: 40.3%
UBC: 40.3%
PABC: 40.3%

Source: Interim Reports, CSE, Advocata Research
What’s going on with the exchange rate
The currency deteriorated 7.55% YTD

As CBSL is managing the USD/LKR at 200 levels

USD/LKR average buying and selling rate

Banks are currently exchanging USD with corporates at LKR 215-220 per USD

As of 06th September 2021

Source: CBSL, Advocata Research
Forward Premium, Interest Differential and Forward Volume

Annualized 3M forward premium USD/LKR – Month end, % of spot

Annualized 3M interest differential – Month end, % of spot

Source: CBSL, Advocata Research
REER depreciated 9.5% since the end of 2019

Effective exchange rate index (LHS); USD/LKR value (RHS)

Inflation YoY

Weights
US – 19.7%, India – 15.6%, UK – 9.9%, Germany – 5.9%. Japan – 4.9%

Note: NEER is the weighted geometric average of the bilateral nominal exchange rates of the domestic currency in terms of a basket of foreign currencies; REER is the inflation adjusted NEER
Source: CBSL, 24 trading partner monetary authorities, JB Securities Research
What drove growth in the past cannot drive growth in the future
Sectors driving growth in the last nine years were largely non-tradeable

% CAGR, YE 2010-2019

- Leaders > CAGR 5.1%
- Steady CAGR 4.0% - 5.1%
- Laggards < CAGR 4.0%

*Industry other includes electricity supply, water collection and sewerage waste treatment and disposal
**Services other includes postal and courier activities, programming and broadcasting and other personal service activities

Source: Central Bank of Sri Lanka, Advocata Research

GDP growth YE2010-2019: 4.9%

GDP real sector size, 2019: LKR 9,889Bn

www.advocata.org
Sri Lanka has had four major shocks

GDP, YoY % change

- Drought (2016-2017)
  - 2016: 6.2%
  - 2017: 4.5%
  - 2018: 5.3%
  - 2017: 3.5%
  - 2018: 3.7%
  - 2018: 3.4%
  - 2018: 3.7%

- Constitutional coup
  - 2018: 3.8%
  - 2019: 4.0%
  - 2019: 3.7%
  - 2019: 1.9%

- Easter Attacks
  - 2019: 3.7%
  - 2020: 1.1%
  - 2020: 2.4%
  - 2020: 2.0%

- Covid-19 Pandemic
  - 2020: -1.8%
  - 2020: -16.4%
  - 2021: 1.3%
  - 2021: 1.3%
  - 2021: 0.6%

Source: CBSL, Advocata Research
Economically active population grew due to demographic transition

*Forecast
Source: UN: Department of Economic and Social Affairs, Advocata Research
Migrant labor force increased, bringing in remittances

Estimated stock of migrant labor force, Mn

Remittances, USD Mn

Source: Department of Census and Statistics, Advocata Research
www.advocata.org
Spatial transformation of urban centers drove agglomeration efficiencies

Colombo Urban Area

1995  2001  2012  2017

Legend
- Colombo/Sri Jgura Kotte/Dehiwala-Mt. Lavinia
- Urban
- Semi Urban
- Water Area
- Non Built

Source: Is Sri Lanka one of the Least Urbanized Countries on Earth? - UNHABITAT
www.advocata.org
Cellular phones and internet penetration grew

Source: Central Bank of Sri Lanka, Advocata Research
Vehicle population grew improving mobility

Transport road network, km'

Motor vehicles all island, Mn'

Source: Central Bank of Sri Lanka, Advocata Research
www.advocata.org
Economic Growth
How economic growth happens

GDP Growth

- Higher Labor Productivity
- Increase in Employment

Higher TFP

- Higher Capital Intensity
  - Investment in Human Resources
  - Technical Progress
  - Economic Restructuring
Profit Equation

\[
Profit = \frac{\sum Price_{Output}}{\sum Price_{Input}} \times \frac{\sum Output}{\sum Input}
\]

What drives **Price Recovery**?
- Inflation
- Low contestability
- Product and factor market rigidities

What drives **Productivity**?
- Competition
- Innovation
- Technology
- Skills upgrading
- Business transformation
Sri Lanka ranks 84th in the Global Competitiveness Index 2019
Sri Lanka’s competitiveness ranking has been declining.
Border protection on a selected construction material

Total tariffs on construction material %

<table>
<thead>
<tr>
<th>Material</th>
<th>Bricks</th>
<th>Asbestos</th>
<th>Cement</th>
<th>Ceramic</th>
<th>Roofing Tiles</th>
<th>Steel</th>
<th>Sanitary Ware</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAT</td>
<td>50</td>
<td>50</td>
<td>27</td>
<td>10</td>
<td>10</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>CESS</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>PAL</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Customs Duty</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Additional VAT</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>85</td>
<td>8.2</td>
<td>75</td>
<td>75</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>
Investment component of GDP has been falling since 2018.
Growth diagnostic framework

Problem: Low growth of exports, low export dynamism, and lack of export-oriented investment, particularly FDI

Low return to economic activity
- Low social returns
  - Poor geography
  - Low human capital
- Bad infrastructure
- Government failures
- Low appropriability
- Market failures
- Low domestic savings and bad international finance
- Low competition
- Low cost
- Bad local finance
- Bad local finance

High cost of finance
- Micro risks: property rights, corruption, taxes
- Macro risks: monetary, financial and fiscal instability
- Information externalities “self discovery”
- Coordination externalities

Source: Centre for International Development and Harvard Kennedy School, Advocata Research
www.advocata.org
Key constraints that bind investment in new and non-traditional export industries

<table>
<thead>
<tr>
<th></th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>Binding</td>
</tr>
<tr>
<td>Policy uncertainty /</td>
<td>Currently binding but may be relaxed in the future if the underlying issue of low revenue can be addressed</td>
</tr>
<tr>
<td>Taxation</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>Currently a binding constraint to geographically-balanced development, and it appears set to constrain growth moving forward</td>
</tr>
<tr>
<td>Water</td>
<td>Water supply and wastewater treatment are potentially constrained in certain locations</td>
</tr>
<tr>
<td>Electricity</td>
<td>Not binding in recent years but the adequacy of future generation is not assured</td>
</tr>
<tr>
<td>Education</td>
<td>Not binding overall, but specific skills are in short supply</td>
</tr>
<tr>
<td>Labor regulations</td>
<td>Not binding but somewhat problematic</td>
</tr>
<tr>
<td>Finance</td>
<td>Not binding, but banks are risk averse, and there is potential to improve access to startup capital</td>
</tr>
<tr>
<td>Health</td>
<td>Not binding based on how Sri Lanka performs relative to comparators</td>
</tr>
</tbody>
</table>

It was on this basis that the MCC program chose to address the following key constraints to future growth

- **Transport project** - a comprehensive strategy to manage congestion and help safeguard continued economic growth in the rapidly urbanizing Colombo Metropolitan Region. Improving regional connectivity between one of the poorest regions of the country and markets and ports, boosting the rural economy and facilitating labor mobility.

- **Land project** - improved documentation of land rights and will ease the process of making land transactions through improved land information systems

Source: Harvard: Growth diagnostic for Sri Lanka, MCC constraint analysis Sri Lanka Advocata Research
Sri Lanka has many holidays

Would You Work Holidays?

<table>
<thead>
<tr>
<th>National Holidays</th>
<th>Religious Holidays</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th Feb - Independence Day</td>
<td>14 Jan - Tamil Thai Pongal Day</td>
</tr>
<tr>
<td>13th Apr - Sinhala &amp; Tamil New Year</td>
<td>17 Jan - Poya Day</td>
</tr>
<tr>
<td>14th Apr - Sinhala &amp; Tamil New Year</td>
<td>16th Feb - Poya Day</td>
</tr>
<tr>
<td>1st May - May Day</td>
<td>1st Mar - Mahasivarathri Day</td>
</tr>
<tr>
<td></td>
<td>17th Mar - Poya Day</td>
</tr>
<tr>
<td></td>
<td>15th Apr - Good Friday</td>
</tr>
<tr>
<td></td>
<td>17th Mar - Poya Day</td>
</tr>
<tr>
<td></td>
<td>3rd May – Eid al Fitir</td>
</tr>
<tr>
<td></td>
<td>16th May – Day after Vesak</td>
</tr>
<tr>
<td></td>
<td>14th Jun - Poya Day</td>
</tr>
<tr>
<td></td>
<td>13th Jul - Poya Day</td>
</tr>
<tr>
<td></td>
<td>11th Aug - Poya Day</td>
</tr>
<tr>
<td></td>
<td>9th Oct - Holy Prophet Birthday/ Poya Day</td>
</tr>
<tr>
<td></td>
<td>24th Oct - Deepavali</td>
</tr>
<tr>
<td></td>
<td>7th Nov - Poya Day</td>
</tr>
<tr>
<td></td>
<td>7th Dec - Poya Day</td>
</tr>
<tr>
<td></td>
<td>25th Dec - Christmas Day</td>
</tr>
</tbody>
</table>

2022 Calendar
Poll 6
One way to increase economic output is to work 5 more days in the year and get paid. Would you rather

I don't want to work any more days: 22.2%
Work on a Saturday in lieu of a weekly holiday: 30.2%
Work on the holiday: 47.6%

Total respondents: 288
Productivity
Most people are engaged in Micro, small and medium enterprises

A significant proportion of all establishments are MSMEs

<table>
<thead>
<tr>
<th>Nos.; % of total</th>
<th>Establishments</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services</td>
<td>935,736</td>
<td>1,338,064</td>
</tr>
<tr>
<td></td>
<td>32.7%</td>
<td>33.8%</td>
</tr>
<tr>
<td></td>
<td>42.0%</td>
<td>39.1%</td>
</tr>
<tr>
<td></td>
<td>25.3%</td>
<td>27.1%</td>
</tr>
<tr>
<td>Trade</td>
<td>71,126</td>
<td>529,248</td>
</tr>
<tr>
<td></td>
<td>39.9%</td>
<td>43.3%</td>
</tr>
<tr>
<td></td>
<td>31.3%</td>
<td>24.4%</td>
</tr>
<tr>
<td></td>
<td>28.8%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Industry</td>
<td>10,405</td>
<td>387,859</td>
</tr>
<tr>
<td></td>
<td>48.4%</td>
<td>36.4%</td>
</tr>
<tr>
<td></td>
<td>19.6%</td>
<td>52.5%</td>
</tr>
<tr>
<td></td>
<td>32.0%</td>
<td>64.6%</td>
</tr>
<tr>
<td></td>
<td>31.6%</td>
<td>25.6%</td>
</tr>
</tbody>
</table>

Most people are engaged in Micro, small and medium enterprises

A significant proportion of all establishments are MSMEs

<table>
<thead>
<tr>
<th>Nos.; % of total</th>
<th>Establishments</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro</td>
<td>91.8%</td>
<td>44.6%</td>
</tr>
<tr>
<td>Small</td>
<td>7.0%</td>
<td>17.6%</td>
</tr>
<tr>
<td>Medium</td>
<td>1.0%</td>
<td>12.9%</td>
</tr>
<tr>
<td>Large</td>
<td>0.2%</td>
<td>24.9%</td>
</tr>
</tbody>
</table>

Establishments

<table>
<thead>
<tr>
<th>Nos.; % of total</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro</td>
<td>1,019,681</td>
</tr>
<tr>
<td>Small</td>
<td>3,003,119</td>
</tr>
</tbody>
</table>

Source: DCS (economic survey 2013/14), Advocata Research
Agricultural production levels expected to decline in 2021...

*Note: 2019 data (provisional)
Source: Economic & Social Statistics of Sri Lanka
Agricultural crop productivity

**Coconut**  
Arable land (2014) - **20.6%**  
Domestic production (Mn. nuts.) – **3,086**  
Domestic consumption (Mn. nuts.) – **1,807**  
Avg. nuts/tree/year - **65**  
Best practice nuts/tree/year - **100**

**Rubber**  
Arable land (2014) - **12.2%**  
Domestic production (Mn. Kg.) – **75**  
Domestic usage (Mn. Kg.) - **58.6**  
Average yield (Ha. Kg.) - **800**  
Best practice (Ha. Kg.) – **2,000**

**Paddy**  
Arable land (2014) - **32.1%**  
Average yield (Ha. Kg.) - **4,795**  
Best practice (Ha. Kg.) - **6,000**

**Tea**  
Arable land (2014) - **10.7%**  
Domestic production (Mn. Kgs.) - **300**  
Exports volume (Mn. Kgs.) - **293**  
Export value (LKR. Mn.) – **240,637**  
Average yield (Ha. Kg.) - **800-850**  
Best practice (Ha. Kg.) - **2,500**

**Dairy**  
Number of milking cows – **415,280**  
Fresh milk production (Liters. Mn.) - **448**  
Avg. milk production (Liters/cow/day) - **5**  
Best practice (Liters/cow/day) - **25**

*Source: Economic & Social Statistics of Sri Lanka, Advocata Research*  
*2019 data (provisional)*
Exports
Trade dynamics: Thailand

Exports
USD Bn'

Trade balance
USD Bn'

Imports
USD Bn'

2018 net trade: USD 30.7bn

Source: Harvard Economic Atlas, Advocata Research

www.advocata.org
Trade dynamics: Vietnam

Source: Harvard Economic Atlas, Advocata Research
Direction of trade: Vietnam

Exports
USD Bn’

Net trade
USD Bn’

Imports
USD Bn’

2018 net trade: USD 9.9bn

Source: Harvard Economic Atlas, Advocata Research
Trade dynamics: Sri Lanka

Exports
USD Bn'

Trade balance
USD Bn'

Imports
USD Bn'

Other
Electronics
Machinery
Vehicles
Chemicals
Metals
Minerals
Stone
Agriculture
Textiles

2018 net trade: USD -10.4bn

Source: Harvard Economic Atlas, Advocata Research

www.advocata.org
Direction of trade: Sri Lanka

Exports USD Bn'


Net trade USD Bn'


Imports USD Bn'

Source: Harvard Economic Atlas, Advocata Research

www.advocata.org
In other countries, diversification results in a direct boost to incomes

New Export products, 2000-2015

<table>
<thead>
<tr>
<th>Country</th>
<th>New Products</th>
<th>USD per Capita</th>
<th>USD (billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>76</td>
<td>245</td>
<td>331.6</td>
</tr>
<tr>
<td>Thailand</td>
<td>70</td>
<td>326</td>
<td>21.8</td>
</tr>
<tr>
<td>Vietnam</td>
<td>48</td>
<td>545</td>
<td>50.4</td>
</tr>
<tr>
<td>Philippines</td>
<td>11</td>
<td>12</td>
<td>1.2</td>
</tr>
<tr>
<td>Malaysia</td>
<td>10</td>
<td>149</td>
<td>4.7</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>7</td>
<td>5</td>
<td>0.1</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>6</td>
<td>139</td>
<td>0.7</td>
</tr>
<tr>
<td>Indonesia</td>
<td>4</td>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td>India</td>
<td>0</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Product
- Rags, textile scraps
- Woven fabrics of bast fibers
- Wheat or meslin flour
- Cigarettes
- Tulles and other net fabrics
- Lead oxides
- Textile for conveyor belts
# Tourism statistics

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourist arrivals</td>
<td>1,798,380</td>
<td>2,050,832</td>
<td>2,116,407</td>
<td>2,333,796</td>
<td>1,913,702</td>
</tr>
<tr>
<td>Guest nights</td>
<td>10.1</td>
<td>10.2</td>
<td>10.9</td>
<td>10.8</td>
<td>10.4</td>
</tr>
<tr>
<td>Spend per night</td>
<td>164.1</td>
<td>168.2</td>
<td>170.1</td>
<td>173.8</td>
<td>181.2</td>
</tr>
<tr>
<td></td>
<td>2,980,652,996</td>
<td>3,518,489,412</td>
<td>3,924,009,055</td>
<td>4,380,628,444</td>
<td>3,606,333,145</td>
</tr>
<tr>
<td>Tourism Receipts from BPM6</td>
<td>2,980,652,996</td>
<td>3,518,489,412</td>
<td>3,924,931,808</td>
<td>4,380,682,444</td>
<td>3,606,930,220</td>
</tr>
<tr>
<td>Tourism Outflows</td>
<td>1,419,630,004</td>
<td>1,541,775,446</td>
<td>1,598,801,300</td>
<td>1,660,000,000</td>
<td>1,638,000,000</td>
</tr>
<tr>
<td>Net Tourism Receipts</td>
<td>1,561,022,992</td>
<td>1,976,713,966</td>
<td>2,326,130,508</td>
<td>2,720,682,444</td>
<td>1,968,930,220</td>
</tr>
</tbody>
</table>
Should we go to the IMF?
Dr. Ahluwalia’s advice about going to the IMF

https://youtu.be/FOkAkmeUmfk
Poll 7
If we go into a major economic crisis due to a sovereign default, I will:

- Neither for I am fatalistic, it's my karma (2.3%)
- Neither I am happy with the way things are (2.0%)
- Stay back and do whatever I can do to change the system so that this does not happen again (55.6%)
- Try to leave the country for either temporary employment or migrate (40.1%)

Total respondents: 347
Thank you