Sri Lanka’s initial social protection response to COVID-19:

Indirect effects of COVID-19 on the wider economy of Sri Lanka

May 2020
Purpose

This is a summary of the third paper of a series of UNICEF Sri Lanka Policy Briefs that aim to provide evidence to support the Government of Sri Lanka in its social protection response to the economic crisis created by the COVID-19 pandemic.

This third brief aims at estimating the potential economic impacts of the COVID-19 pandemic and to explore possible policy options to minimize the risk that “bad” scenarios occur.

It employed interviews with stakeholders, literature review, and the SAM data from 2012.

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Outline

- From micro to macro analysis: Motivation for the analysis
- Scenario building approach: information on the scenarios explained in the presentation.
- Assumption and methodological steps
- Stylized description of the economy
- Results under the several scenarios: Macroeconomic variables, focus on GDP and Employment.
Impact of COVID-19 crisis on Sri Lanka Economy From micro to macro economic analysis

• Previous presentations have shown the negative economic effect on households under the COVID-19 related crisis, with a high level of detail, by analysing the HIES 2016;

• This analysis aims at estimating the potential economic impacts of the COVID-19 pandemic and to explore possible policy options to minimize the risk that “bad” scenarios occur;

• While the microeconomic analysis may support the government in detecting which households are the most vulnerable facing the crisis, the macroeconomic analysis shows the total impact of government policies on economic growth;

• The macroeconomic analysis shows how powerful is the lifecycle social protection approach to support the economy and guarantee the GDP growth, and at the same time guaranteeing a better quality of life to the most vulnerable.
Impact of COVID-19 crisis on Sri Lanka Economy
Scenario Building Approach

- Under the Actual COVID-19 Outbreak, we can imagine two different periods in which the consumptions and exports by economic sector will decrease;
- We consider two possible periods the shock will persist (three and six months);
- With the COVID-19 Economic shock, we can be more or less optimistic on the magnitude of economic sector-level impacts. Then, we consider an optimistic and a pessimistic scenario;
- Government policies have a role on the recovery after the shock. To conduct the analysis, we introduce government cash transfers in each scenario (shock lasting 3 or 6 months): the additional cash transfer for two months decided by the government; the lifecycle transfers for 6 months;
- The expectations of the economic agents are myopic, i.e. we assume they do not know for how long the crisis will continue;
- We model how the economy looks like in each scenario and then compare the difference with the absence of COVID-19.
Impact of COVID-19 crisis on Sri Lanka Economy

Assumptions and Methodological steps

• After stakeholder engagement and literature review, we assume the impact of the COVID-19 on consumption and exports across different sectors (including remittances);

• We then assume the sectorial impact on consumption and exports is exogenous, on the demand side;

• We assume the impact duration (3 or 6 months).

• We estimate the indirect effects might occur to different sectors/component of the economy given the interlinkages of these sectors measured by the SAM data from 2012;

• The model estimates economy-wide impacts of our initial presumed impacts on GDP, employment, household income;

• Finally, we estimate the length of the COVID-19 crisis by how long it will take to recover to the Sri Lankan GDP under the baseline (No COVID-19), assuming a steady state growth in the economy, no further monetary and fiscal policies, and myopic expectations.
Around two-thirds of the GDP, on the demand side, is composed by Household consumption.

The government expenditure equals less than 10% of GDP.

The structure of the economy, in particular the Government expenditure (as % of GDP), is in line with other South Asian Countries.
The effect of COVID-19 shock is estimated, under a pessimistic and an optimistic scenario, considering 3 months of crisis, compared to the counterfactual (No-COVID):

- GDP decreases between 8.3 per cent and 3.6 per cent;
- Total Employment decreases between 13 per cent and 6.6 per cent;
- Household consumption reduces between 11.8 per cent and 6.5 per cent;
- Investments reduce between 17 and 7.7 per cent;
- Exports reduce between 10.1 per cent and 5.9 per cent.

Note: Simulations are based on official source of data that consider the formal sector (the informal sector is excluded by the simulations).
Comparison with International Organizations COVID-19 Shock in Sri Lanka

- 3 months Pessimistic Shock Scenario generates a high negative impact, compared to the estimations by IMF and WB.
- 3 months Optimistic Scenarios is in line with both the estimates by IMF and the optimistic scenario by WB.

![Diagram showing the difference between GDP under COVID-19 Scenario and GDP 2020 with No COVID (% Reduction)]
The graph below shows how, under a Pessimistic Scenario and 3 months of crisis, the actual government transfers to the households, and a lifecycle approach, would alleviate the reduction in the Sri Lanka Economy

Compared to what would have happened without COVID-19:

- GDP would have decreased by 8.3% in 2020 if the government did not decide to transfer cash to households;
- With the actual cash transfers to the households decided by the Government, GDP is expected to decrease by 7.2% in 2020;
- With a lifecycle approach, GDP would decrease by 6.4% in 2020.
3 Months Shock - GDP
Pessimistic Scenario with Temporary Cash Transfers

The graph below shows how, under a Pessimistic Scenario and 3 months of crisis, the actual government additional transfers to the households, and a lifecycle approach, would alleviate the reduction in Sri Lanka GDP along the years, when the transfers are distributed only during the 2020.

Compared to what would have happened without COVID-19:

- If the government did not intervene, GDP would be lower than the level under the baseline (No COVID-19) for more than 20 years;
- With the actual additional cash transfers to the households decided by the Government (only for 2020), GDP is not going to reach the GDP level without COVID-19 even 20 years later;
- With a lifecycle approach only for 2020, the GDP would recover much before compared to the other scenarios.
The graph below shows how, under a Pessimistic Scenario and 3 months of crisis, the actual government transfers to the households, and a lifecycle approach, when permanent, would alleviate the reduction in Sri Lanka GDP along the years.

Compared to what would have happened without COVID-19:

- If the government did not intervene, GDP would be lower than the level in 2020 with no COVID-19 for more than 20 years;
- With the actual one-off cash transfers to the households decided by the Government, GDP is not going to reach the same level of GDP without COVID-19 also after 20 years;
- With a lifecycle approach, and keeping this same amount of transfers each year, the GDP would recover already in 2021, and will constantly grow, after a marginal reduction in 2022.
The graph below shows how, under a Pessimistic Scenario and 3 months of crisis, the actual government transfers to the households, and a lifecycle approach, would alleviate the reduction in Sri Lanka employment by sector in 2020.

Compared to what would have happened without COVID-19:

- If the government did not intervene, total formal employment would be lower than the baseline level (with no COVID-19 for more than 20 years);
- With the actual one-off cash transfers to the households decided by the Government, total formal employment is going to reach the same level it would be without COVID-19 only after 15 years;
- With a lifecycle approach, and keeping this same amount of transfers each year, the employment would recover already in 2021, and then being constantly up the baseline since 2026.
The effect of COVID-19 shock is estimated, under a pessimistic and an optimistic scenario considering 6 months of crisis, compared to the counterfactual (No-COVID):

- GDP decreases between 22 per cent and 9 per cent.
- Total Employment decreases between 28 per cent and 13 per cent.
- Household consumption reduces between 30 per cent and 12 per cent.
- Investments reduce between 42 and 18 per cent.
- Exports reduce between 21 per cent and 12 per cent.

Effect of the COVID-19 Shock compared to No-COVID Scenario (% reduction) in 2020:

- GDP: -22.0% to -8.9%
- Employment: -28.0% to -13.2%
- Household Consumption: -29.7% to -12.5%
- Investment: -41.6% to -18.4%
- Export: -20.2% to -11.8%

Note: Simulations are based on official source of data that consider the formal sector (the informal sector is excluded by the simulations).
6 Months Shock Scenario – Macroeconomic variables

Pessimistic Scenario

The graph below shows how, under a Pessimistic Scenario and 6 months of crisis, the actual government transfers to the households, and a lifecycle approach, would alleviate the reduction in the Sri Lanka Economy

Compared to what would have happened without COVID-19:

- GDP would have decreased by 22% in 2020 if the government did not decide to transfer cash to households;
- With the actual cash transfers to the households decided by the Government, GDP is expected to decrease by 19.1% in 2020;
- With a lifecycle approach, GDP would decrease by 15.8% in 2020.

Economic Effect of COVID-19 compared to a No COVID-19 Scenario (Pessimistic - 6 Months Lock Down) in 2020

- **GDP**:
  - Without New Government Transfers: -22.0%
  - With New Government Transfers (2 months): -19.1%
  - With New Inclusive Lifecycle (6 months): -15.8%

- **Employment**:
  - Without New Government Transfers: -28.0%
  - With New Government Transfers (2 months): -26.2%
  - With New Inclusive Lifecycle (6 months): -23.0%

- **Households Consumption**:
  - Without New Government Transfers: -29.7%
  - With New Government Transfers (2 months): -24.9%
  - With New Inclusive Lifecycle (6 months): -20.7%

- **Investment**:
  - Without New Government Transfers: -41.6%
  - With New Government Transfers (2 months): -40.5%
  - With New Inclusive Lifecycle (6 months): -34.5%
The graph below shows how, under a Pessimistic Scenario and 6 months of crisis, the actual government additional transfers to the households, and a lifecycle approach, would alleviate the reduction in Sri Lanka GDP along the years, when the transfers are distributed only during the 2020.

Compared to what would have happened without COVID-19:

- If the government did not intervene, GDP would be lower than its baseline with no COVID-19 for more than 20 years;
- With the actual additional cash transfers to the households decided by the Government (only for 2020), GDP is not going to reach the baseline level without COVID-19 even 20 years later;
- With a lifecycle approach only for 2020, the GDP would recover much before the other scenarios.
The graph below shows how, under a Pessimistic Scenario and 6 months of crisis, the actual government transfers to the households, and a lifecycle approach, when permanent, would alleviate the reduction in Sri Lanka GDP along the years.

Compared to what would have happened without COVID-19:

- If the government did not intervene, GDP would be lower than the level in 2020 with no COVID-19 for more than 20 years;
- With the actual additional one-off cash transfers to the households decided by the Government, GDP is not going to reach the same level of GDP without COVID-19 even 20 years later;
- With a lifecycle approach, permanent, the GDP would recover much before the other scenarios (in 2030).
The graph below shows how, under a Pessimistic Scenario and 6 months of crisis, the actual government transfers to the households, and a lifecycle approach, would alleviate the reduction in Sri Lanka employment by sector in 2020.

Compared to what would have happened without COVID-19:

- If the government did not intervene, total formal employment would be lower than the baseline level (with no COVID-19 for more than 20 years);
- With the actual one-off cash transfers to the households decided by the Government, total formal employment will not reach the same level it would be without COVID-19 after 20 years;
- With a lifecycle approach, the employment would recover already in 2021, and after a decrease compared to the baseline, being constantly up the baseline since 2031.
## Impact of COVID-19 crisis on Sri Lanka Economy Scenarios

<table>
<thead>
<tr>
<th>Economic Sectors</th>
<th>Code Divisions (ISIC Rev. 4)</th>
<th>Optimistic Scenario</th>
<th>Pessimistic Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, fishing, and forestry</td>
<td>1 - 3</td>
<td>-5%</td>
<td>-10%</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>5 - 9</td>
<td>-10%</td>
<td>-20%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>10 - 33</td>
<td>-30%</td>
<td>-50%</td>
</tr>
<tr>
<td>Utilities</td>
<td>35 - 39</td>
<td>-5%</td>
<td>-10%</td>
</tr>
<tr>
<td>Construction</td>
<td>41 - 43</td>
<td>-20%</td>
<td>-30%</td>
</tr>
<tr>
<td>Wholesale and retail trade; repair of motor vehicles and motorcycles</td>
<td>45 - 47</td>
<td>-30%</td>
<td>-60%</td>
</tr>
<tr>
<td>Transportation and Storage</td>
<td>49 - 53</td>
<td>-20%</td>
<td>-40%</td>
</tr>
<tr>
<td>Food and beverage service activities</td>
<td>55 - 56</td>
<td>-50%</td>
<td>-70%</td>
</tr>
<tr>
<td>Information and communication</td>
<td>58 - 63</td>
<td>-20%</td>
<td>-10%</td>
</tr>
<tr>
<td>Insurance, Real Estate, and Financial Activities</td>
<td>64 - 66</td>
<td>-15%</td>
<td>-30%</td>
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<tr>
<td>Professional, scientific and technical activities</td>
<td>69 - 75</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Administrative and support service activities</td>
<td>77, 78, 80- 82</td>
<td>-25%</td>
<td>-50%</td>
</tr>
<tr>
<td>Tourism</td>
<td>79</td>
<td>-70%</td>
<td>-90%</td>
</tr>
<tr>
<td>Public administration and defence; compulsory social security</td>
<td>84</td>
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<td>0%</td>
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<tr>
<td>Education</td>
<td>85</td>
<td>0%</td>
<td>0%</td>
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<tr>
<td>Human health and social work activities</td>
<td>86 - 88</td>
<td>0%</td>
<td>0%</td>
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<tr>
<td>Arts, entertainment and recreation</td>
<td>90 - 93</td>
<td>-30%</td>
<td>-60%</td>
</tr>
<tr>
<td>Other service activities</td>
<td>94 - 96</td>
<td>-25%</td>
<td>-50%</td>
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<tr>
<td>Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use</td>
<td>97 – 98</td>
<td>-25%</td>
<td>-50%</td>
</tr>
<tr>
<td>Remittances</td>
<td></td>
<td>-10%</td>
<td>-30%</td>
</tr>
</tbody>
</table>