SRI LANKA

SELECTED ISSUES

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INTERNATIONAL MONETARY FUND

SRI LANKA

SELECTED ISSUES

February 10, 2022

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CONTENTS

MOBILIZING REVENUE IN SRI LANKA[1]

Sri Lanka has substantial scope to mobilize revenue by strengthening income taxes and VAT. Currently, Sri Lanka's tax-to-GDP ratio is among the lowest in the world, and its tax system stands out with its low rates, small base, and complexity. Aligning its PIT rate schedule with other Asian emerging market economies and removing sector-specific CIT exemptions could generate around 0.7 percent of GDP in additional revenue. Since Sri Lanka's VAT rate is low compared to peers, there is scope to mobilize additional revenue from rate increases. However, such a reform should be accompanied by base broadening measures and enhanced revenue collection efficiency. Indirect tax reform should be comprehensive and reduce the complexity of the system, by combining the removal of VAT exemptions with a phasing-out of para-tariffs.

A.   Introduction

1.   From an international perspective, persistently large fiscal deficits in Sri Lanka reflect relatively low tax revenues, not excessively high government expenditures. In a bid to promote production and reduce the cost of living, the current government revamped the tax structure shortly after taking office, legislating a variety of rate cuts and exemption increases to the Personal Income Tax (PIT), Corporate Income Tax (CIT), and Value Added Tax (VAT) in December 2019. Largely as a result, Sri Lanka's tax-to-GDP ratio fell to a historic low of 8.1 percent in 2020 and is now among the lowest in the world.[2]

2.   The government has pledged to keep the current low-tax regime unchanged over the medium-term for simplicity and predictability. For 2020, it raised the tax free allowance for the PIT from 500,000 to 3,000,000 LKR, and cut the top marginal tax rate from 24 to 18 percent, substantially reducing the effective tax rate at all income levels. The government also cut the standard CIT rate from 28 to 24 percent, and raised exemptions for many sectors. In particular, the agriculture and information technology sectors are now fully CIT exempt. In addition, the government cut the standard VAT rate from 15 to 8 percent, and introduced additional exemptions. Furthermore, it simplified the tax system by eliminating the Nation Building Tax, the Economic Service Charge, and the Debt Repayment Levy.[3] In a bid to boost Foreign Direct Investment (FDI), the government removed all restrictions on the Strategic Development Projects Act, under which firms executing projects deemed strategically important can be granted tax exemptions for up to 25 years. Finally, the government has proposed a new Special Goods and Services Tax (SGST), to replace various taxes and levies on liquor, vehicles, cigarettes, telecommunications, and gambling.

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[1] Prepared by Klaus Hellwig and Francis Vitek.

[2] Non-tax revenues, at around 1 percent of GDP, are also relatively low by international comparison.

[3] The Nation Building Tax was a 2 percent turnover tax on businesses. The Economic Service Charge was a 0.5 percent turnover tax on businesses deductible from any income taxes payable. The Debt Repayment Levy was a 7 percent tax on value added from the provision of financial services by licensed banks and finance companies.

3.   **This chapter assesses the current tax system in Sri Lanka, and discusses tax policy reform options.** Our tax assessment focuses on the personal, corporate and indirect taxes, and is supported by peer country comparisons. These comparators are Asian emerging market economies having similar levels of economic development as Sri Lanka. The reform options we discuss take into consideration the need to mobilize revenue while promoting economic efficiency and equity. They are consistent with long-standing policy advice by IMF experts in the context of IMF-supported programs, Article IV consultations, and technical assistance.

B. Tax Revenue Performance

4.   **Sri Lanka's tax revenue performance has long fallen short of its comparators, and deteriorated sharply in 2020 (Figure 1).** Total tax revenue was fairly stable at around 10 to 12 percent of GDP over the period 2000 to 2019. It was resilient to plunges in output growth in 2001, 2009, and 2013. However, during the recession in 2020 caused by the COVID-19 pandemic, total tax revenue fell sharply to 8 percent of GDP, due to the tax cuts, cyclical effects, suspension of non-priority imports, and lockdown measures. Throughout this period, Sri Lanka's tax-to-GDP ratio was below the average across its comparators, and this revenue underperformance has been rising.

Figure 1. Sri Lanka: General Government Tax Revenue

Sources: October 2021 WEO Database, FAD Revenue Assessment Tool; and 2020 MOF Annual Report.
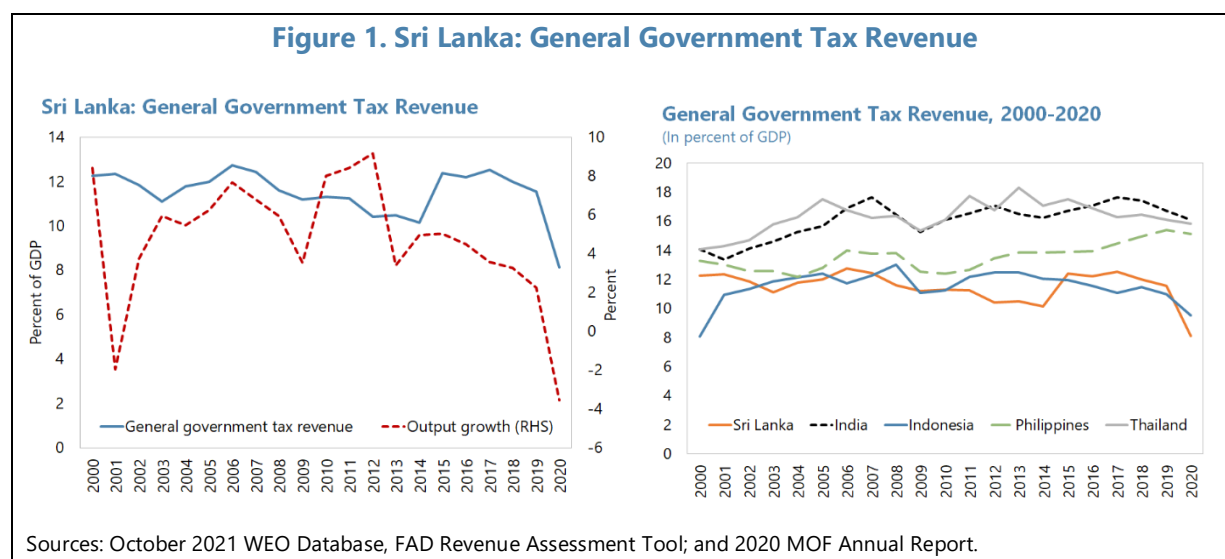
5.   **Sri Lanka's primary source of tax revenue has been taxes on goods and services (Figure 2).** Indeed, on average over the period from 2000 to 2020, taxes on goods and services accounted for 58 percent of total tax revenue. Sri Lanka's secondary revenue source was taxes on international trade, which accounted for 19 percent of total tax revenue on average over this period. Relative to its comparators, in 2020 Sri Lanka relied much more on taxes on international trade as a source of revenue. At the same time, it relied much less on PIT and CIT, which only generated 1.3 percent of GDP in revenue.

Figure 2. Sri Lanka: Tax Revenue Composition

Sources: October 2021 WEO Database, FAD Revenue Assessment Tool; and 2020 MOF Annual Report.
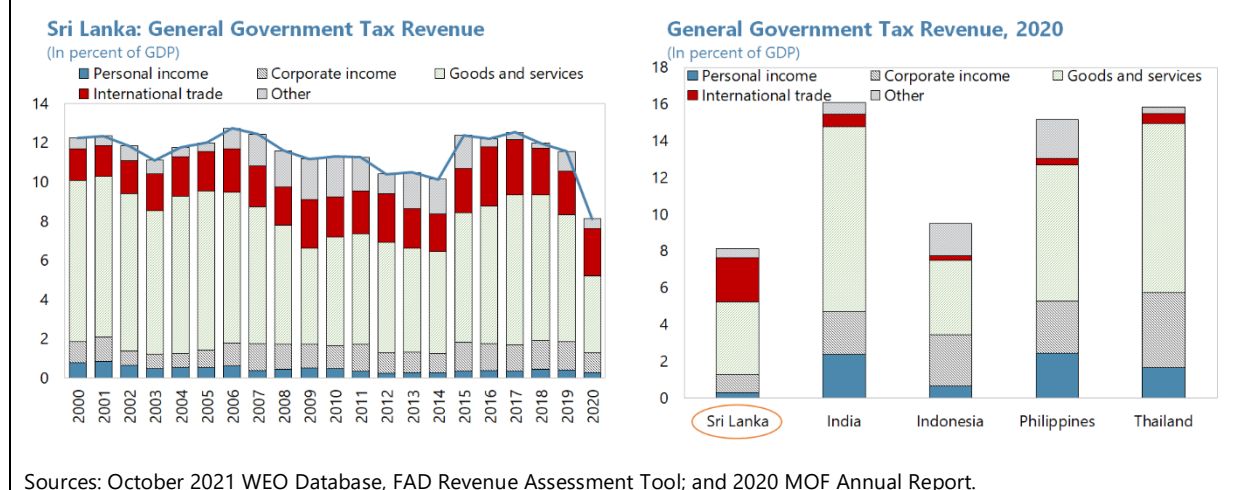
6.   The number of registered taxpayers in Sri Lanka fell sharply following the 2019 tax reforms (Table 1). As a result of the higher tax exemptions and more generous registration thresholds, relatively few Sri Lankan individuals and businesses are now captured by the tax system. Due to the change in the PIT rate structure and withholding regime, the number of registered income tax payers fell by 32 percent in 2020. In addition, more than three-quarters of previously registered VAT payers dropped out of the tax net. Finally, a large number of businesses that were previously only captured by the Nation Building Tax are no longer registered.

Table 1. Sri Lanka: Number of Registrations: Selected Taxes

	end-2019	end-2020
Income taxes	1,522,911	1,036,014
Corporate income tax	56,460	60,721
Non-corporate income taxes	1,449,092	975,293
Individuals	281,105	292,712
Partnerships	17,300	16,949
Bodies of persons	804	804
Employees paying under mandatory or voluntary withholding schemes	1,149,883	664,828
Economic Sercive Charge	17,359	-
Value-added tax	28,914	8,152
Nation Building Tax	92,028	-
Source: Inland Revenue Department		

C. Personal and Corporate Income Taxes

7.   Sri Lanka has low PIT and CIT revenue productivities (Figure 3). In 2020, Sri Lanka had the lowest PIT revenue-to-GDP ratio among its comparators, as well as the lowest top marginal PIT rate. It also had a lower CIT revenue-to-GDP ratio than all of its comparators, despite a near average standard CIT rate. As shown in Figure 3, Sri Lanka's CIT and PIT revenue productivities are low compared to its comparators, which means that the PIT and CIT generated less revenue in Sri Lanka

relative to proxy measures of potential revenue. This indicates some combination of high tax exemptions and low tax collection efficiency.

Figure 3. Personal and Corporate Income Tax Productivities

Sources: October 2021 WEO Database, FAD Revenue Assessment Tool; and 2020 MOF Annual Report.

Note: We estimate PIT revenue productivity by total PIT revenue divided by the product of: i) the top marginal PIT rate ; ii) the labor-income share of GDP; and iii) nominal GDP. We estimate CIT revenue productivity by total CIT revenue divided by the product of: (i) the standard CIT rate; ii) the capital-income share of GDP; and iii) nominal GDP.

Personal Income Taxes

8.   **Sri Lanka's marginal and effective PIT rate schedules are very low (Figure 4).** For 2020, it raised the tax-free allowance for the PIT from 500,000 to 3,000,000 LKR, and cut the top marginal tax rate from 24 to 18 percent. In internationally comparable terms, Sri Lanka's revised tax-free allowance amounted to about 16,200 USD, versus 0 to about 5,000 USD across its comparators. At the same time, its revised top marginal tax rate of 18 percent fell far short of its comparators, where it ranged from 30 to 35 percent. Sri Lanka's high tax exemption threshold and low top marginal tax rate imply much lower effective PIT rates than in its comparators, at all income levels. The PIT is designed to make the tax system progressive, by imposing the tax burden disproportionately on high income earners. Raising Sri Lanka's PIT rate schedule from its very low level could make the tax system considerably more progressive.

Figure 4. Marginal and Effective Personal Income Tax Rate Schedules

Sources: PWC Worldwide Tax Summaries; and 2020 MOF Annual Report.
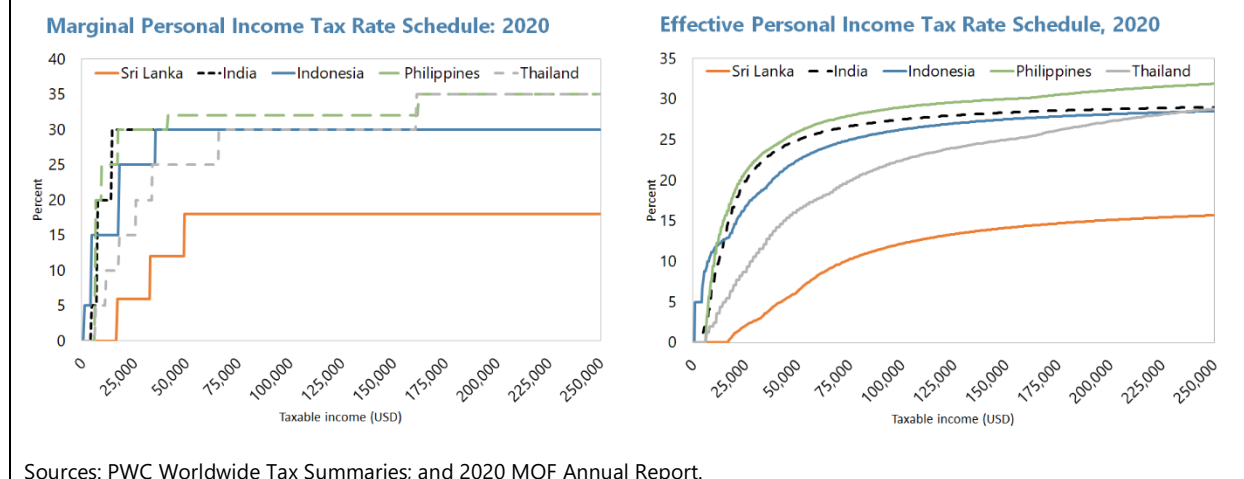
9.   There is scope to mobilize revenue in Sri Lanka through PIT reforms. Based on Sri Lanka's relative revenue performance, we estimate that adopting a marginal PIT rate schedule broadly in line with those of its comparators would raise PIT revenue by an additional 0.2 percent points of GDP, up from its 2020 level of 0.3 percent of GDP. This hypothetical marginal PIT rate schedule sets the tax-free allowance at 600,000 LKR, and raises the marginal tax rate in 10 percentage point increments for each additional 600,000 LKR of taxable income, up to a top marginal tax rate of 30 percent. Based on Sri Lanka's household income distribution, we estimate that this hypothetical marginal PIT rate schedule would be strongly progressive, imposing an estimated 82 percent of the tax burden on households in the top 10 percent of the income distribution, and none on those in the bottom 60 percent.

Corporate Income Taxes

10.   For 2020, Sri Lanka's standard CIT rate was cut, and exemptions were increased for many sectors (Figure 5). Its standard CIT rate was cut from 28 to 24 percent, versus 20 to 30 percent across its comparators. But Sri Lanka's near average standard CIT rate was subject to widespread sector-specific exemptions, unlike in its comparators where it applied more or less uniformly across the entire economy. In Sri Lanka, only the financial and the gambling, liquor and tobacco sectors were subject to at least the standard CIT rate in 2020. Many sectors received CIT exemption increases in 2020, while the agriculture and information technology sectors were fully CIT exempt. Moreover, the government removed all restrictions on the Strategic Development Projects Act in 2020, under which firms executing FDI projects deemed strategically important can be granted CIT and other tax exemptions for up to 25 years. Granting sector-specific and firm-specific CIT exemptions erodes the tax base, reduces tax collection efficiency, and distorts the allocation of resources in the economy.

Figure 5. Sri Lanka: Corporate Income Tax Rates

Standard Corporate Income Tax Rates, 2020
(In percent)

Sri Lanka: Sectoral Corporate Income Tax Rates
(In percent)

Sources: PWC Worldwide Tax Summaries and 2020 MOF Annual Report.
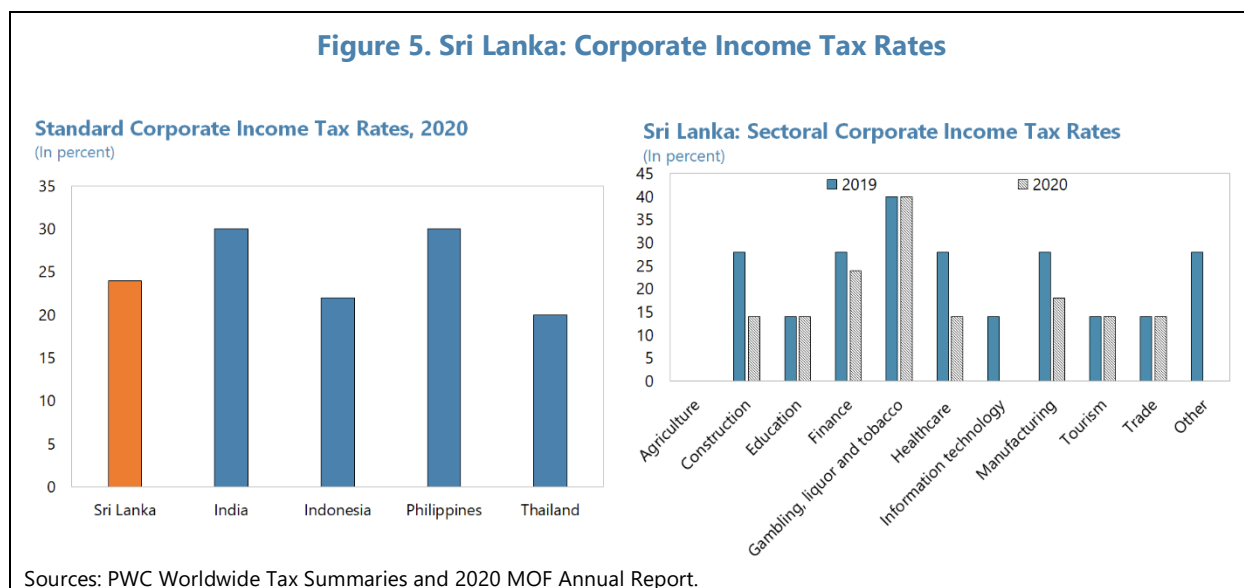
11.   There is scope to mobilize revenue in Sri Lanka through CIT reforms. Based on Sri Lanka's sectoral CIT revenue composition, we estimate that imposing the standard CIT rate of 24 percent economy-wide would raise CIT revenue by an additional 0.5 percent of GDP, up from its 2020 level of 1.0 percent of GDP. This hypothetical CIT rate structure would eliminate all of the sector-specific exemptions that undermine efficient revenue collection. It would also help bring Sri Lanka into conformity with the OECD-led Inclusive Framework to reform the international corporate tax system, which includes a global minimum CIT rate of 15 percent, applicable to the global profits of large multinational corporations.

D. Indirect Taxes

12.   Indirect taxes take various forms with different functions. They can be used to alter the relative prices of goods and services, and thereby affect consumption choices. For example, excises are imposed on fuel in most countries, to make consumers internalize the negative environmental externalities from consuming it, consider buying more fuel-efficient cars, or switch to public transportation. Taxes on international trade, in particular import duties, were important historically to mobilize revenue, and to shield domestic firms from foreign competition by raising the relative prices of imported goods. However, following decades of global tariff reductions, taxes on international trade are now relatively low in many countries. Indirect taxes are also used to promote distributional equity in many countries, by imposing lower taxes on goods consumed by low-income households. But in practice, other instruments such as progressive income taxes, property taxes and social transfers tend to be more efficient at redistributing income, as they better target low-income households. A VAT has a larger tax base than excises and taxes on international trade.

13.   A VAT with few exemptions is an efficient vehicle to mobilize revenue, while excises can both generate revenues and correct negative externalities. A VAT is more growth-friendly than a turnover tax, as it avoids the cascading of the tax burden along the supply chain, by taxing only the value added portion of turnover. Since a VAT and excises have distinct policy purposes,

excisable goods should also be subject to the VAT. Goods having negative consumption externalities that are typically subject to excises include fuel, liquor and tobacco. A simple indirect tax framework minimizes administrative costs and the compliance burden for firms, whereas a complex framework favors those who know how to find loopholes or game the system. International experience suggests that complex tax incentives can create opportunities for rent seeking and corruption.[4] In a similar vein, an IMF analysis has found that tax complexity is among the policy variables most robustly correlated with measures of corruption.[5]

14.   In Sri Lanka, revenue from taxes on goods and services declined over time, and reliance on international trade taxes is high. Despite a gradual decline since the 1990s, Sri Lanka's indirect tax revenue in 2019 was comparable to that of its comparators (Figure 6). However, indirect tax revenue relied relatively heavily on taxes on international trade rather than taxes on goods and services. After the 2019 tax reforms, revenue collection from taxes on goods and services dropped significantly, due to the cut in the standard VAT rate and the elimination of the Nation Building Tax. The falls in economic activity and imports in 2020 due to the recession associated with the COVID-19 pandemic also contributed to the collapse in revenue from taxes on goods and services.

Figure 6. Sri Lanka: Indirect Tax Revenue Composition

Sources: World Economic Outlook; Sri Lankan authorities; and IMF staff calculations.
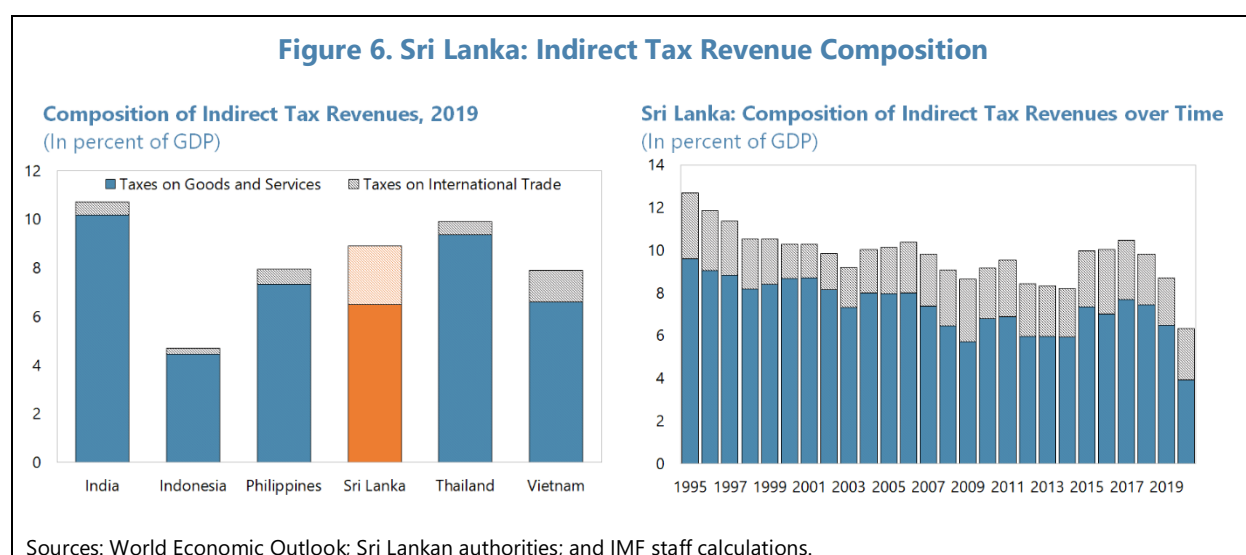
15.   Despite recent streamlining efforts, the indirect tax structure in Sri Lanka remains complex, and effective tax rates on many imported goods are high (Figure 7). At least 11 levies and other excises have been eliminated over the past 5 years. In addition, the Nation Building Tax (a broad-based turnover tax that overlapped significantly with the VAT) was eliminated in 2019. Nevertheless, there remain a number of excise-like taxes and para-tariffs that are applied to the same tax base, in addition to differentiated import duties. As a result, effective tax rates vary widely across products. Figure 7 illustrates the complexity of the tax code in the case of imported goods. It

[4] See "Options for Low Income Countries' Effective and Efficient Use of Tax Incentives for Investment", IMF, OECD, UN, and World Bank, 2015.

[5] See "Curbing Corruption", April 2019 Fiscal Monitor, IMF.

shows that under the 2020 tax schedule, no taxes are levied on 5 percent of imports. And around 50 percent of imports entered the country with an effective tax rate of less than 20 percent. But for other goods, the overlapping tariffs, para-tariffs and taxes added up to high effective tax rates, undermining the competitiveness of the economy. For example, as shown in Figure 7, around 10 percent of imports entered the country subject to effective tax rates of over 60 percent.

Figure 7. Sri Lanka: Distribution of Effective Tax Rates across Imported Goods: 2020
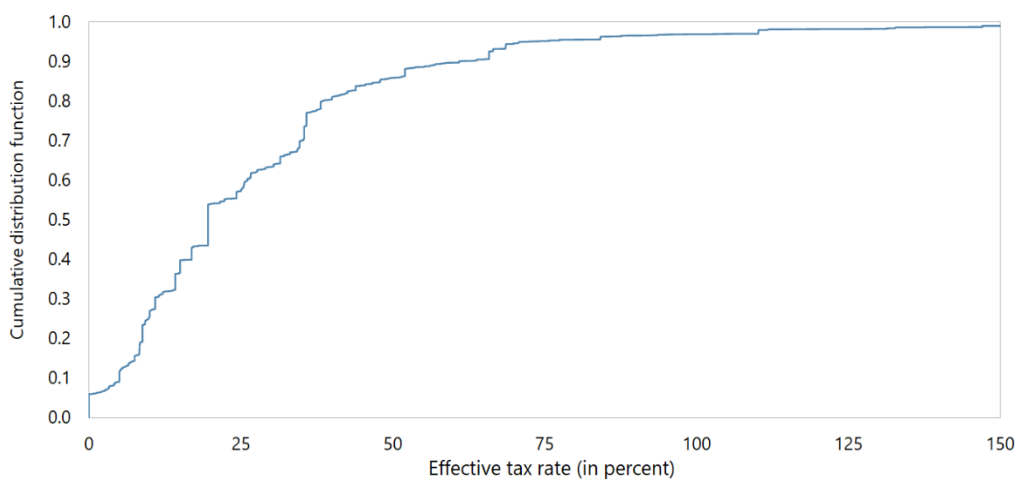
Sources: Sri Lankan authorities, UN-COMTRADE, and IMF staff estimates.

Note: The Figure shows the distribution of effective tax rates across products, based on the import tariff and tax schedule for 2020, as published by Sri Lanka Customs. Tax rates are weighted by the latest available (i.e., 2017) product-level CIF import values as reported by the COMTRADE database.

16.   The complexity of the indirect tax structure is further increased by the Special Commodities Levy (SCL). Goods and services subject to the SCL are exempt from other taxes and levies such as customs duties, excises, and VAT. The indirect tax schedule has frequently changed, through the addition and removal of VAT exemptions, changes to product-specific excise rates, and movements of products into or out of the SCL regime. For example, in 2020 alone there were 20 separate directives changing the SCL schedule.[6]

Value Added Tax

17.   Sri Lanka's VAT revenues, already low by international standards, fell to a historic low in 2020 (Figure 8). The drop in VAT revenues from 3 percent of GDP in 2019 to 1.6 percent in 2020 is largely explained by the cut in the standard VAT rate from 15 to 8 percent. While Sri Lanka's VAT rate is now below the average across Asian emerging market and developing economies of around 12 percent, the low standard rate alone cannot explain the low level of VAT revenues. As a share of GDP, VAT revenues in Indonesia, Thailand and Vietnam have exceeded that in Sri Lanka, despite relatively low standard VAT rates. As shown in the right-hand side of Figure 8, in Sri Lanka a

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[6] See http://www.customs.gov.lk/customs-tariff/.

one percentage point increase in the standard VAT rate is associated with a 0.2 percent of GDP increase in tax revenues, whereas for Thailand and Vietnam the corresponding increase is close to 0.5 percent of GDP. According to the Asian Development Bank, Sri Lanka has the lowest VAT revenue productivity in Asia.[7]

Figure 8. Sri Lanka: VAT Rates and Revenues

Sources: Sri Lankan authorities; IMF Fiscal Affairs Department; IMF Government Finance Statistics; and IMF staff calculations.
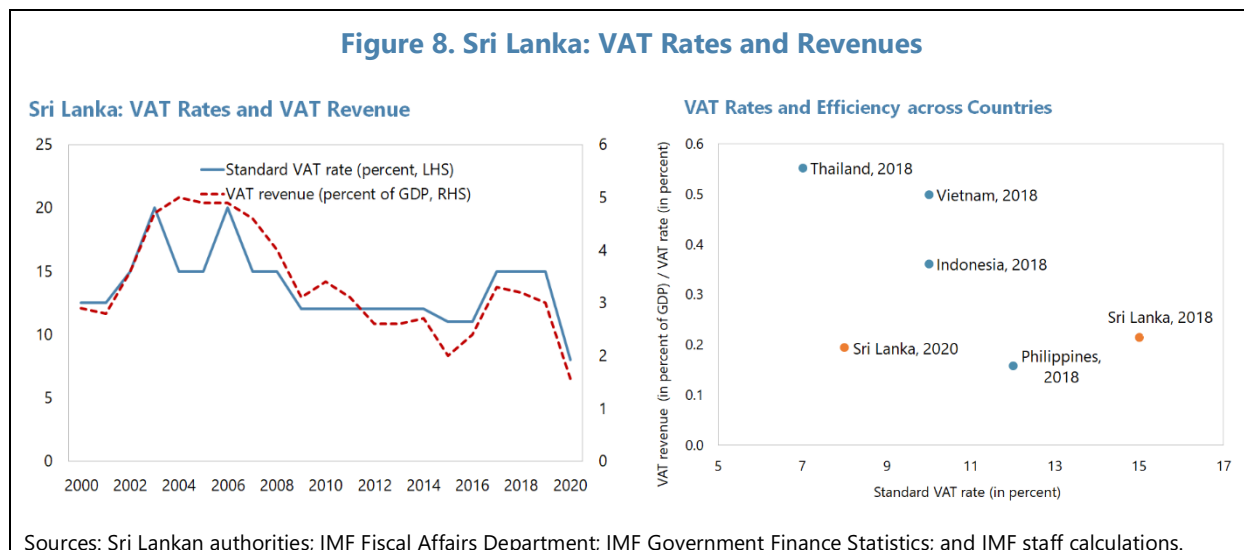
18.   In Sri Lanka, the links between statutory VAT rates and revenues are relatively weak. Figure 9 shows that the relationship between VAT rates and revenues in Sri Lanka is particularly weak in the case of domestic activity. A one percentage point increase in the VAT rate is associated with a 0.4 percentage point increase in the effective VAT rate on imports, but only a 0.14 percentage point increase in the effective VAT rate on domestic activity. These weak relationships are further evidence that large shares of imports and domestic activity are not subject to VAT. This suggests that VAT revenue could be significantly raised by broadening the tax base and enhancing compliance.

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[7] See ADB, 2020, "A Comparative Analysis of Tax Administration in Asia and the Pacific."

Figure 9. Sri Lanka: VAT Revenue Efficiency for Imports and Domestic Activity, 2000–2020
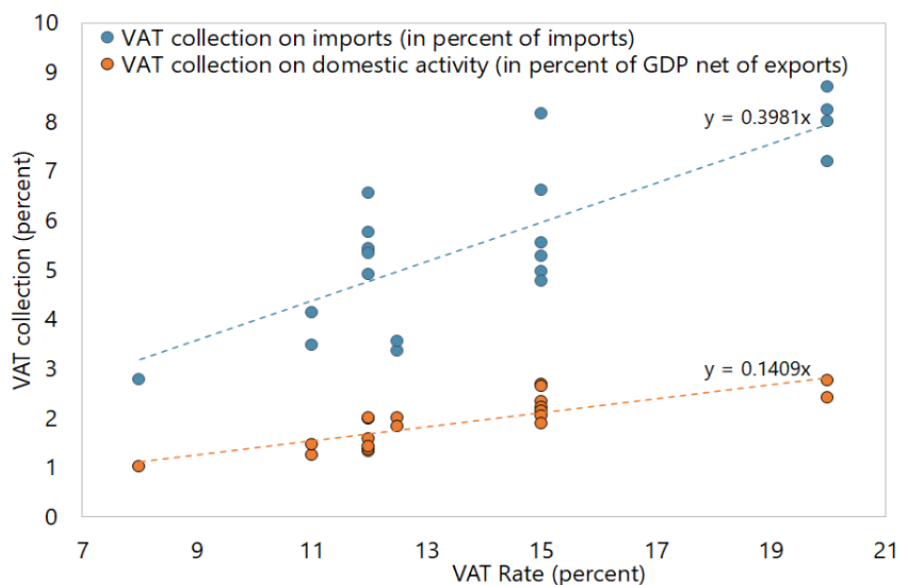
Sources: Sri Lankan authorities; and IMF staff estimates.

Note: The chart plots annual VAT collection as a share of the associated economic activity (i.e., imports or domestic production) against the standard VAT rate.

19.   Product-level data point to large VAT revenue shortfalls (Figure 10). In Sri Lanka, many products and taxpayers are VAT exempt, implying that the effective VAT rate (calculated as the ratio of import VAT collection to the potential import VAT base) was only 2.1 percent in 2020, about one-quarter of the statutory VAT rate. Based on our estimates, in 2020 only about half of all imports—8.4 billion USD—fell into a product group in which the standard VAT rate of 8 percent was fully applied, whereas about a quarter of imports—4.2 billion USD—were fully VAT exempt. The remainder of imports fell under product groups in which only some products were subject to VAT.[8] Product-specific exemptions are most prevalent for vehicles, textiles, food, and fuel. Figure 10 shows that, according to staff estimates, these product-specific exemptions alone reduced the effective VAT rate by 2.8 percentage points. In addition, the coverage of products by the SCL reduced the effective VAT rate by 0.4 percentage points, since products that fall under the SCL are VAT exempt. Finally, the effective VAT rate was reduced by exemptions granted to certain taxpayers, in particular several state-owned enterprises, as well as special projects approved by the Board of Investment (BOI). In Figure 10, these taxpayer-specific exemptions are captured by the residual term.

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[8] Import data from COMTRADE are reported at the HS6 product level, whereas import taxes are defined at the more granular HS8 level. Some HS6 product groups include both taxed and untaxed HS8 products.

Figure 10. Sri Lanka: Statutory and Effective VAT Rates on Imports in 2020
(In Percent)

Sources: Sri Lankan authorities, UN-COMTRADE, and IMF staff estimates.

Notes: (i) Effective tax rate is computed as the ratio of the 2020 import VAT collection and the potential import VAT base (i.e., CIF value of 2020 imports, multiplied by 1.1 and by an adjustment factor reflecting that excises and import duties are included in the VAT base); (ii) "products" refers to losses from product-specific exemptions; (iii) "SCL" refers to losses from goods that are covered by the Special Commodities Levy and hence VAT exempt; (iv) the "Residual" includes losses from importer-specific exemptions.

20.   The VAT on domestic activity is also subject to many exemptions. To incentivize investment, Sri Lanka offers broad sectoral exemptions (agriculture, information technology, some manufacturing) as well as targeted exemptions (tax holidays for Sri Lankans returning from abroad to start a business).

21.   The VAT registration threshold in Sri Lanka was raised significantly in 2020, putting it among the highest in the world (Figure 11). It rose from 12 million to 300 million LKR, which is much higher than in comparators. This lightened the tax compliance burden for many medium-sized firms, but also drastically reduced the number of VAT payers. Indeed, there were only 8,152 registered VAT payers at end-2020, down from 28,914 at end-2019. Given that VAT revenues are highly concentrated among the largest taxpayers, the immediate revenue impact of this measure has been less than proportional to the decrease in VAT payers. However, a smaller roster of VAT taxpayers could contribute to compliance weaknesses, as information for invoice matching is becoming more limited with fewer taxpayers.

Figure 11. Annual Turnover Threshold for VAT Registration
(In Millions of USD)

Sources: Ernst & Young; World Economic Outlook; and IMF staff calculations.
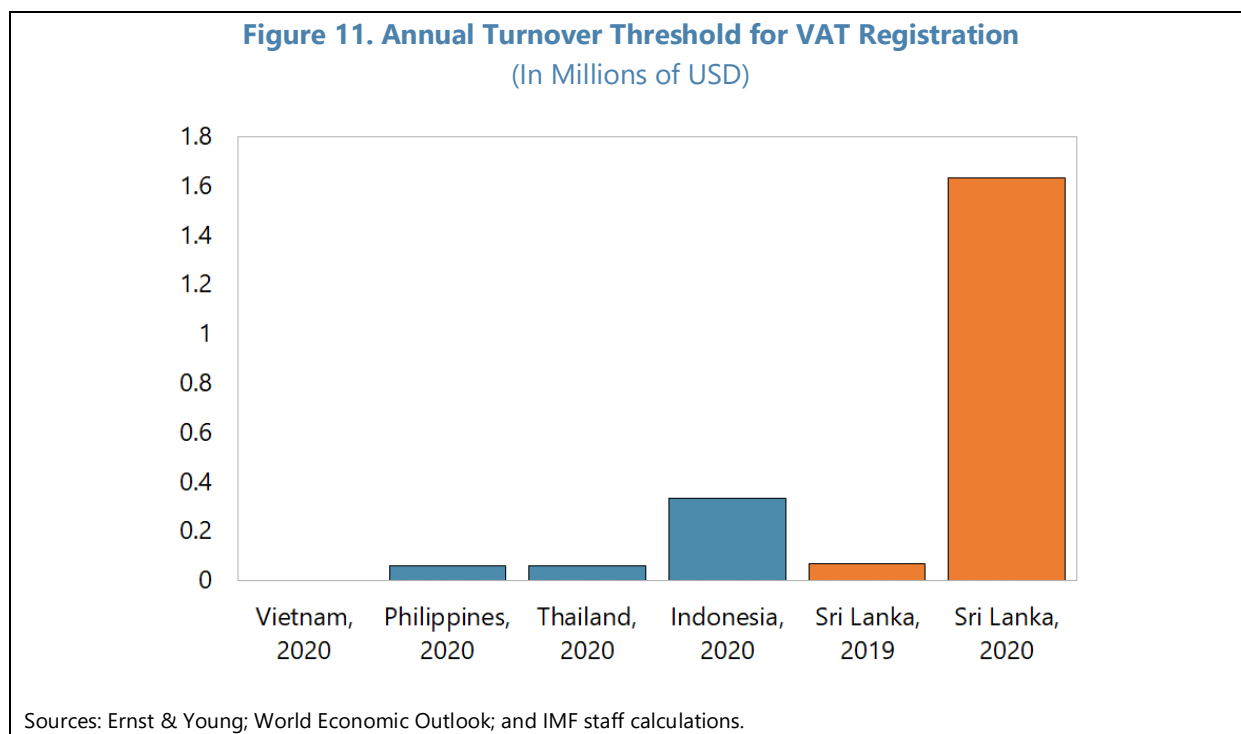
22.   There is scope to mobilize revenue in Sri Lanka through VAT reforms. Sri Lanka's standard VAT rate is relatively low compared to peers, and additional revenue could be mobilized by raising it. However, such a reform should go hand in hand with base broadening measures and enhanced revenue collection efficiency. Our analysis has shown that tax exemptions for specific products and taxpayers account for a large share of revenue losses from VAT. Indirect tax reform should be comprehensive and reduce the complexity of the tax system, by combining the removal of VAT exemptions with a phasing-out of para-tariffs.

GOVERNMENT FINANCING DURING COVID-19 AND ITS IMPLICATIONS FOR MONEY AND INFLATION IN SRI LANKA[1]

The Central Bank of Sri Lanka (CBSL) has provided the government with a large amount of direct financing through primary market purchases of treasury bills during the pandemic. These purchases have helped stabilize the treasury security market and lower the government financing costs, but also inevitably led to an unprecedented increase in money supply. A battery of empirical analyses point to potential inflationary pressures from this large money expansion at least in the long run: estimated impulse response suggests that a one percent increase in M1 leads to higher inflation by 0.4-0.5 percent after ten quarters. Cross-country analyses suggest that the money and inflation relationship would be stronger for countries with weaker fiscal and external positions, providing relevant insights into Sri Lanka at this juncture.

A.   Government Financing Challenges and the Authorities' Policy Response

1.   Government financing needs increased sharply during the pandemic. The 2019 tax cuts, the COVID-19 impact on revenues, and the pandemic relief measures widened fiscal deficits to 12.8 percent of GDP in 2020 and 11.4 percent of GDP in 2021. The government's loss of access to international capital markets and foreign investors' exit from the local currency debt market together created a large budget financing gap that needed to be filled by other financing sources. The sharp improvement in the private sector savings-investment balance during the pandemic, as economic activities contracted, created space for domestic banks to absorb more government debt, but it was not enough.

Sri Lanka: Real GDP and CCPI Inflation
(Y-o-Y, percentage change)
Source: Department of Census and Statistics.

Sri Lanka: Financing of Government Deficits
(in percent of GDP)
Sources: MoF; and CBSL.
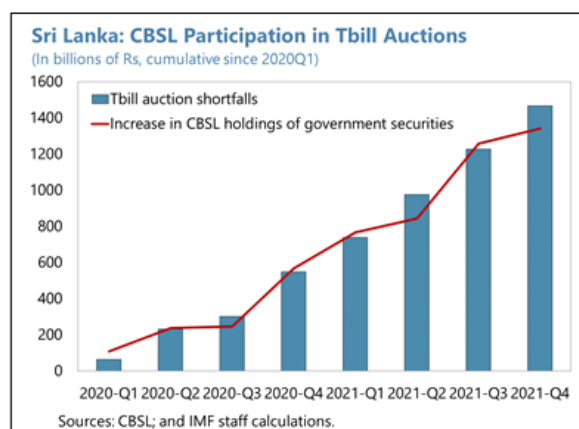
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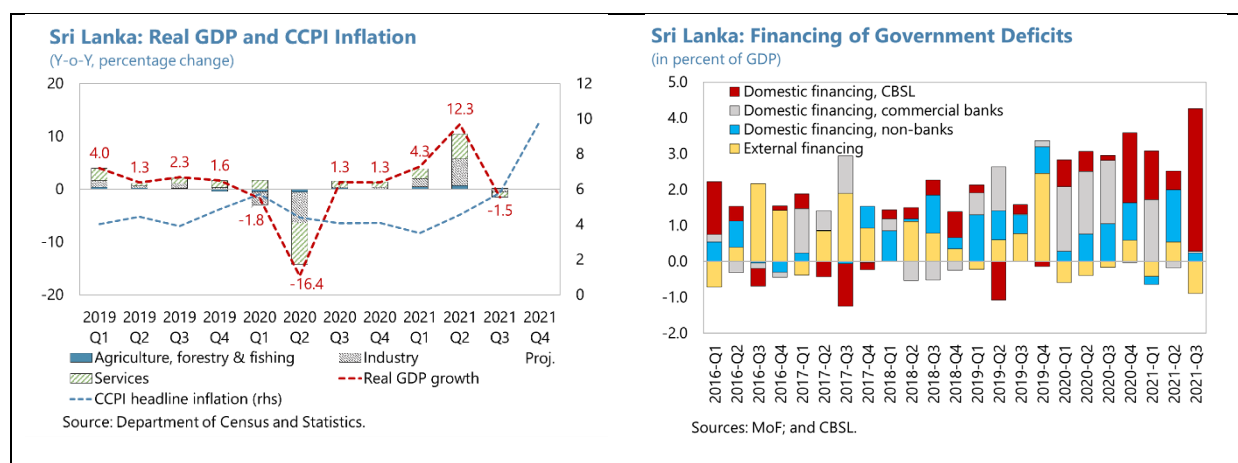
[1] Prepared by Mike Li.

2.   In this context, the Central Bank of Sri Lanka (CBSL) significantly stepped up its direct financing of the government. The central bank's net credit to the government increased by 9 percent of GDP between March 2020 and September 2021, mainly through its primary market purchases of treasury bills.[2] In doing so, the CBSL acted as a noncompetitive bidder to absorb auction shortfalls resulting from the rate cap imposed on 364-day bills (starting from April 2020, and later removed in September 2021), as bids received above the cap were rejected.
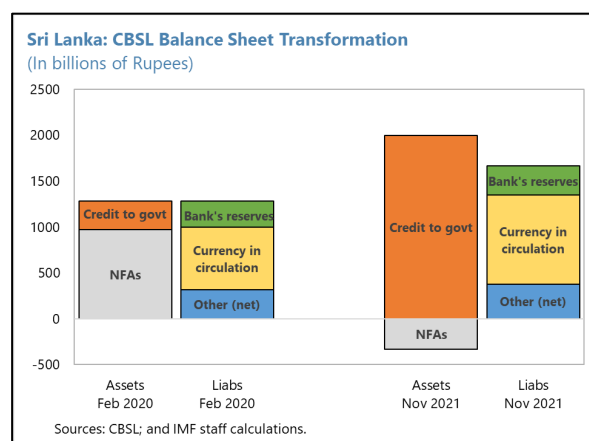
B.   Consequences of the Policy Response

3.   The CBSL's direct financing of the government significantly eased the government's financing constraints. The central bank's direct purchases of treasury bills were aimed at "fulfilling funding requirements of the Government and suppressing the yields on government securities" (according to the CBSL's 2020 Annual Report). In this regard, the policy has achieved what it was set out to do—the budget financing gap was filled, and the government securities market was stabilized with rates falling to historical low levels. A counterfactual could have been a much tighter fiscal stance, while the economy faced an unprecedented shock from COVID-19.

Sri Lanka: CBSL Participation in Tbill Auctions
(In billions of Rs, cumulative since 2020Q1)
Tbill auction shortfalls
Increase in CBSL holdings of government securities
Sources: CBSL; and IMF staff calculations.

4.   The CBSL's increased claims on the government also contributed to a rapid money expansion. The monetary base has increased by 34 percent since the onset of the pandemic, as Rupees were created to finance the CBSL's purchases of government securities, despite the drawdown of FX reserves. The narrow money supply (M1) grew by 36 percent (year-on-year, YoY) in December 2020 and 24 percent in November 2021, reflecting a strong growth in demand deposit. The large liquidity injection was unsterilized and, together with the policy easing through conventional policy instruments (policy rates and statutory reserve ratio cuts to historical low levels), initially led to significant excess liquidity in the interbank market, part of which

Sri Lanka: CBSL Balance Sheet Transformation
(In billions of Rupees)
Credit to govt
Bank's reserves
Currency in circulation
Other (net)
NFAs
Assets Feb 2020   Liabs Feb 2020   Assets Nov 2021   Liabs Nov 2021
Sources: CBSL; and IMF staff calculations.

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[2] The CBSL's provisional advances to the government (which are legally capped at 10 percent of estimated government revenues for the year in which they are made) were fully utilized during the pandemic. The CBSL also increased its treasury securities holdings through special operations to offset its FX provision to the government in meeting the principal payments of international sovereign bonds in October 2020, July 2021, and January 2022.

was channeled to private sector credit growth as loan demand recovered. The excess liquidity was eliminated after monetary policy was tightened in August 2021.

Sri Lanka: CBSL Balance Sheet Transformation
(In billions of Rs)

Source: CBSL.

Sri Lanka: Interbank Market Conditions

Source: CBSL.
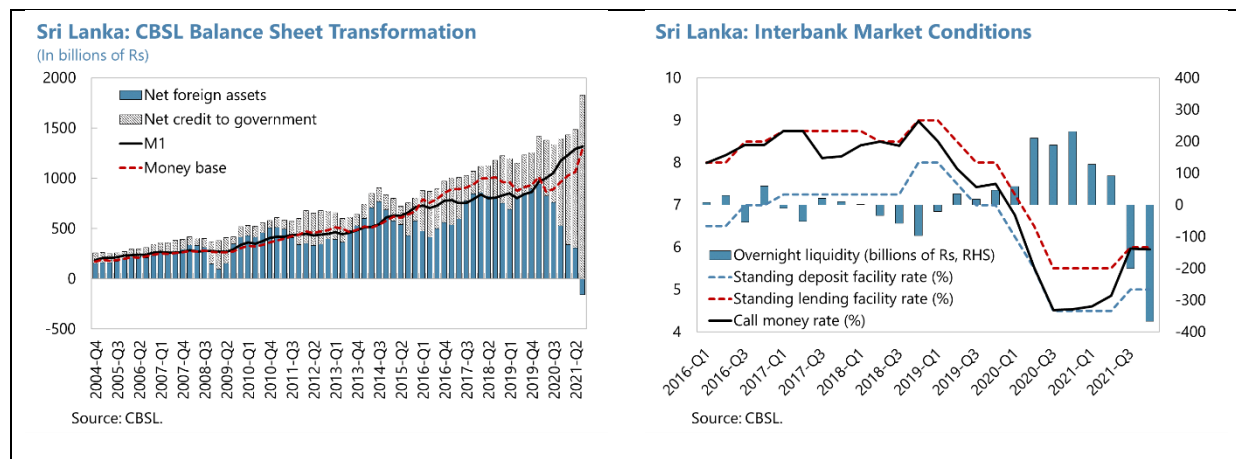
5.   This unprecedented money expansion has slowly transmitted to the real economy. The decline in money market rates was passed through to bank lending rates, which helped support a rebound in private credit demand and in turn a nascent economic recovery in the first half of 2021. Historically, private credit in Sri Lanka tended to respond strongly (albeit with some lag) to money expansion and to low interest rate environment. This said, lending to the government (by both the CBSL and commercial banks) has been the key contributor to broad money growth thus far during the pandemic, differing from previous episodes of large money expansion.

Sri Lanka: Bank Lending and Deposit Rates
(In percent)

Sources: CBSL; and IMF staff calculations.

Sri Lanka: Broad Money Composition
(In billions of Rs, YoY change)

Sources: CBSL; and IMF staff calculations.
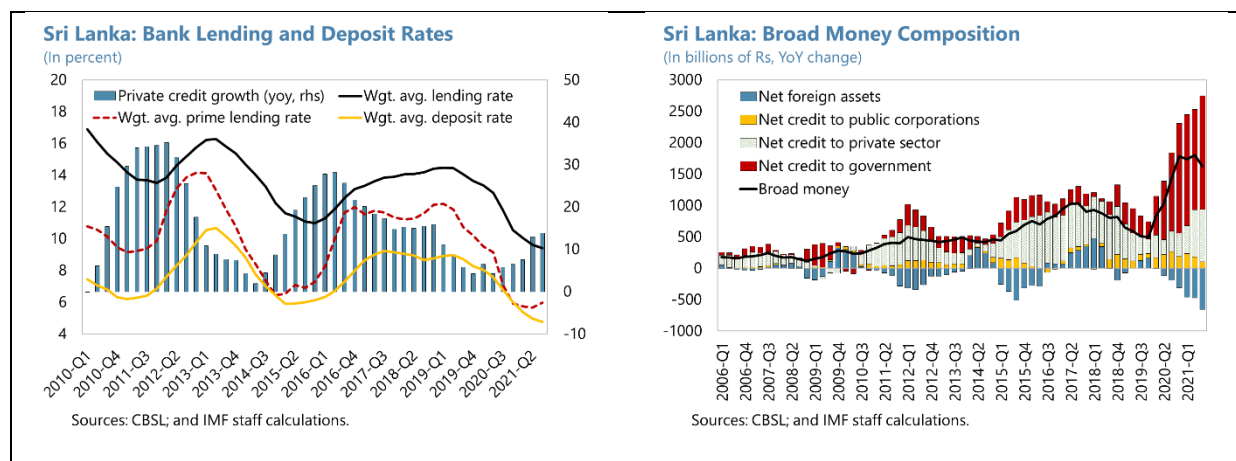
C.   Policy Response's Impact on Inflation

6.   Inflation was broadly in check during 2020. A large slack in the economy and the 2019 VAT rate cut (implemented in 2020) held down inflation. Also, from a Quantity Theory of Money (MV=PQ) point of view, the multiyear downtrend in money velocity, which further decelerated during the pandemic due to less frequent cash transactions, also helped partially offset the large money expansion.

Sri Lanka: Colombo CPI and Wage Inflation
(percentage change, YoY)

Actual - headline
Actual - core
Corporate inflation expectations (12m)
Private (informal) wage inflation (3mma)

Sources: CBSL and IMF staff calculations.

Sri Lanka: Broad Money Velocity
(Calculated as nominal GDP divided by M2)

Sources: CBSL; and IMF staff calculations.
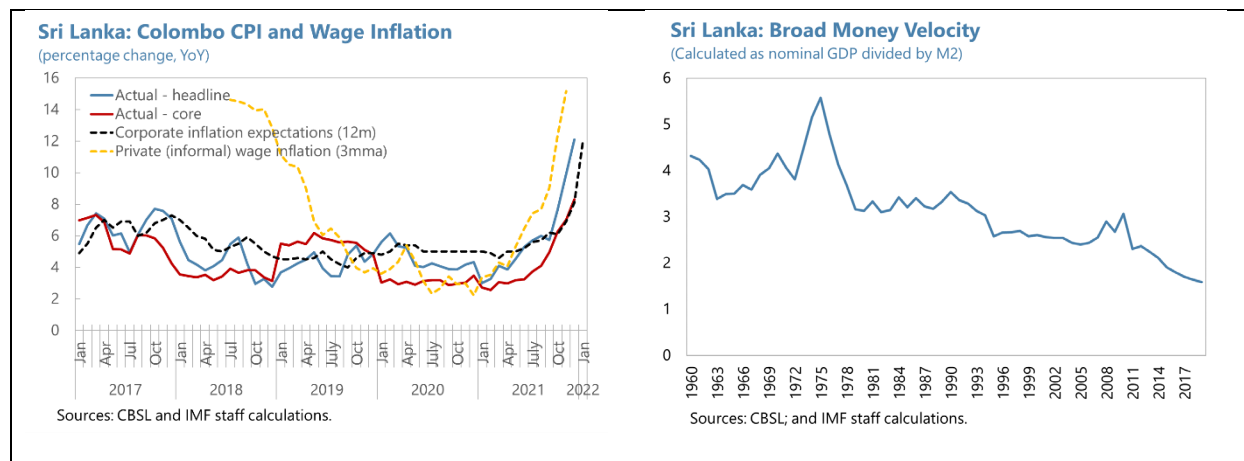
7.   However, inflation quickly gathered speed in 2021. Colombo CPI (CCPI) inflation has steadily risen since April 2021, reflecting exchange rate depreciation, supply shortages, increases in administered fuel and food prices (reflecting higher international prices), and a recovery in demand in the backdrop of the large money expansion.[3] Headline inflation has breached the 4–6 percent target band of the CBSL and rose to 14.2 percent in January 2022. Core inflation rose from 2.7 percent in January 2021 to 9.9 percent a year later. With rising private sector wages and inflation expectations as well as the public sector wage increase announced in January 2022, price pressures could become more persistent. Meanwhile, supply side pressures may persist to the extent that their root causes, including acute FX shortages, prolong.

8.   In this regard, Sri Lanka's past experience offers invaluable insights into the inflation dynamics. During 2014-17, inflation eventually exceeded 6 percent (the upper bound of the CBSL's current target band) following a large money expansion (Figure 1). In resemblance to the ongoing developments, the 2014-17 episode of high inflation started with a sharp increase in the central bank's net credit to the government and an associated M1 expansion. The overall monetary conditions were also eased through policy rate cuts. Private credit responded very strongly, while inflation only started on an upward trajectory in mid-2015, about six quarters from the beginning of this episode. The exchange rate started to depreciate soon after. Eventually, the large money expansion of the 2014-17 episode was unwound, but the inflation and exchange rate pressures lingered on for some time. These developments are broadly consistent with the strong co-

Sri Lanka: Monetary Financing and Depreciation
(Percentage change, YoY)

CBSL net credit to government
Exchange rate (Rs/$, rhs)

Sources: CBSL; and IMF staff calculations.

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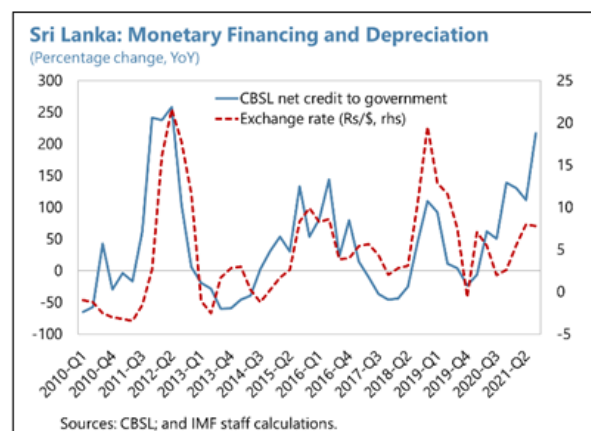
[3] The elevated food inflation reflects not only higher global prices but also supply shortages attributed to the temporary restriction (between May and November 2021) of use and importation of chemical fertilizer which adversely affected agricultural production.

movement observed historically between the increase in the CBSL's net credit to the government and exchange rate depreciation, which has passed through to inflation.

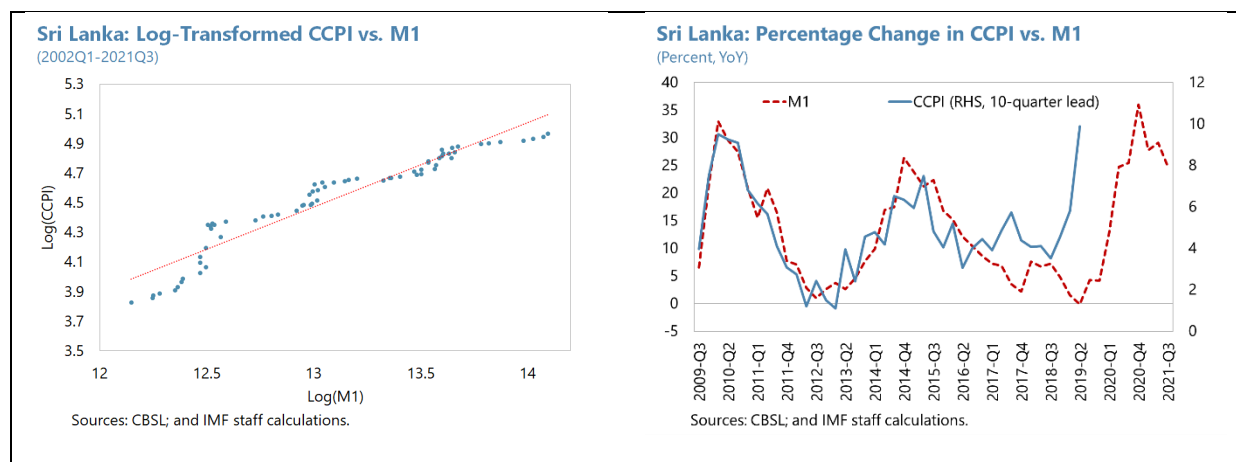## D.   Empirical Analysis on the Relationship between Money and Inflation

9.   This section revisits empirical evidence on the relationship between money supply and inflation in Sri Lanka. Milton Friedman (1970) famously said: "Inflation is always and everywhere a monetary phenomenon in the sense that it is and can be produced only by a more rapid increase in the quantity of money than in output." In this regard, money supply in excess of long run equilibrium money demand is expected to give rise to inflationary pressures by having too much money chasing too few goods. To abstract from the uncertainty surrounding short-run dynamics, the analyses in this section focus more on the long-run equilibrium relation between money supply and inflation.

10.   There is already rich empirical literature on inflation dynamics and determinants in Sri Lanka. Ratnasiri (2009) used both vector autoregression (VAR) and vector error correction (VEC) models to estimate a money demand function that factors in income, price, interest rate, exchange rate, and an exogenous rice price, and found money supply's significant role in determining inflation in the long run. Kulatunge (2015) confirmed this finding using a more updated dataset and an alternative VEC specification which also incorporates the impact of government spending on inflation. Amarasekara (2009) delved into the transmission mechanism with recursive and semi-structural VARs and found that money supply affects inflation mostly through the interest rate and with a relatively long lag. In a more recent study, Jegajeevan et al (2019) pointed to a potentially weakening relationship between money supply and inflation in Sri Lanka since 2010.

11.   Studies based on a broader set of countries can also help understand the inflation risks Sri Lanka is currently facing. Agur et al (2022) examined the relationship between monetary aggregates and inflation using a panel data with annual data from the 1950s covering 195 countries. Using the local projection model based on Jordà (2005), the paper found a clear relationship between money growth and inflation, which tends to be stronger in cases of a high initial level of inflation, weak central bank independence, or large fiscal deficits which would imply higher risk of fiscal dominance.[4] Monetary policy credibility, which can weaken the money-inflation relationship by anchoring inflation expectations, would be eroded under these conditions. Supply side pressures currently play a significant role in inflation in Sri Lanka; in this regard, Kim and Lee (2013) found that previous episodes of high food and energy inflation raised inflation expectations in Asia. Relatedly, IMF (2021) cautions that a persistent breach of the inflation target could risk de-anchoring expectations, suggesting that transitory price shocks could lead to permanently higher inflation.

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[4] Jordà (2005) introduces a flexible alternative to standard VAR models, which rely on global projections that are most efficient for one-period ahead forecast. His local projections approach does not constrain the shape of the impulse response function—which is instead constructed based on coefficients estimated at each forecast horizon—and is thus less sensitive to misspecification.

12.   Three empirical approaches are taken to analyze money supply's long-run impact on inflation in Sri Lanka. Seasonally adjusted quarterly data covering the period of 2000Q1 to 2021Q3 (to the extent of availability) are used. Money supply is represented by M1, which is found to be most strongly correlated with the CBSL's net credit to the government (which is of particular interest to this paper) and the inflation dynamics in the past. Most findings of these analyses are robust against the choice between M1 and M2 as the proxy of money supply.

Sri Lanka: Log-Transformed CCPI vs. M1
(2002Q1-2021Q3)
Sources: CBSL; and IMF staff calculations.

Sri Lanka: Percentage Change in CCPI vs. M1
(Percent, YoY)
Sources: CBSL; and IMF staff calculations.

a.   Firstly, a bivariate VEC model for CCPI and M1 are estimated. Cointegration tests confirm the existence of a positive long-run relationship between these two variables.[5] The estimated bivariate VEC model implies a long-run money supply elasticity of price level at 0.4, broadly in line with the finding of Ratnasiri (2009). This indicates that the CCPI tends to increase by 0.4 percent for every 1 percent increase in the M1 over the long run. The error correction term of the model points to a relatively lengthy adjustment process, i.e., a relatively slow correction for deviations from the long-run equilibrium relation.

$$\Delta Y_t = A(L)\Delta Y_t + \Pi Y_{t-1} + \varepsilon_t,$$

where Y = [c, CCPI, M1]; L (lag operator) = 4; and Π (cointegration rank) = 1.

b.   Secondly, an unrestricted VAR model is estimated with a similar specification as in Ratnasiri (2009) and Jegajeevan et al (2019). Variables comprise the first differences of CCPI, M1, real GDP, and the Rs/$ exchange rate, as well as the call market rate. International food prices are included as an exogenous variable, given the importance of food inflation in Sri Lanka. The impulse response function (IRF) of the VAR model results in a positive response of the CCPI inflation to the M1 shock, which peaks in six quarters. The cumulative IRF points to about 0.4 percentage point increase in the CCPI inflation over a period of ten quarters after a

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[5] Two or more nonstationary variables are cointegrated if there exists at least one linear combination of these variables whose residuals is stationary.

1 percent shock to the M1, broadly consistent with the long-run elasticity estimated in the cointegration model above.[6]

$$y_t = A_0 + A_1 y_{t-1} + \cdots + A_p y_{t-p} + B x_t + \varepsilon_t;$$

where y = [CCPI, M1, real GDP, Rs/$ exchange rate, call market rate], x = [international food prices]; and p (lags) = 4.

Sri Lanka: Response of CCPI to 1-Percent Change in M1
(In percent)

Sri Lanka: Cumulative Response of CCPI to 1-Percent Change in M1
(In percent)
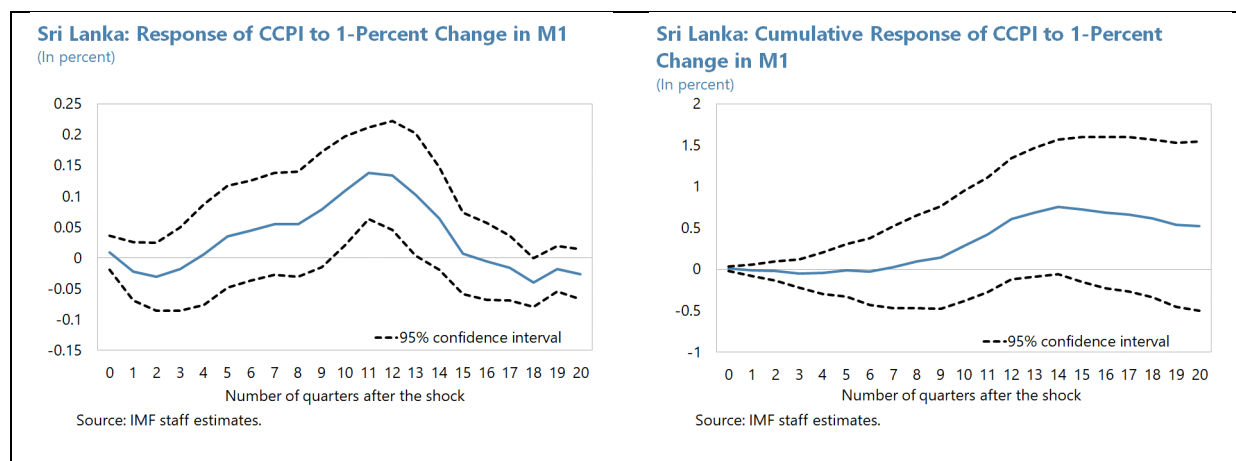
Source: IMF staff estimates.

Source: IMF staff estimates.
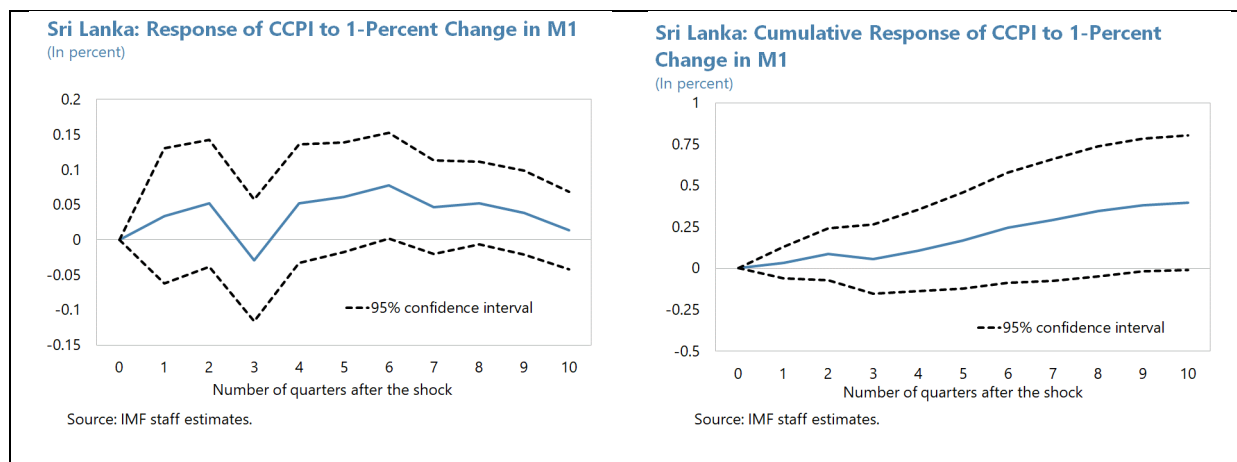
c. Lastly, as in Agur et al (2022), the relationship between money supply and inflation is explored based on the Quantity Theory of Money (PQ=MV). Instead of assuming a stable money velocity, the local projections approach as in Jordà (2005) is applied to assess the relationship at different horizons, which is then used to generate the impulse response. The IRF shows a slower transmission from the M1 shock to the CCPI inflation than that of the VAR estimated above, with the impact peaking ten quarters after the shock. The cumulative response analysis points to a similar but slightly more pronounced impact: an increase of about 0.5 percentage point is expected in the CCPI inflation over a period of ten quarters after a 1 percent shock to the M1.

$$\pi_{it+h} = \beta_{h0} d \log M_{it} + Z_{it} \Gamma_h + \varepsilon_{ith}$$

where Z_{it} is a set of controls including the lagged values of M1, CCPI and real GDP growth.

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[6] The relatively wide confidence interval can be attributed to a relatively small sample size.

Sri Lanka: Response of CCPI to 1-Percent Change in M1
(In percent)

Sri Lanka: Cumulative Response of CCPI to 1-Percent Change in M1
(In percent)

Source: IMF staff estimates.
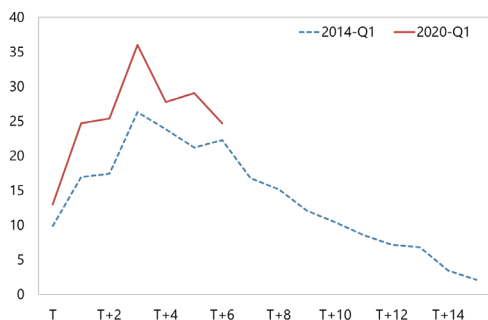
Source: IMF staff estimates.

13.   Overall, these empirical findings support the proposition that large money expansion can give rise to inflationary pressures in Sri Lanka. The long-run equilibrium relationship between money supply and inflation in Sri Lanka appears to remain intact. Short-run dynamics can be more uncertain as deviation from the long-run equilibrium does happen and can take time to correct, leading to delayed response of inflation. This can be attributed to a slow monetary policy transmission or other "frictions" such as price administration and exchange rate stabilization measures. However, the empirical analyses suggest that inflation tends to eventually catch up with money expansion—estimated impulse response suggests that a one percent increase in M1 leads to higher inflation by 0.4-0.5 percent after ten quarters. Cross-country analyses suggest that the money and inflation relationship would be stronger for countries with weaker fiscal and external positions, providing relevant insights into Sri Lanka at this juncture.

Figure 1. Sri Lanka: 2014–17 Episode and Its Resemblance to the Current Episode
(In quarters, the legends mark the starting point of the episodes)

Similar to the current episode, the 2014-17 episode also started with a rapid expansion of the money supply (M1), …

M1 - Narrow Money Supply
(Percentage change, YoY)

… driven by a sharp increase in the CBSL's net credit to the government, …

CBSL Net Credit to the Government
(Percentage change, YoY)

… while the monetary policy stance was eased.

Call Market Rate
(Percent)

Private credit started to respond strongly to the looser monetary conditions in about three quarters.

Private Credit
(Percentage change, YoY)

Inflation was initially subdued, but started to take off in about six-to-eight quarters and persisted even after the monetary policy stance started to tighten, …

CCPI Headline Inflation
(Percentage change, YoY)
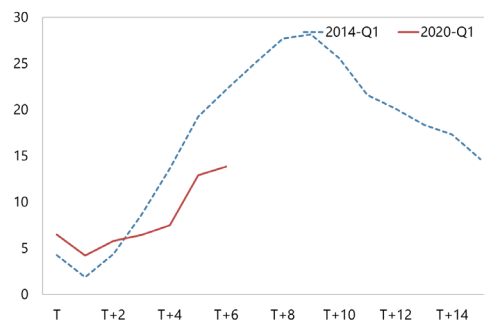
… reflecting in part underlying price pressures as evidenced by the core inflation, …

CCPI Core Inflation
(Percentage change, YoY)
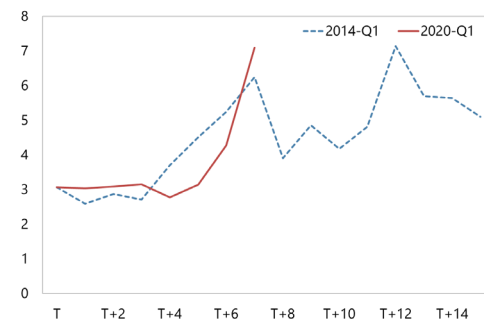
Figure 1. Sri Lanka: 2014-17 Episode and Its Resemblance to the Current Episode (Concluded)

(In quarters, the legends mark the starting point of the episodes)

… and to some extent the currency depreciation, which followed the large money expansion, …
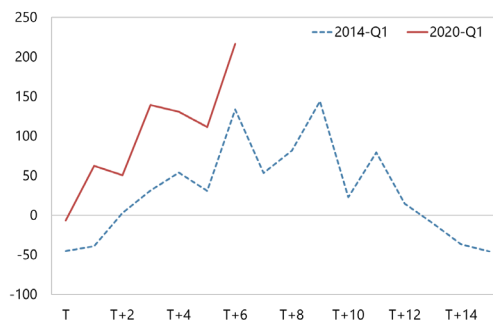
Exchange Rate
(Rs per $)
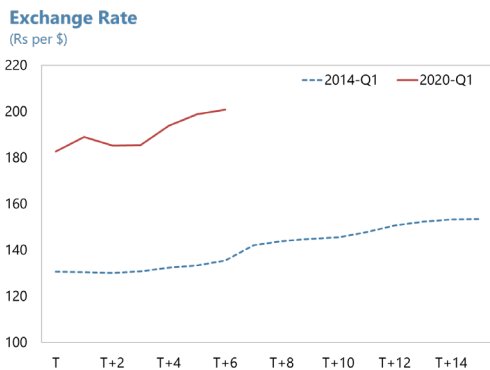
… as the external position weakened. Compared to the 2014-17 episode, the current episode features a much weaker external position, …

Gross International Reserves
(Months of imports of goods and services)
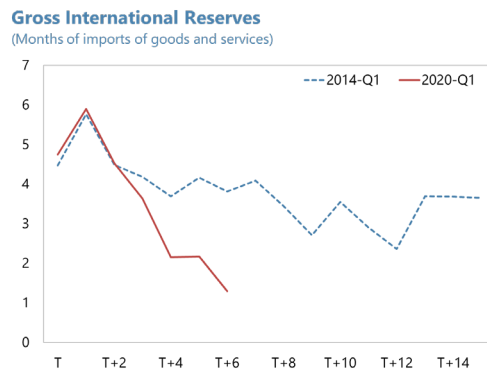
…, a much weaker fiscal position, …

Budget Deficit
(Percent of GDP)
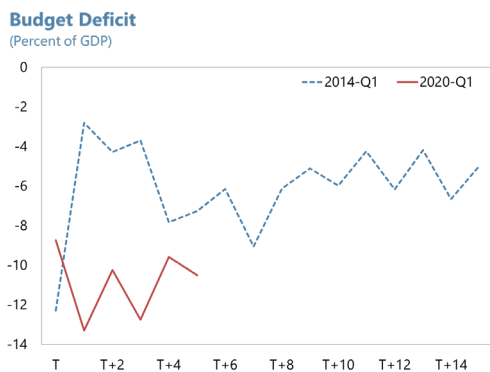
…, and much tighter financing conditions, with the government effectively cut off from international capital markets due to debt sustainability related concerns.

EMBI Spreads
(Basis points)
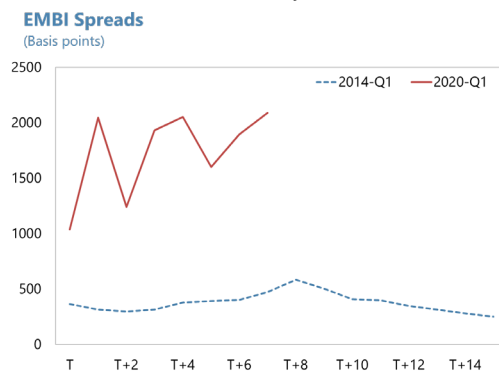
Sources: CBSL; JP Morgan Chase & Co.; IMF staff calculations.

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THE INFORMAL SECTOR AND THE IMPACT OF THE COVID-19 PANDEMIC IN SRI LANKA[1]

Informal employment accounts for about two-thirds of employment in Sri Lanka, and has been adversely affected by the COVID-19 pandemic. Revenues, employment, and salary expenditures of micro, small, and medium enterprises declined substantially during the lockdown, and the decline was more severe in micro informal enterprises. The authorities' COVID-19 relief helped mitigate the adverse impact, but it remained small compared to household income and expenditure, calling for revenue mobilization to provide fiscal space to support the poor and vulnerable groups.

1.   **This study presents the characteristics of the informal sector in Sri Lanka and the impact of the COVID-19 pandemic.** The informal sector has played an important role in Sri Lanka, contributing to economic growth, absorbing employment, and providing income and a safety net for millions of people. Informal economic activities are typically small-scale, unregistered, and not covered by regulations, including on occupational safety, health, and social protection. The sector has low productivity, low rates of savings and investment, and limited capital accumulation, making it vulnerable to economic shocks. Moreover, the COVID-19 economic shutdown has affected both formal and informal sectors at the same time, preventing adjustment and resource allocation from the formal to the informal sector. The first section of this paper describes the concept, stylized facts, and determinants of informality; the second section provides the COVID-19 impact on the informal sector; and the third section discusses the authorities' COVID-19 relief measures.

A.   The Concept of Informality and Stylized Facts in Sri Lanka

Definition and Measurement

2.   **The informal sector is defined as a group of production units in the economy that are not captured by formal arrangement in terms of regulations and institutions.** While the *informal sector* refers to production units, *informal economy* refers to activities by economic agents that are not captured by formal arrangements, and *informal employment* refers to jobs under informal arrangements. Economic activities in the informal sector are mostly legal but are not captured by official statistics for various reasons, such as the absence of tax payments and social security contributions and the exclusion from regulation such as company or employment laws. Measuring informal economic activities is challenging since they are undetected and previous studies have utilized direct and indirect methods. *The direct approach* is mostly based on surveys and samples, relying on voluntary replies or tax auditing, and other compliance methods. *The indirect approach* uses indirect information, such as the number of informal jobs or informal enterprises as a proxy for the informal economy. Recent literature uses Multiple Indicator Multiple Cause (MIMIC) models that treat the informal economy as an unobserved component to be estimated based on observable causes and effects (Medina and Schneider, 2019).

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[1] Prepared by Tubagus Feridhanusetyawan and Manavee Abeyawickrama, with contributions by Amitha Sundararaj.

3.   **This study uses informal employment indicators developed by the International Labor Office (ILO) and applied to national labor force and household survey data collected by Department of Census and Statistics (DCS**). Based on ILO classification and DCS data, *informal employment* is measured as the number of informal jobs carried out in formal enterprises, informal enterprises, or households. These include employees holding informal jobs, employers, and own-account workers employed in their own informal sector enterprises or households; members of producers' cooperatives; and contributing family workers in formal or informal sector enterprises (ILO, 2013). The formal or informal enterprises are classified based on criteria such as the number of employees, whether the enterprise is registered, and whether the employees are informal or registered.

The Informal Sector in Sri Lanka

4.   **Based on the concept of informality above, informal employment contributed to two thirds of total employment in Sri Lanka** (Table 1, Figure 1). In 2019, about 5.5 million (67 percent) of total 8.2 million employed in Sri Lanka were considered informal.[2] These workers are neither subject to national labor legislations and income tax nor entitled to social protection and employment benefits. They are not registered with the Inland Revenue Department (IRD) and Employment Provident Fund (EPF), do not have formal financial accounts, do not have EPF accounts, or do not have 10 or more employees. An important feature of informal employment in Sri Lanka is that a significant share of workers (0.8 million, 9 percent of total employment or 22 percent of formal sector employment) has informal contractual relationships while working in formal enterprises. They work in the formal sector but without contribution to social security programs.

Table 1. Sri Lanka: Formal and Informal Employment by Sector – 2019
(Number of Employment in thousands, unless otherwise indicated)

Production unit by type	Jobs by status in employment											
	Public sector employees		Private sector employees		Employers		Own account workers		Contributing family workers	Total		
	Formal [1]	Informal	Formal	Informal	Formal	Informal	Formal	Informal	Informal	Formal	Informal	Total
Formal sector enterprises	1,131	85	1,259	622	100		230		55	2,721	762	3,483
Informal sector enterprises [2]			-	1,641		109		2,429	519	-	4,698	4,698
Total	1,131	85	1,259	2,263	100	109	230	2,429	575	2,721	5,460	8,181
In percent											33.3	66.7	100.0

Source: Sri Lanka Labor Force Survey 2019, Department of Census and Statistics.
1/ Excludes members of the armed forces who are not living in households. If included, the informal employment rate will decline to 64 percent of total employment.
2/ Includes households.

▨ Informal Employment
▨ Employment does not exist in the type of enterprise and job status

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[2] Labor Force Survey 2019 is based on a nationwide two-stage stratified sample of 25,750 housing units. The survey covers persons living in housing units only and excludes the institutional population such as the armed forces.

5. **Formal employment contributed to the remaining one third of total employment, with a 40:60 percent split between the public and private sectors.** In 2019, total formal employment

was about 2.7 million, comprising public sector employment (excluding the armed forces) of about 1.2 million and private sector employment of 1.5 million (including employers and self-employment). The low share of formal employment in the economy indicates that a large segment of workers is excluded from social security programs and other benefits from formal employment contracts. It also implies a smaller tax base, posing a challenge in mobilizing revenues and financing public goods.

Figure 1. Sri Lanka: Population and Employment Status

Source: Labor Force Survey 2019, Department of Census and Statistics
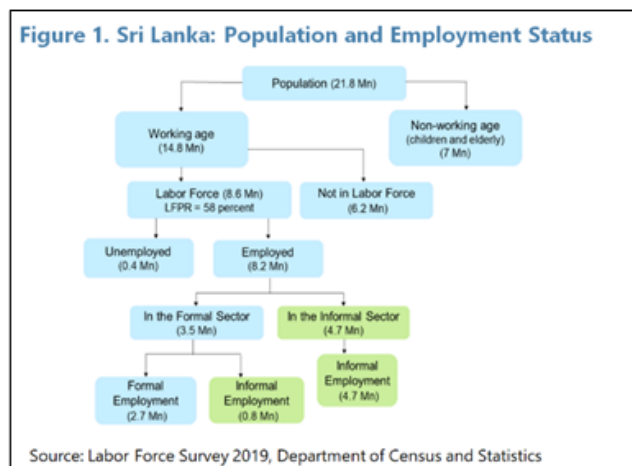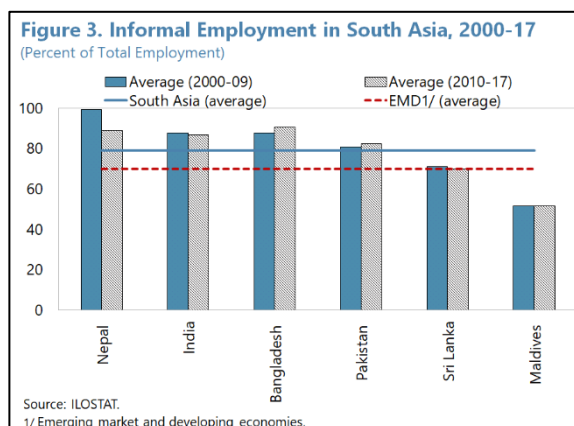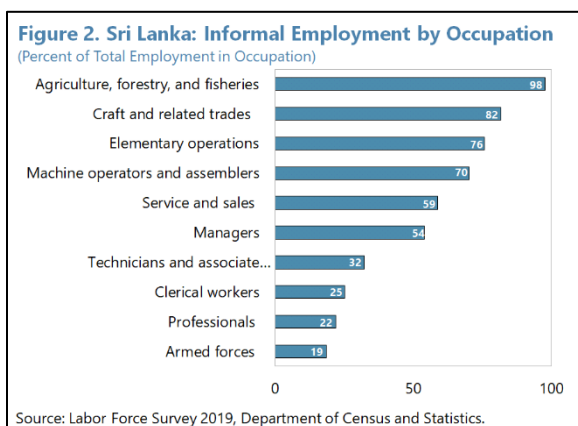
6. **Informal employment in Sri Lanka is concentrated in the primary and trade sectors and has remained persistent for the past two decades** (Figures 2 and 3)**.** Sectors with the highest share of informal employment include agriculture, forestry, and fisheries sectors, followed by craft and related trade sectors such as construction, mining, textiles, and elementary occupations such as street vendors, domestic workers, and daily wage earners. Informal employment has stayed around 70 percent during 2000-17, broadly comparable to the world average in emerging and developing economies, but lower than the South Asian average of 79 percent (Figure 3). Contributing factors would include: (1) the smaller agriculture sector in Sri Lanka compared to South Asian peers such as Nepal, India, and Bangladesh, and (2) the relatively higher level of education in Sri Lanka which generally correlates with lower informality.

Figure 2. Sri Lanka: Informal Employment by Occupation
(Percent of Total Employment in Occupation)

Source: Labor Force Survey 2019, Department of Census and Statistics.

Figure 3. Informal Employment in South Asia, 2000-17
(Percent of Total Employment)

Source: ILOSTAT.
1/ Emerging market and developing economies.

7. **Our empirical analysis of the determinants of informality in South Asia identifies several factors that could explain the level of informality in Sri Lanka** (Annex 1)**.** The empirical results show that income inequality and tax burden tend to increase informal employment, while education, government effectiveness, labor freedom, and business freedom tend to lower it. The negative impact of education on informality and the relatively higher level of education in Sri Lanka could explain the lower levels of employment informality in Sri Lanka compared to its South Asian

peers. On the other hand, stringent labor laws and lack of enforcement have contributed to persistent informality in Sri Lanka. For example, employment termination in Sri Lanka involves high severance pay cost to the employer which are difficult to enforce, reducing job creation in the formal sector (World Bank, 2020). Moreover, mandatory social security contributions by private sector employers to EPF and ETF make formal employment costly. Similar to other South Asian countries, poor business environment, land tenancy issues, complex business registration processes, and poor access to finance are often cited in the literature as barriers to formalization in Sri Lanka (de Mel et al, 2012).

8.   Our empirical results above help identify policies to facilitate transition of informal workers and firms to the formal sector in Sri Lanka. The transition to the formal sector would improve productivity, increase potential growth, raise tax revenues, and provide labor protection, but a gradual and balanced approach is crucial as the informal sector represents the only source of income and critical safety net for millions of people (IMF, 2021). Based on our empirical findings above and Sri Lanka's current business environment, the relevant policies include: 1) Investing in human capital including equal access to education; 2) Reforming labor laws to promote formal employment and reduce labor-related transaction costs; 3) Improving the business, trade, and investment regimes to promote trade and business freedom; 4) Increasing access to finance; and 5) Strengthening the quality of public service and governance to facilitate formal economic activities.

B.   The Impact of COVID-19 on the Informal Sector

9.   Sri Lanka experienced three COVID-19 waves from March 2020 to December 2021 (Figure 4). During the first wave (March–September 2020), the authorities implemented strict containment measures that helped contain the infection, including airport closure, island-wide lockdowns, contact-tracing, mandatory quarantine, and isolation of high-risk areas (including a 4,000-personnel Navy camp). However, a cluster that emerged from a garment factory in the Gampaha district led to a second wave in October 2020, resulting in a lockdown of high-risk areas, inter-provincial travel bans, limitation of public and private functions, and restriction of inbound flights, while agricultural and export sectors were permitted to resume activities. Cases started to decline significantly in January 2021 amid the commencement of vaccinations, before the third outbreak following the national new year holidays in April 2021. Cases peaked in May 2021 and led to a lockdown through June 2021. Cases started to rise again in August, largely due to the

Figure 4. Sri Lanka: Daily Covid-19 Cases and Fatalities

Source: Our World in Data.

spread of the more transmissible Delta variant and led to a lockdown during August–October 2021.
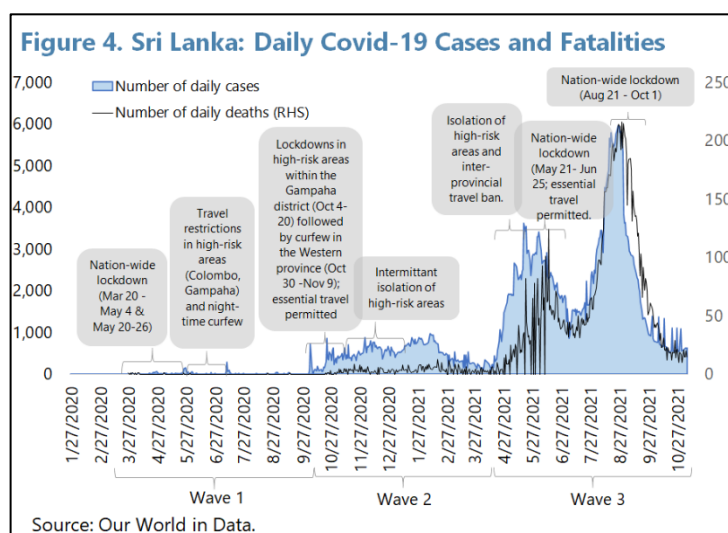
Cases then declined alongside a strong vaccination drive with over 63 percent of the population fully vaccinated, and a further 18 percent of the population having received the booster (third dose) by December 2021.

10.   **The COVID-19 impact is expected to be more severe in the informal sector, partly due to its reliance on physical operations and lack of savings or access to finance.** Frequent lockdowns and travel restrictions reduced activities that require workers to be physically present, particularly construction, tourism, transport, education, hotels, and restaurants, hurting informal workers in those sectors. Many informal workers also miss the opportunity of a flourishing online business, such as food delivery, due to their limited infrastructure and capacity. In addition, low-wage informal workers tend to have little savings or less access to finance, thus less cushion to absorb losses or smooth out consumption.

11.   **Informal workers also receive less protection from labor regulations due to gaps in labor legislation and weak law enforcement in the informal sector.** Although Sri Lankan labor laws seek to protect all workers, some components of the law exclude informal workers. For example, provisions of the Termination of Employment of Workmen Act (TEWA) and the Payment of Gratuity Act generally apply to enterprises with 15 or more workers. Thus, workers engaged in smaller, informal establishments lack protection and compensation against sudden dismissals by an employer, like in the case of COVID-19. Informal workers also have limited protection since the unemployment and retirement benefits in Sri Lanka rely on payment by the employer at the end of the contract. Workers in informal establishments are also vulnerable due to limited enforcement of labor laws due to their lack of visibility.

12.   **Preliminary data suggest that the COVID-19 pandemic would reverse recent progress in poverty reduction and widen inequalities.** The World Bank (2021) estimates that the job losses due to COVID-19 are expected to have increased the $3.2/day poverty rate in Sri Lanka from 9.2 percent in 2019 to 11.7 percent in 2020. This would reverse progress since 2016 and push 500,000 people into poverty, particularly those from urban areas and sectors affected by the pandemic. Estimates based on the $1.90/day (extreme) poverty line suggest that the poor in Sri Lanka have also fallen into deeper poverty in the wake of the pandemic. Earnings losses have been disproportionately spread across the income distribution, with richer households experiencing minor earnings losses compared to the bottom 40 percent (World Bank, 2021), likely exacerbating income inequalities.

13.   **We use primary survey data collected by the DCS to assess the impact of COVID-19 in Sri Lanka**. A representative sample of 17,469 enterprises was used to capture the 1.36 million enterprises belonging to the micro, small, and medium enterprises (MSME) sector based on the 2013 Economic Census Listing Database classification (Table 2). Within the MSME, we use the size of enterprises as a criterion for informality and assume enterprises, with 1-4 persons employed, as micro enterprises, while the rest of the SMSE enterprises in the survey as small and medium enterprises (SMEs). The micro enterprises are considered to be more informal in nature than the SMEs. The first phase of the DCS survey covers the period January–May 2020 and collects data on
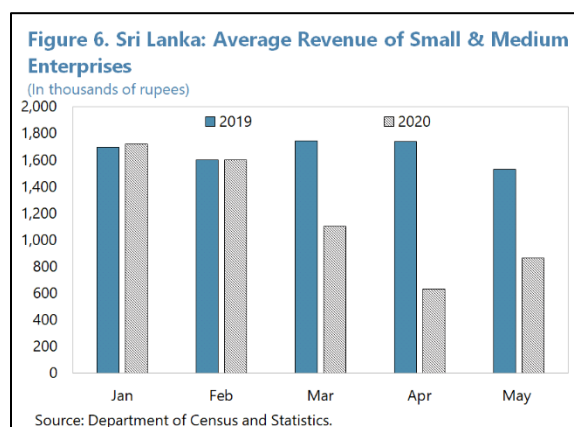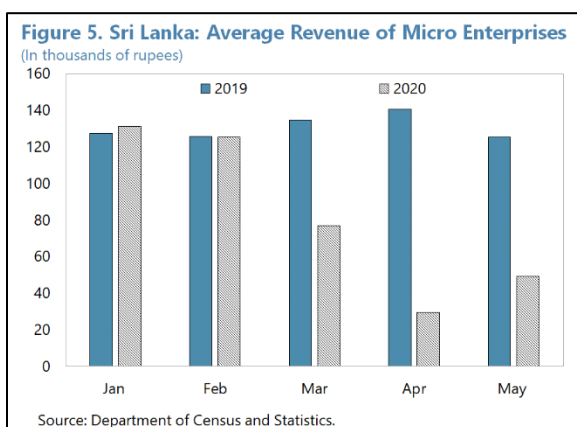
firm revenue, employment, and expenditure on salaries before and after the onset of the pandemic in March 2020.

Table 2. Sri Lanka: Responses to the Survey by the Department of Census and Statistics (DCS), 2020

Type of Enterprise	Criteria (No. of Persons Engaged)	No. of Enterprises (Population)	No. of Responses (Sample)	No. of Responses by Sector		
				Industry and Construction	Trade	Services
Micro	1-4	1,308,898	15,270	3,678	6,541	5,051
Small and Medium (SME)	5-199	48,992	2,199	912	751	536
Total Micro and SME (MSME)	<200	1,357,890	17,469	4,590	7,292	5,587

Source: Department of Census and Statistics.

14.   Revenue data indicate a substantial negative impact of COVID-19 on the MSME sector, with a more severe impact on the micro enterprises (Figures 5 and 6). The average revenue in the MSME sector during March–May 2020 fell by 57 percent from the same period last year, and the decline was much steeper for the micro enterprises (61 percent) compared to the SMEs (48 percent). The steepest decline took place during the height of the first COVID wave in April 2020, before recovering slightly in May as soon as travel restrictions were relaxed, indicating the resilience of the sector. These results are broadly consistent with the preliminary survey conducted by the Ministry of Labor in May 2020 that found that smaller firms were more likely to close operations and lay off workers, while larger firms demonstrated a higher level of resilience to the pandemic by continuing to operate, albeit at lower capacity (Wimalaweera, 2020).

Figure 5. Sri Lanka: Average Revenue of Micro Enterprises
(In thousands of rupees)
Source: Department of Census and Statistics.

Figure 6. Sri Lanka: Average Revenue of Small & Medium Enterprises
(In thousands of rupees)
Source: Department of Census and Statistics.

15.   The sectoral comparison reveals that the education, accommodation, food, administrative services, construction, transport, and manufacturing sectors were among the hardest hit (Figures 7 and 8). Furthermore, the disproportionate impact of the pandemic on the micro enterprises compared to the SMEs during the first wave in March–May 2020 was more apparent in the manufacturing, transport, and administration sectors. In contrast, the SMEs were hit harder than the micro enterprises in the ICT and financial and insurance service sectors. The results are generally consistent with the fact that the tourism sector, where three quarters of the labor force is estimated to be informal (ILO, 2020), was the earliest affected sectors and will likely take the longest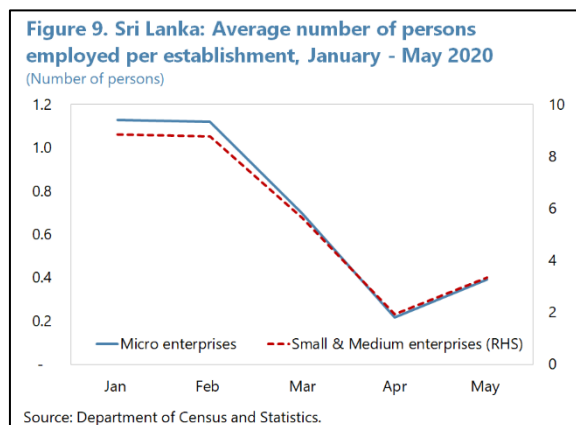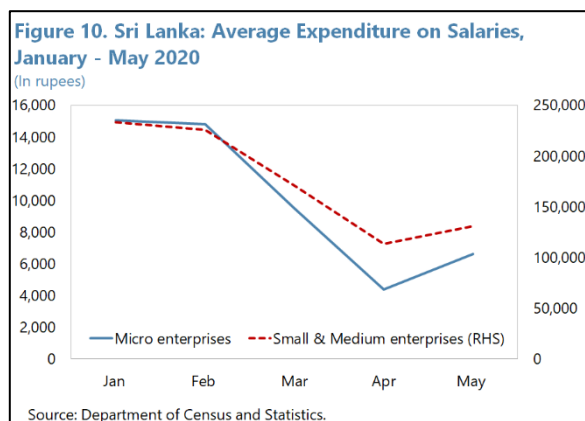 to recover, with possible spillovers to the hospitality and food and beverage industries. Lockdowns and travel restrictions clearly hampered transport, mining, construction, and entertainment, while supply chain disruptions affected the manufacturing sectors such as textile and garment.

Figure 7. Sri Lanka: Average Revenue of Micro Enterprises by Sector, March-May 2019-20
(In thousands of rupees/ percent (RHS))
Source: Department of Census and Statistics.

Figure 8. Sri Lanka: Average Revenue of Small & Medium Enterprises, by Sector, March-May 2019-20
(In thousands of Rupees/ percent(RHS))
Source: Department of Census and Statistics.
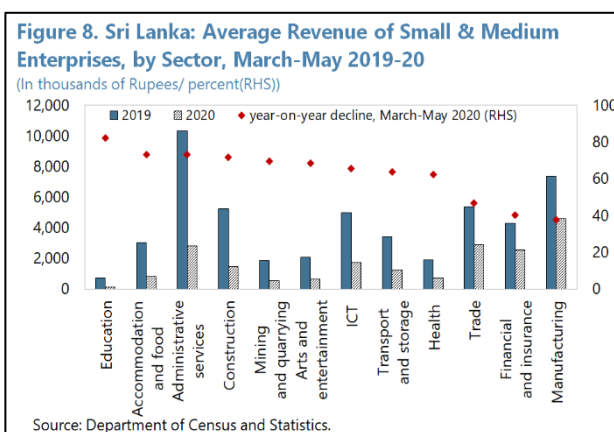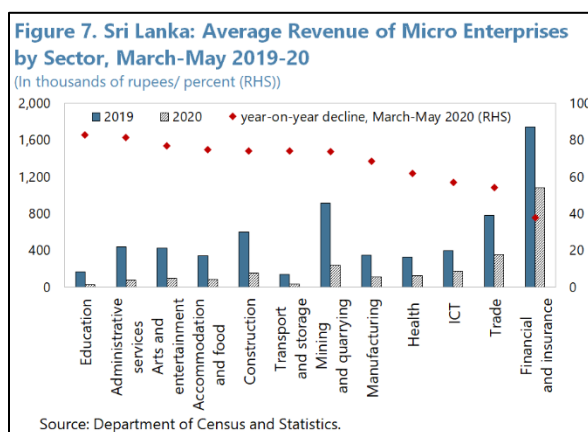
16.   Employment in the MSME sector declined substantially during the COVID-19 lockdown. COVID (Figure 9). The DCS survey data show that employment in the MSME sector fell by 64 percent during the first wave in March–May 2020. Nonetheless, the data also indicate the resilience of the informal sector, reflected by some employment recovery as soon as the lockdown restrictions were relaxed in May 2021. This is consistent with the Ministry of Labor 2020 survey showing that 64 percent of workers were not at work by May 2020 but only 9 percent of workers had lost their jobs or expected to be laid off. The UNICEF-UNDP survey conducted in May–December 2020 also found that 16 percent of households lost their incomes due to job losses, while 57 percent faced a decline in income due to fewer hours of work, travel restrictions, or illness (UNICEF & UNDP, 2020).

Figure 9. Sri Lanka: Average number of persons employed per establishment, January - May 2020
(Number of persons)
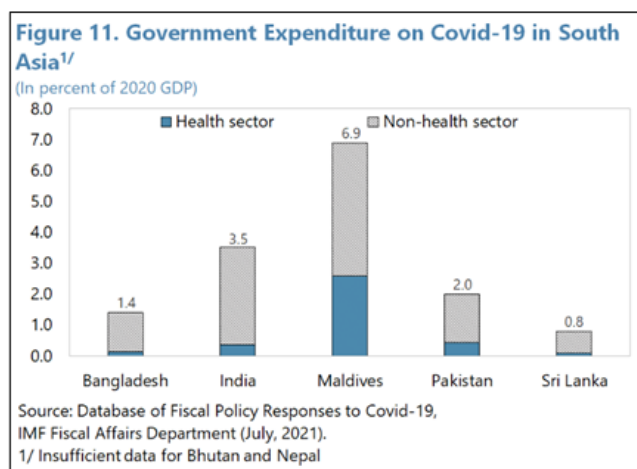Source: Department of Census and Statistics.

17.   The decline in salary expenditures mimics the employment trend with a sharper decline in micro enterprises (Figure 10). These outcomes are consistent with the UNICEF-UNDP survey showing that the COVID-19 impact has been particularly hard on daily and weekly wage earners with informal contracts as more than 95 percent have lost their incomes or have experienced pay-cuts. The World Bank (2021) also indicated that low-waged informal workers were more vulnerable during the pandemic as job and earning losses concentrated in the lower-middle of the income distribution, according to preliminary data. Workers on the higher end of the distribution are likely to have formal contracts, access to paid leave, better protection by labor laws, and better connectivity infrastructure that enable them to work remotely. Meanwhile, low-waged informal workers face greater risk of losing jobs and have limited savings, access to finance, or severance pay, thus widening existing labor market inequalities.

Figure 10. Sri Lanka: Average Expenditure on Salaries, January - May 2020
(In rupees)
Source: Department of Census and Statistics.

C.   The Impact of COVID-19 Relief Measures on the Informal Sector

18.   The authorities implemented various COVID-19 relief measures in 2020 to mitigate the adverse impact on low-income households and small businesses. In addition to the regular welfare and subsidy programs, the authorities allocated Rs. 117.5 billion[3] (0.8 percent of GDP) in 2020 to finance the COVID-19 support package (Table 3). A large component of this, about Rs. 79 billion (0.5 percent of GDP), was in the form of cash transfers to poor and vulnerable households. The remaining funds were used to facilitate quarantine processes, improve health infrastructure, support state-owned enterprises (SOEs), and provide emergency funding for agriculture, IT, education, and transport sectors. In a cross-country comparison, however, the COVID-19 related spending is low compared to South Asian peers (Figure 11). A further Rs. 192 billion (1.2 percent of GDP) was allocated in 2021, of which Rs. 18.5 billion (0.1 percent of GDP) was for cash transfers to selected families in April 2021 and the

Figure 11. Government Expenditure on Covid-19 in South Asia[1/]
(In percent of 2020 GDP)
Source: Database of Fiscal Policy Responses to Covid-19, IMF Fiscal Affairs Department (July, 2021).
1/ Insufficient data for Bhutan and Nepal

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[3] This excludes COVID-19 spending by other ministries (e.g., the Ministry of Defense) and support for farmers and other institutions that were not reported as COVID-19 spending in the 2020 Annual Report of the Ministry of Finance.

remaining funds for vaccination, quarantine, medical supplies and infrastructure, and other COVID-19 measures.

Table 3. Sri Lanka: Allocations for COVID-19 Support Measures by the Government, 2020

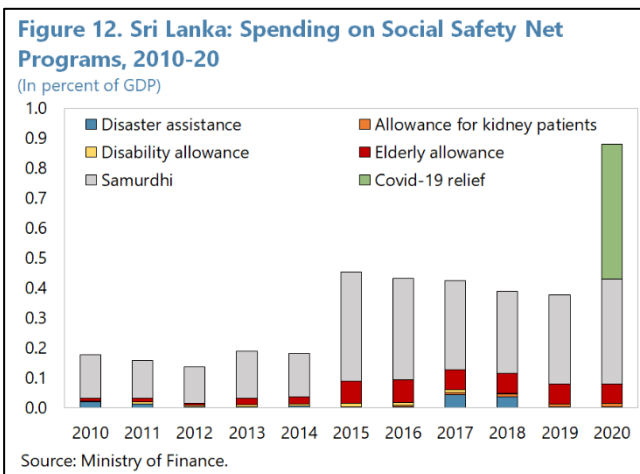| Covid-19 Support Measures	Number of Beneficiaries [1] (in thousands)	Cost (millions of Rupees)
Cash transfers (total)	6,103	79,272
Cash transfers via existing welfare programs	4,347	69,353
Samurdhi program	3,205	56,593
Senior Citizens' allowance	839	9,893
Disability allowance	105	1,808
Chronic Kidney Disease (CKD) allowance	33	
Farmers' pension	161	1,010
Fishermen's pension	5	49
Livelihood support during the second wave	1,338	7,073
Food packs to households under quarantine	417	2,846
Health infrastructure, quarantine, and medicines	n.a.	29,045
Covid-19 emergency response project	n.a.	3,929
Support to SOEs affected by Covid-19	n.a.	311
Other		4,955
Total		117,512
as a percentage of GDP		0.8

Sources: Ministry of Finance (2021), World Bank (2021).
1/ Staff estimates based on Ministry of Finance Annual Report 2020 and World Bank (2021).

19. Existing Social Safety Net (SSN) programs and networks were used to provide COVID-19 relief, substantially increasing SSN spending to 0.9 percent of GDP in 2020 from 0.4 percent on average during 2015-19 (Figure 12). The SSN programs include poverty targeted cash transfers such as Samurdhi and illness allowances; social pensions such as the elderly or disability allowances; and emergency cash or in-kind transfers during natural disasters. The Samurdhi program remains the largest SSN program, benefitting nearly 1.8 million households (33 percent of total households) in the form of monthly cash grants and several savings and credit schemes targeted at informal entrepreneurs and own-account workers. The authorities provided cash transfers of Rs. 5,000/month during the first (April–May 2020) and second (October 2020) waves of the pandemic to existing and waitlisted or newly identified beneficiaries of the existing SSN programs, in addition to livelihood support and in-kind transfers to poor and vulnerable households excluded by the above programs. In addition to these COVID-19

Figure 12. Sri Lanka: Spending on Social Safety Net Programs, 2010-20
(In percent of GDP)

Legend: Disaster assistance, Allowance for kidney patients, Disability allowance, Elderly allowance, Samurdhi, Covid-19 relief

Source: Ministry of Finance.

relief spending in the budget, the authorities introduced other policies to support individuals and small businesses, including the informal sector.[4]

20.   Early evidence suggests that these COVID-19 relief measures helped mitigate the impact of the pandemic on poor and vulnerable households. While it is too early to estimate the precise impact, the COVID-19 relief reached around 6.1 million people (Table 3) in 3.6 million households or 66 percent of total households since more-than-one recipient in each household may receive the benefit (UNICEF, 2020a). World Bank estimates suggest that these measures have the potential to buffer the impact on poor households by reducing the share of population living under the $3.2 poverty line by 1.4 percent from the estimated baseline under COVID-19 of 11.7 percent in 2020.

21.   Data on sectoral distribution revealed that a larger proportion of workers in the primary sectors benefitted from the COVID-19 support. UNICEF (2020b) used household income and expenditure survey (HIES) data to estimate the share of workers receiving COVID-19 support by occupation (Table 4, Column 3). The study finds relatively good coverage among elementary occupations and skilled agricultural, forestry, and fisheries sectors which tend to have a higher share of informal workers. In contrast, professionals, clerical workers, technicians, and armed forces, that are largely formal occupations, are less likely to have received support.

Table 4. Sri Lanka: Distribution of COVID-19 Support by Occupation
(In percent)

Occupation	Total number of workers by occupation (LFS, 2019)	Share of recipients by occupation (UNICEF, 2020b)	Share of informal workers by occupation (LFS, 2019)
Elementary operations	1,757,807	75	76
Skilled agricultural, forestry and fishery	1,375,540	89	98
Craft and related trades workers	1,307,767	76	82
Service and sales workers	707,967	69	59
Plant and machine operators, and asser	714,546	72	70
Clerical support workers	308,894	51	25
Managers	622,466	71	54
Technicians and associate professionals	741,805	49	32
Professionals	609,084	46	22
Armed forces	34,816	51	19
Total	8,180,692	71	67

Sources: UNICEF (2020b) and Department of Census and Statistics (2019)

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[4] Additional COVID-19 measures to support individuals and small businesses included debt moratoria, concessional working capital loans, and tax concessions for MSMEs, lending targets for priority sectors, a grace period for utility bill payments, and moratoria on lease payments.

22.   Despite this positive outcome, the size and duration of these relief measures remain small compared to household income and expenditure. The cash allowance of Rs. 5,000 accounts for only 12.8 percent of monthly expenditure of an average household (UNICEF, 2020b). It is also well below the average earnings of workers in the hardest hit sectors, where median monthly wages were around Rs. 32,000 for salaried workers and Rs. 20,000 for daily wage earners (ILO, 2020). Moreover, Rs. 5,000 only accounts for around 3.9 percent of the average monthly revenue (pre-pandemic) of micro enterprises, providing limited protection to self-employed and own-account workers. Furthermore, poorer households tend to be larger in size and therefore received lower transfers per person. The support level was not sustained during subsequent waves of the pandemic. In the meantime, many households faced depressed incomes for a prolonged period, beyond the implementation period of the relief measures. Many lower-income households had to resort to alternative financing options such as borrowing from relatives and selling or pawning their belongings.

23.   There are also gaps in coverage that exclude a large number individuals who need support. Although the relief measures reached 97 percent of the first (poorest) decile, it excluded 30 percent of middle-income earners who are close to the poverty line and are at risk of losing their incomes (ILO, 2020). Moreover, only 33 percent of households in urban areas and a small number of workers in the manufacturing sector were eligible for relief, meaning that many daily wage earners and those severely hit by the pandemic were likely excluded.

24.   The preliminary findings above call for policy priorities as follows. *In the near term*, mobilizing revenue to provide adequate fiscal space to support the poor and vulnerable groups remain the top priority. This could be complemented by broadening the coverage of SSN programs to include the informal sector and improve targeting, allowing for support to be intensified during a crisis. *Over the medium-term*, the policies should focus on facilitating a gradual transition from the informal to formal sector to increase productivity, employment protection, and government revenues. These include investing in human capital, improving business and investment climate, simplifying registrations and regulations for new businesses, simplifying tax payments, reforming labor market and laws, and improving access to finance.

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Annex I. Determinants of Informality in South Asia: Empirical Analysis

1.   This annex presents the determinants of informality in South Asia by estimating empirical model that specifies informal employment as a function of explanatory variables (Table AI.1). The model is fitted on cross-country time series data using panel regression. Seemingly Unrelated Regression approach is also used to obtain parameter estimates for South Asia and other countries separately, and test whether the parameter estimates are statistically different between the two regions. The model is estimated based on 2000-17 data from 13 countries in South Asia (Bangladesh, India, Maldives, Nepal, Pakistan, and Sri Lanka) and other Asian countries (Cambodia, Indonesia, Lao PDR, Mongolia, Myanmar, Thailand, and Vietnam). The dependent variable is informal employment in the informal sector, and the choice of independent variables is motivated by the existing literature and data availability.

The baseline model specification is as follows:

$$Informal\ employment_{it} = \alpha + \beta_1 GDP\ per\ capita_{it} + \beta_2 Education_{it} +$$

$$\beta_3 Gini\ index_{it} + \beta_4 Government\ effectiveness_{it} + \beta_5 Tax\ burden_{it} +$$

$$\beta_6 Labor\ freedom_{it} + \beta_7 Business\ freedom + \beta_8 Trade\ freedom_{it} + u_{it};$$

where u_{it} includes the within and between groups error terms.

2.   The results indicate that income inequality, tax burden, and labor freedom tend to increase informal employment in Asian countries in general, while education, government effectiveness, business freedom, and trade freedom tend to lower it (Table AI.2, Column 2-3). The positive coefficient on tax burden, reflected in both tax policies and administration, leads to larger informal employment in the region as firms and workers attempt to avoid high costs. The impact of labor freedom is also positive, suggesting that higher labor market flexibility can increase informal employment. Conversely, the impact of education (used as a proxy for national income) on informal employment is generally negative, indicating that a higher level of education and income would reduce informality. Similarly, the negative effects of government effectiveness, business freedom, and trade freedom suggest that better quality of public goods and services as well as stronger governance facilitate formal economic activity, while a conducive business environment and trade liberalization incentivize formalization.

Table AI.1. Determinants of Informality: Description of Variables

Informal employment	The number of employees in the informal sector as percentage of total employment (International Labor Office).
GDP per capita	Gross Domestic Product per capita, constant 2010, in thousands of US$ (World Bank, World Development Indicator).
Education	Average education level, in years, of people aged 25 or older, converted from education attainment levels using official durations of each level (Human Development Index, World Bank).
Gini index	Gini index, ranges from 0 (perfect equality) to 100 (perfect inequality) (World Development Indicators, World Bank).
Government effectiveness	Perceptions of the quality of public and civil services and its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. The score ranges from minus 2.5 (weak) to 2.5 (strong), multiplied by 100 for empirical estimation (Worldwide Governance Indicators, World Bank).
Tax burden	A sub-component of the Economic Freedom Index. Tax burden reflects marginal tax rates on individual and corporate income and the overall tax burden as a percentage of GDP. The score ranges from 0 to 100 (highest tax burden) (The Heritage Foundation).
Labor freedom	Labor freedom accounts for various aspects of the legal and regulatory framework of a country's labor market, including minimum wage, hiring and firing workers, rigidity of hours, mandatory severance pay, and labor force participation rate. The score ranges from 0 to 100 (freest labor market) (The Heritage Foundation).
Business freedom	Business freedom measures the extent to which the regulatory and infrastructure environments constrain the efficient operation of business. The score ranges from 0 to 100 (freest business environment) (The Heritage Foundation).
Trade freedom	Trade freedom accounts for the tariff and non-tariff barriers that affect imports and exports of goods and services. The score ranges from 0 to 100 (freest trade regime) (The Heritage Foundation).

Sources: ILO; World Bank; The Heritage Foundation.

3.   **More in-depth analysis shows that the effects of education, government effectiveness, and labor freedom differ between South Asia and other Asian countries** (Table AI.2, Column 4-6). The negative impact of education on informality is more prevalent in South Asia. On governance, the result for South Asia supports the argument that better public governance lowers informal employment. In contrast, the impact in the other Asian countries support the notion that workers choose to remain informal if they could reap the benefits of better public goods and services regardless of their employment status (Perry et al., 2007). The negative impact of labor freedom on informal employment in South Asia shows that greater labor freedom reduces market segmentation and encourages labor movement from the informal to formal sectors. This suggests that promoting labor flexibility is important to facilitate labor transition to the formal sector.

Table AI.2. Determinants of Informal Employment: Regression Results 1/
(Dependent variable: informal employment rate)

| Variable | Combined: South and other Asian Countries | | South Asia vs. other Asian countries 4/ | | |
	Fixed Effects 2/	Random Effects 3/	South Asia	Other Asian	$H_0: \beta_{SA} = \beta_{other}$ Chi2 statistic
Education	-0.01	-0.03	-1.21**	-1.12	0.01
	(0.40)	(0.63)	(0.50)	(0.81)	
Gini index	1.00***	1.00***	3.12***	1.55***	10.67***
	(0.24)	(0.16)	(0.28)	(0.38)	
Govt effectiveness	-0.07**	-0.06***	-0.13***	0.13***	34.62***
	(0.02)	(0.02)	(0.03)	(0.03)	
Tax burden	0.25**	0.24***	0.03	0.01	0.02
	(0.09)	(0.07)	(0.14)	(0.16)	
Labor freedom	0.10***	0.09	-0.33***	0.23**	13.33***
	(0.03)	(0.06)	(0.09)	(0.12)	
Business freedom	-0.09	-0.09*	-0.42***	-0.47***	0.13
	(0.07)	(0.05)	(0.09)	(0.11)	
Trade freedom	-0.09***	-0.09**	0.06	-0.01	0.20
	(0.03)	(0.04)	(0.07)	(0.15)	
Constant	4.64	6.65	-2.57	21.13	
	(10.12)	(11.63)	(2.09)	(20.12)	
Observations	234	234	108	126	
R-sq	0.26	0.01	0.86	0.33	

Source: IMF staff estimates.

1/ Standard errors in parentheses. *, ** and *** denote significance at 10, 5, and 1 percent, respectively.

2/ Fixed effects with Driscoll-Kraay standard errors.

3/ Random effects, Generalized Least Squares method with heteroscedasticity and autocorrelation robust standard errors.

4/ Seemingly unrelated regression method that allows for testing the homogeneity of beta between the two regions (South Asia vs. other Asian countries).