

Diagnosis of Sri Lankas Current Economic Crisis and Potential Solutions

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10 September 2021

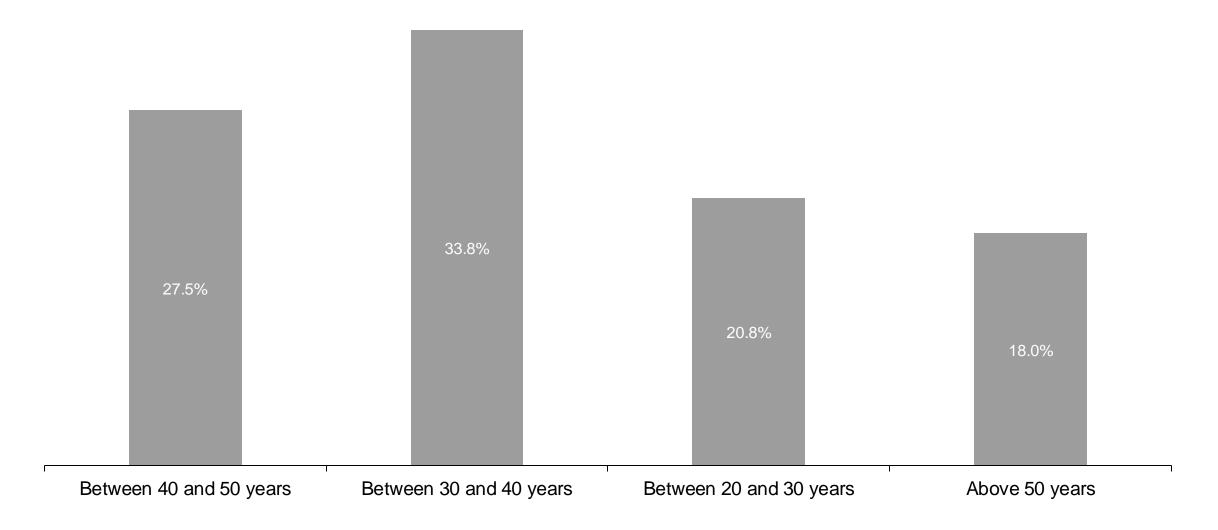
Organized by the CFA Society Sri Lanka

Poll 1



How old are you?

Total respondents: 400

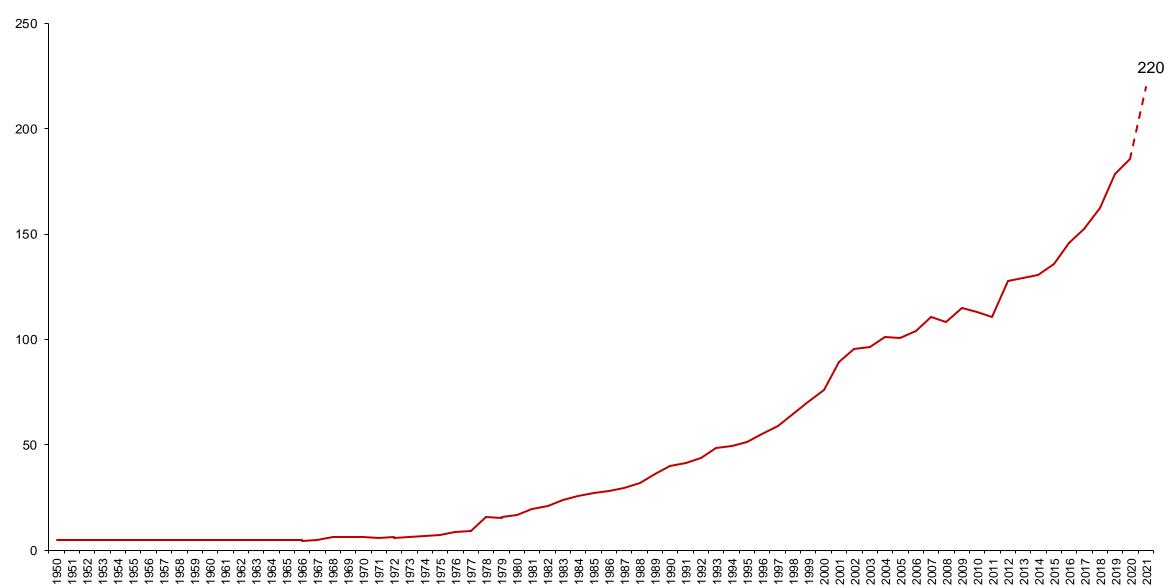


We have had decades of Macro Economic Instability

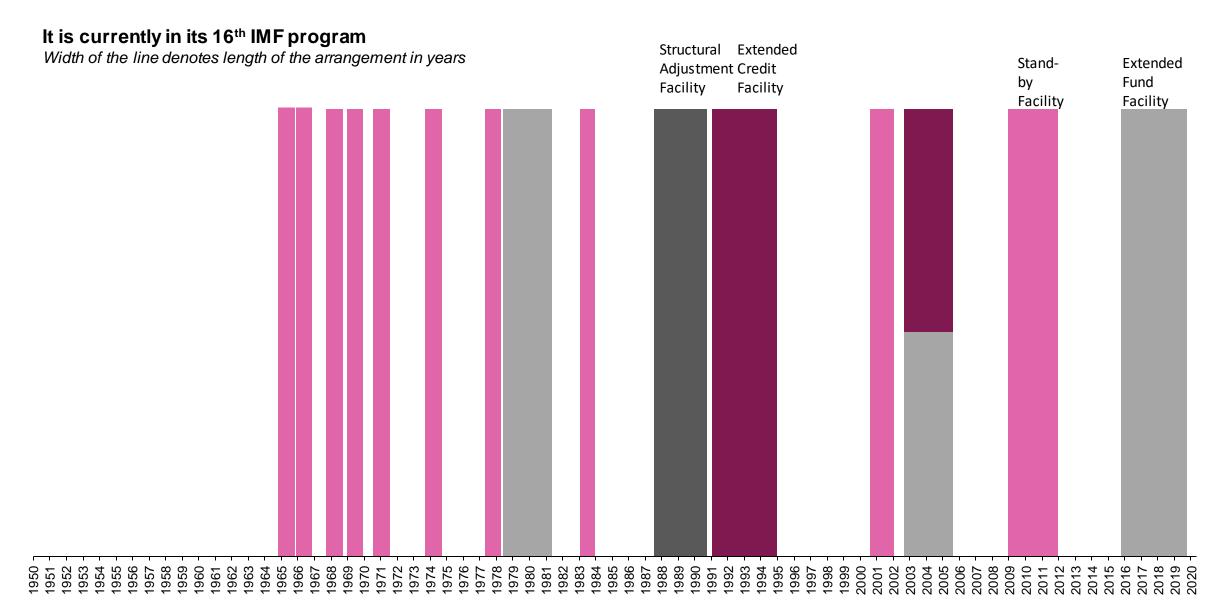


USD/LKR rate since 1950

Average annual exchange rate



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





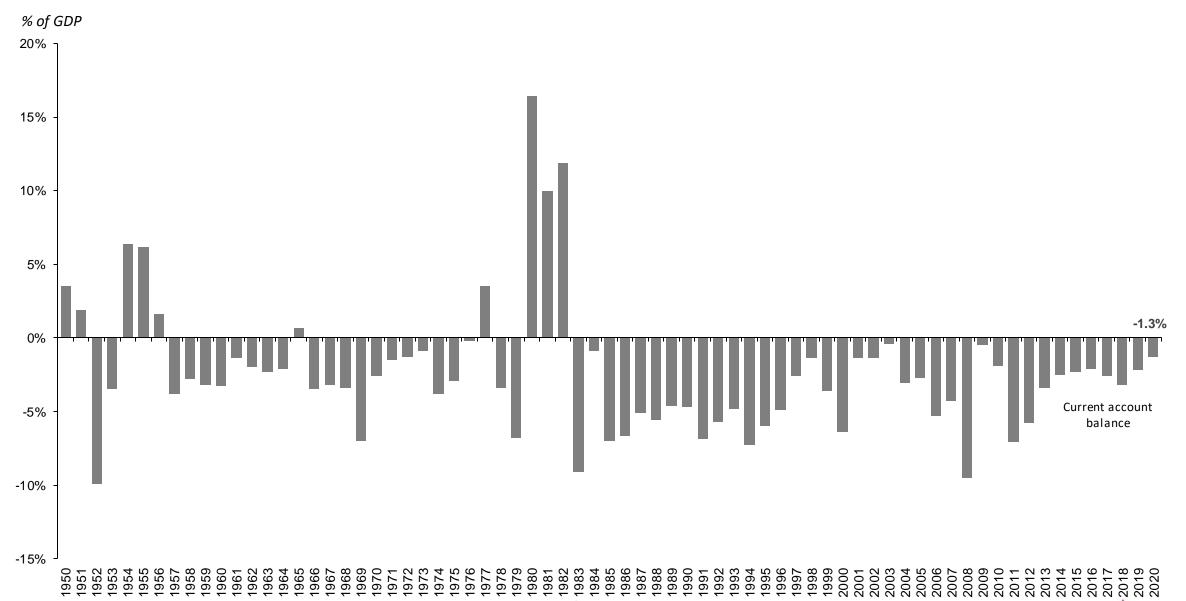
Some countries have repeat IMF programs



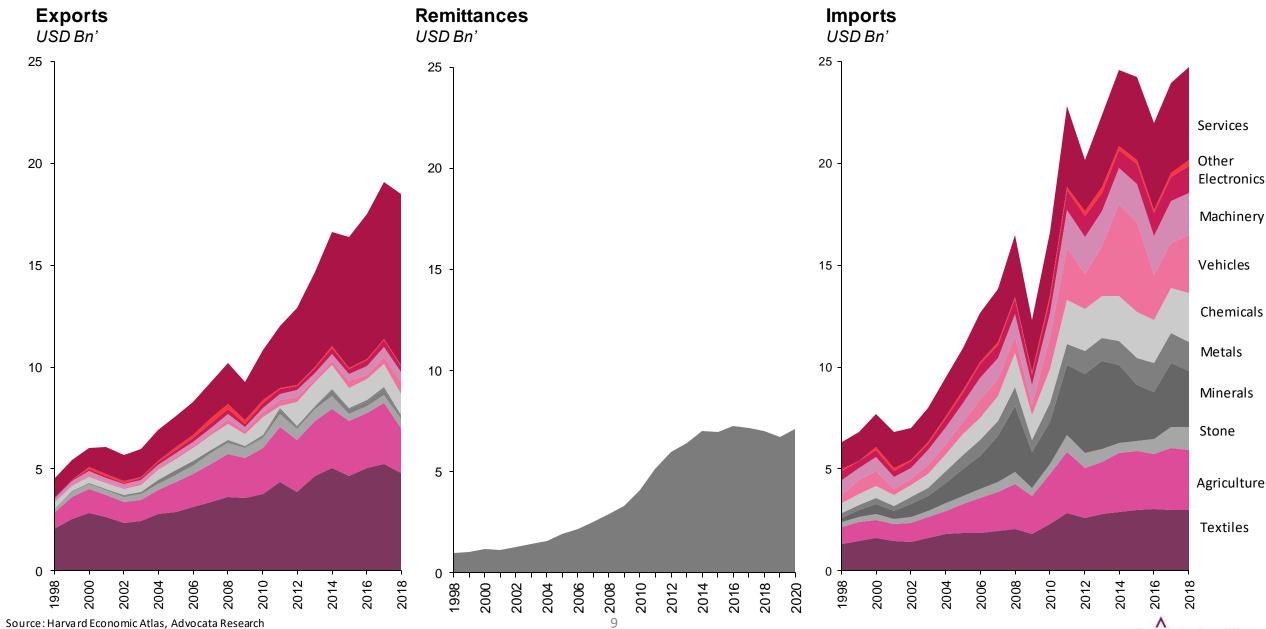




Sri Lanka's Current account balances – 70 years



External Sector – Inflows are growing but outflows are growing faster



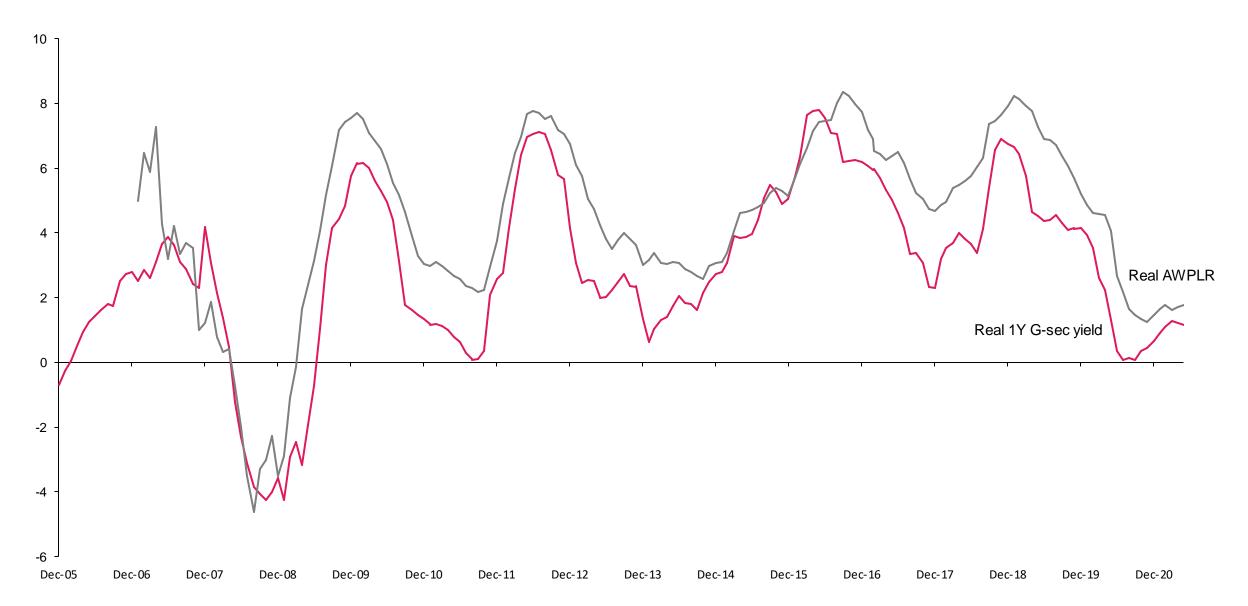
∧D**Ŷ**OCATA

Is the problem due to trade or excess spending

- Absorption can also be defined as spending
- Spending is a function of disposable income (income taxes) and credit
- Taxes are determined by Fiscal Policy
- Credit is determined by Monetary Policy



Is Monetary Policy the Problem - Real interest rates





Is Fiscal Policy the problem? The problem of twin deficits

LKR Bn	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Government dis-savings	-102.9	-41.9	-63.5	-51.9	-118.3	-240.8	-64.2	-88.1	-157.3	-525.8	-1,175.1
Current Account balance	-119.3	-525.7	-506.3	-332.2	-260.5	-271.2	-261.0	-352.9	-511.5	-334.8	-201.9
Dis savings % of current account balance	86.3%	8.0%	12.5%	15.6%	45.4%	88.8%	24.6%	25.0%	30.7%	157.0%	582.0%
CA balance % of GDP	-1.6%	-0.6%	-0.7%	-0.5%	-1.1%	-2.2%	-0.5%	-0.7%	-1.1%	-3.5%	-7.8%
Dis-savings % of GDP	-1.9%	-7.3%	-5.8%	-3.5%	-2.5%	-2.5%	-2.2%	-2.6%	-3.6%	-2.2%	-1.3%

Primary and Overall Balance

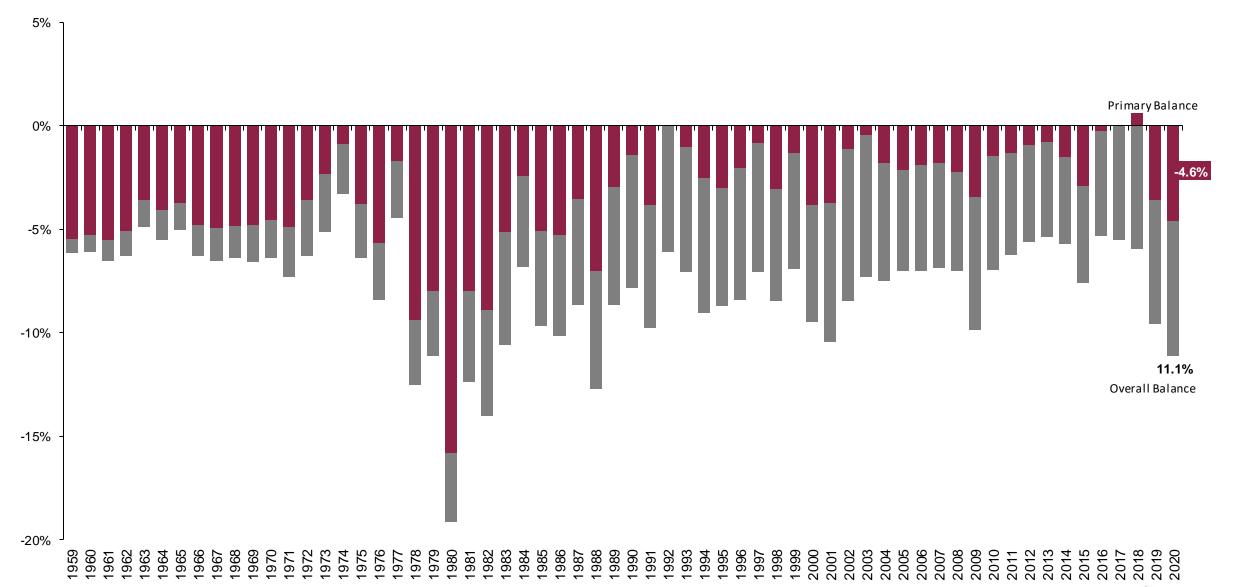
Primary Balance (PB) is the difference between Government Revenue(R) and non-interest Government expenditure(G)

PB = Revenue – Primary Expenditure

The primary balance is an indication of fiscal performance in each year, interest (I) is on debt that is inherited which is excluded. The PB illustrates how resources raised each year have been used.



Except for 4 years we have been posting primary balance deficits since the 1950s



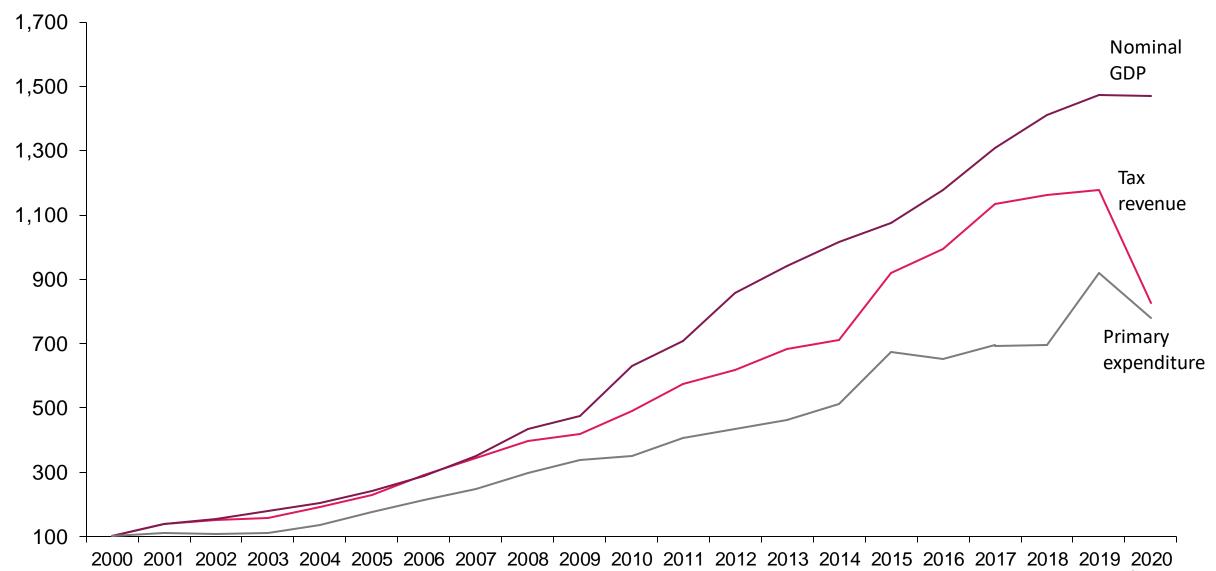
The problem is a revenue shortfall





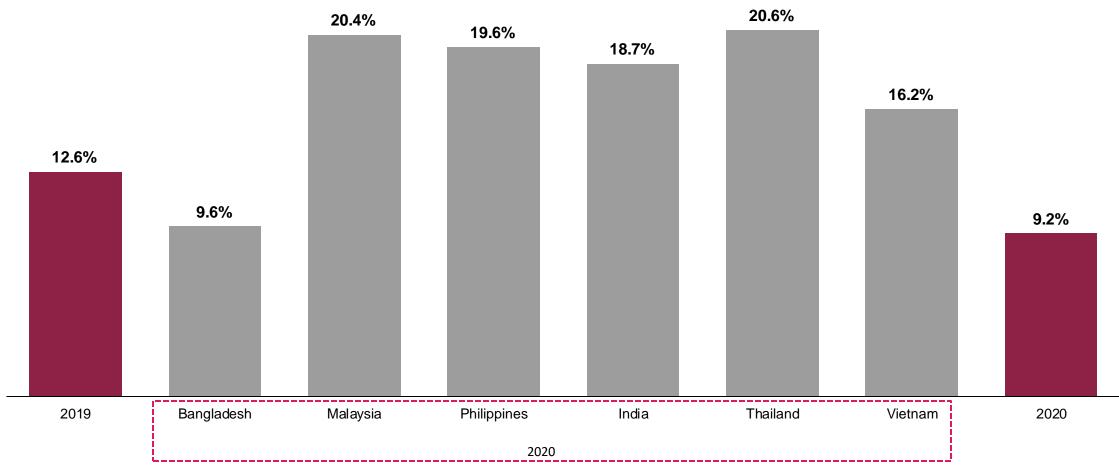
Tax revenue has not kept pace with nominal GDP growth

Tax revenue Primary expenditure and nominal GDP indexed to 2000



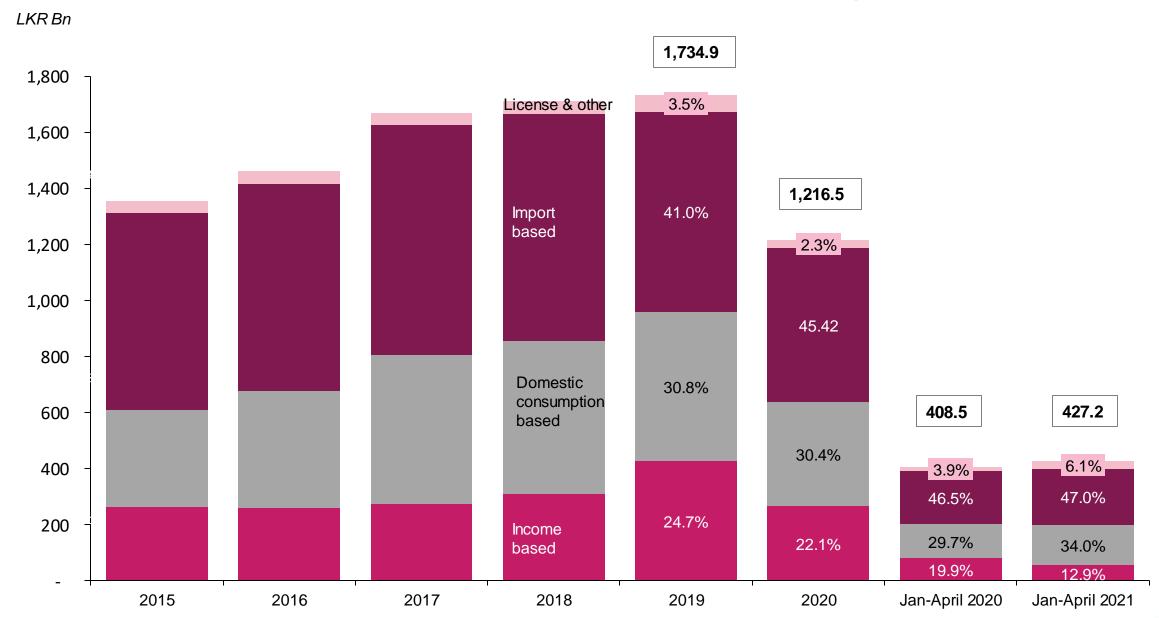
Sri Lankas revenue to GDP is considerably lower than regional peers

% of GDP



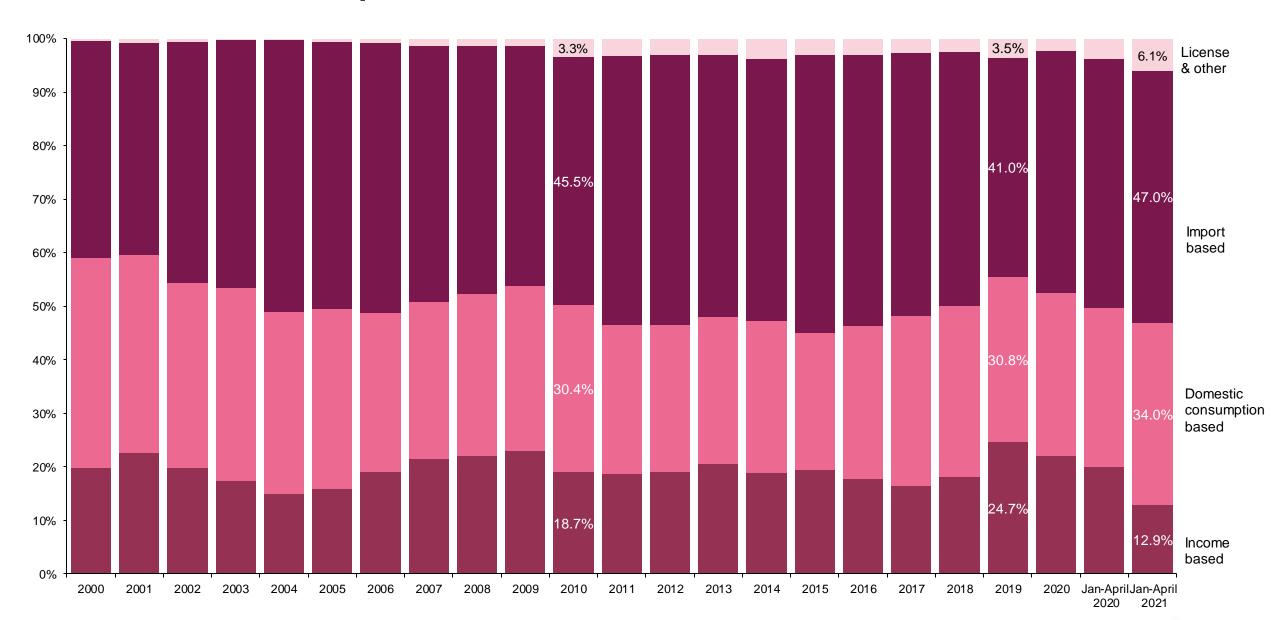


Tax revenue has fallen due to Covid19 and policy changes...

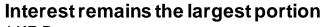


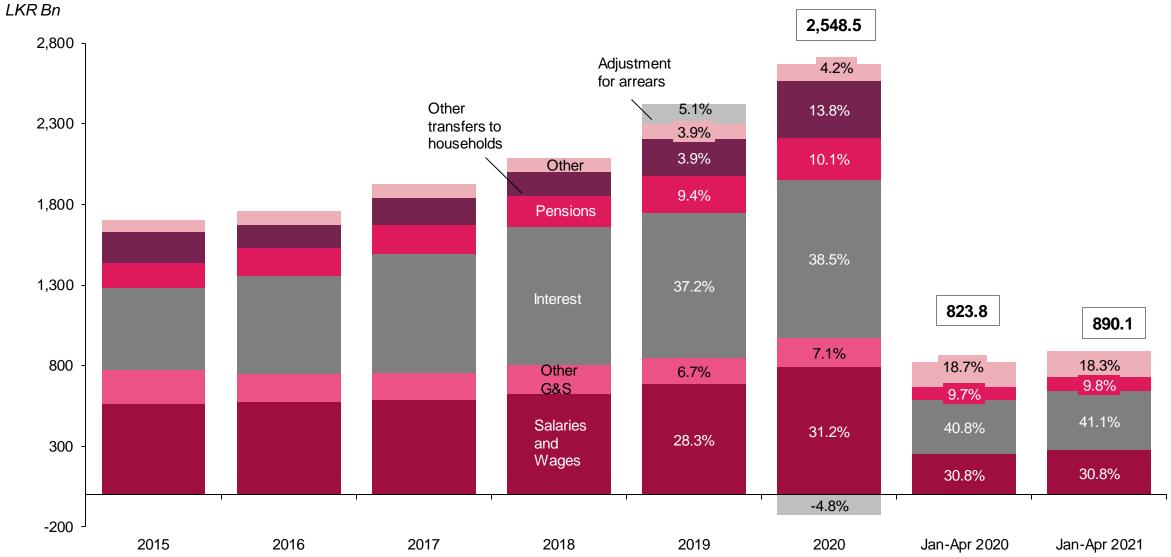


Indirect taxes make up a bulk of the tax revenue



Recurrent expenditure composition

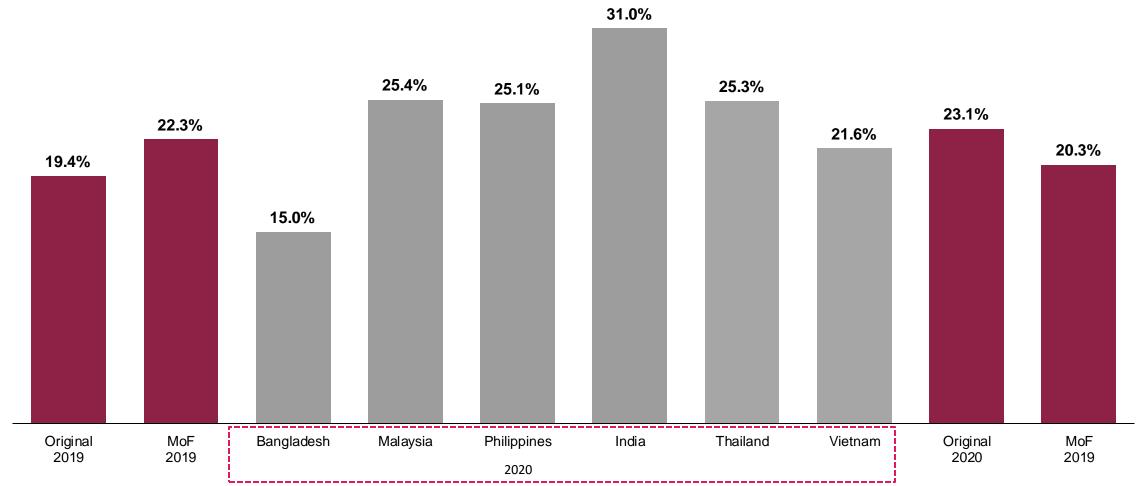






Comparison to regional peers

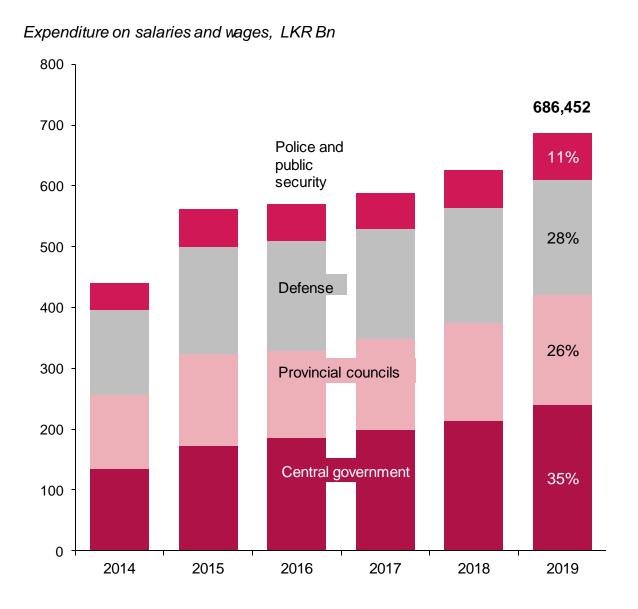
Total expenditure was lower than most peers even when adjusted for arrers %~GDP



Note: 2020 figures for Bangladesh Malaysia and Vietnam are estimates Source: IMF World Economic Outlook April 2021, Advocata Research



Salaries and wages are a significant portion of recurrent expenditure



Within which teachers and healthcare workers are a large component

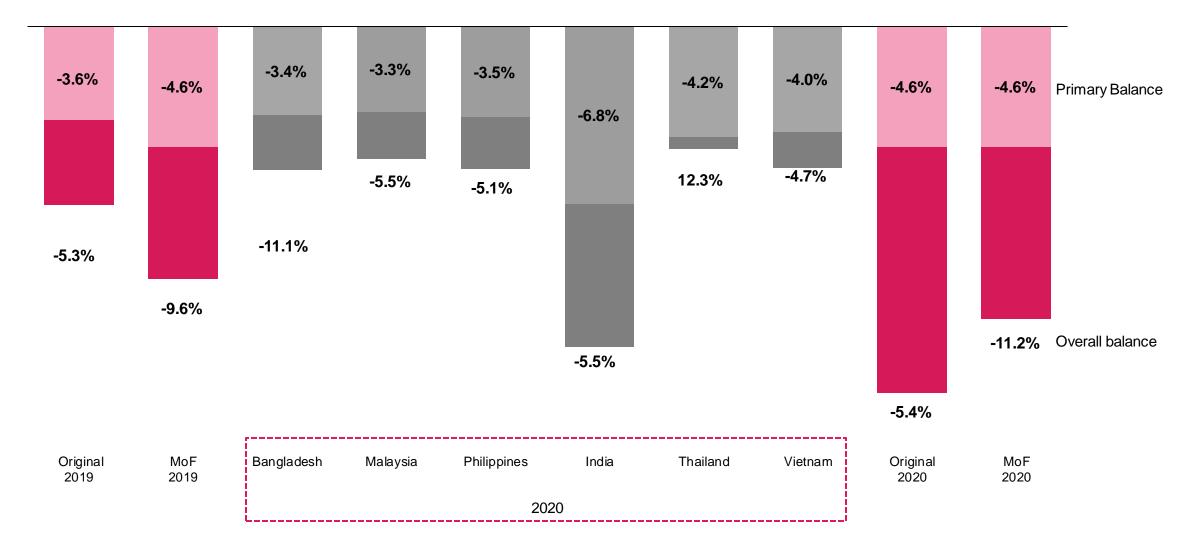
Public sector cadre composition, '000

	2019	%
Teachers	238.0	17.3%
Health care workers	150.0	10.9%
Tri forces	250.9	18.2%
Provincial Councils	444.3	32.3%
State Owned Enterprises	251.4	18.2%
Other public sector (mostly ministries, departments and special spending units)	43.1	3.1%
Total public sector	1,377.8	100.0%



Comparison to regional peers

Balance % GDP





Why is the tax collection so low

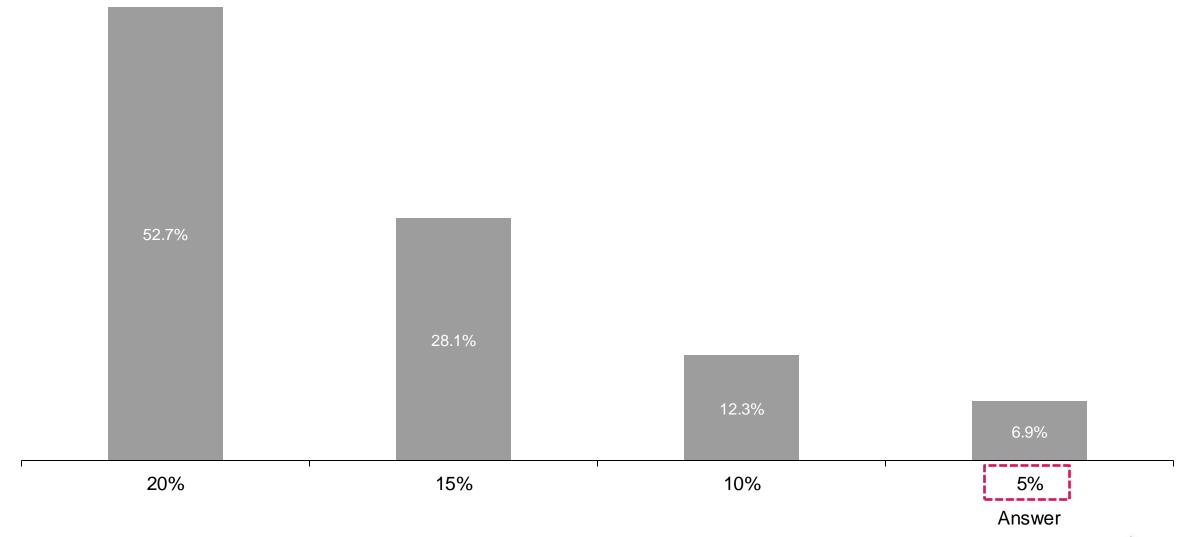


Poll 2



How much is the total taxes on an iPhone?

Total respondents: 440

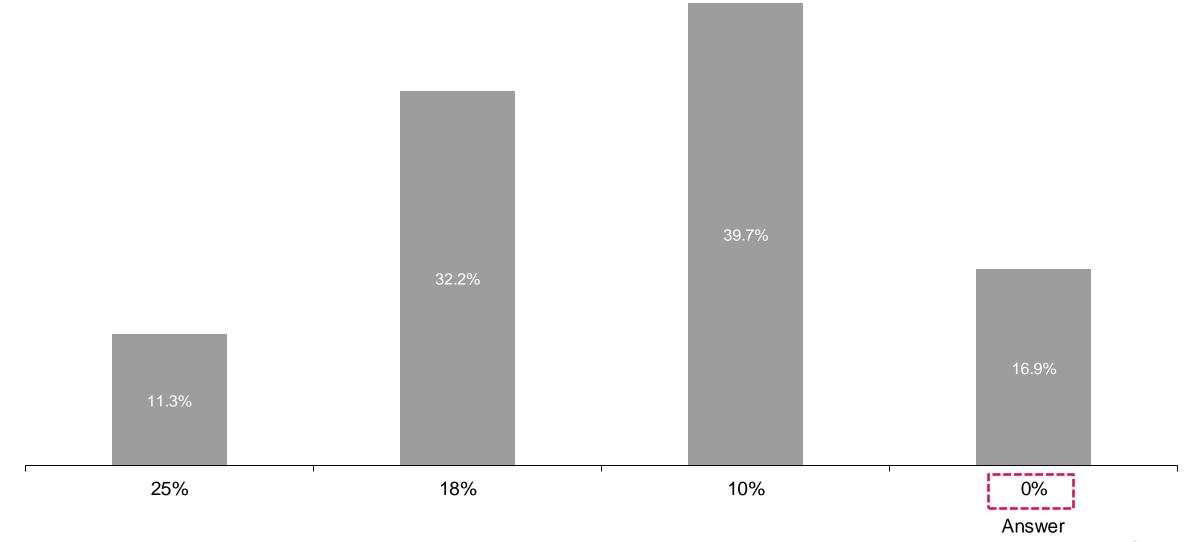






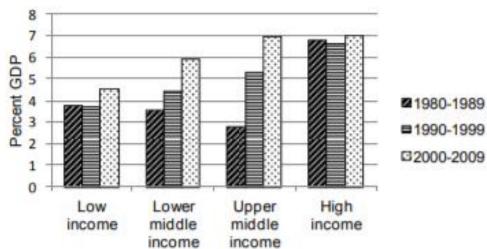
How much is the total taxes on a restaurant bill?

Total respondents: 451

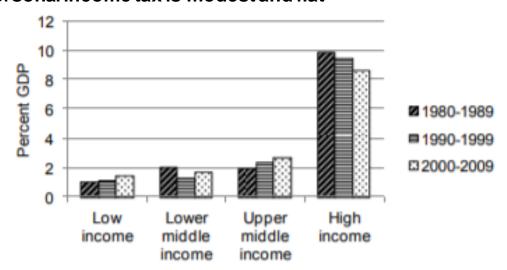


Trends in the composition of revenues, 1980 - 2009

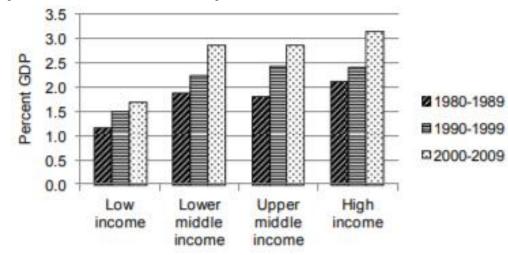
VAT revenues have increased



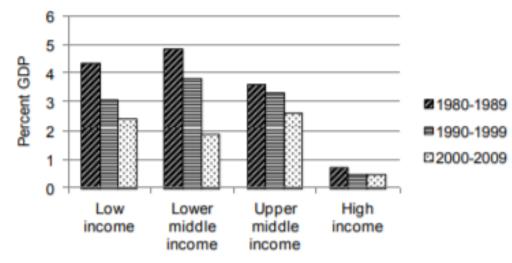
Personal income tax is modest and flat



Corporate income tax receipts have been robust



... and trade tax receipts are in decline





Notable Quotes

"Taxes are what we pay for a civilized society." In some respects, a "civilized society" is the rationale for government in the first place.

- Oliver Wendell Holmes

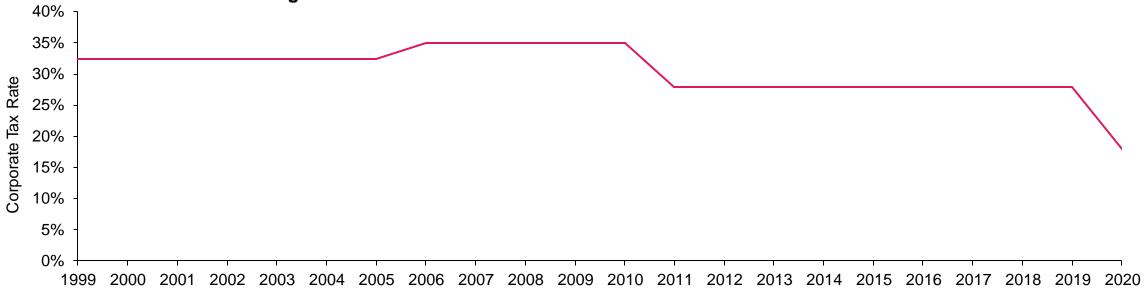
"Societies in which its citizens pay taxes enjoy better governance".

- Prof. Mick Moor



Corporate tax rates have been declining over the years

Business with revenues starting at LKR 100 million



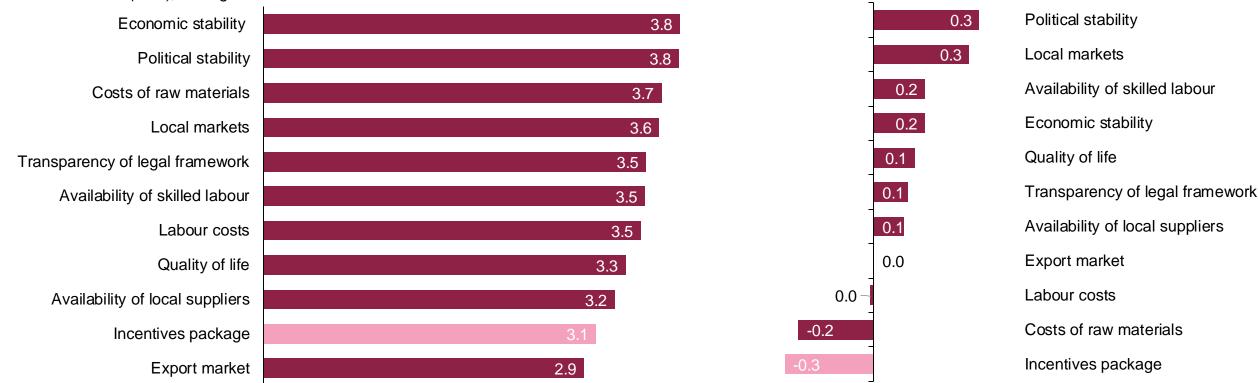
Business with revenues starting at LKR 50 million



The case for tax incentives

Relative importance of tax packages in investor location survey

Relative rank (LHS), Change in Rank since 2007



Strategic Development Projects Act, No. 14 of 2008

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

Enactments specified for exemption: The Inland Revenue Act, No. 10 of 2006, The Value Added Tax Act, No. 14 of 2002, The Finance Act, No. 11 of 2002 The Finance Act, No. 5 of 2005, The Excise (Special Provision) Act, No. 13 of 1989, The Economic Service Charge Act, No. 13 of 2006, The Debits Tax Act, No. 16 of 2002 and The Customs Ordinance (Chapter 235)



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

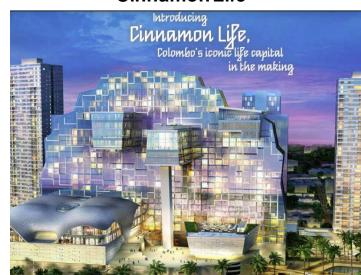
Shangri La SAGT Wind







Cinnamon Life



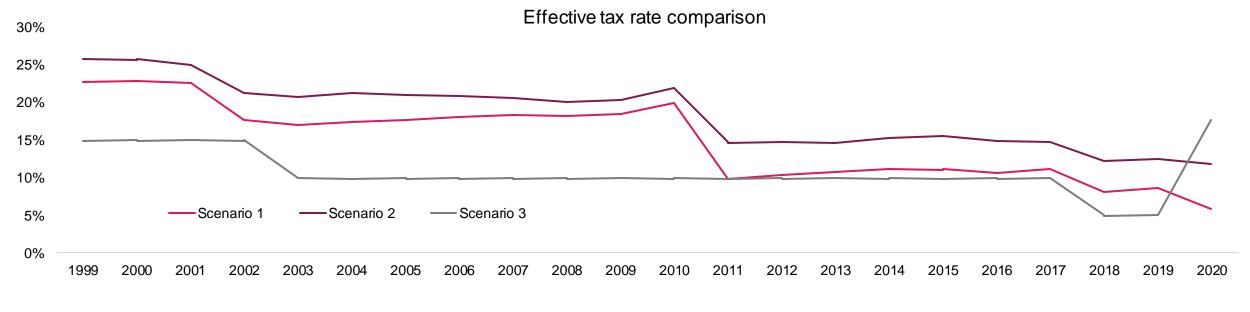


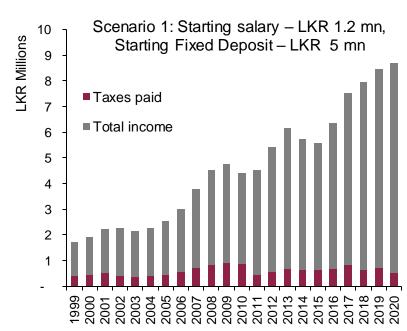
Solar

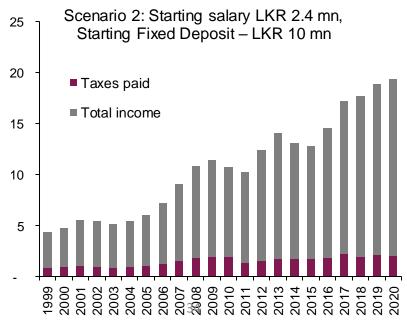


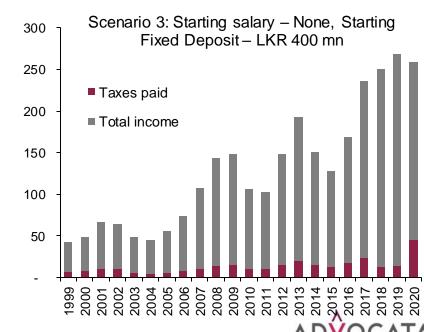


Effective personal tax rates have been on a declining trend

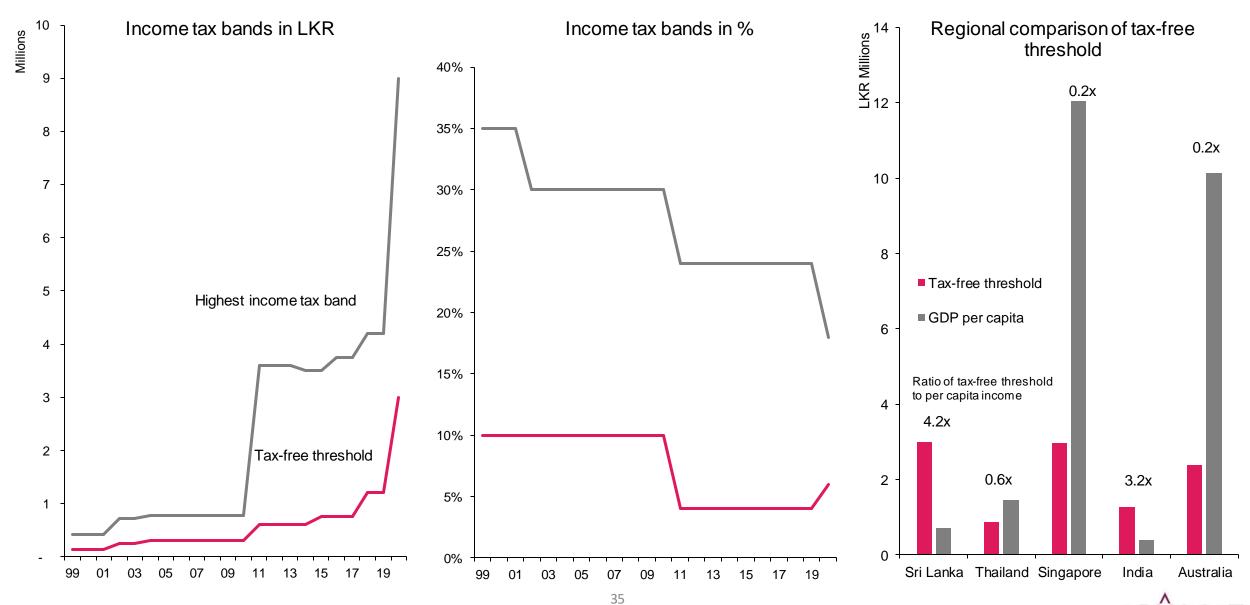








Effective personal tax rates have been on a declining trend



www.advocata.org

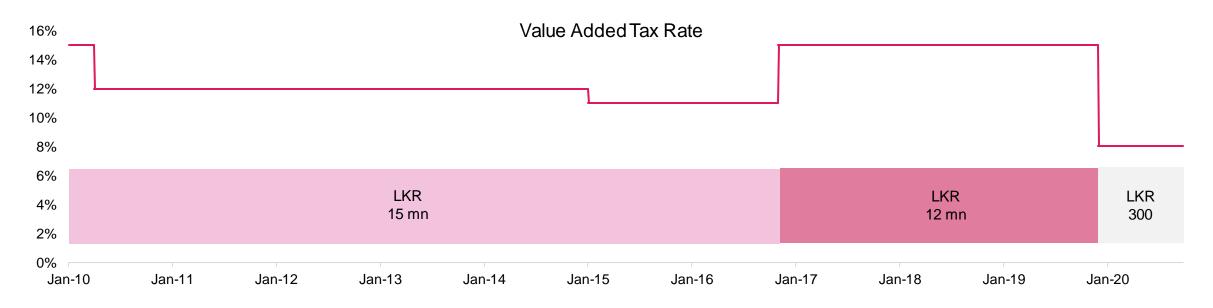
Details of Taxpayer Registration (2019)

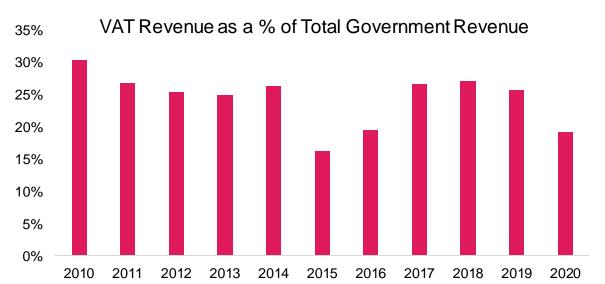
Number of Registered Taxpayers as at 31.12.2019				
Income Tax				
<u>Corporate</u>				
Resident Co./ Non – Resident Co.	56,460			
Non - corporate				
Individuals	281,105			
Partnerships	17,300			
Bodies of Persons	804			
Employees paying Income Tax under PAYE	1,149,883			
Total Income Taxpayers		1,505,552		
Other Taxpayers				
Persons and Partnerships registered for ESC	17,359			
Persons registered for VAT	28,914			
Persons registered for VAT on Financial Services	237			
Persons registered for NBT	92,028			
Persons registered for NBT on Financial Services	237			
Persons registered for Betting Levy Taxpayers	631			
Persons registered for Gaming Levy Taxpayers	4			
Total Other Taxpayers		139,410		

Total Other Taxpayers		139,410
Employers Registered under PAYE Scheme	35,448	
Withholding agents registered for Withholding Tax on Interest (Withholding Agents)	1,627	
Withholding Tax on Specified Fess (Regular monthly schedules Senders)	13,764	
Stamp Duty (Regular Monthly Schedules Senders)	9,432	60,271
Total Number of Tax Files/ Taxpayers as at 31.12.2019		1,705,233



Changes to the VAT system in the last decade





Recent VAT tax amendments in end 2019

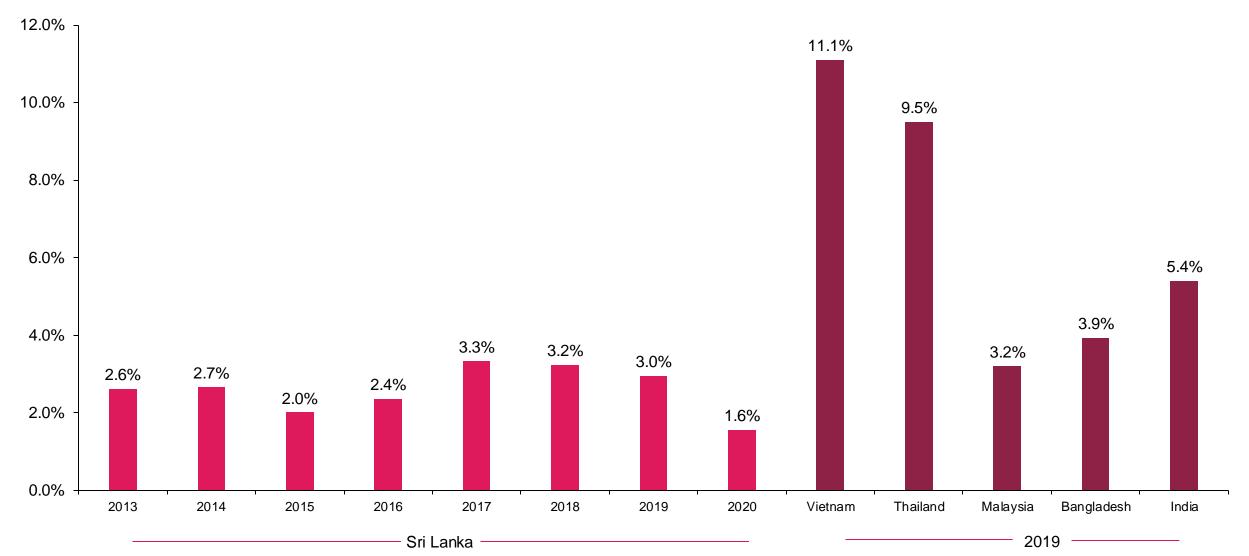
- Rate reduced from 15% to 8%
- Base increased from LKR 12 mn to LKR 300 mn
- Exemptions increased including hotels and restaurants

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

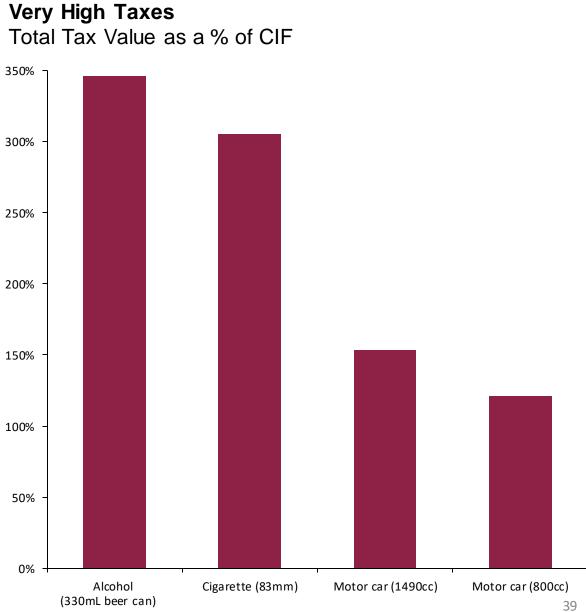


VAT/GDP ratio lowest amongst our Peers

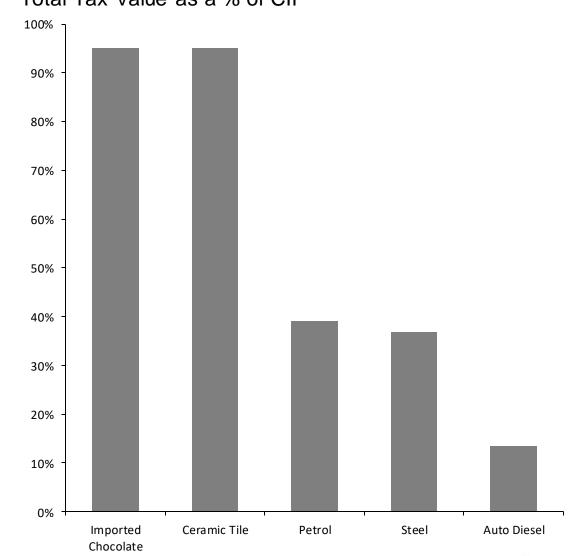
VAT Revenue to GDP Ratio, %



Level of indirect taxation on a selection of goods...

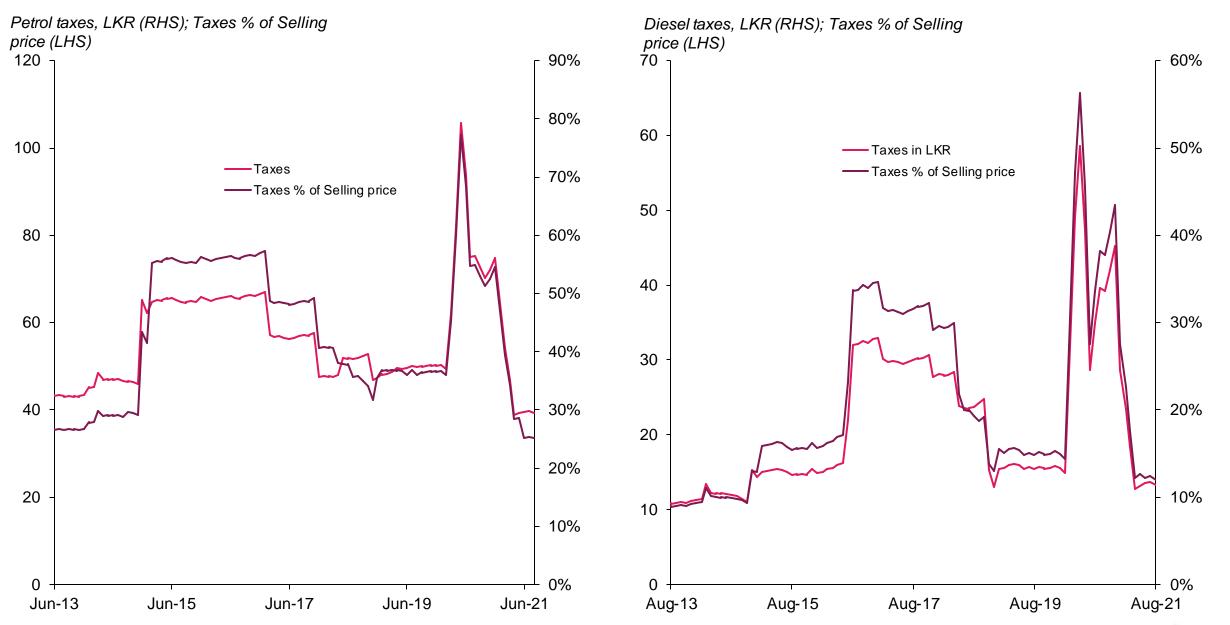


High Taxes Total Tax Value as a % of CIF





Tax subsidies on Diesel when there is a case for corrective taxes



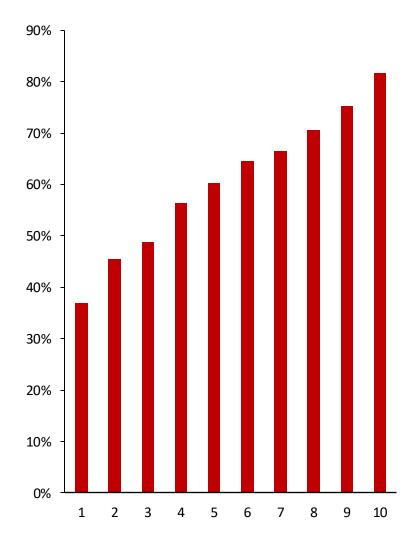
Regional comparison – Sri Lanka is the cheapest by far

Per Capita GDP USD 2020	,	Absolute (Prices are as of 8 th Sep 2021)			Relative			Relative price
		Petrol (LKR/litre)	Diesel (LKR/litre)	Kerosene (LKR/litre)	Petrol (LKR/litre)	Diesel (LKR/litre)	Kerosene (LKR/litre)	of Petrol/Diesel
3,679	Sri Lanka	157	111	77	100	100	100	41%
1,965	India (Delhi)	276	242	112	176	218	145	14%
1,260	Pakistan	140	138	104	89	124	135	1%
1,998	Bangladesh	204	154	154	130	139	200	32%
1,196	Nepal	224	194	194	142	175	252	15%

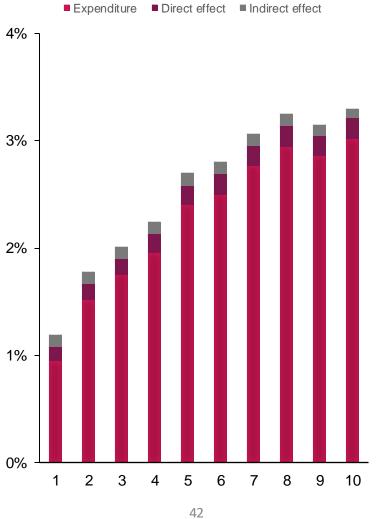


The Rich are benefitting from the tax subsidies on fuel

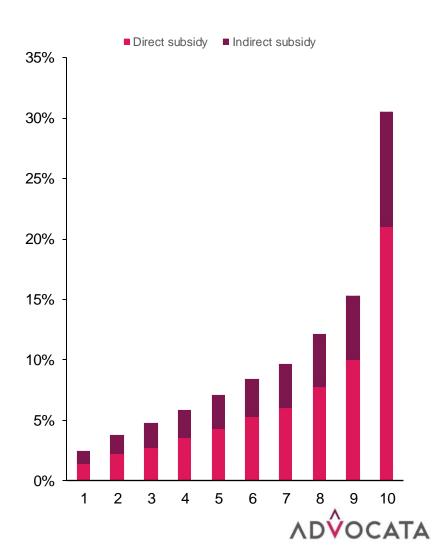
Share of Households with Fuel X axis -Expenditure 1(poorest) to 10(richest)



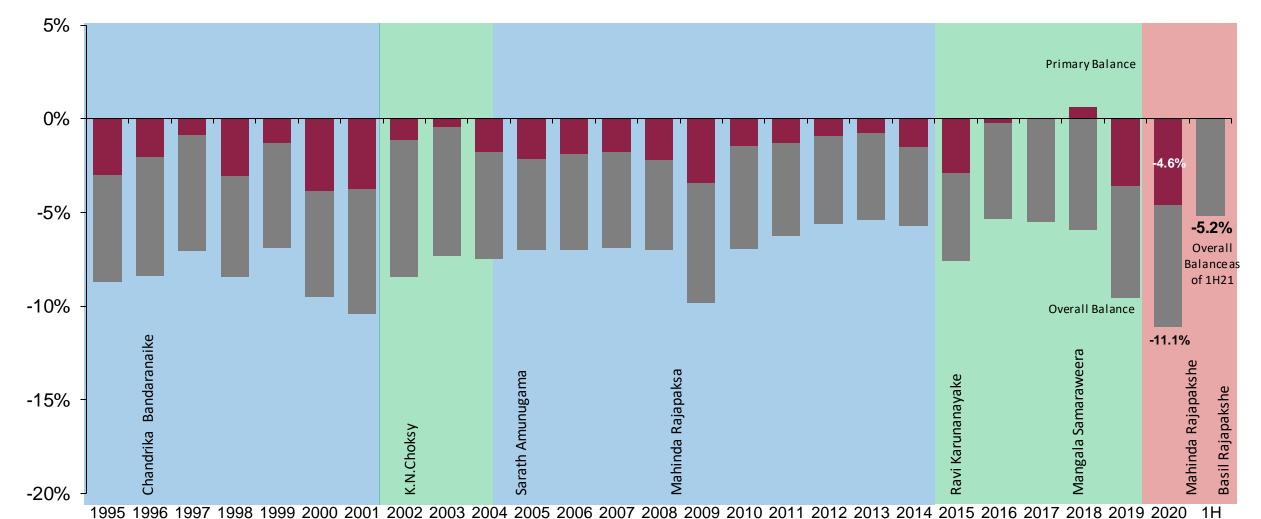
% of fuel expenditure, direct and indirect subsidies as a share of total consumption X axis - 1(poorest) to 10(richest)



Distribution of the subsidy budget X axis - 1(poorest) to 10(richest)



We need a full time Finance Minister to be the bad cop The President or the Prime Minister has been holding the post for 61% of the last 26 years





The need for a social compact

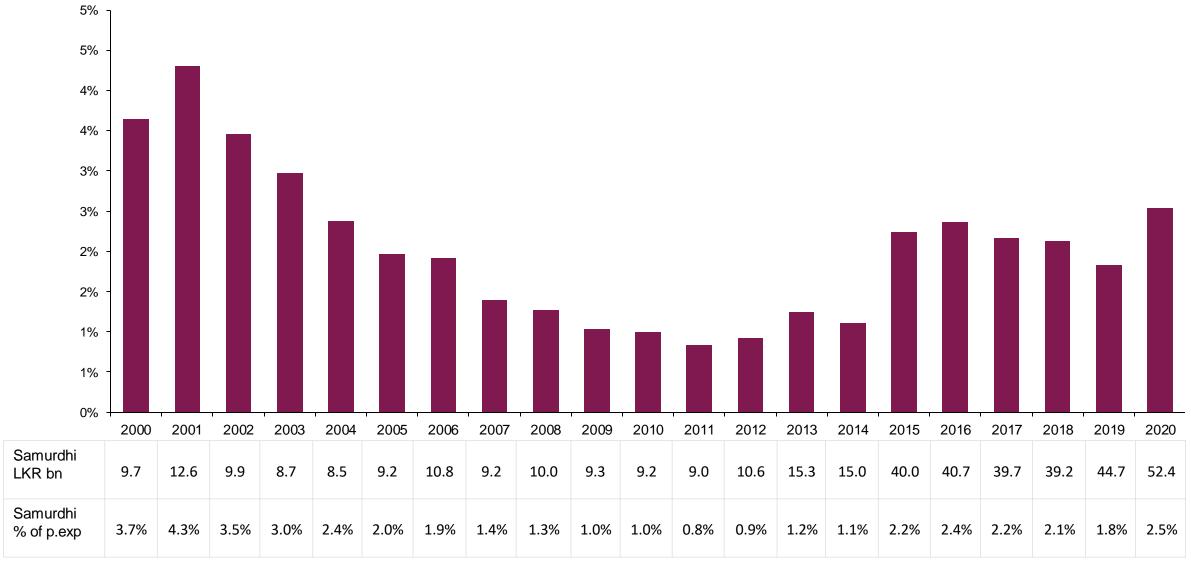


https://youtu.be/DTMcc8c4pHs



Cash transfers... a better way to redistribute

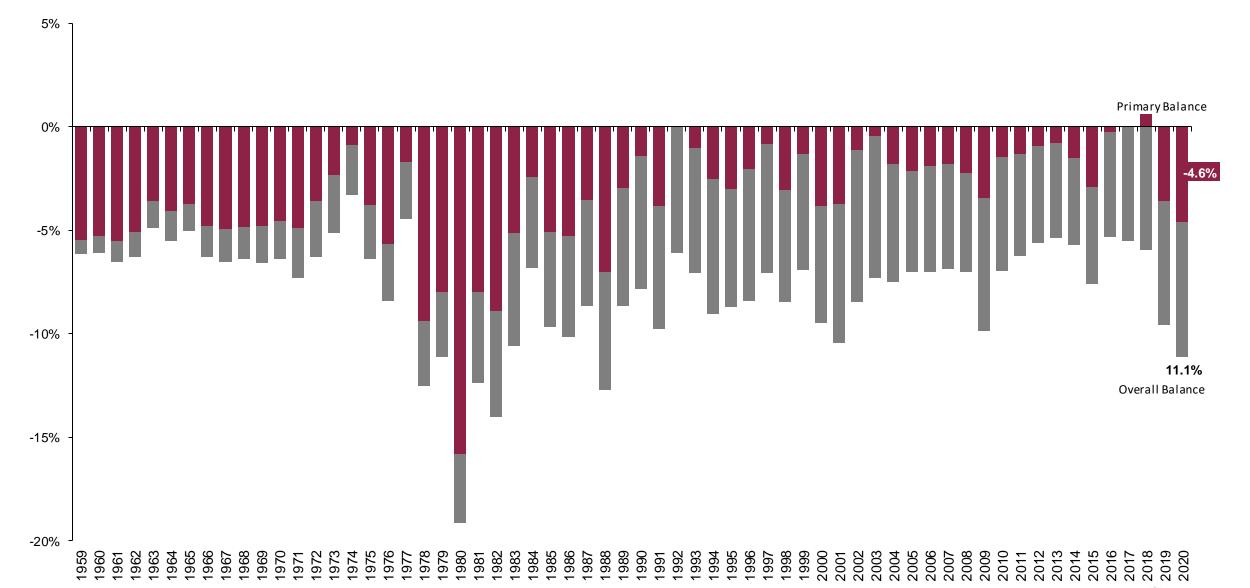
Samurdhi payments % of primary expenditure



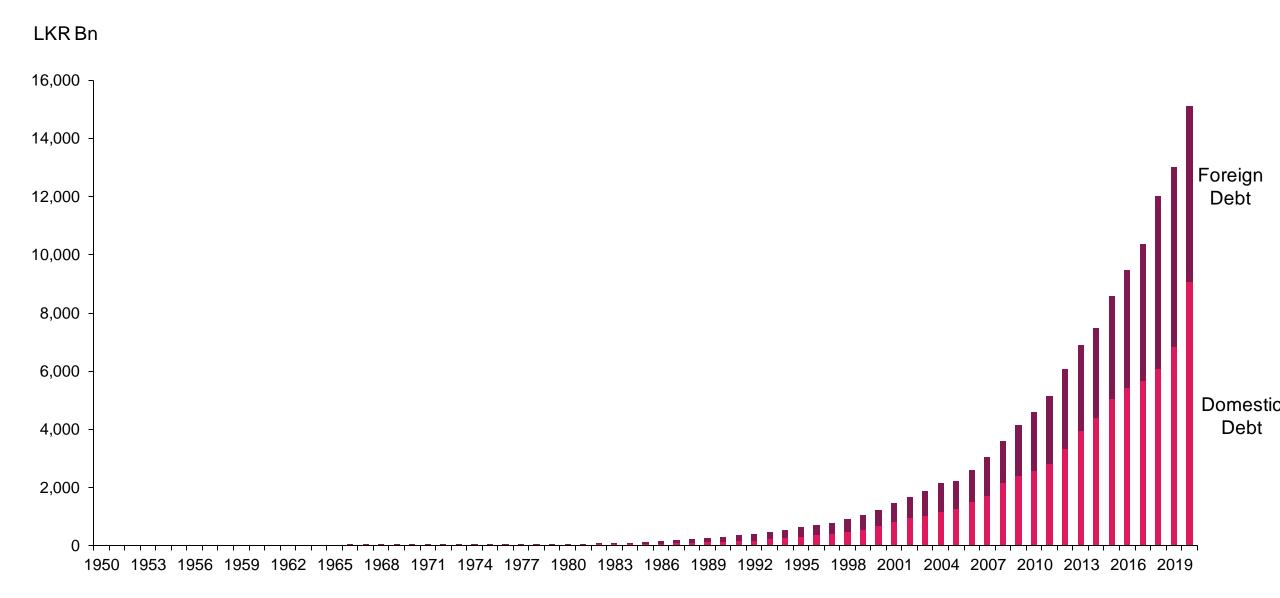
What is going on with the country's public debt



Except for 4 years we have been posting primary balance deficits since the 1950s



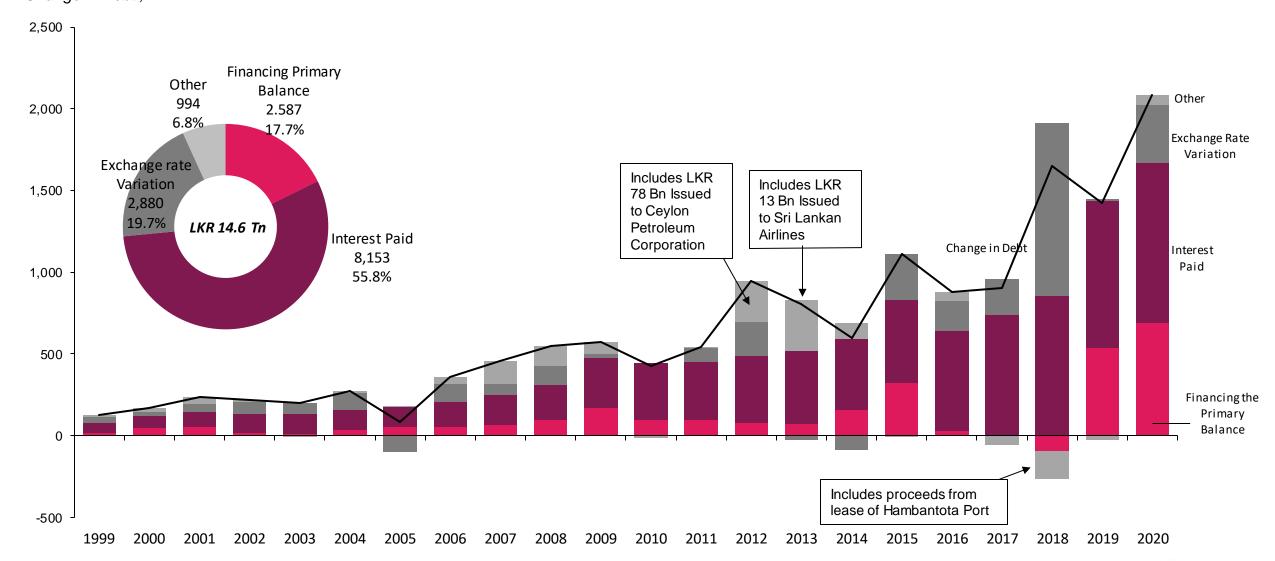
Outstanding Central Govt. Debt reached LKR 15 Tn by end 2020





Debt Attribution Analysis - Absolute

Interest expense and Exchange rate variation account for 75% of the Debt increase since 1999 Change in Debt , LKR Bn

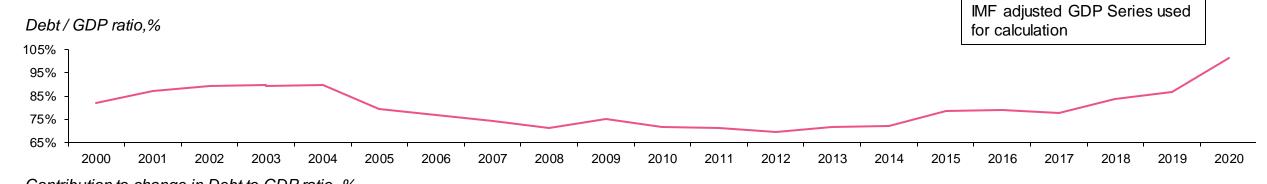


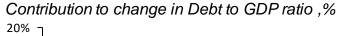
Breakdown of change in debt

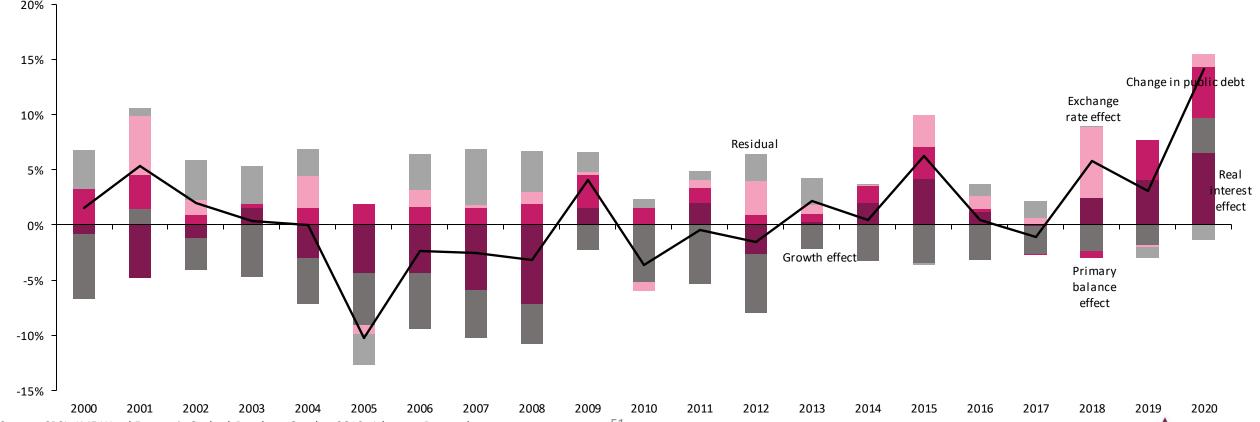
$$d_t - d_{t-1} = \frac{i_t^w - \pi(1 + g_t)}{(1 + g_t)(1 + \pi_t)} - \frac{g_t}{(1 + g_t)(1 + \pi_t)} + \frac{\alpha \varepsilon (1 + i_t^f)}{(1 + g_t)(1 + \pi_t)} - pb + residual$$



Debt Attribution Analysis for Sri Lanka



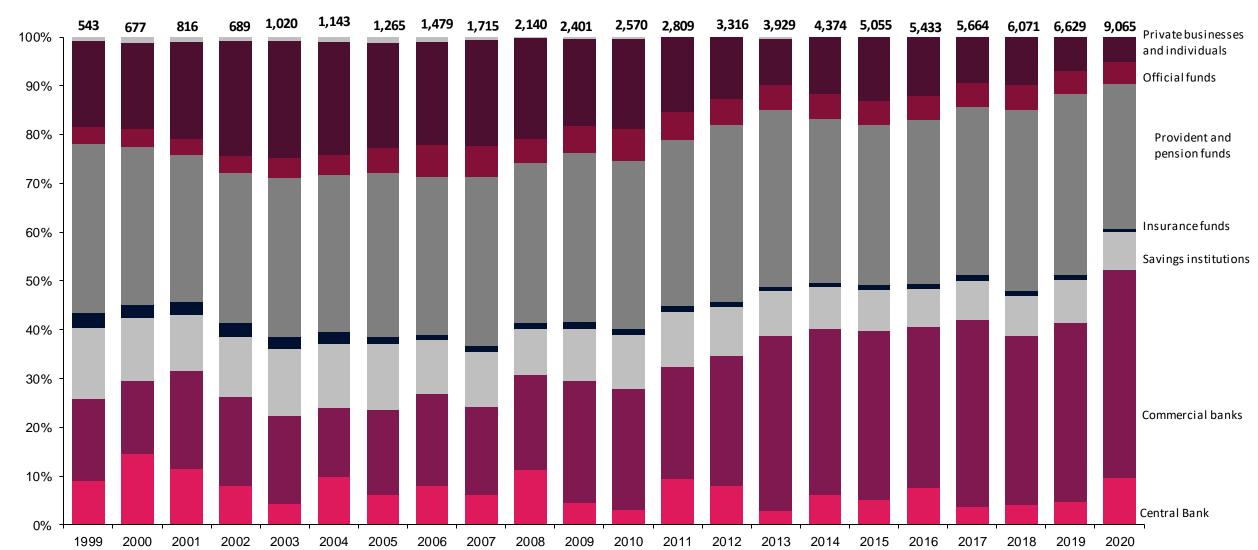




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Domestic debt by ownership

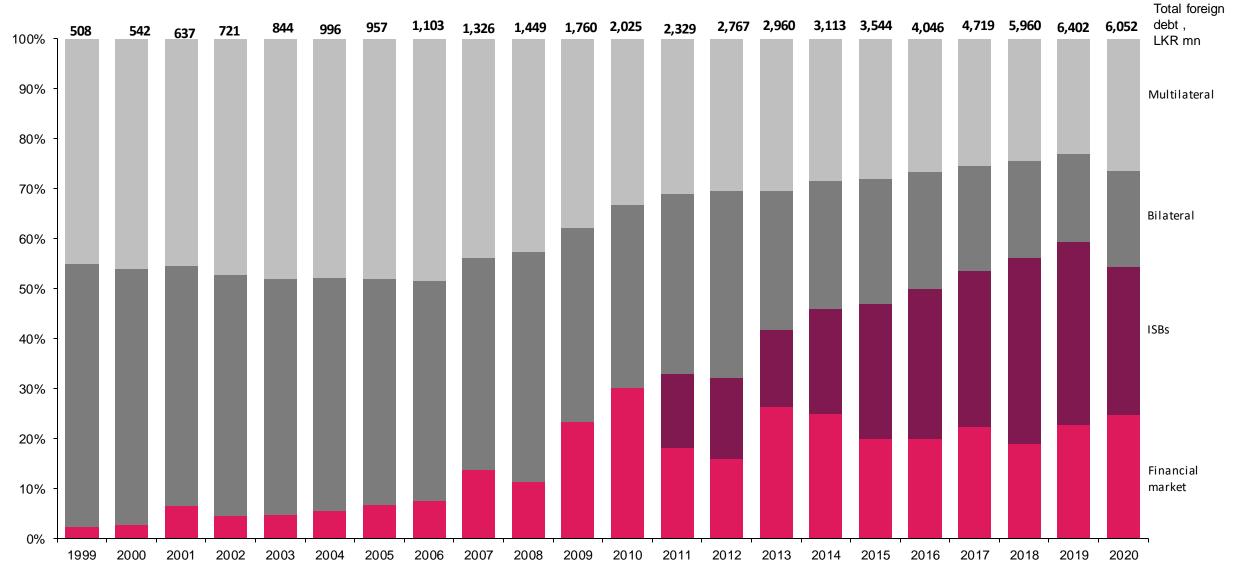
% of total domestic debt



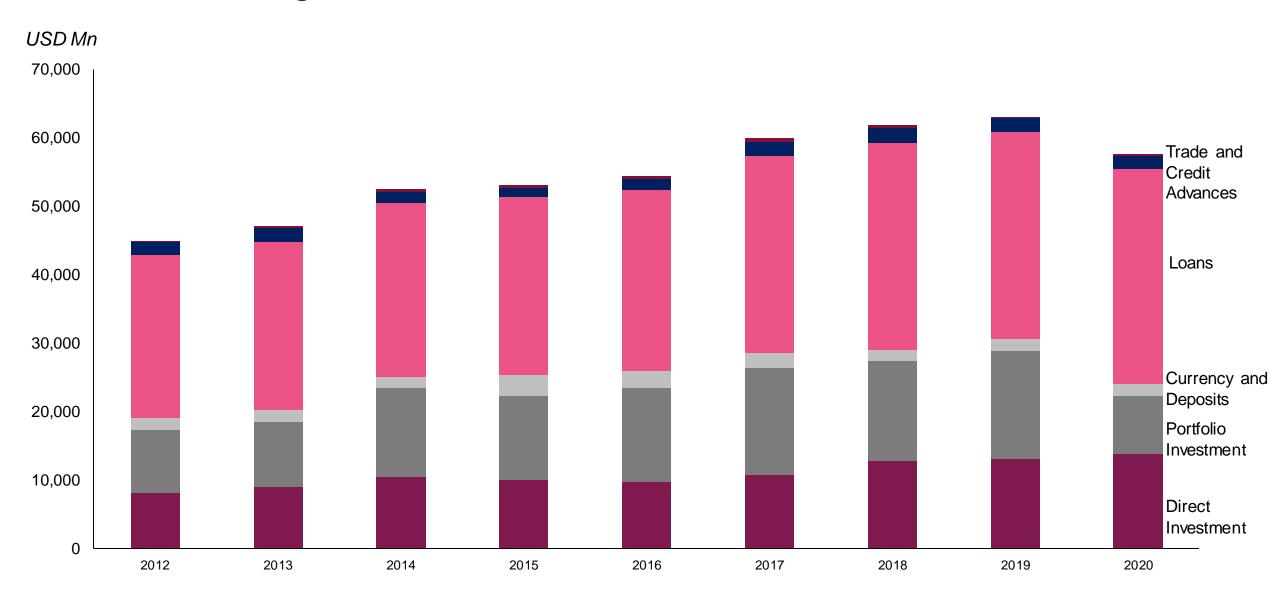


Foreign debt by type

% of total foreign debt

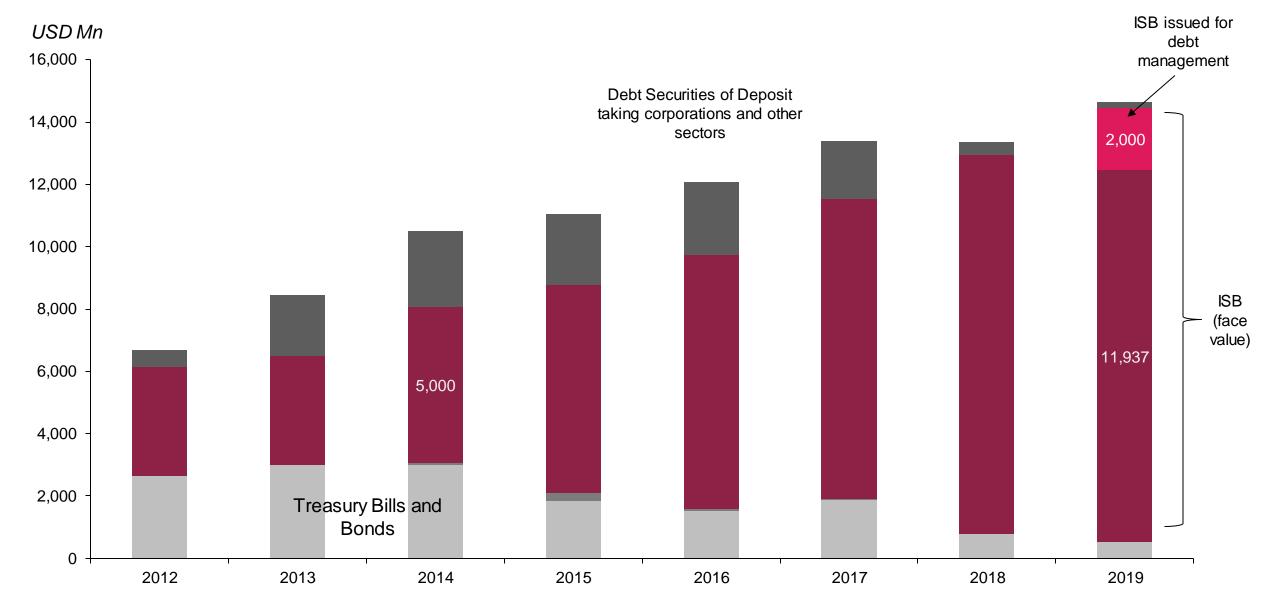


Sri Lanka's Foreign Liabilities





Debt Securities in External Liabilities



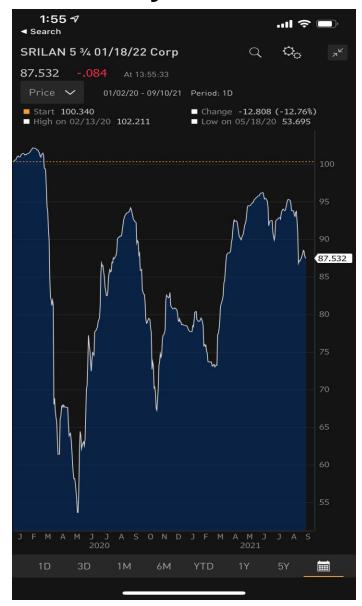


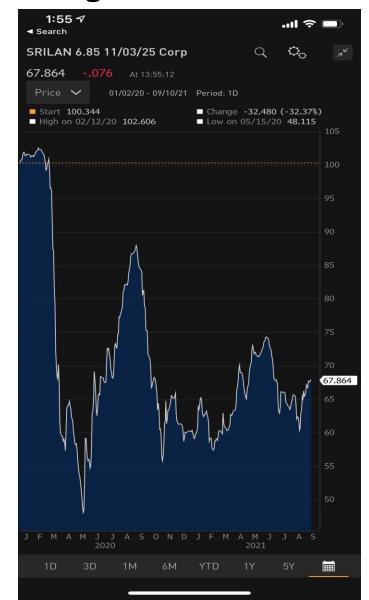
42% Chance of Selective Default within one year of downgrade...

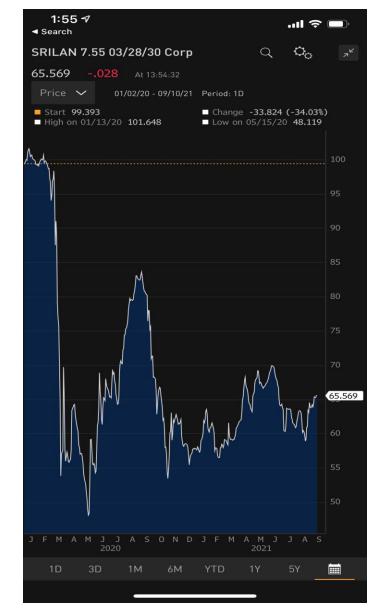




The January 2022 Bond is trading at 87 cents to the dollar









Warning from Prof. Ricardo Hausmann about debt crisis

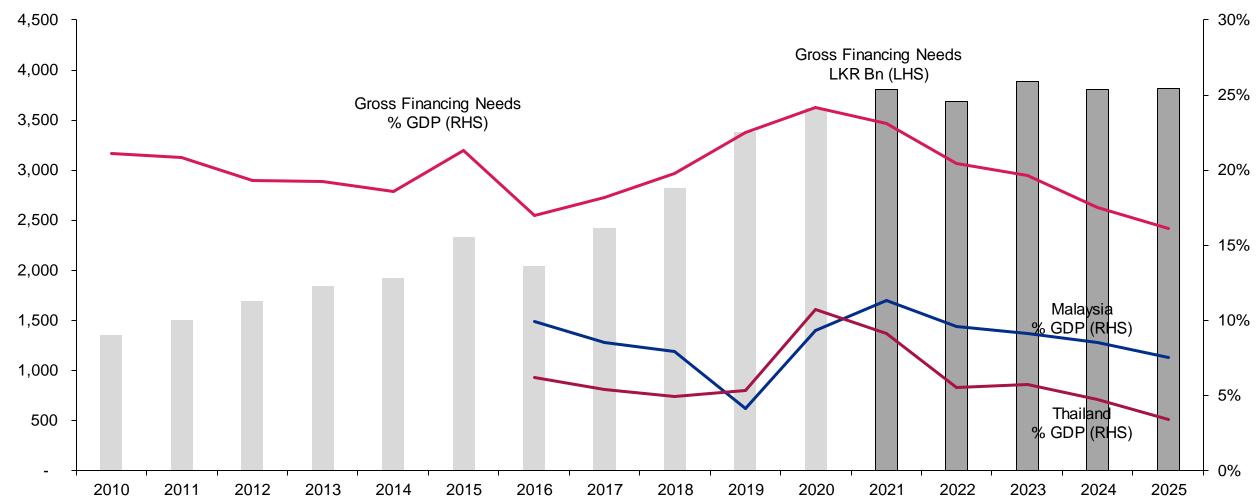


https://youtu.be/hlaTH0AYd6Y



Gross Financing Needs highly elevated

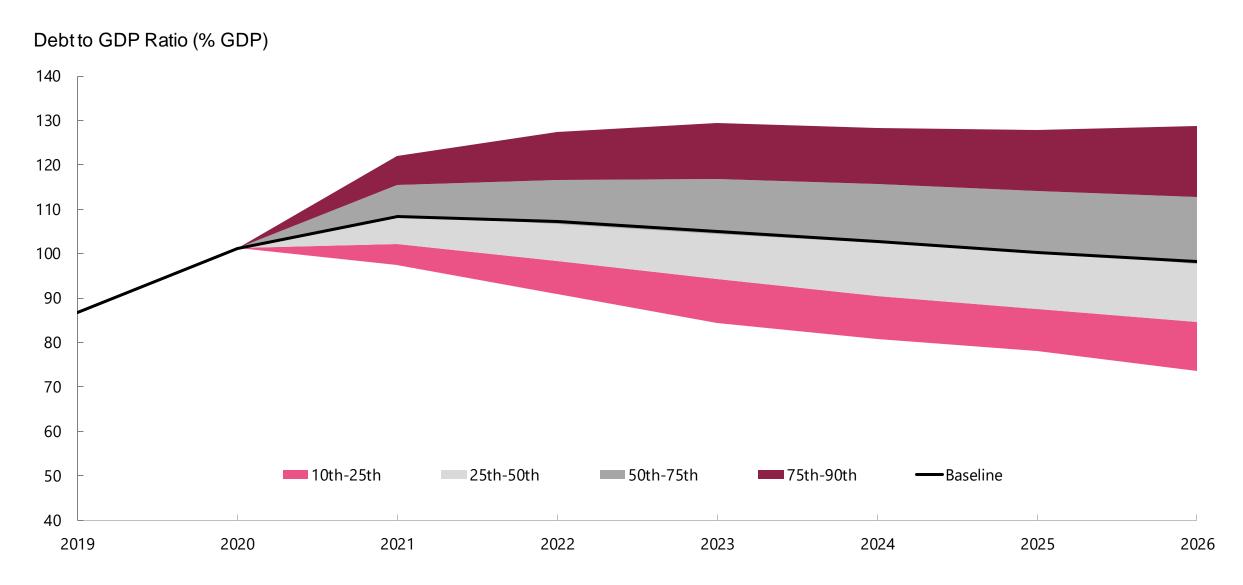




Note: Gross Financing Needs is calculated as sum of budget deficit + Amortisation of Debt, Data from 2021- Sri Lanka: In house Estimates, Malaysia and Thailand; IMF Estimates Source: CBSL, Advocata Research



Debt to GPD Ratio trajectory

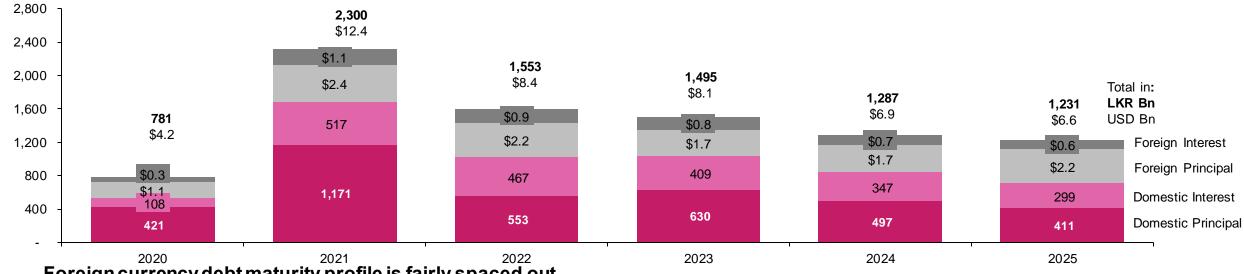




Domestic debt is a larger proportion of government debt service obligation

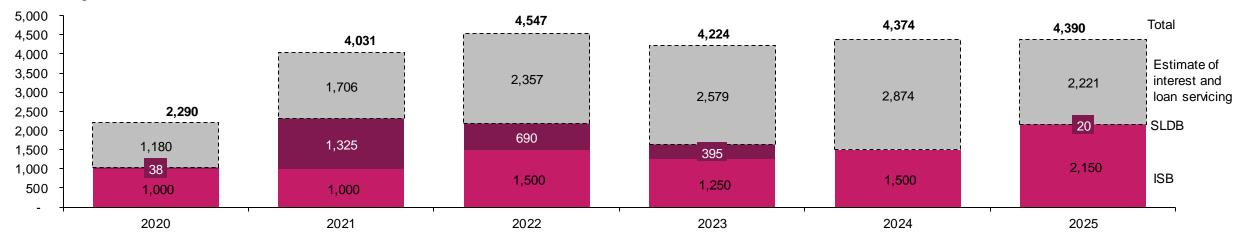
Debt securities maturity profile

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



Foreign currency debt maturity profile is fairly spaced out...

Foreign debt service, USD mn

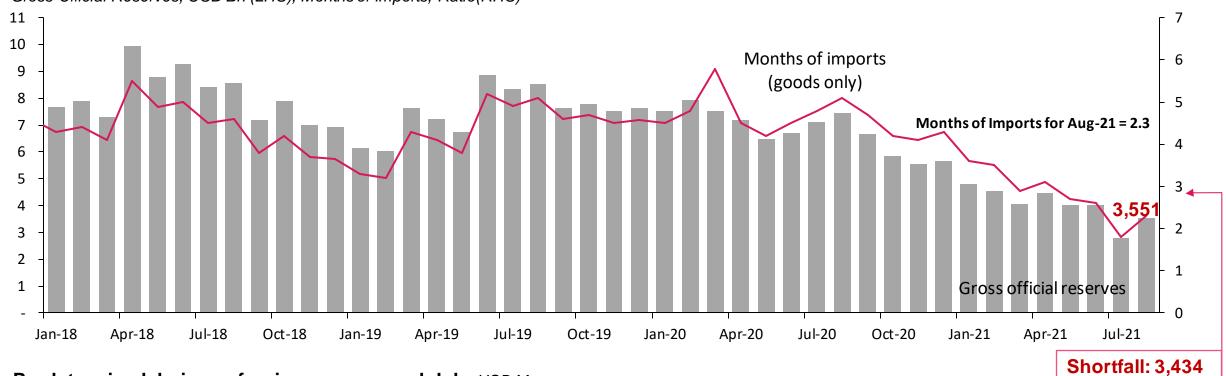






Reserves have been falling

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



Predetermined drains on foreign currency end-July, USD Mn

		Up to 1 month	More than 1 month and up to 3 months	More than 3 months and up to 1 year	Total
Foreign currency loans, securities, and deposits		-261	-1,447	-5,277	-6,985
outflows (–)	Principal	-227	-1,117	-4,254	-5,598
	Interest	-34	-330	-1,023	-1,387

How the Korean people responded when their country was in crisis





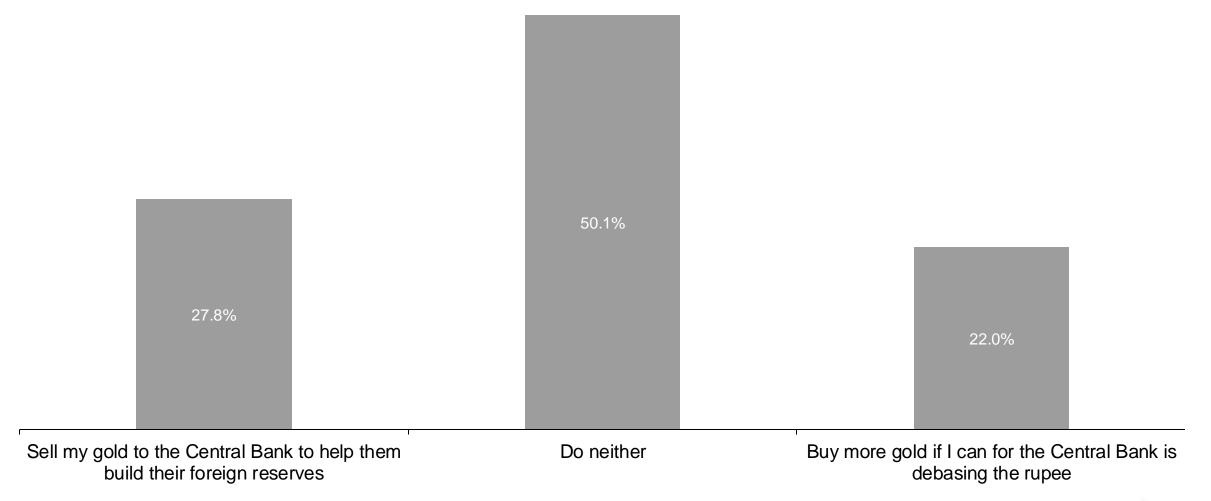






One way to raise our foreign reserves is for our citizens to sell their gold to the Central Bank for rupees. I will:

Total respondents: 395



Is The Big Bad Wolf On The Way?











Definitions

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

Solvency crisis – when a country's capacity to meet long term financial commitments is compromised and financial obligations cannot be met without renegotiating terms of debt, an implausibly large fiscal adjustment, or simply defaulting

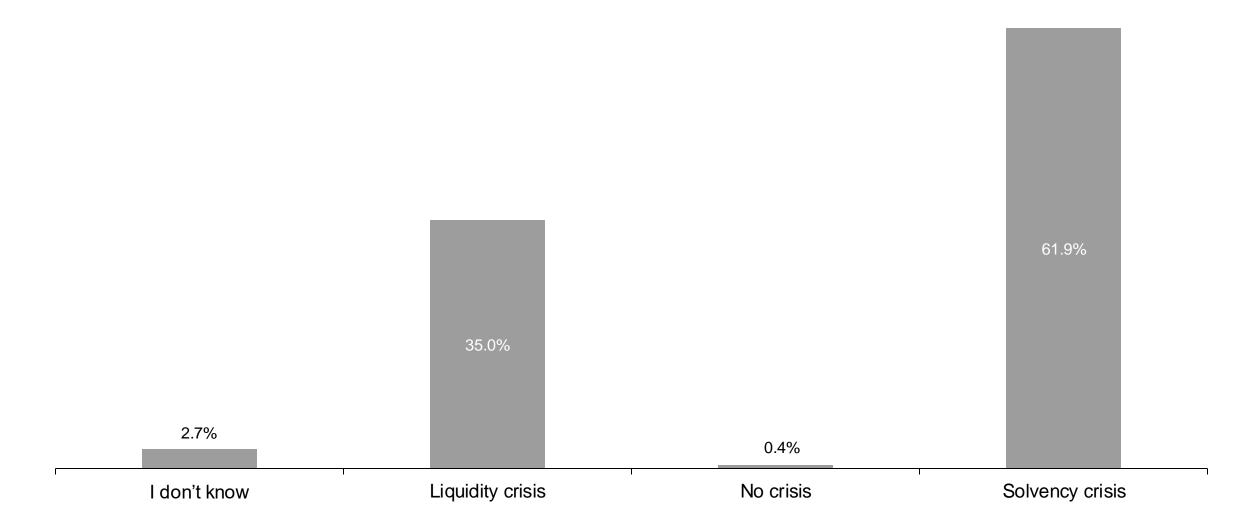






What kind of crisis are we facing?

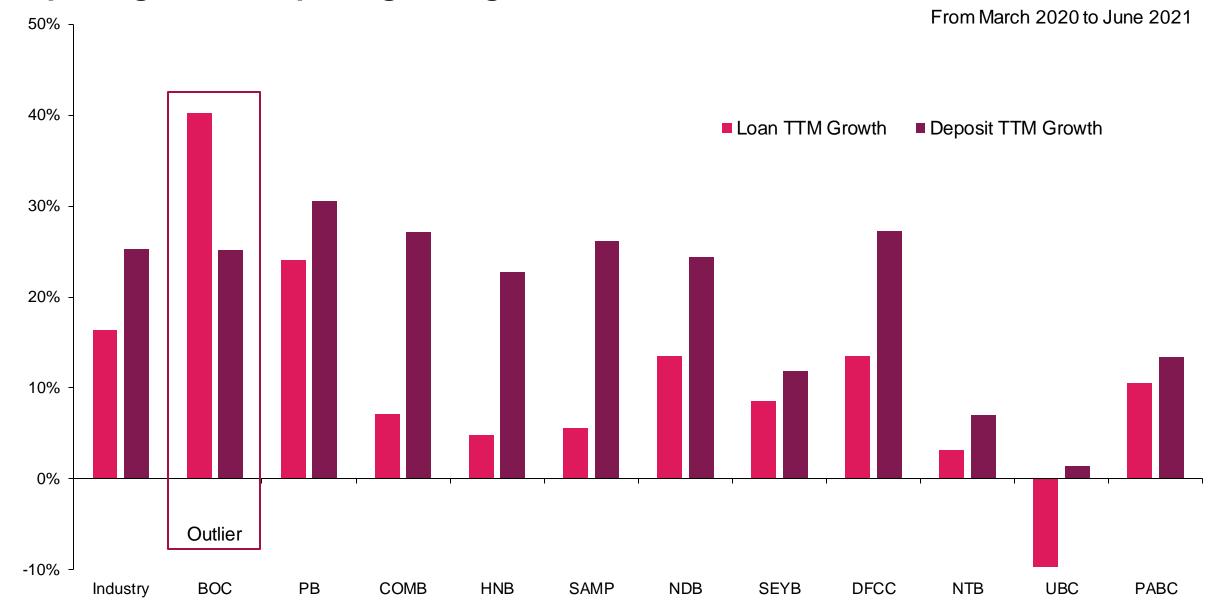
Total respondents: 395



What about the banks?



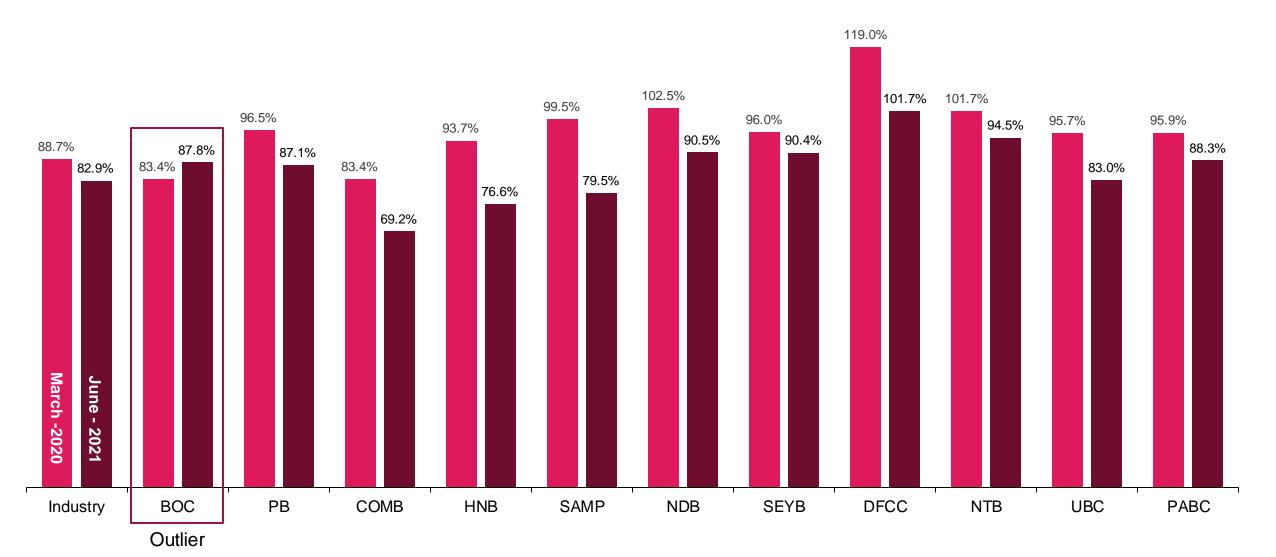
Deposit growth outpacing loan growth ...



Source: CBSL, Advocata Research



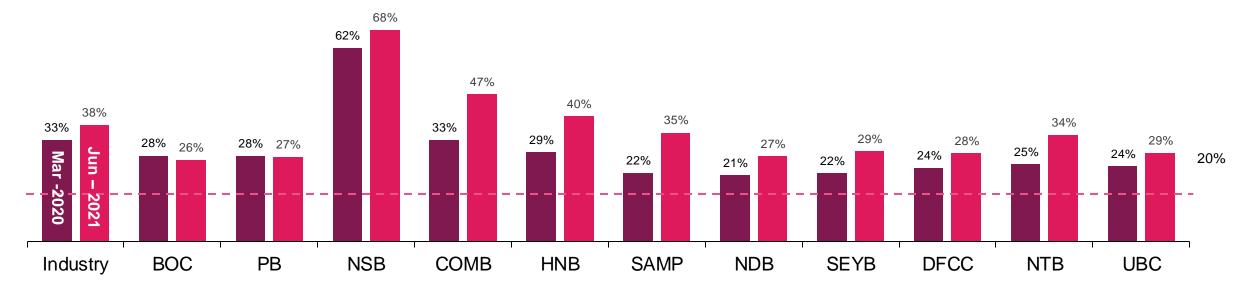
Loan to Deposit Ratios falling...less reliance on wholesale funding

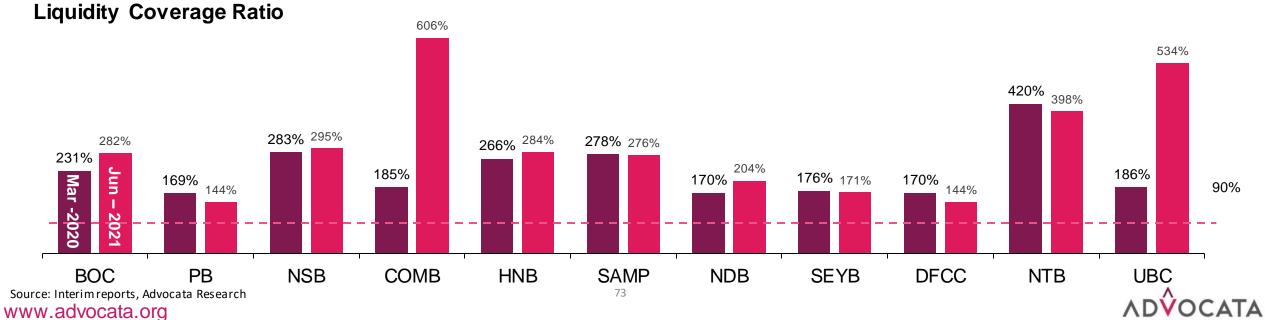




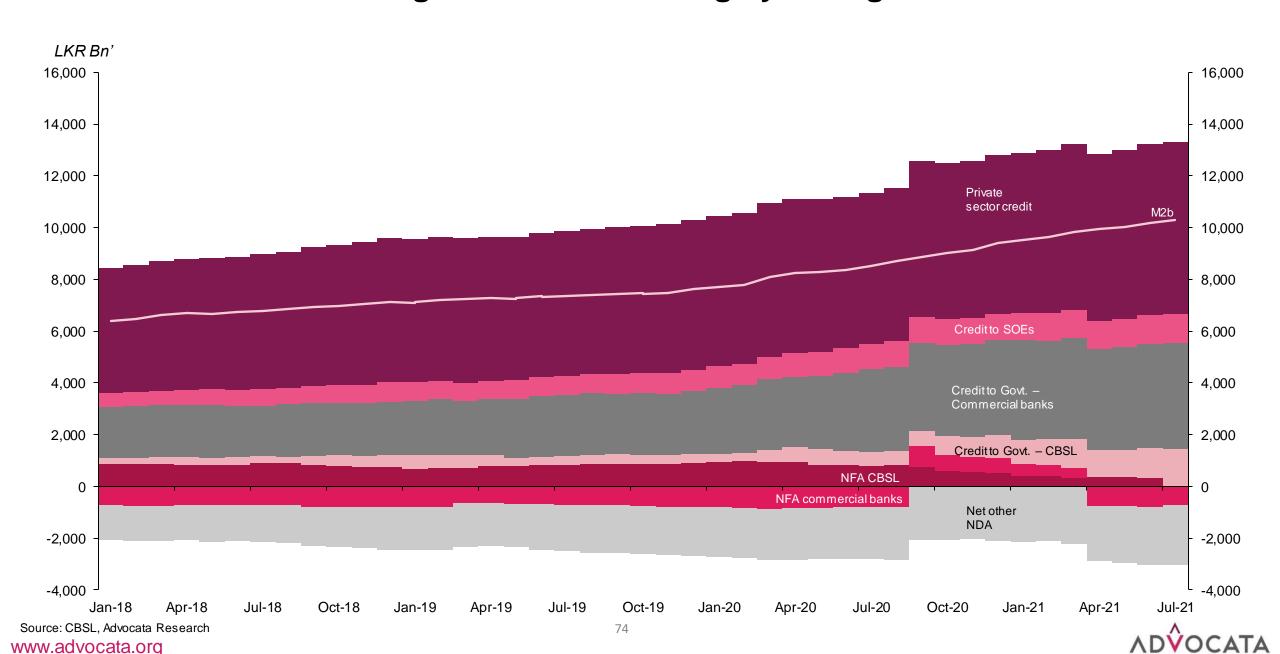
Prudential liquidity coverage well above norms...

Statutory Liquid Asset Ratio





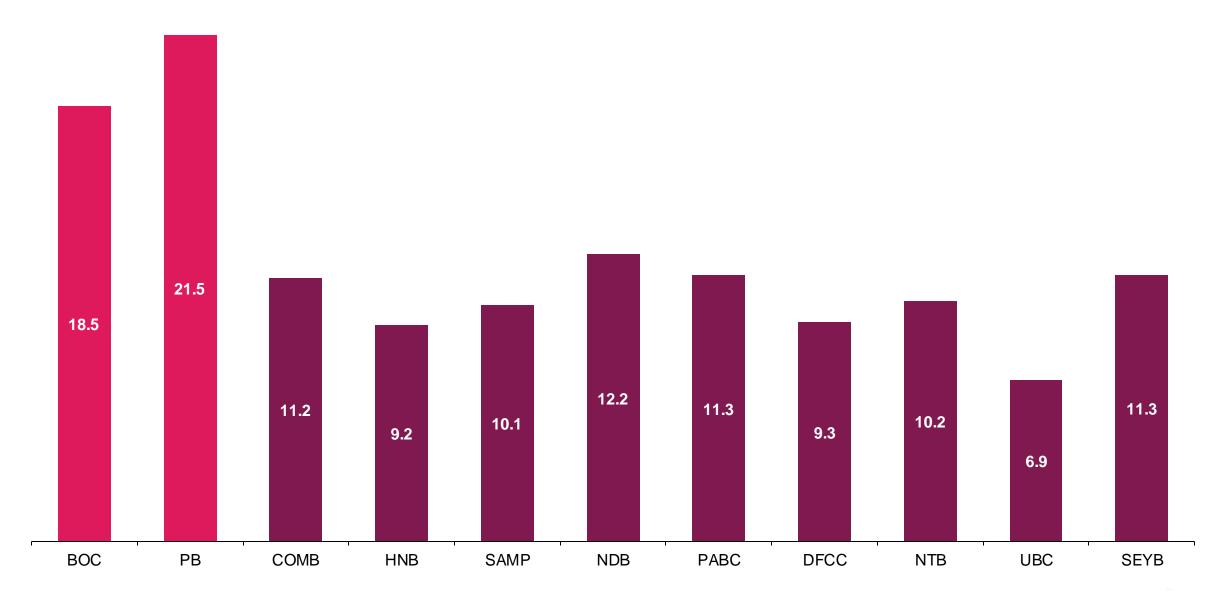
The increase in credit to government was largely through commercial banks



Reported capital adequacy ratios are at healthy levels...

30 June 2021 20% ■ Tier 1 ■ Tier 2 18% 16% 14% 12% 10% 8% 6% 4% 2% 0% + РΒ UBC BOC COMB SAMP NDB DFCC NTB **PABC** HNB **SEYB**

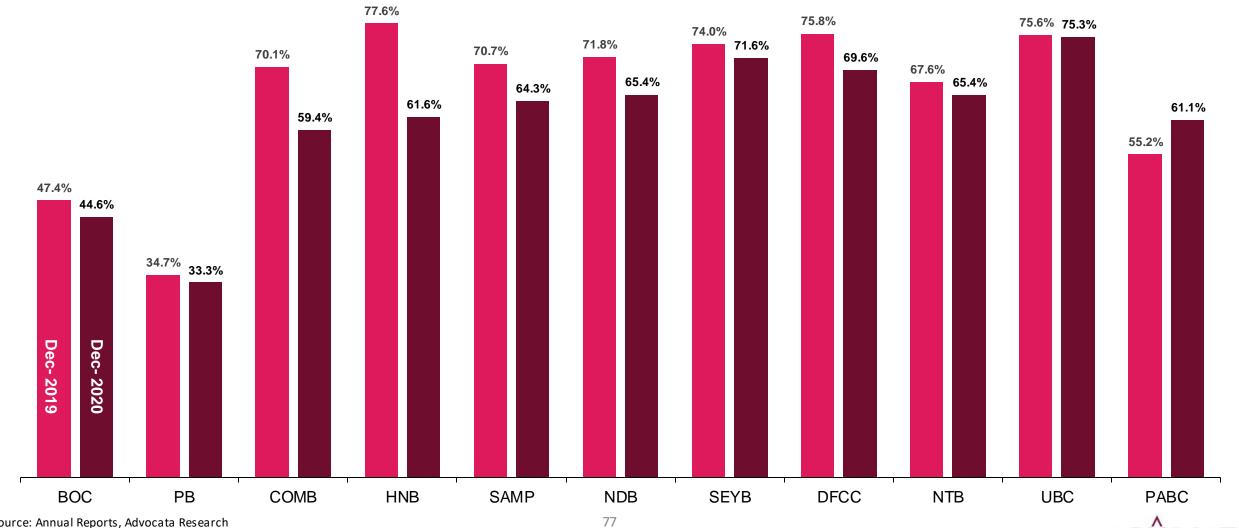






Large investment portfolio is g-secs require zero risk weighting...

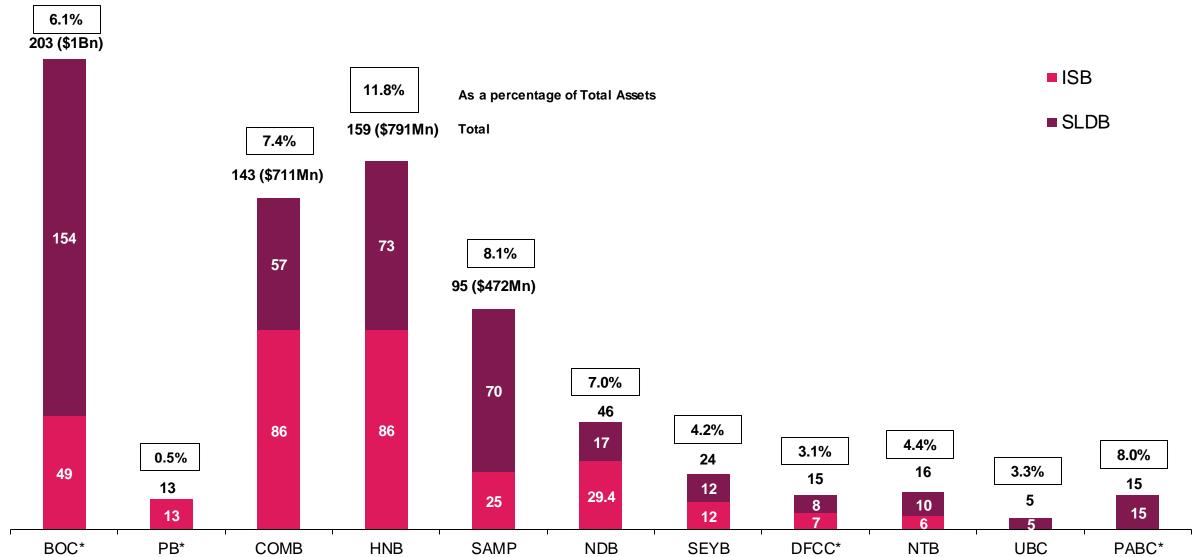
Risk-weighted assets to Total assets – Bank-wise



Source: Annual Reports, Advocata Research www.advocata.org

High exposure to dollar denominated sovereign debt...

LKR Billions 30 June 2021



^{*} As of 31 December 2020



Have these instruments been adequately provided for ?

CBSL guidance on PD and LGD

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

Total Provision = $10\% \times 20\% = 2\%$

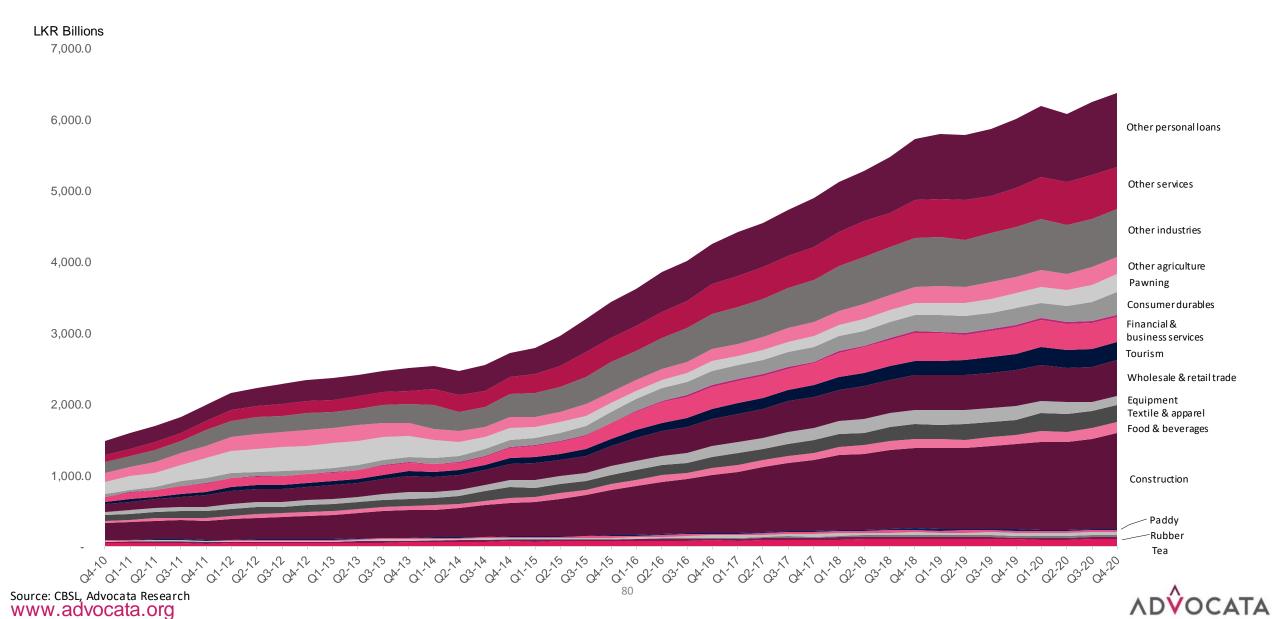
ISB prices as of 09 Sept 2021

< [25] Sri	Lanka	overeign (
Ticker	(i)	Last Price (i)	Bid Yld	Ask Yld
SRILAN 7.55 03	3/28/30	65.60	14.9299	14.602
SRILAN 7.85 03	3/14/29	65.65	16.0377	15.6335
SRILAN 6 3/4 0	4/18/28	65.70	15.363	14.9373
SRILAN 6.2 05/11/27		65.87	15.6879	15.2252
SRILAN 6.825	07/18/26	66.80	17.4635	16.9066
SRILAN 6.85 11/03/25		67.94	18.5276	17.8714
SRILAN 6 1/8 06/03/25		67.98	18.7244	18.0063
SRILAN 6.35 06/28/24		68.51	22.4505	21.6028
SRILAN 6.85 03/14/24		68.48	24.9317	23.900
SRILAN 5 3/4 04/18/23		70.44	31.2405	29.6506
SRILAN 5 7/8 07/25/22		78.17	38.995	36.221
SRILAN 5 3/4 01/18/22		87.62	49.9945	43.6656
SRILAN 6 1/4 0	7/27/21			



Where did the credit flow ...

Commercial Bank Loans and Advances to the Private Sector



A significant portion of private sector credit has been flowing to the construction sector...





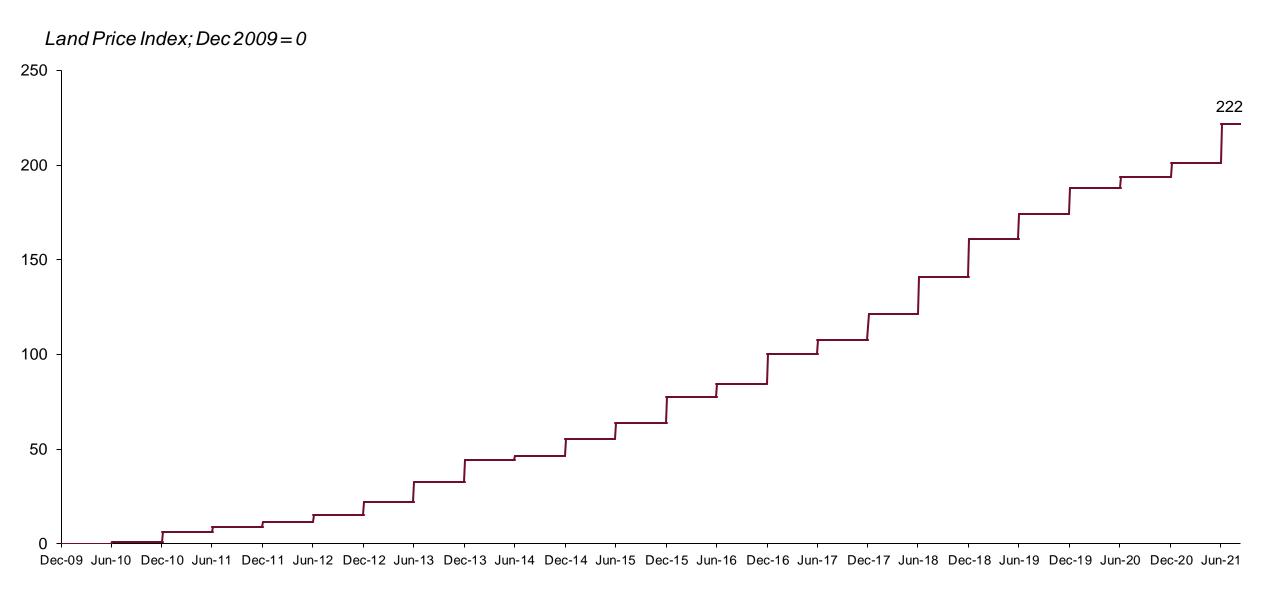








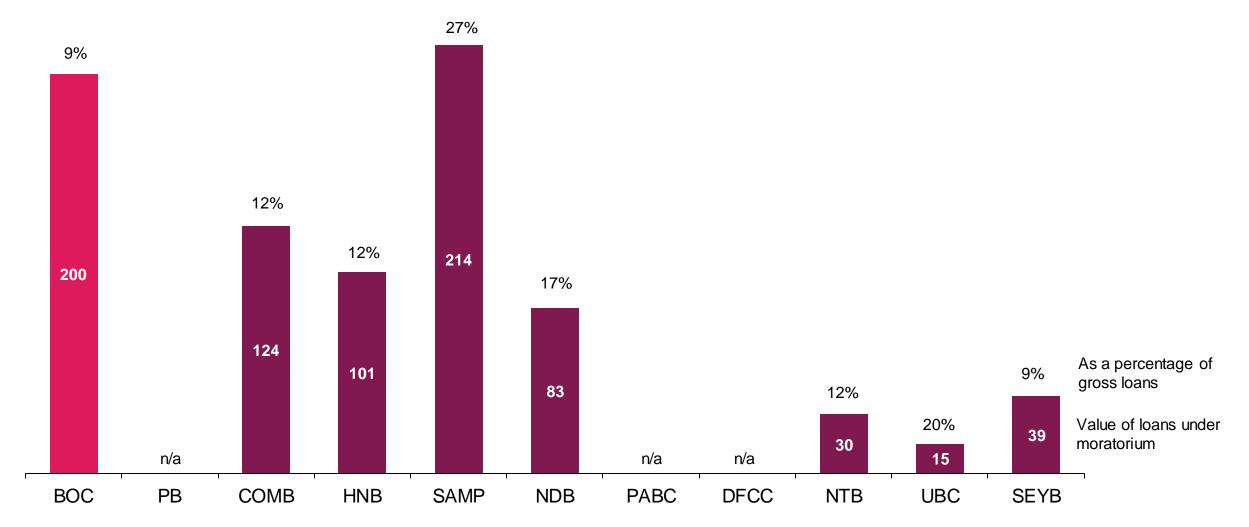
Colombo District Land Prices have gone up by 222% since December 2009





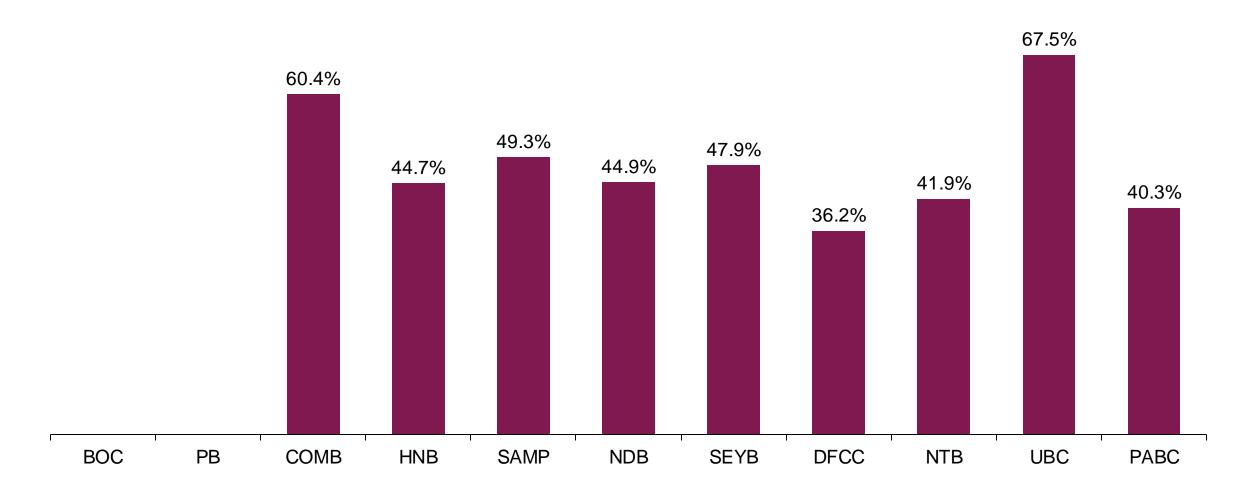
Moratorium loans...big numbers...how much more needs to be impaired?

LKR Billions 30 June 2021





Stock market seems to be anticipating significant capital erosion...



Price to Book Value as of 07 September 2021



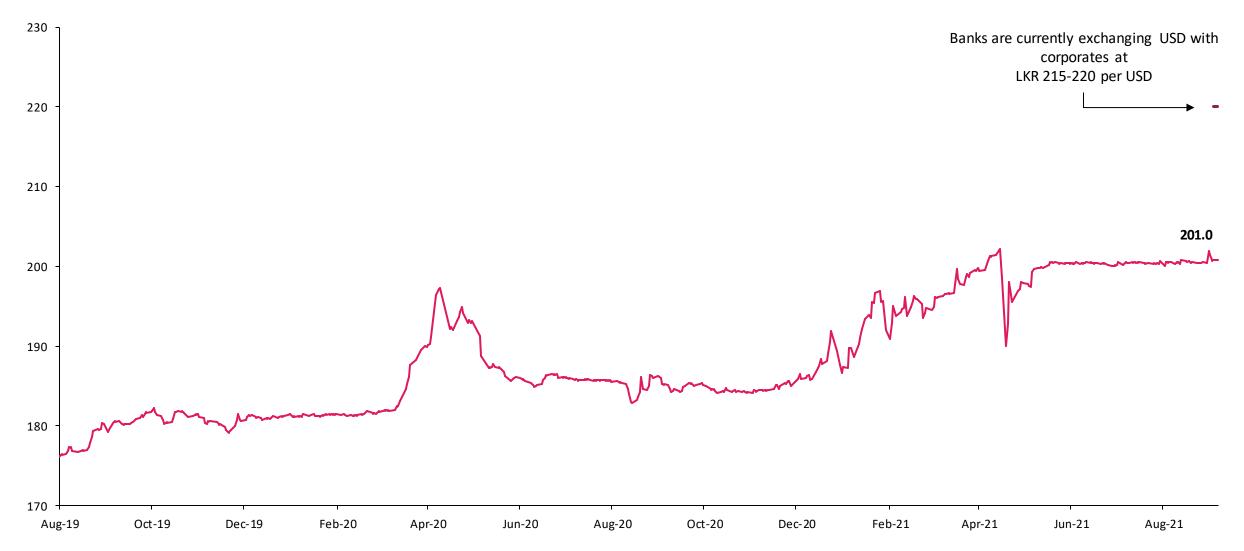
What's going on with the exchange rate



The currency deteriorated 7.55% YTD

As CBSL is managing the USD/LKR at 200 levels

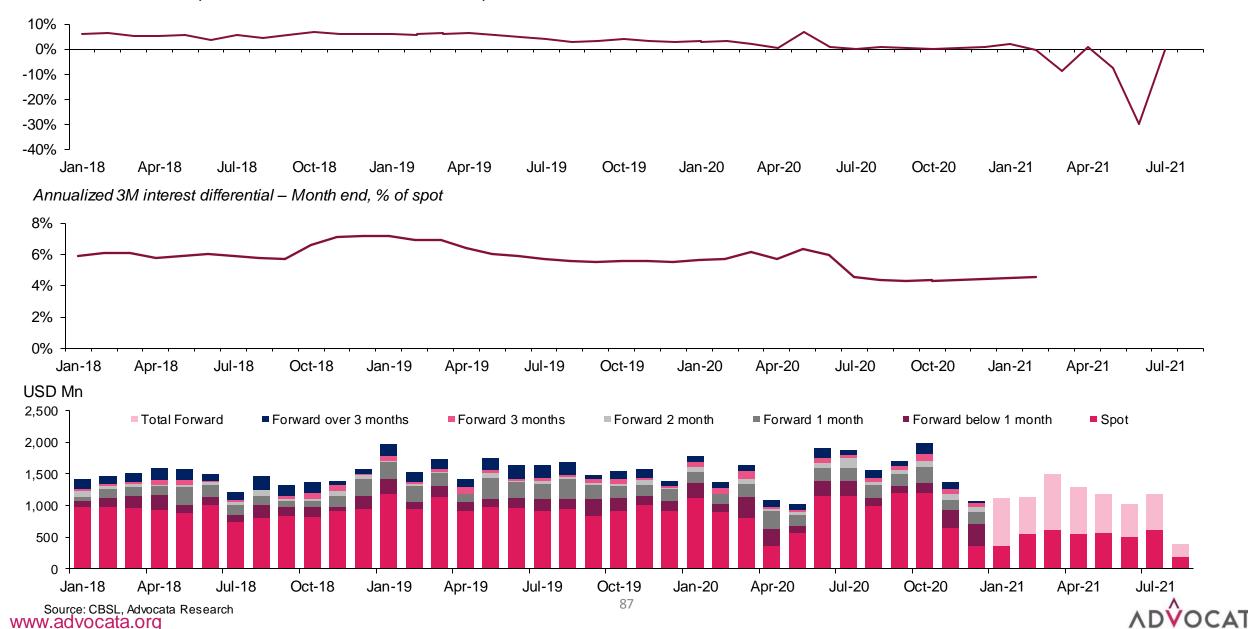
USD/LKR average buying and selling rate



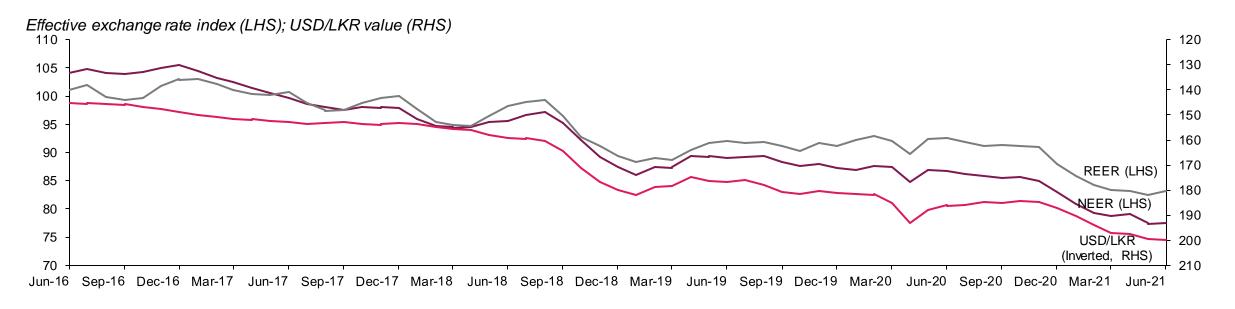


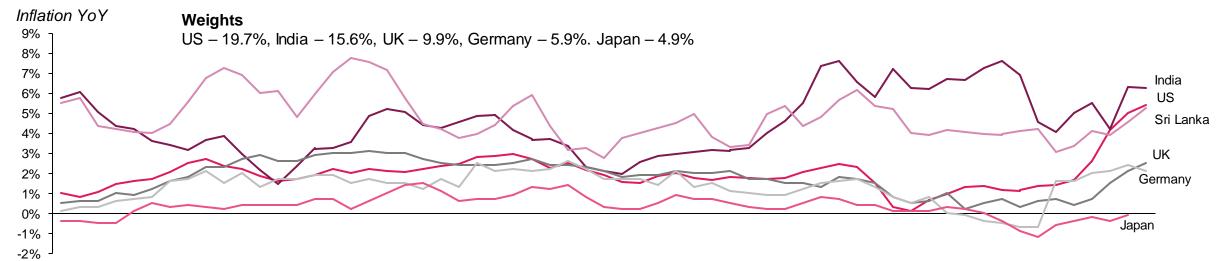
Forward Premium, Interest Differential and Forward Volume

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



REER depreciated 9.5% since the end of 2019





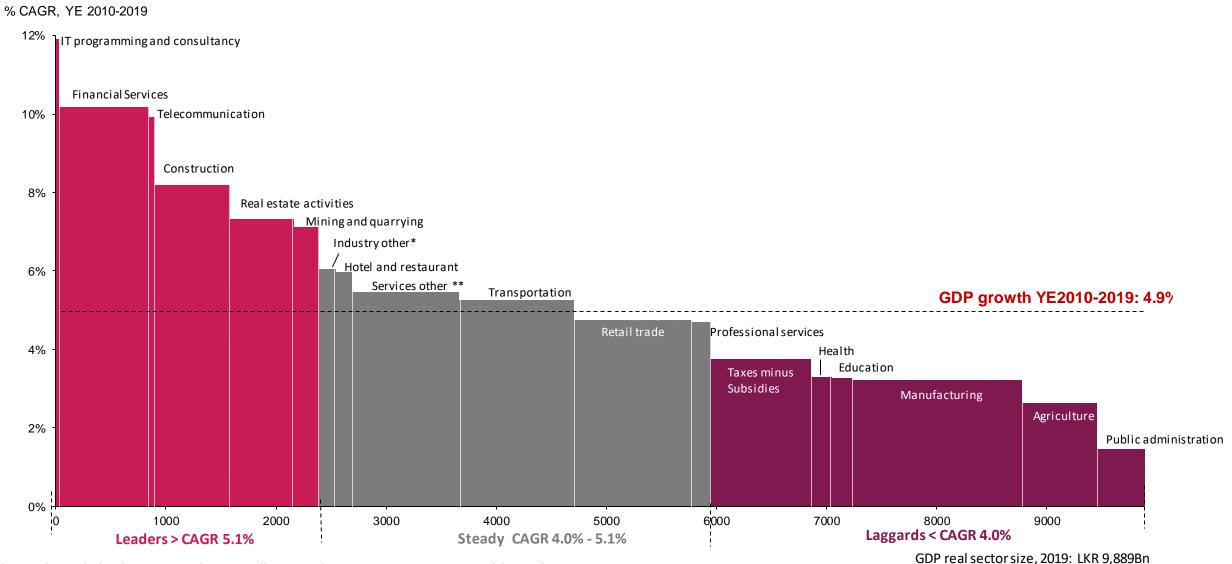
Jun-16 Sep-16 Dec-16 Mar-17 Jun-17 Sep-17 Dec-17 Mar-18 Jun-18 Sep-18 Dec-18 Mar-19 Jun-19 Sep-19 Dec-19 Mar-20 Jun-20 Sep-20 Dec-20 Mar-21 Jun-21



What drove growth in the past cannot drive growth in the future



Sectors driving growth in the last nine years were largely non-tradeable

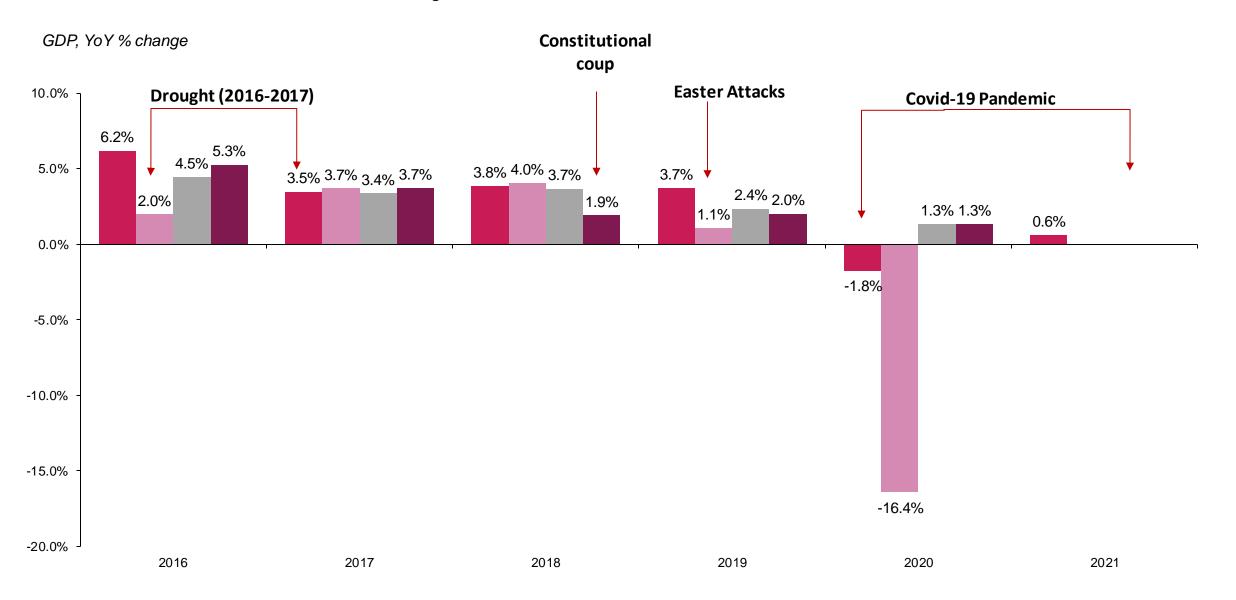


^{*}Industry other Includes electricity supply, water collection and sewerage waste treatment and disposal



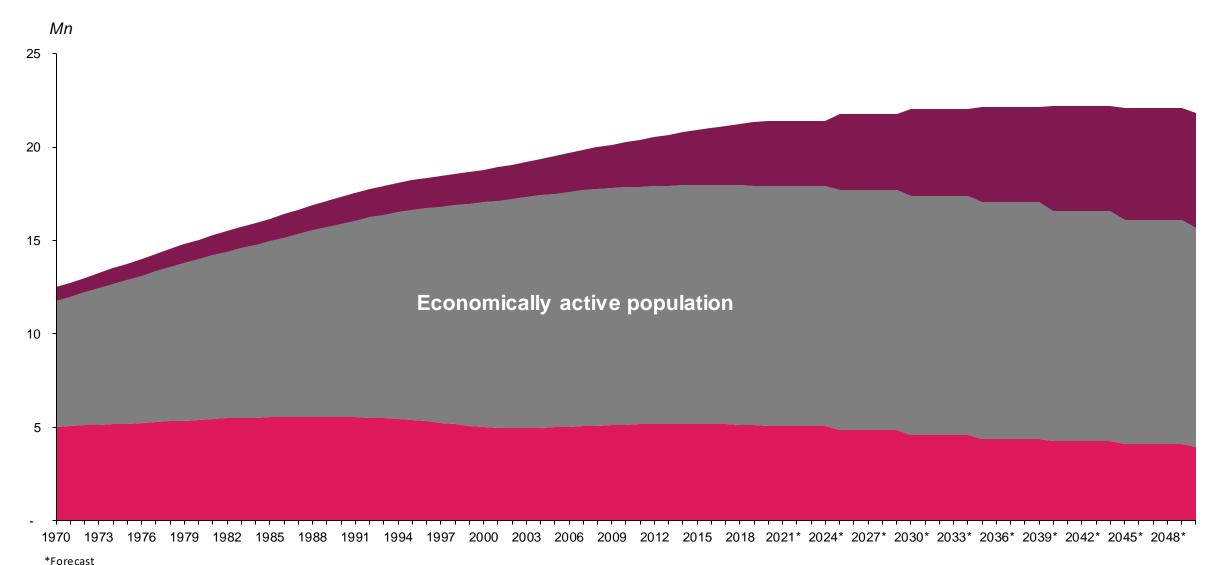
^{**}Services other includes postal and courier activities, programming and broadcasting and other personal service activities Source: Central Bank of Sri Lanka, Advocata Research

Sri Lanka has had four major shocks





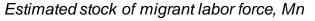
Economically active population grew due to demographic transition

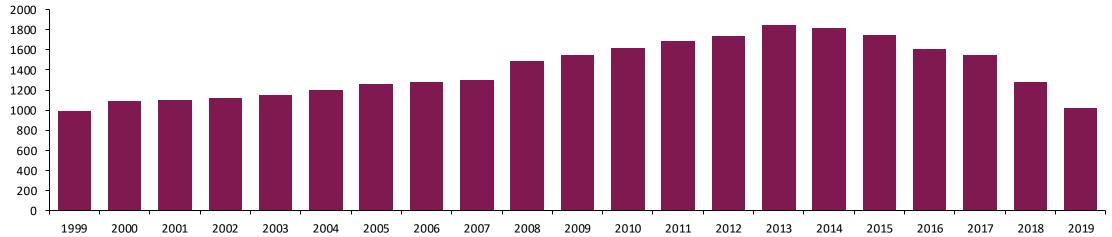


Source: UN: Department of Economic and Social Affairs, Advocata Research

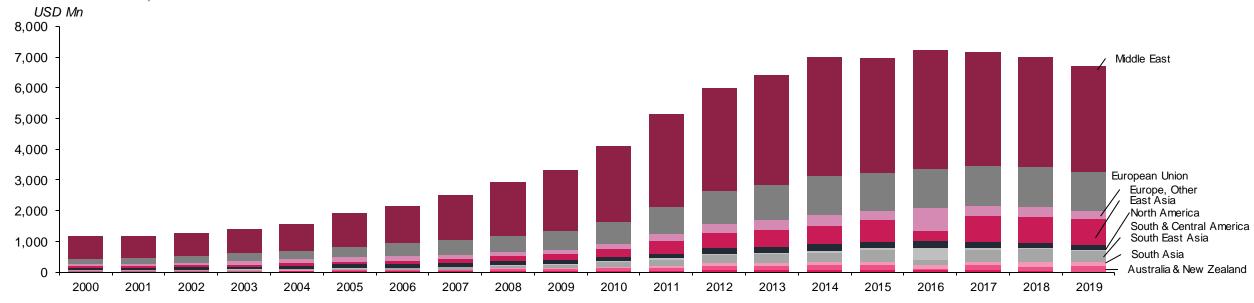


Migrant labor force increased, bringing in remittances





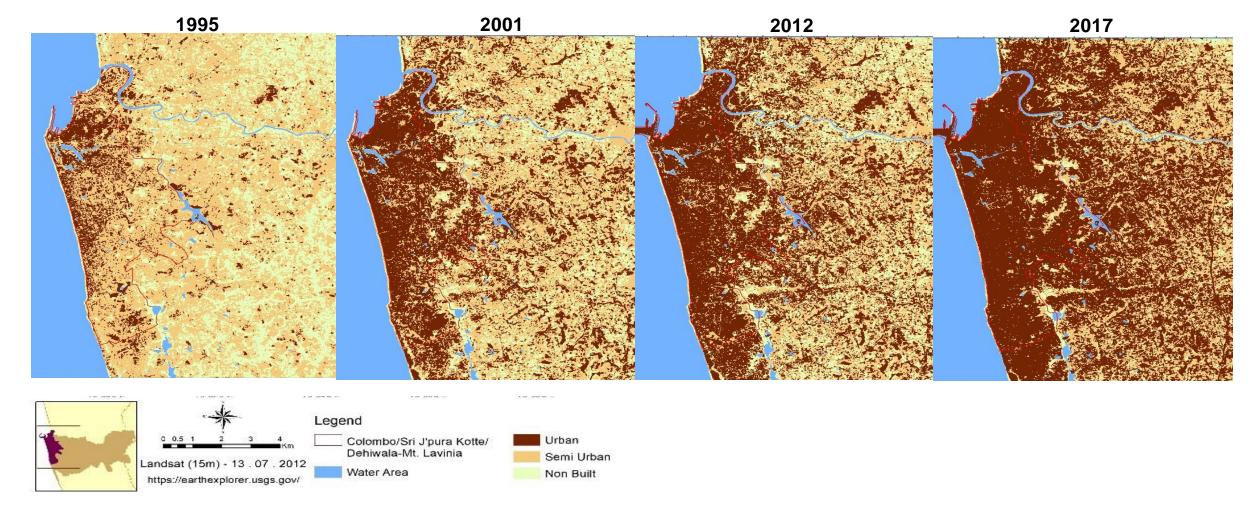
Remittances,





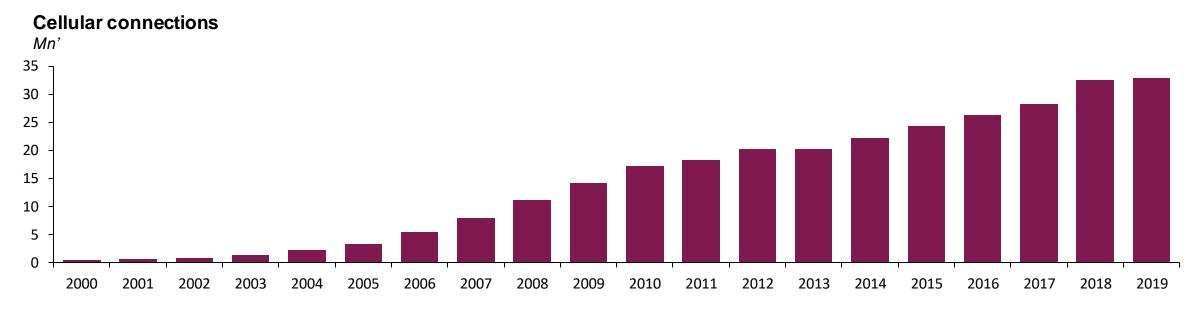
Spatial transformation of urban centers drove agglomeration efficiencies

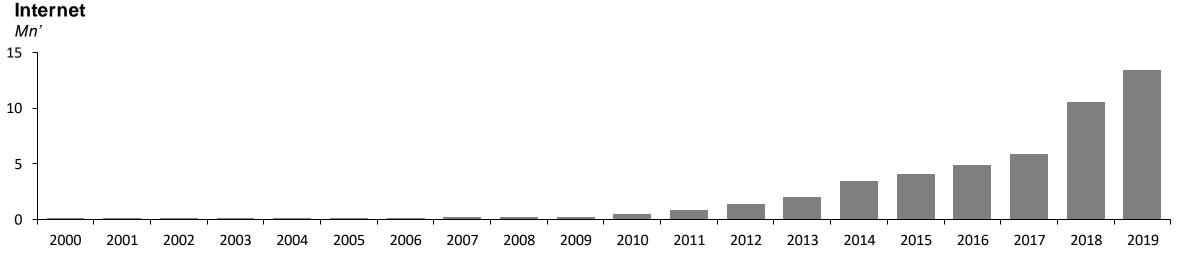
Colombo Urban Area





Cellular phones and internet penetration grew

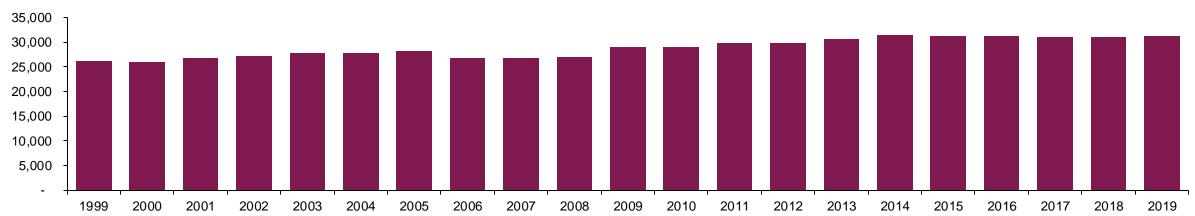




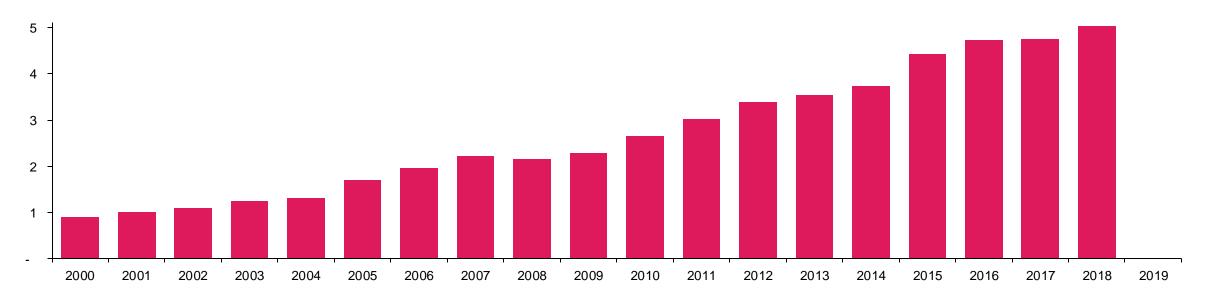


Vehicle population grew improving mobility

Transport road network, km'



Motor vehicles all island, Mn'

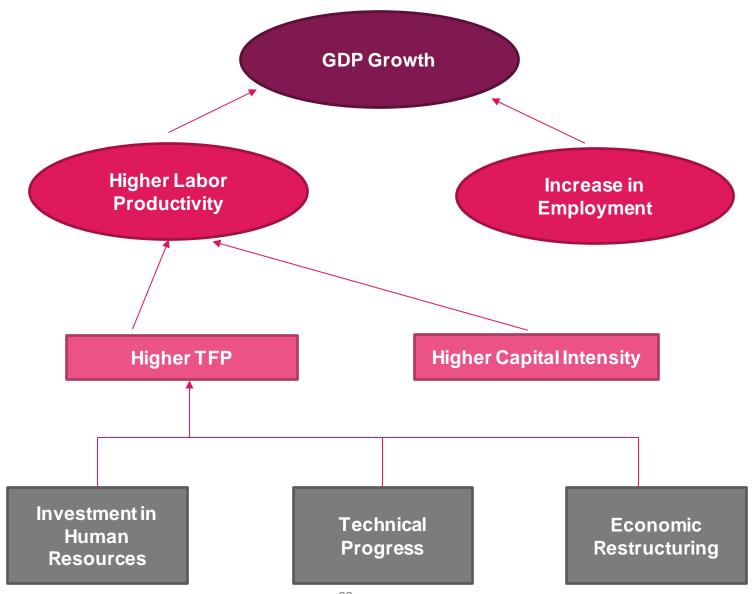




Economic Growth



How economic growth happens





Profit Equation

$$Profit = \frac{\sum Price_{Output}}{\sum Price_{Input}} x \frac{\sum Output}{\sum Input}$$

Price Recovery

What drives **Price Recovery**?

- Inflation
- Low contestability
- Product and factor market rigidities

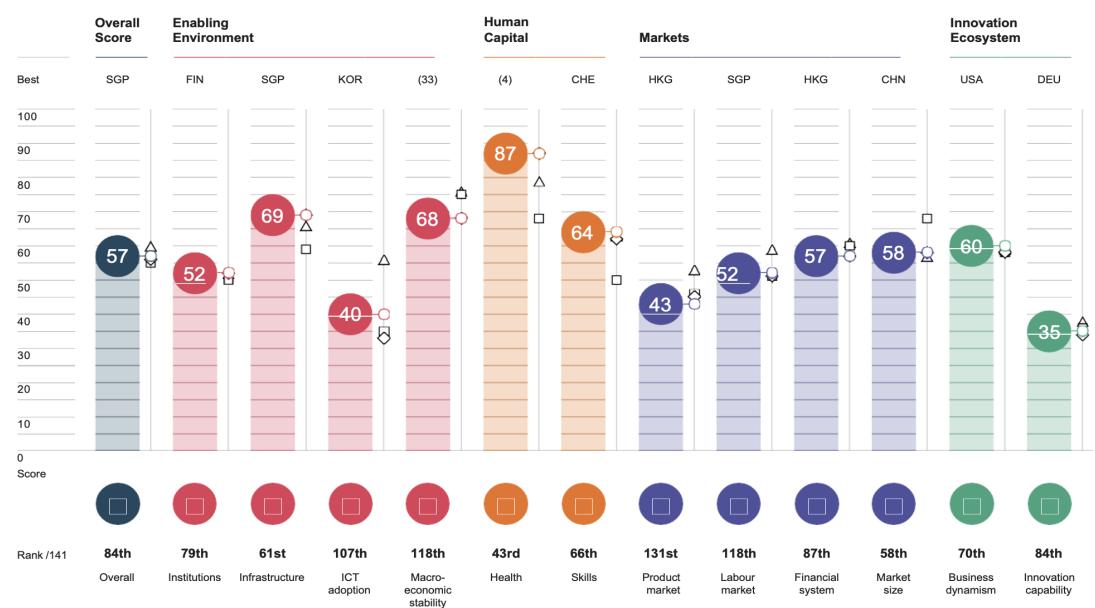
Productivity

What drives **Productivity**?

- Competition
- Innovation
- Technology
- Skills upgrading
- Business transformation

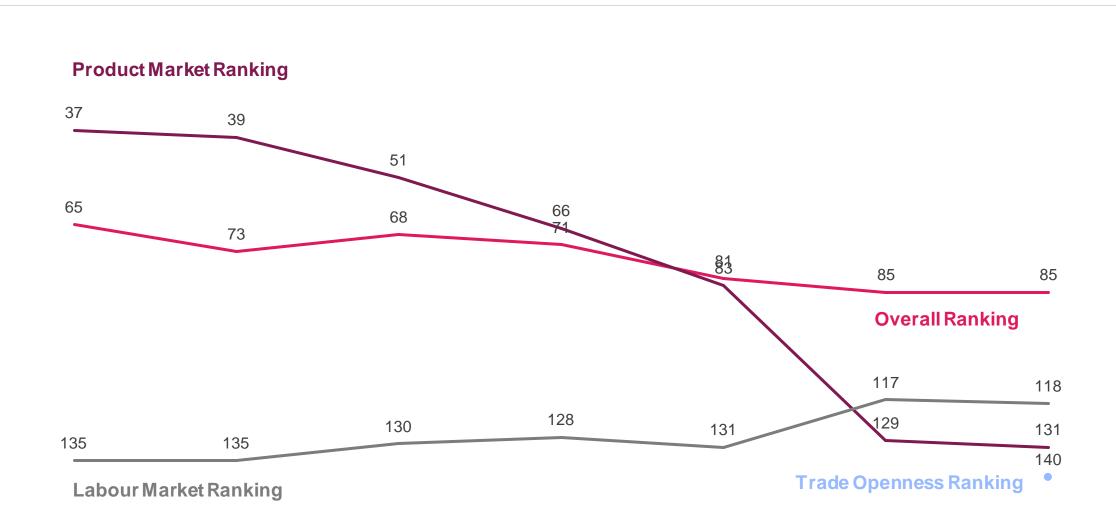


Sri Lanka ranks 84th in the Global Competitiveness Index 2019





Sri Lanka's competitiveness ranking has been declining

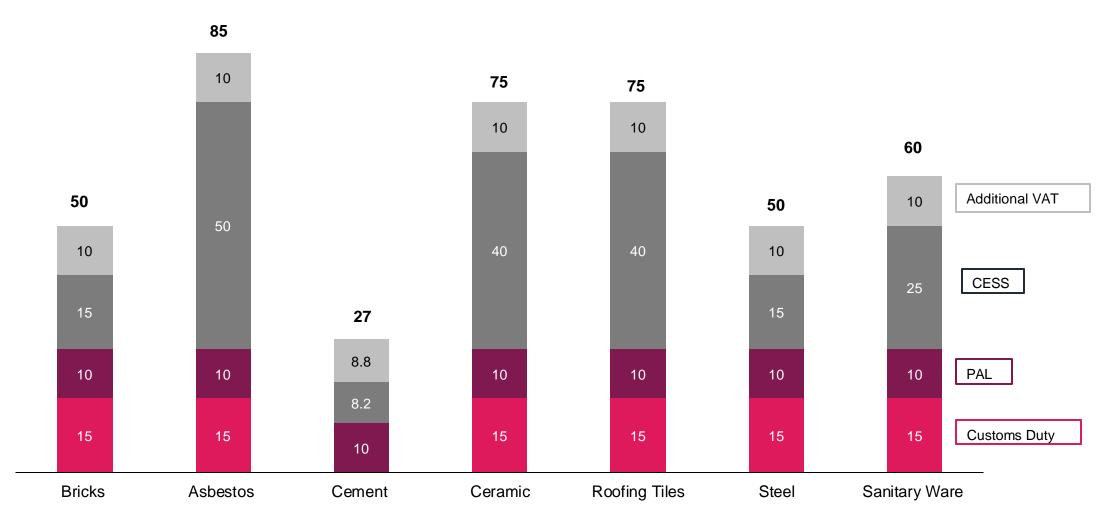




Border protection on a selected construction material

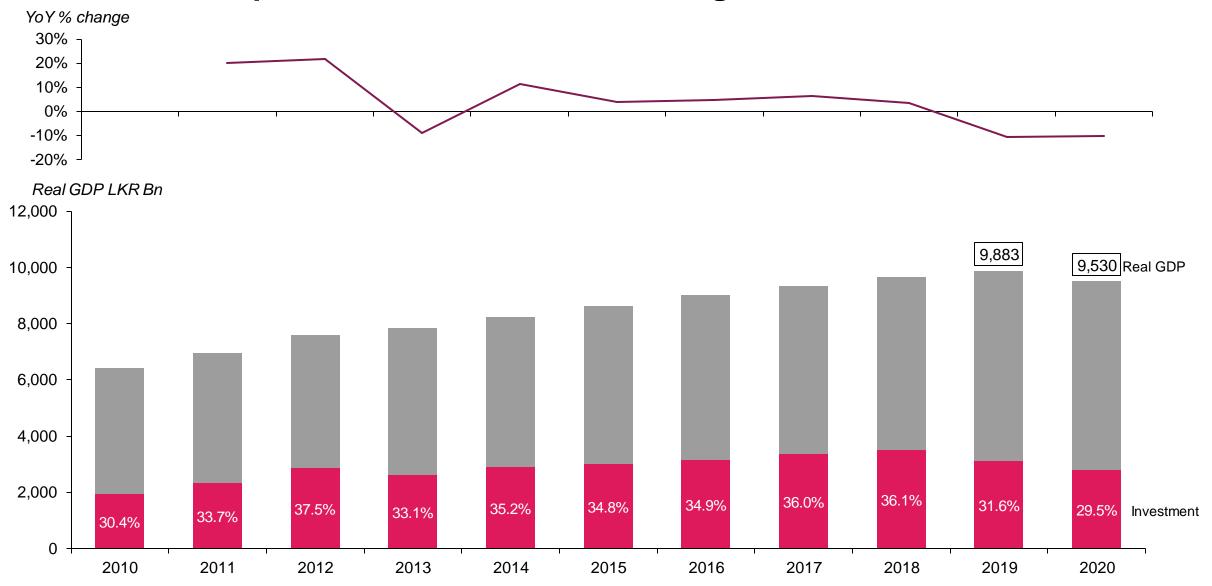
Total tariffs on construction material

%



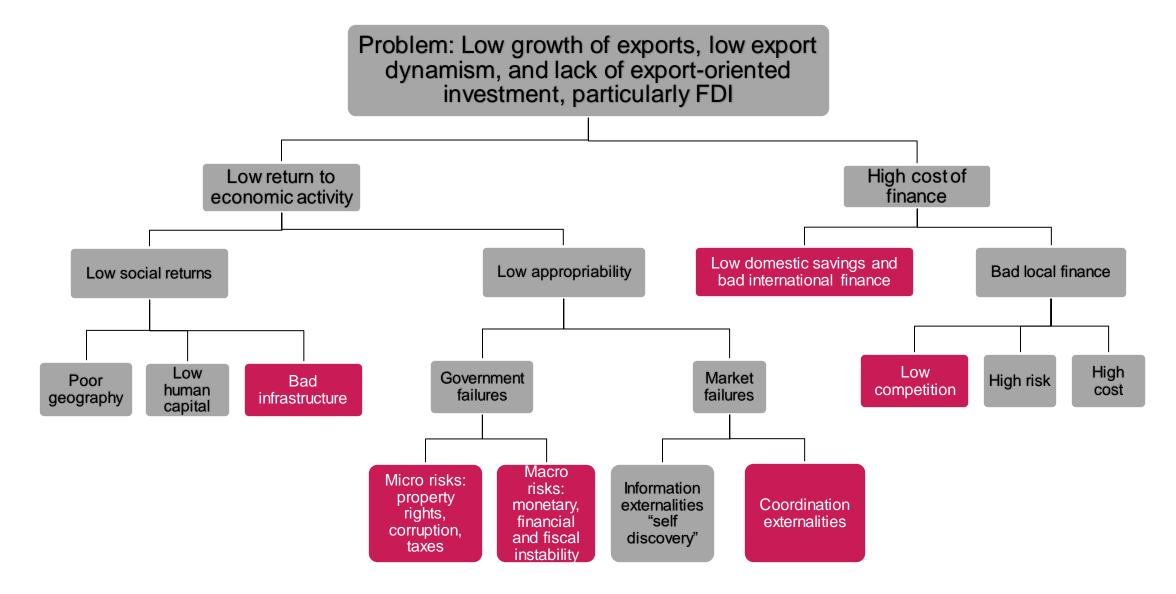


Investment component of GDP has been falling since 2018





Growth diagnostic framework





Key constraints that bind investment in new and non-traditional export industries

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

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

- **Transport project** a comprehensive strategy to manage congestion and help safeguard continued economic growth in the rapidly urbanizing Colombo Metropolitan Region. Improving regional connectivity between one of the poorest regions of the country and markets and ports, boosting the rural economy and facilitating labor mobility.
- Land project improved documentation of land rights and will ease the process of making land transactions through improved land information systems



Sri Lanka has many holidays

■ Would You Work Holidays?

2022 Calendar

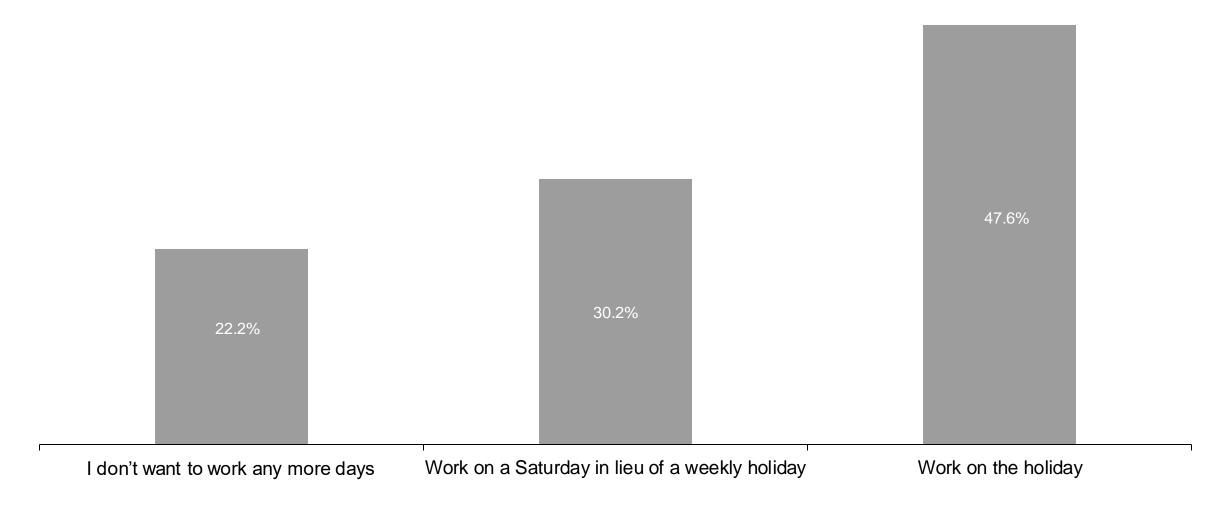
National Holidays	Religious Holidays
4 th Feb - Independence Day	14 Jan - Tamil Thai Pongal Day
13 th Apr - Sinhala & Tamil New Year	17 Jan - Poya Day
14 th Apr - Sinhala & Tamil New Year	16 th Feb - Poya Day
1st May - May Day	1st Mar - Mahasivarathri Day
	17 th Mar - Poya Day
	15th Apr - Good Friday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





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

Total respondents: 288



Productivity



Big business































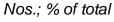
Small business





Most people are engaged in Micro, small and medium enterprises

A significant proportion of all establishments are MSMEs

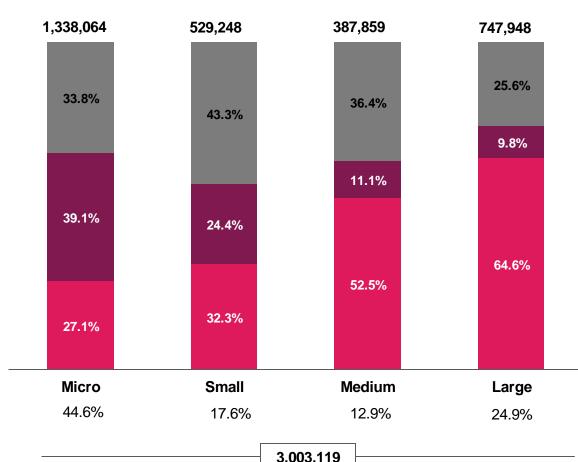




MSMEs generate 75% of total employment

Nos.; % of total

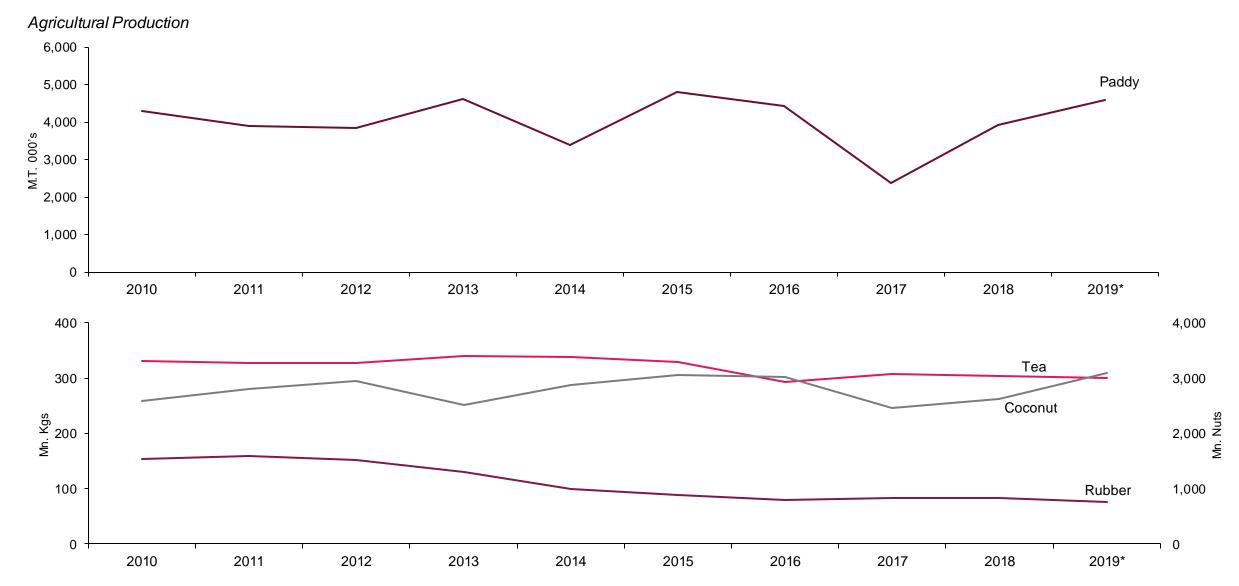
Employment



3,003,119



Agricultural production levels expected to decline in 2021...



*Note: 2019 data (provisional)

Source: Economic & Social Statistics of Sri Lanka

Agricultural crop productivity

Coconut

Arable land (2014) - 20.6%

Domestic production (Mn. nuts.) - 3,086

Domestic consumption (Mn. nuts.) - 1,807

Avg. nuts/tree/year - 65

Best practice nuts/tree/year - 100

Paddy

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

Rubber

Arable land (2014) - 12.2%

Domestic production (Mn. Kg.) - 75

Domestic usage (Mn. Kg.) - 58.6

Average yield (Ha. Kg.) - 800

Best practice (Ha. Kg.) - 2,000

Tea

Arable land (2014) - 10.7%

Domestic production (Mn. Kgs.) - 300

Exports volume (Mn. Kgs.) - 293

Export value (LKR. Mn.) - 240,637

Average yield (Ha. Kg.) - 800-850

Best practice (Ha. Kg.) - 2,500

Dairy

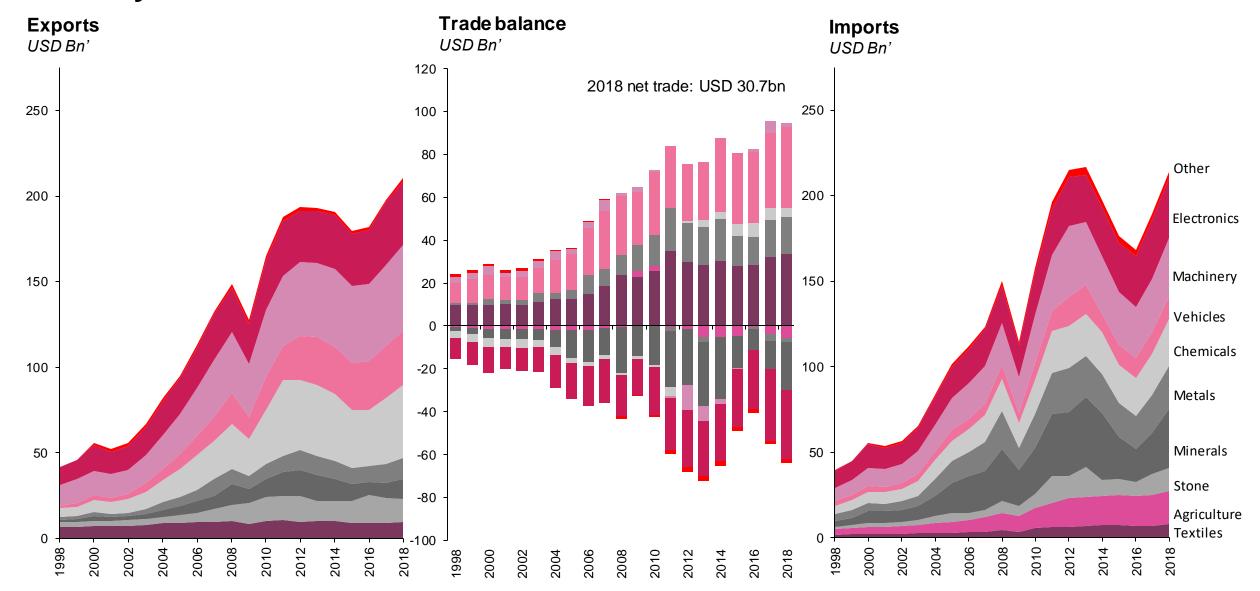
Number of milking cows – **415,280**Fresh milk production (*Liters. Mn.*) - **448**Avg. milk production (*Liters/cow/day*) - **5**Best practice (*Liters/cow/day*) - **25**



Exports

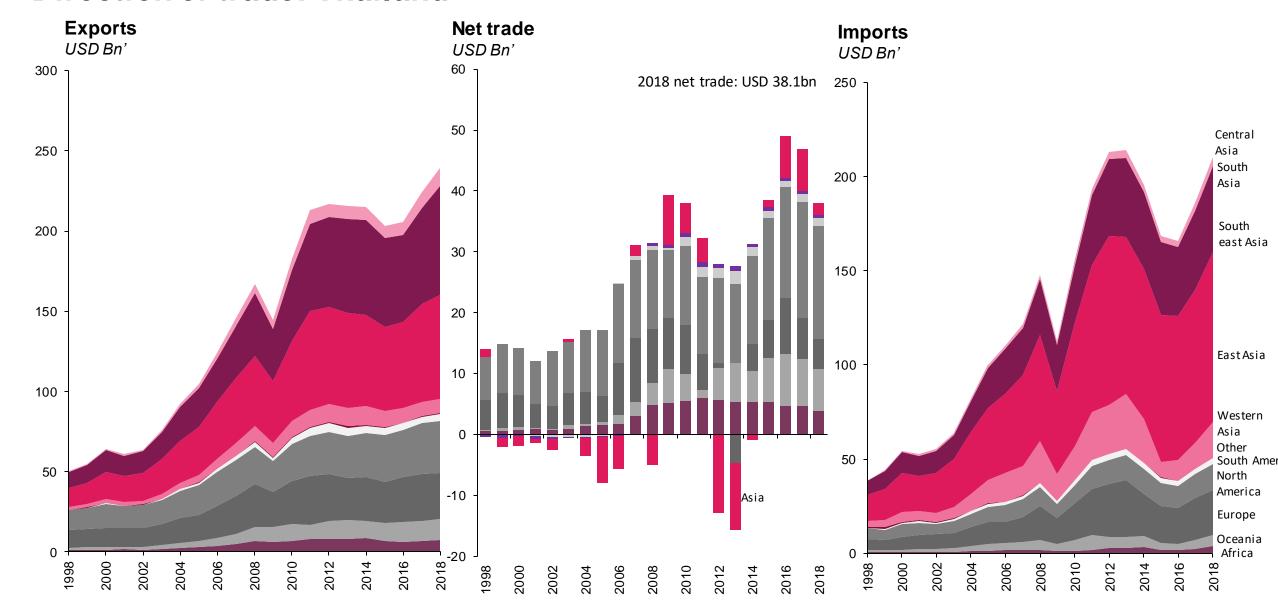


Trade dynamics: Thailand



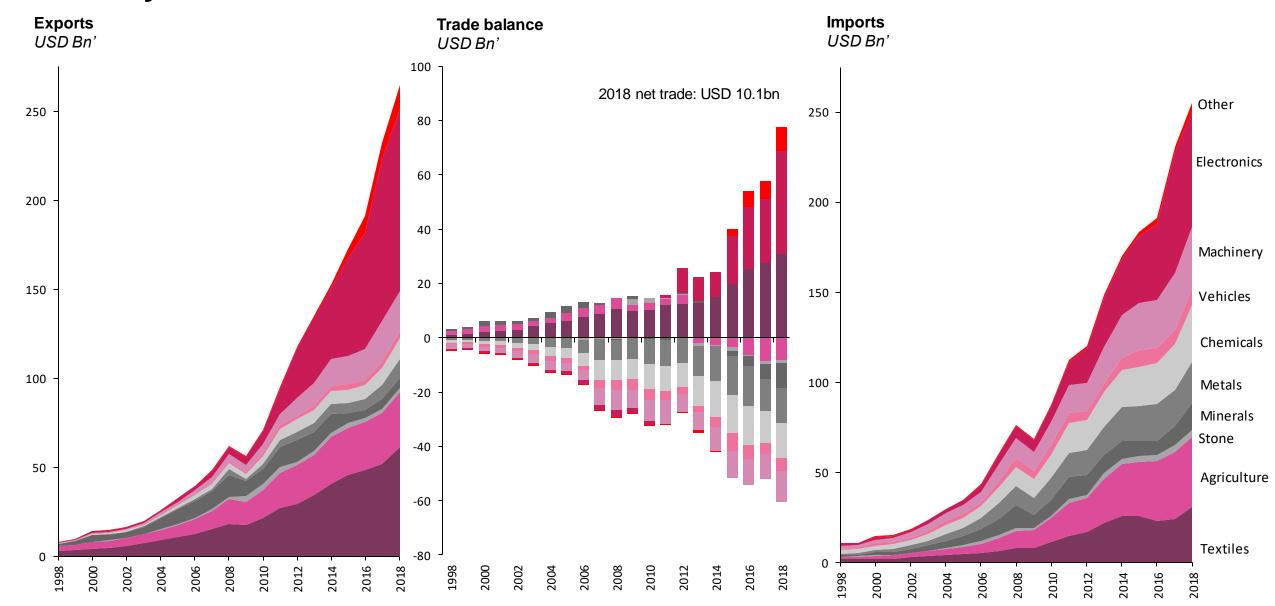


Direction of trade: Thailand



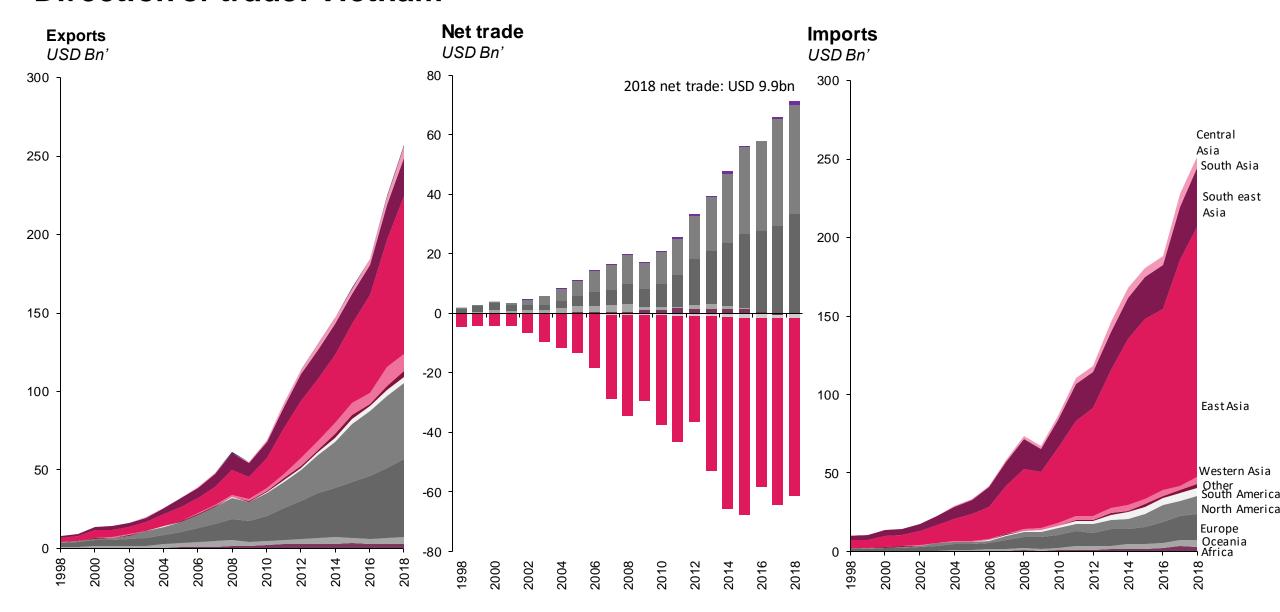


Trade dynamics: Vietnam



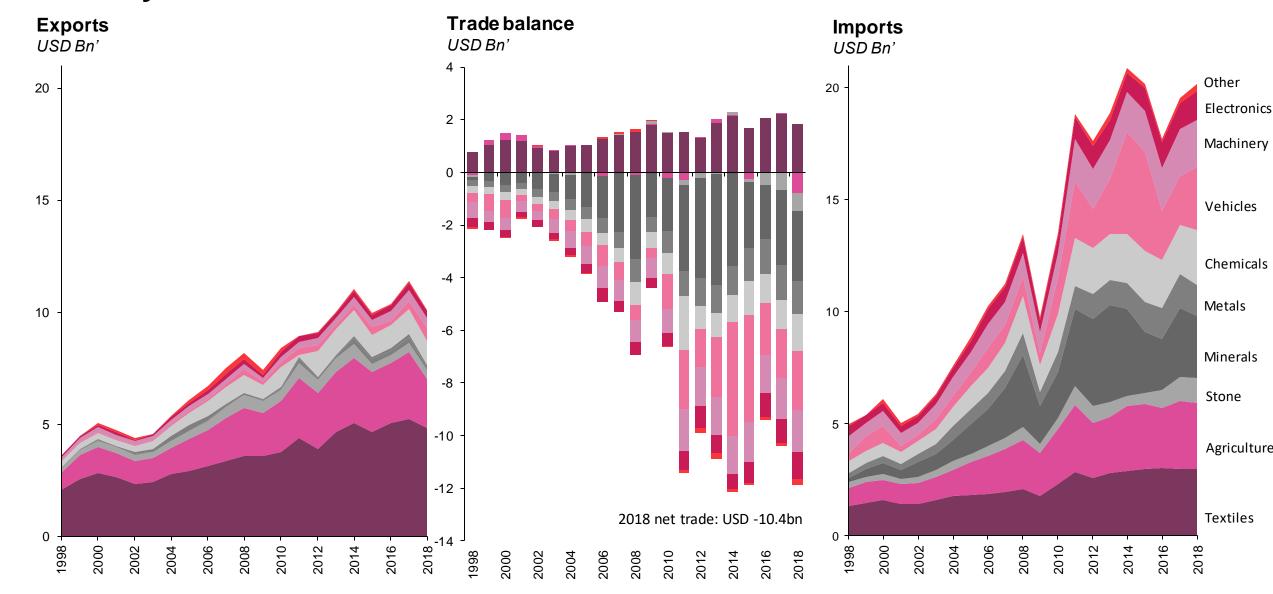


Direction of trade: Vietnam



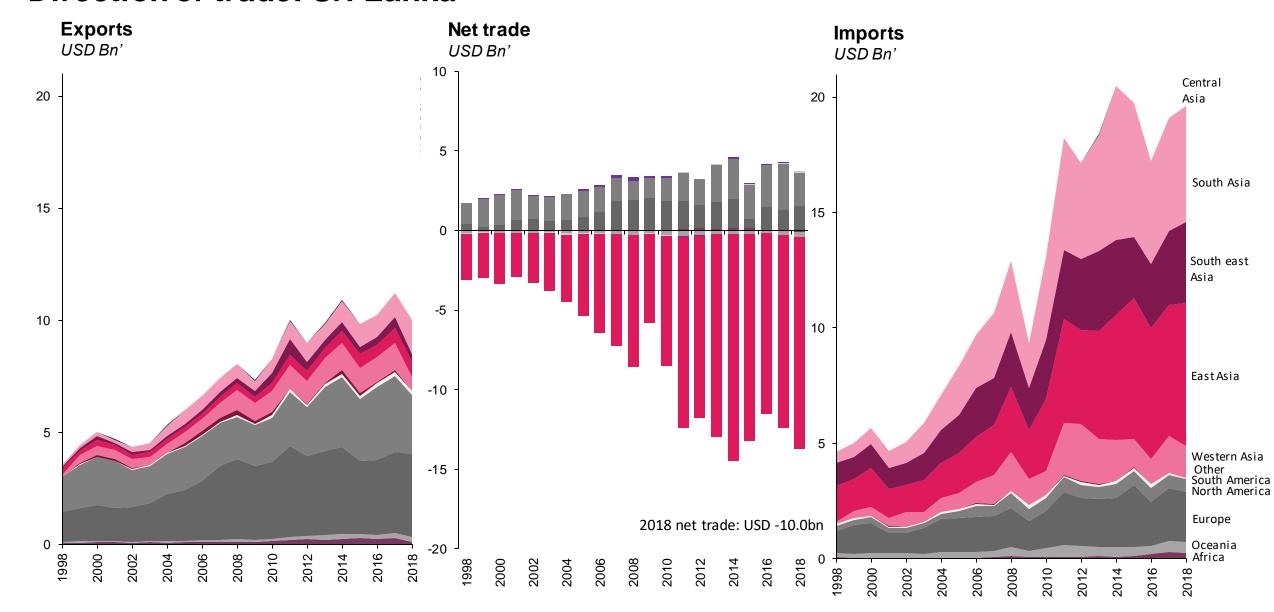


Trade dynamics: Sri Lanka



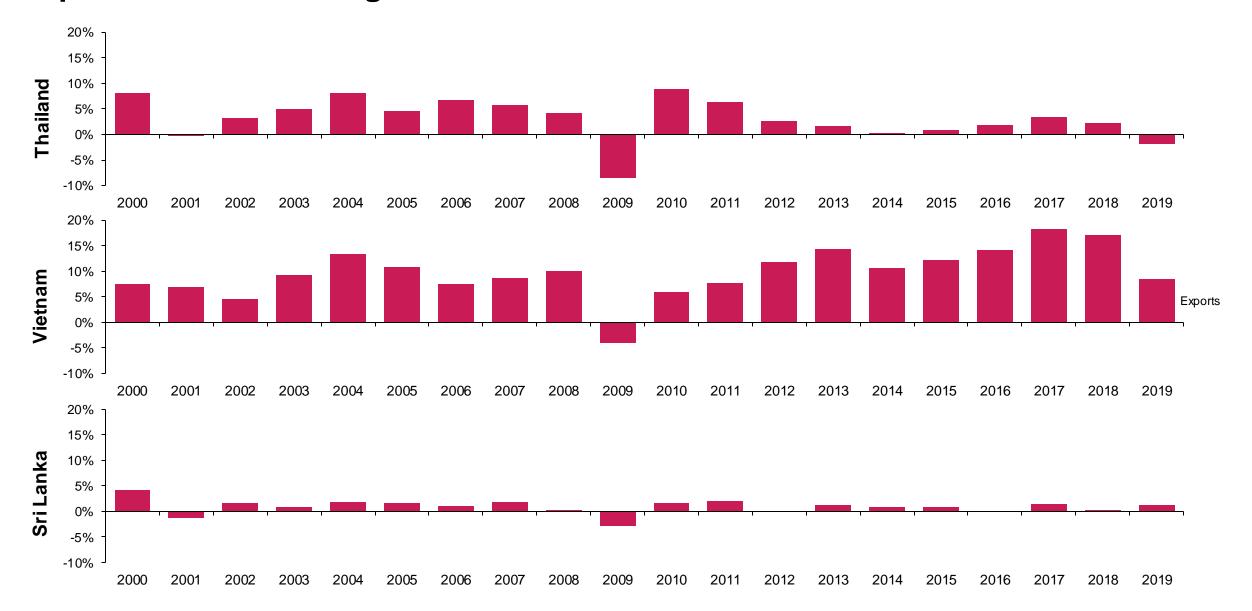


Direction of trade: Sri Lanka





Export contribution to growth





In other countries, diversification results in a direct boost to incomes

New Export products, 2000-2015

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

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



Tourism statistics

	2015	2016	2017	2018	2019
Tourist arrivals	1,798,380	2,050,832	2,116,407	2,333,796	1,913,702
Guest nights	10.1	10.2	10.9	10.8	10.4
Spend per night	164.1	168.2	170.1	173.8	181.2
	2,980,652,996	3,518,489,412	3,924,009,055	4,380,628,444	3,606,333,145
Tourism Receipts from BPM6	2,980,652,996	3,518,489,412	3,924,931,808	4,380,682,444	3,606,930,220
Tourism Outflows	1,419,630,004	1,541,775,446	1,598,801,300	1,660,000,000	1,638,000,000
Net Tourism Receipts	1,561,022,992	1,976,713,966	2,326,130,508	2,720,682,444	1,968,930,220

Should we go to the IMF?



Dr. Ahluwalia's advice about going to the IMF



https://youtu.be/FOkAkmeUmfk

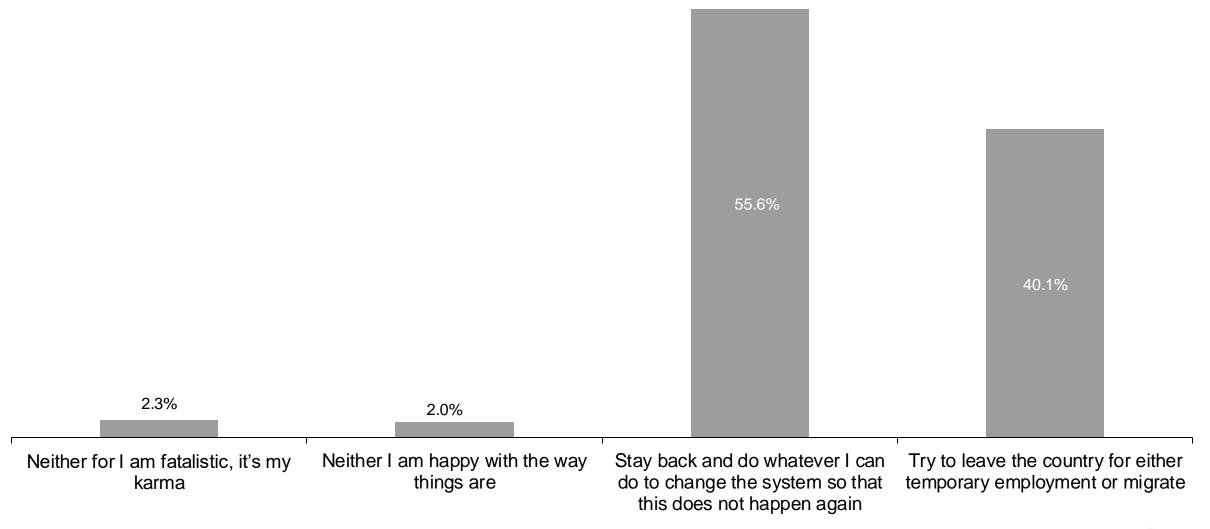






If we go into a major economic crisis due to a sovereign default, I will:

Total respondents: 347





Thank you