

# Coping with Shocks

## Migration and the Road to Resilience

TOKYO SEMINAR

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WORLD BANK GROUP

SOUTH ASIA ECONOMIC FOCUS | FALL 2022

CHAPTER I

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# Braving the Perfect Storm

CHAPTER II

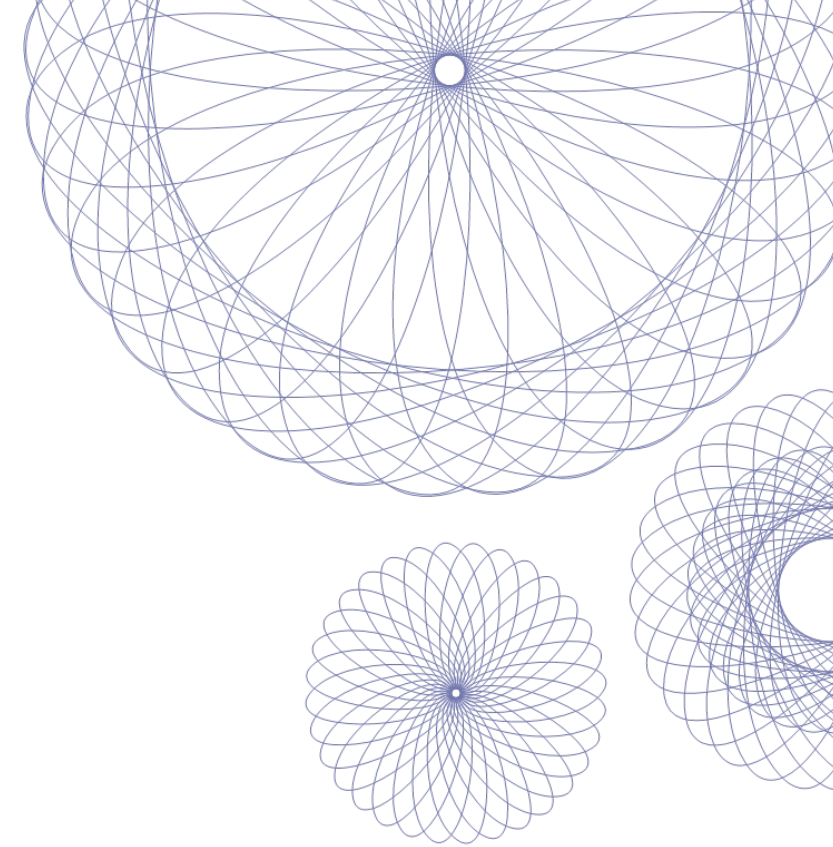
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# Manage the Aftershocks

CHAPTER III

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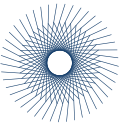
# COVID and Migration in South Asia



CHAPTER I

Braving the perfect storm

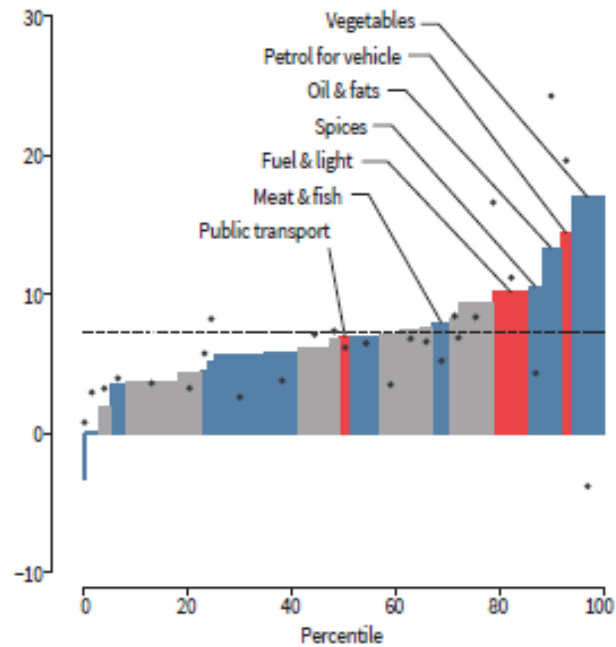




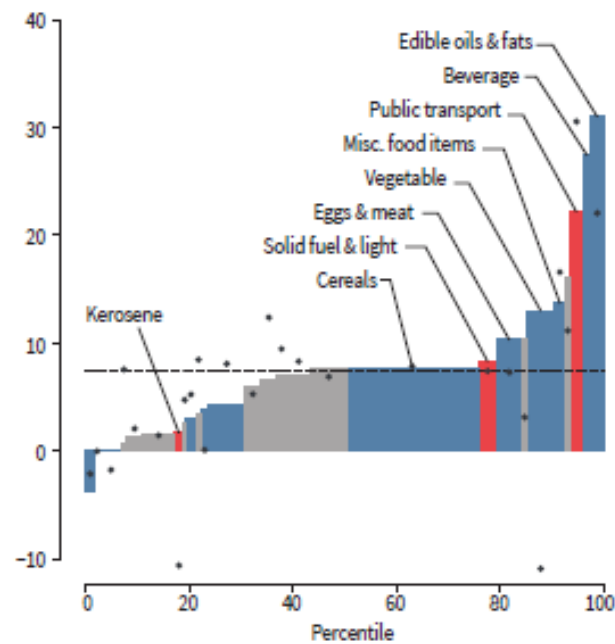
# Inflation becomes more broad-based

- Rising global commodity prices continue to contribute to domestic inflation in South Asia.
- Inflation has spread to more food categories and non-food and non-energy goods, compared to the beginning of 2022.

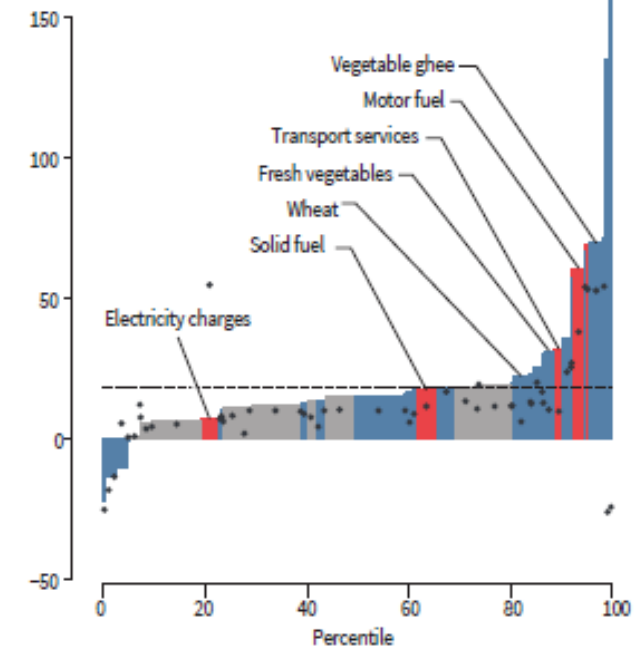
India: Average (Apr-Jun) inflation by goods



Bangladesh Rural: Average (Apr-Jun) inflation by goods



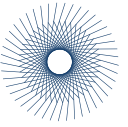
Pakistan Rural: Average (Apr-Jun) inflation by goods



■ Energy      ■ Food      ■ Others  
--- Headline, Apr-Jun 2022      • Inflation, Nov 2021-Jan 2022

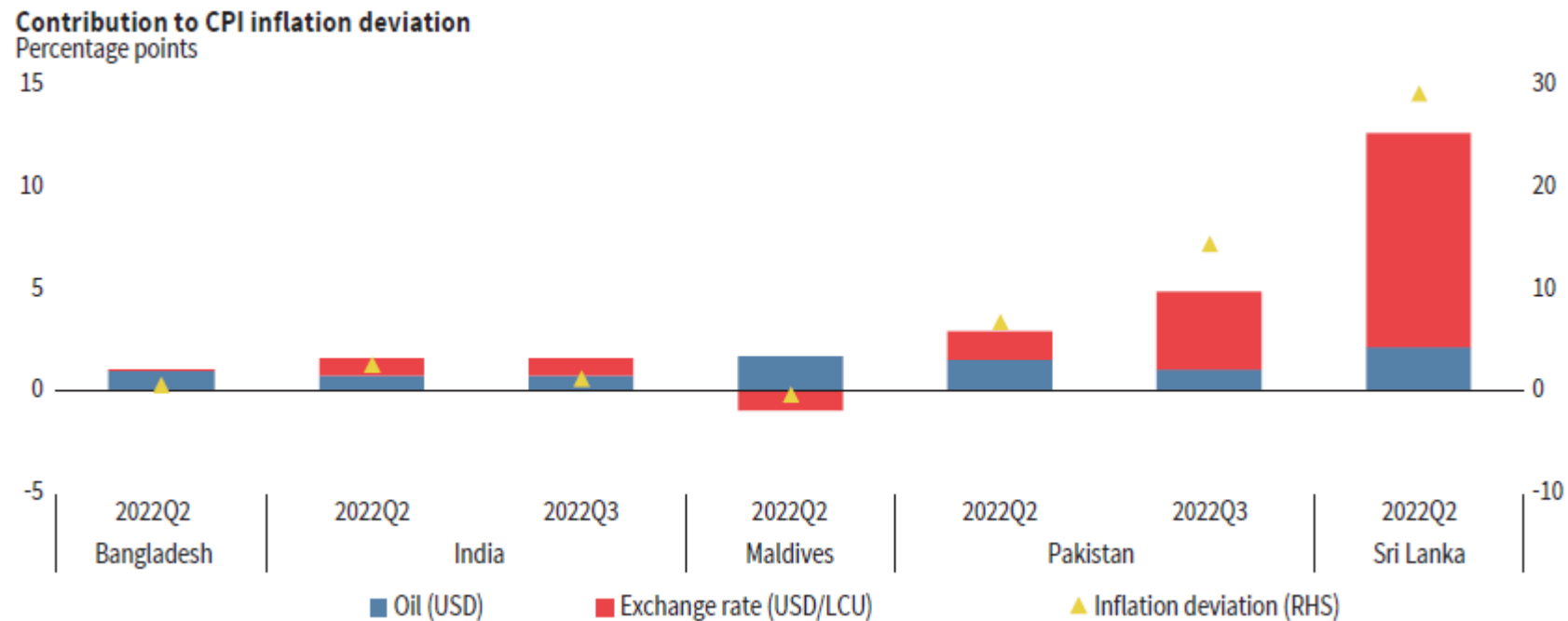
Source: Haver Analytics, Bangladesh Bureau of Statistics, and staff calculations.

Note: Monthly inflation is computed as the year-over-year change in the price index for each month. The width of each bar indicates the weight of the good in the CPI index. Energy categories include energy utilities used in households and energy used in transportation. Food items include food and non-alcoholic beverages. The horizontal broken line indicates the average headline inflation during the period.



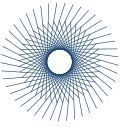
# Depreciation in local currencies contribute to inflation

- As most South Asian countries are net energy importers, elevated global oil prices and currency depreciation against the dollar contribute to inflation...
- ...especially in Pakistan in 2022Q3 and in Sri Lanka, both experienced large depreciations



Source: Haver Analytics and staff calculations.

Note: Based on a sign-restricted Bayesian vector autoregressive model with stochastic volatility. Inflation is computed as the year-over-year percent change in price indexes. The exchange rate shock is identified as a shock that depreciates the local currency, increases inflation, but has no contemporaneous impact on output. Oil and exchange rate contributions to inflation are deviations from a longer-run average inflation rate (for example in India this is 5.1 percent). Variables are modeled in log changes.

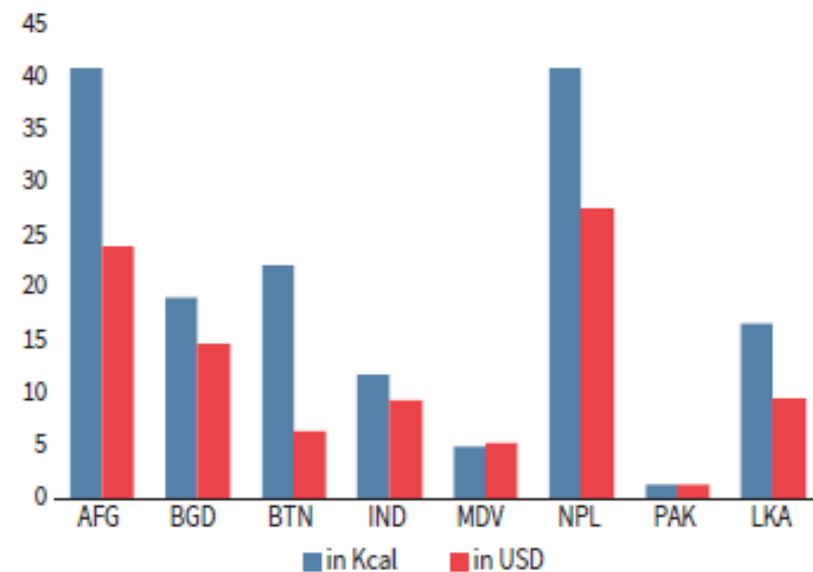


# Elevated global prices and export restrictions worsen food shortages

- Many South Asian countries face food shortages, esp. in Afghanistan and increasingly in Sri Lanka.
- High energy costs, fertilizer and food prices lead to food shortages.
- Trading partners' export restrictions directly impact South Asian countries' food and fertilizer imports.

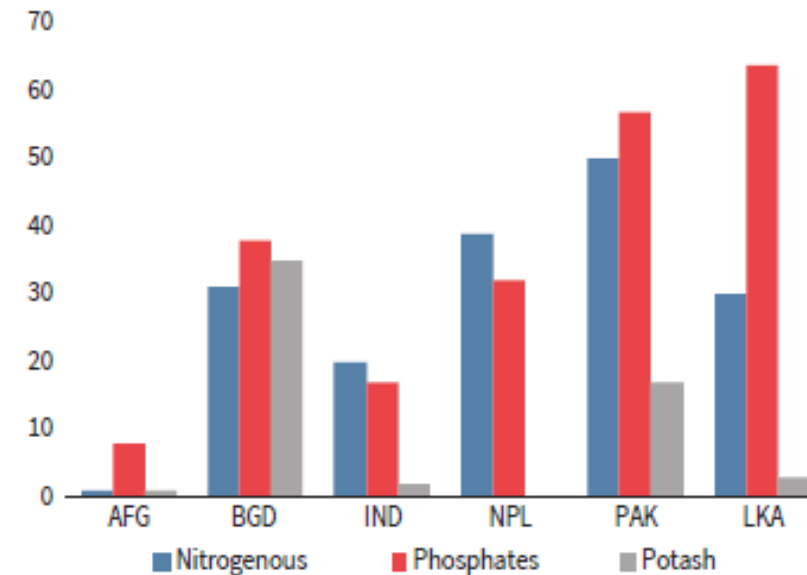
**Impact of trade restrictions on food import**

Percent impact in Kcal or USD



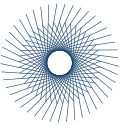
**Impact of trade restrictions on fertilizer import**

Percent nutrient equivalent units



Source: Laborde and Mamun 2022, Food and fertilizer restrictions during the Ukraine-Russia crisis (dataset), World Food Programme (accessed September 18, 2022), <https://public.tableau.com/app/profile/laborde6680/viz/ExportRestrictionsTracker/FoodExportRestrictionsTracker>.

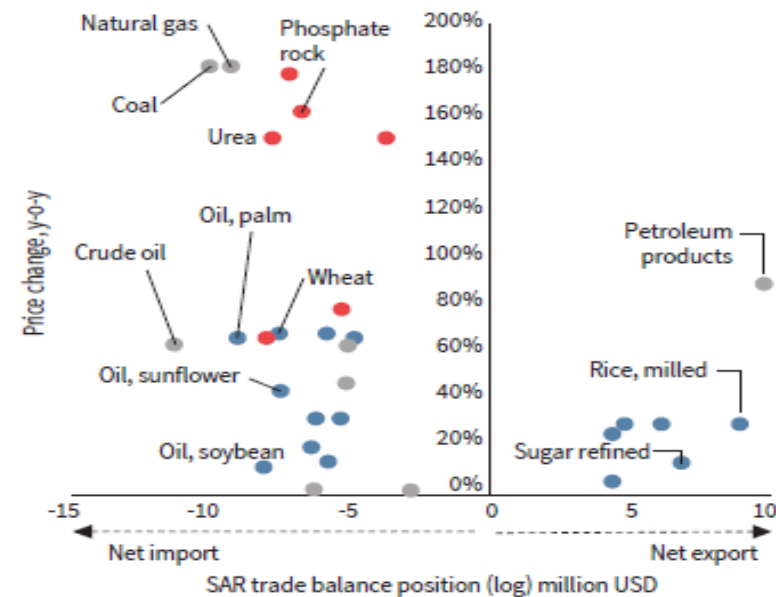
Note: Methodology in Laborde and Mamun (2022), based on average 2018-2020 bilateral trade flows at the HS6 level. The numbers shown are for current trade restriction measures and do not take into account exceptions made to export bans.



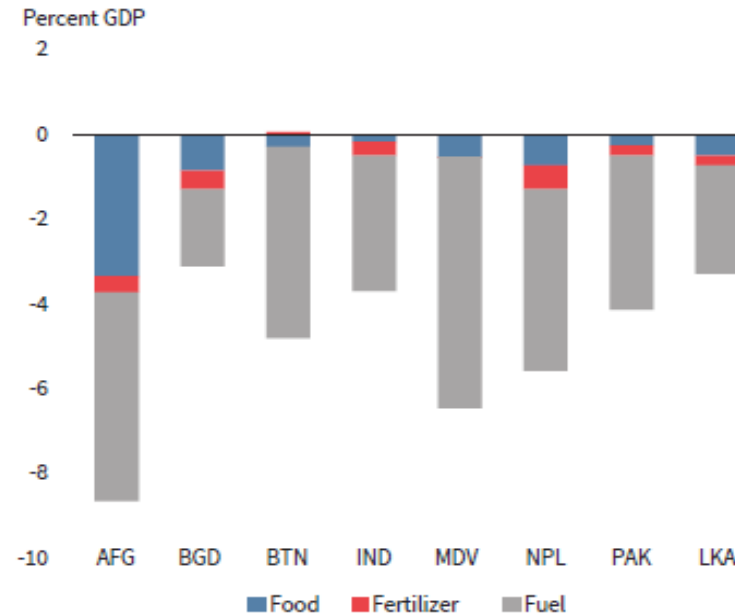
# Higher commodity prices increase external sector pressures

- Higher commodity prices raised import prices, worsened terms of trade and contributed to trade deficits.
- In addition, other factors—a global slowdown reduces momentum in export growth, recovery in remittances through official channels stagnates, and capital outflow increased due to U.S. monetary tightening and increased uncertainty—also contributed to external pressures.

**A. South Asia goods trade value and price changes (y-o-y) as of end-May 2022**

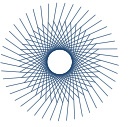


**B. Impact of price changes (y-o-y) as of end-May 2022 on trade balances**



**Source:** Staff calculations based on 2016-2020 country food trade matrix and 2015-2019 country fertilizer trade database from the Food and Agricultural Organization (FAO); 2015-2019 country fuel trade data from Comtrade (dataset); and price changes from tradingeconomics.com and World Bank commodity prices Pink Sheet.

**Note:** The calculations include 17 food groups most traded in South Asia (e.g., rice, refined sugar, wheat, palm oil), 6 fertilizer items (e.g., DAP, Urea), and 8 fuel items (e.g., coal, crude oil, petroleum products, natural gas). The calculation assumes no change in trade volumes from the average historical levels. Country GDP is average from 2016-2019.

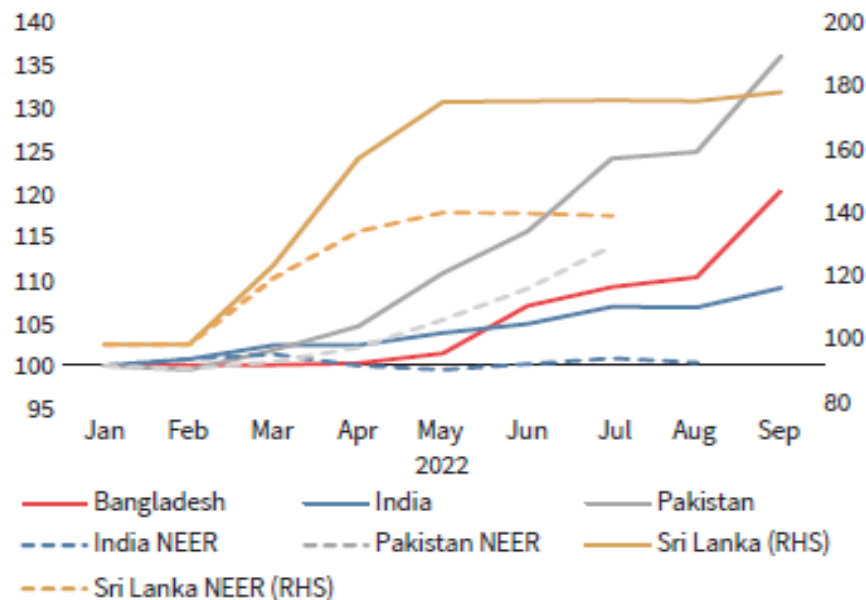


# As a result, countries face exchange rate pressures and foreign reserves dwindle

- Pakistani rupee and Sri Lankan rupee both depreciated by double digits in 2022.
- Foreign reserves are nearly depleted in Pakistan and Sri Lanka, and fell drastically in Bangladesh.
- Countries use import controls to reduce trade deficits, which can impede economic activities.

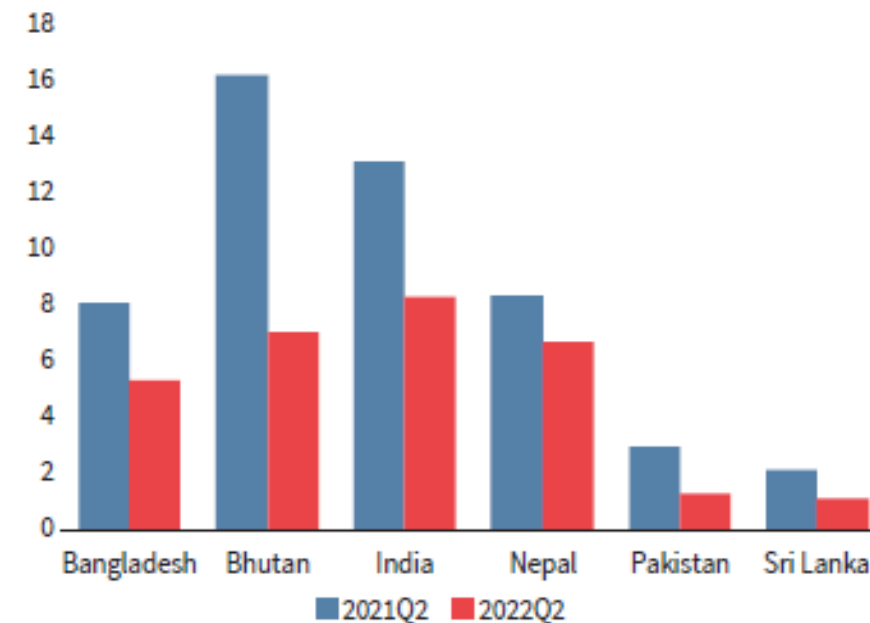
**A. Exchange rate vis-à-vis USD and nominal effective exchange rate**

Index Jan 2022=100



**B. Foreign reserve import cover**

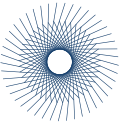
Months



Source: Haver Analytics, CEIC, Royal Monetary Authority of Bhutan.

Note: A. Exchange rates vis-à-vis the US dollar are local currency per US dollar, indexed to 100 in January 2022. The nominal effective exchange rate (NEER) is also indexed to 100 in January 2022 and inverted so that a higher value indicates a depreciation of the local currency. B. Foreign reserve import covers are computed using the total imports (goods and services) over the past year.





# To cope with shocks, South Asian countries face policy tradeoffs

- Most South Asian countries have fuel, food, and fertilizer subsidies. Rising subsidy costs add to fiscal burden
- Pakistan, Bangladesh cut energy subsidies; Bhutan raised daily tourist tax, and Maldives raised GST for all.
- Cutting subsidies expose the poor to even higher prices. Countries need to target fiscal support at the vulnerable.

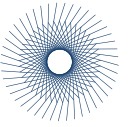
|                   | Food subsidy   | Fertilizer subsidy  |
|-------------------|--|---|
| <b>Bangladesh</b> | Through the state-owned Trading Corporation of Bangladesh (TCB), the government is running its Open Market Sales (OMS) operations which provides necessary food items to the poor at a subsidized rate. Food subsidy at BDT55 bn in FY21/22.                     | The government recently increased the price of fertilizer in the domestic market marginally, but subsidy payments are expected to remain elevated. Fertilizer subsidy at BDT120 bn in FY21/22   |
| <b>Bhutan</b>     | The government fixed the prices of vegetable and fruits in the beginning of 2022.  | Fertilizer imported from India via a special concession; prices of fertilizers in the domestic market are fixed. There were no changes in fertilizer prices between FY20/21 and FY21/22. In the past, the government subsidy on fertilizers amounted to below 1 percent of total expenditure and declined by 70 percent in FY20/21. |
| <b>India</b>      | Under the Public Distribution System (PDS), grains are procured by the government from farmers at prices above market and sold at subsidized rates or free to vulnerable and poor households. Food subsidy accounted for almost 1.2 percent of GDP in FY2021-22. | 100 percent subsidy on various types of fertilizers, paid to fertilizer companies based on sales.   |
| <b>Maldives</b>   | Blanket food subsidies mainly on rice, flour and sugar; these subsidies have not changed over the past year.   | —   |
| <b>Nepal</b>      | Subsidy on producer side through subsidies on seeds and agricultural equipment and reduced electricity tariff for irrigation.  | Subsidies on chemical fertilizers.  |
| <b>Pakistan</b>   | Large scheme for wheat (which is largely procured through the government at set prices – above market) and sugar (subsidies along the value chain), direct subsidies to farmers.   | Multiple subsidies on fertilizer, including direct transfers to fertilizer producers, cheaper gas available to fertilizer companies.  |
| <b>Sri Lanka</b>  | Price controls on agricultural products in 2021 and early 2022, later relaxed to avoid parallel markets.   |   |



## CHAPTER II

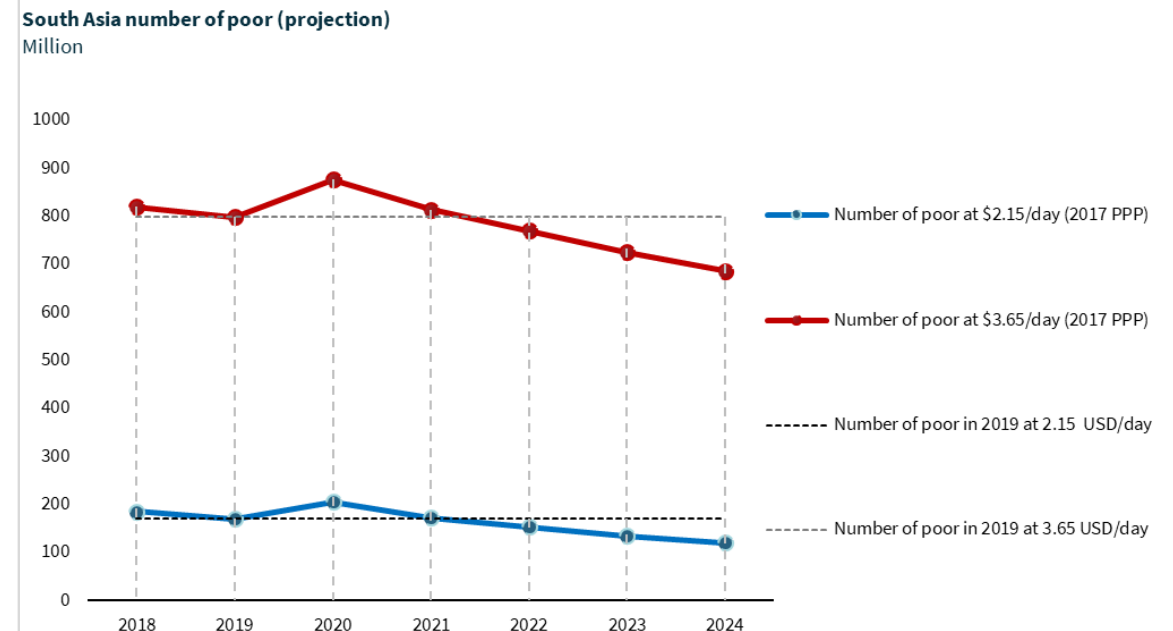
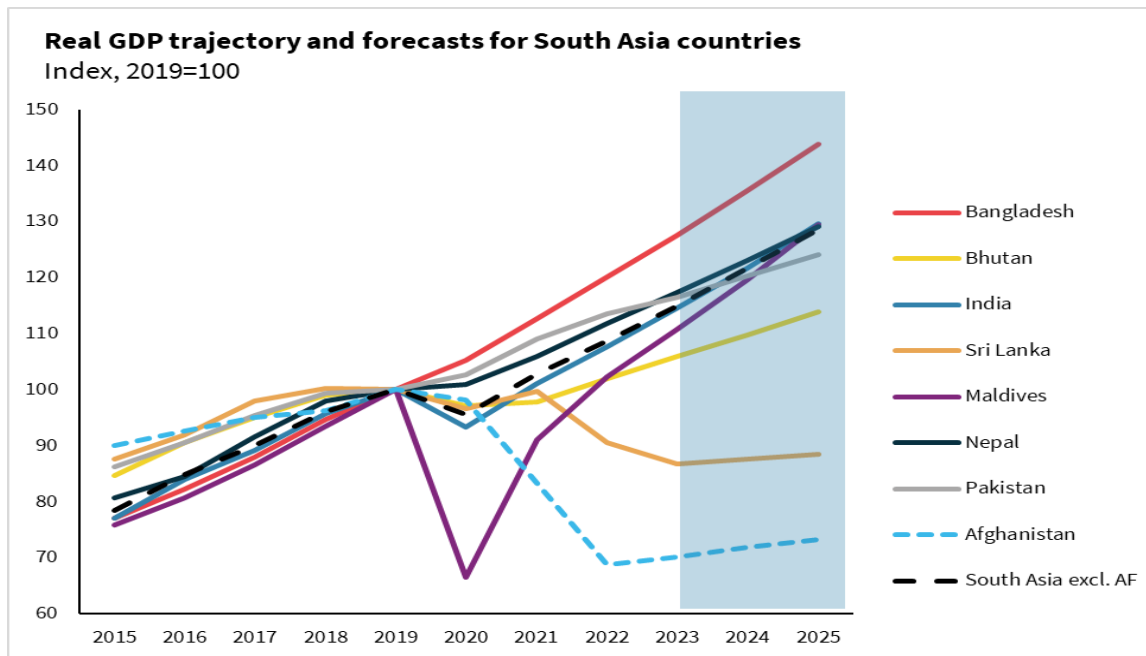
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# Managing the aftershocks



# The region's GDP growth has recovered mostly to pre-pandemic levels...

- All the economies except Sri Lanka and Afghanistan have recovered beyond 2019 GDP levels.
- Nevertheless, the pressures on the current account balances remain high and will take some time to abate.
- The poverty rate in Pakistan will remain flat in 2023 as the major floods primarily affected rural areas in Sindh and Balochistan where poverty rates are already high and rising.





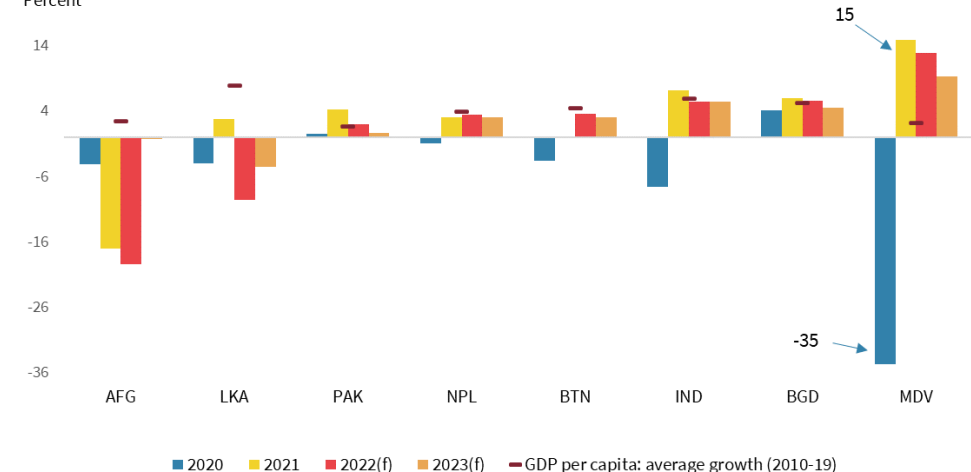
## ...but the war and its effects have eroded the region's per-capita GDP recovery

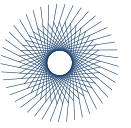
- Per-capita GDP in the region is expected to grow about one percentage point slower than earlier expected by 2023.
- Some countries in the region are continuing their recovery, and others are diverging amid major setbacks in their development paths.
- Afghanistan, Sri Lanka, and Pakistan are expected to see lackluster or no recovery in per-capita GDP.
- Bhutan, India, Maldives, and Nepal will experience a rough and still incomplete but steady recovery.

South Asia real GDP per capita forecast  
Index, 2019=100



Change in GDP per capita  
Percent



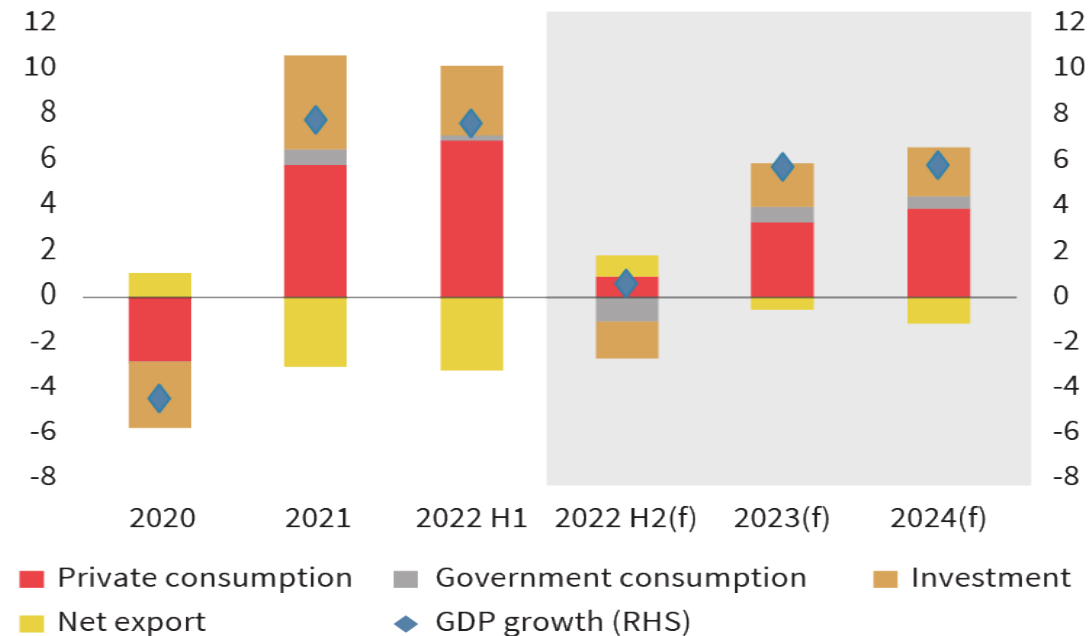


# Inflation affecting growth, continues to be perceived as the top risk to recovery

- Private consumption for domestic goods and imports will be the most affected by the expected erosion of purchasing power from high inflation.
- Activity in the manufacturing sector is expected to decline.
- The services sector will see a steady recovery in 2022 and 2023.

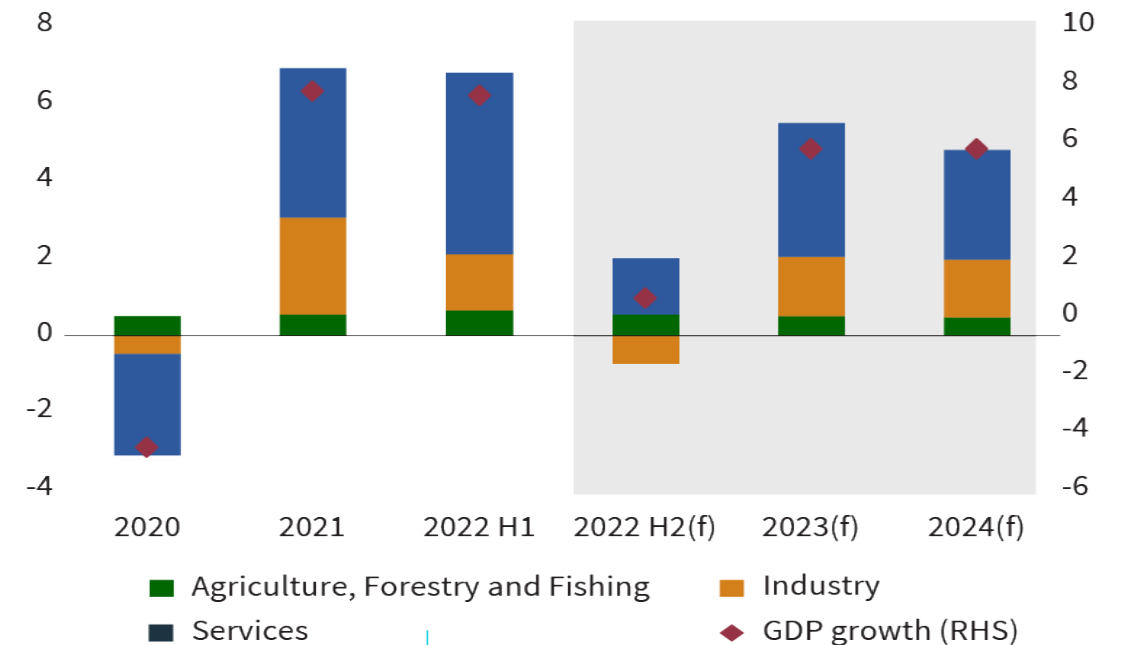
## A. Private consumption and import demand will take a heavy toll in 2022H2...

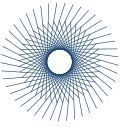
Contribution of demand component to GDP growth  
Percentage point



## B. ...which will reduce inputs for industry, contributing to its slowdown starting in mid-2022

Contribution of supply component to GDP growth  
Percentage point

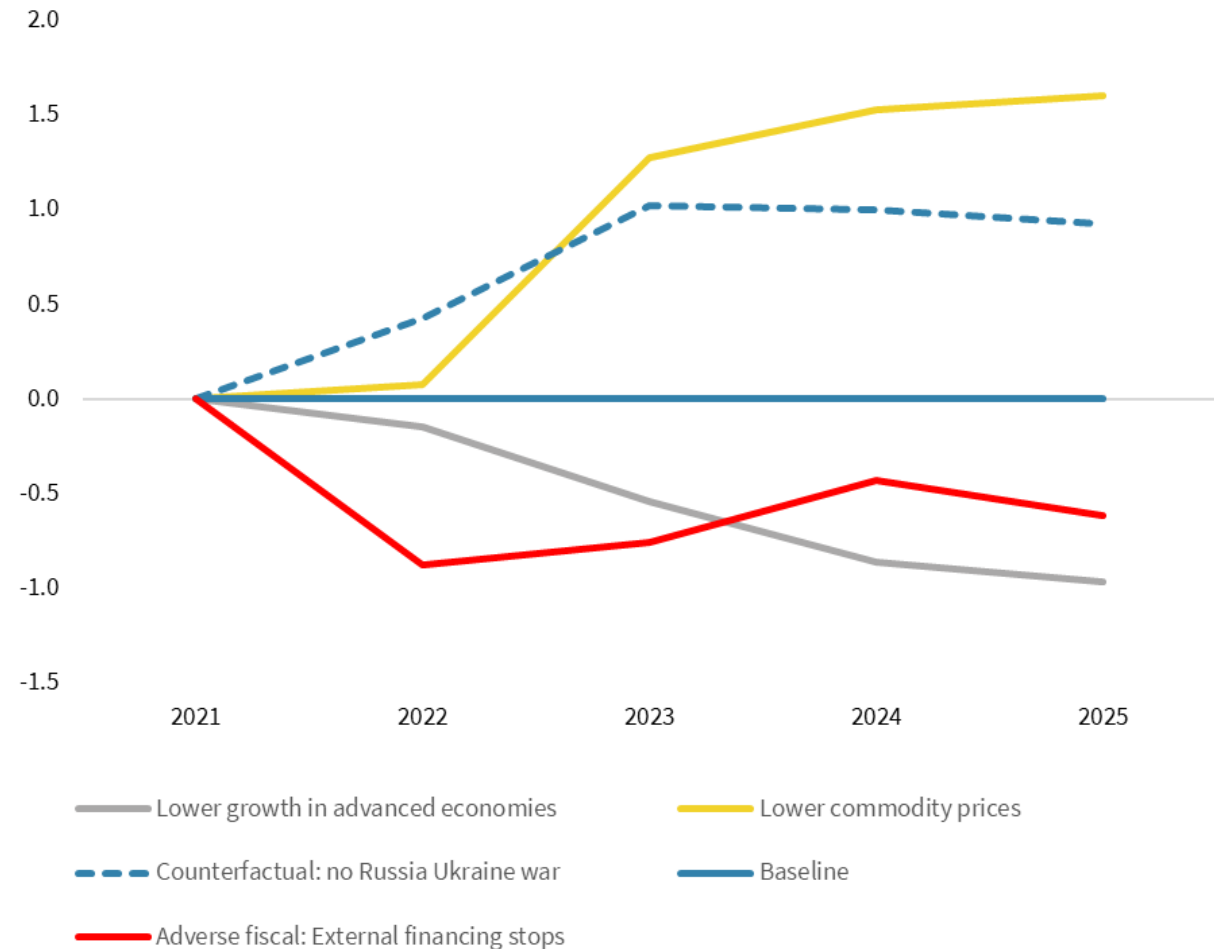




# External developments could change the growth trajectory

- Changes in commodity prices have the largest impact: GDP growth would be considerably higher starting in 2023.
- The impact of changes in import demand in the rest of the world and of capital-flow reversals is more muted.
- Lower external demand a risk, though its effect could be muted due to sensitivity to HIC growth.
- Sudden stop would significantly decelerate growth in the region and reduce output compared to the baseline.

South Asia (exclude Afghanistan)

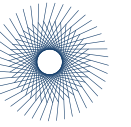


CHAPTER III

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# COVID and Migration in South Asia



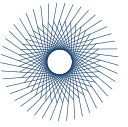


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# Main takeaways

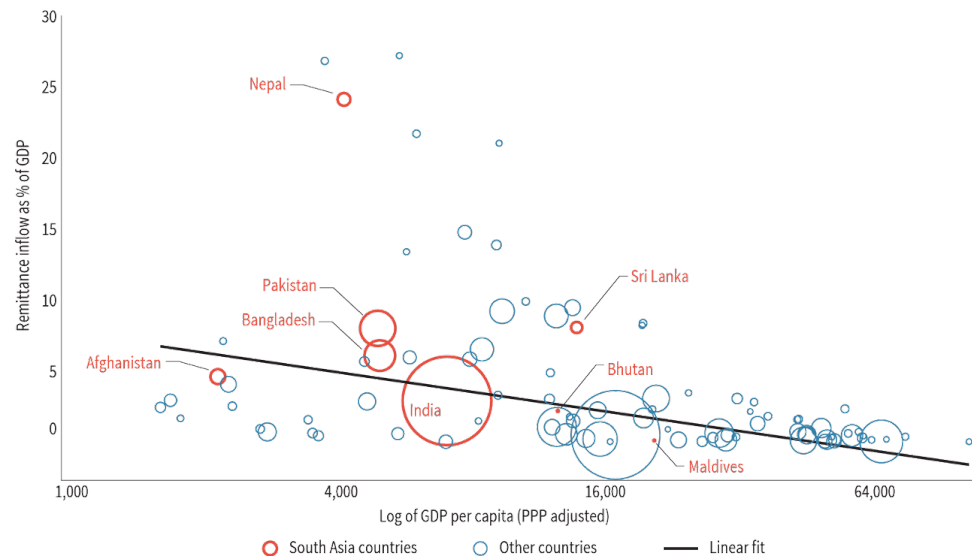
- Though international migration in South Asia is relatively low compared to some other regions of the world, internal migration, especially that of a temporary/seasonal nature, is quite widespread in parts of South Asia
- Migration is central to the process of economic development in the region: it aids in reallocation of labor to more productive places and helps households manage economic shocks (such as weather-related shocks) better
- Remittances owing to international migration (especially from Gulf countries where many South Asians work) are also quite significant for some South Asian economies such as Nepal
- Though the net economic benefits to migration are positive, they have not yet been fully tapped, likely due to mobility costs—pecuniary and non-pecuniary—and frictions in credit and labor markets, which have been persistent
- Poor South Asian migrants – who often hold temporary jobs in the informal sector – face several challenges such as precarious labor market conditions, visas tied to employment, and limited access to social protection
- The early phase of the COVID crisis exposed their vulnerability on a large scale, and the later phase of the pandemic re-emphasized the important role of migration as a mechanism to cope with shocks
- The recovery in migration, however, has been slow and uneven, raising concerns about a potential scarring effect of the pandemic on migration and migrant-supporting institutions
- Therefore, there is a role for policy to accelerate recovery by making migration more resilient – addressing unnecessarily high costs and frictions to migration, and incorporating measures to “de-risk” migration





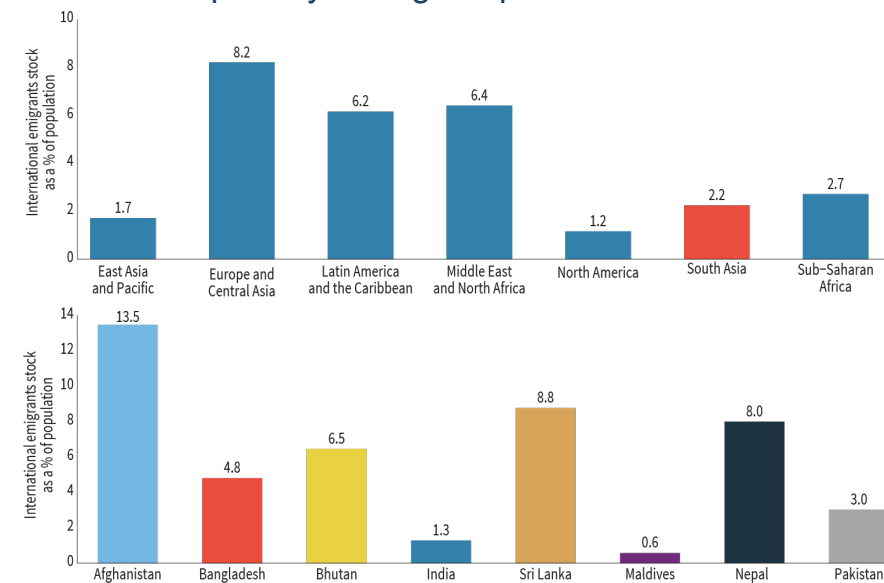
# Migration matters for economic development, however international migration is relatively low in South Asia region

- Migration is central to the process of development – it helps households **manage economic shocks better** and **reallocate labor** to where it is more productive
- **Remittance inflows** owing to international migration (especially from the GCC countries) are also **significant for the economies** of many South Asian countries



Source: Staff calculations based on KNOMAD 2019.

- Though **international migration is relatively low** in South Asia and varies across countries, **temporary/seasonal migration is quite significant** in many parts of the region, especially rural households
  - In parts of Bangladesh, ~33% households out-migrate temporarily during the pre-harvest lean season

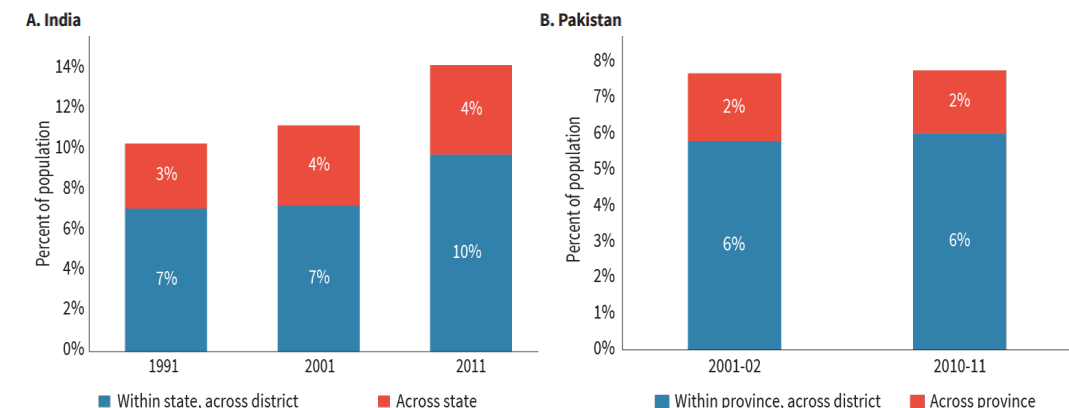
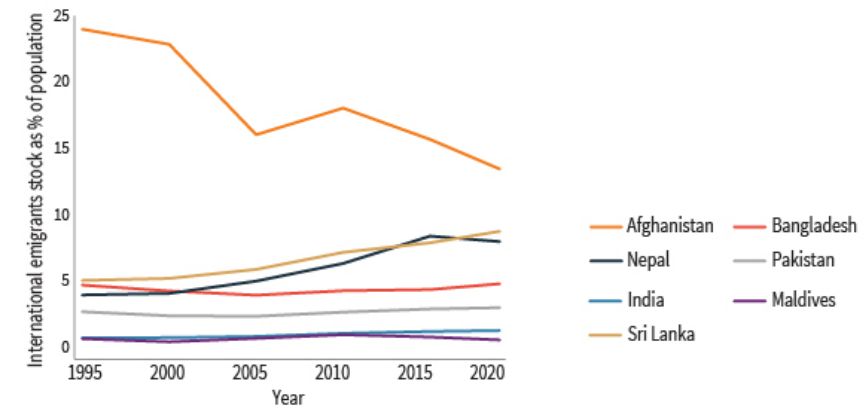


Source: Staff calculations based on UNDESA 2019.

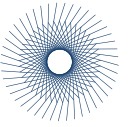


# Frictions to mobility and institutional gaps may have prevented South Asia from fully tapping gains from migration

- The decision to migrate principally depends on the **wage differences as well as amenities** between the origin and the destination, relative to the **costs of moving** (pecuniary and non-pecuniary)
- However, even if the net benefits from migration are positive, **credit constraints, lack of information, labor market frictions**, etc. could prevent gains from migration from being fully realized
- Countries in South Asia were experiencing a **stagnation in international and long-distance internal migration** even before the pandemic began
- This suggests that the **sources of friction** impeding mobility and limiting gains from migration have **remained high and persistent**

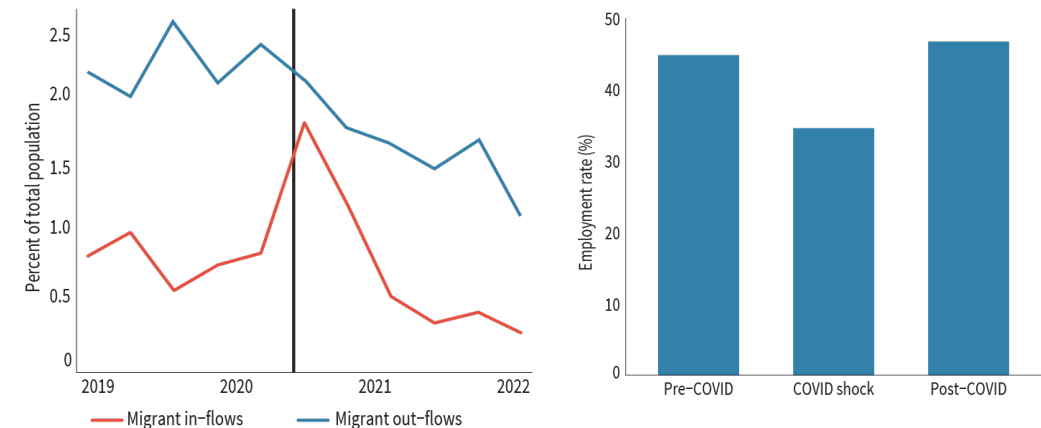


Source: Staff calculations based on data from the Population Census of India and the Pakistan Labor Force Survey.

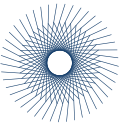


# The COVID-19 crisis highlighted and likely exacerbated the long-standing vulnerabilities of poor migrants in South Asia

- Restrictions on mobility, lockdowns, and job losses caused **widespread shocks to employment & earnings**
  - 33% workers who were employed pre-COVID experienced a job loss and/or earnings loss (World Bank SAR-CPMS)
- Migrant-dependent households in Nepal and Bangladesh also experienced **severe economic distress**
  - They were 4x likely to be food insecure during COVID (Barker et al. 2020)
- Job losses also **triggered large flows of return migration** in the region
  - Early in the pandemic, internal return migrant flows were estimated to be 2.5x international return migrant flows (World Bank/KNOMAD 2020)
- Labor market impacts of the pandemic were heterogeneous and **may also have exacerbated pre-existing inequalities**
  - Job losses were concentrated in the non-agricultural sector and affected women, the youngest age cohorts, and workers in the informal sector disproportionately (World Bank SAR-CPMS; (Bussolo, Kotia, and Sharma 2021)
- Newly analyzed survey data from India show that the pandemic led to an **unprecedented reduction in total migrant stock because of return migration**
- Return migrants in India were also (even if temporarily) either **employed in less-favorable occupations or were unemployed** – male return migrants were 10 percentage points less likely to be employed after the first COVID shock vs. the pre-COVID cohorts of return migrants

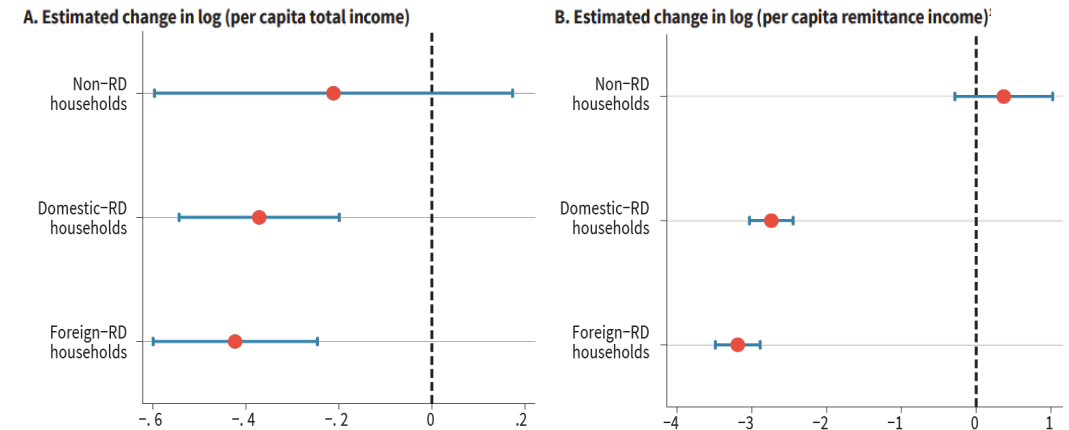


Source: Staff calculations based on the Indian Consumer Pyramid Household Survey (CPHS) using survey waves 15-25.

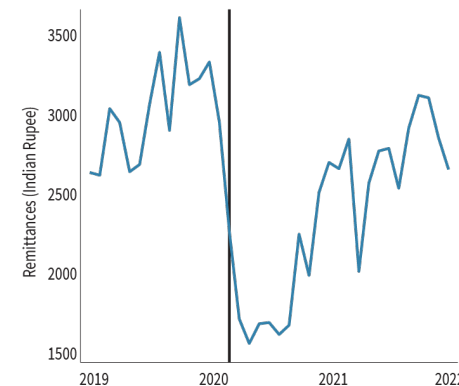


# Remittance-dependent households in the region also suffered large income shocks, likely due to a drop in remittance income

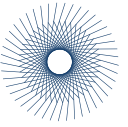
- Newly analyzed survey data from Pakistan show that among the remittance-dependent households, the **value of domestic and international remittances received fell 21% and 35% respectively** during COVID, relative to pre-COVID levels
- As a result, **remittance-dependent households suffered disproportionately larger income losses**
- Specifically, domestic (respectively, foreign) remittance-dependent households experienced a **26-percentage point (respectively, 29-percentage point) greater drop in per capita income** than non-remittance-dependent households
- Survey data from India also show that remittance-dependent households faced a negative shock in remittance inflows early in the pandemic – **monthly remittance receipts nearly halved** in the direct aftermath of the pandemic in 2020



Source: Staff calculations based on the Pakistan COVID Special Survey 2020.



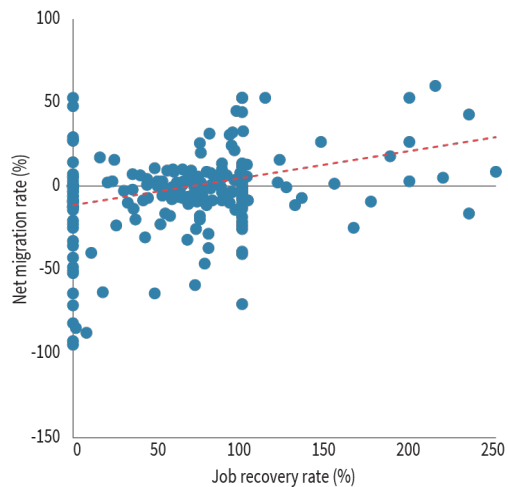
Source: Staff calculations based on the Indian Consumer Pyramid Household Survey (CPHS) using survey waves 15-25.



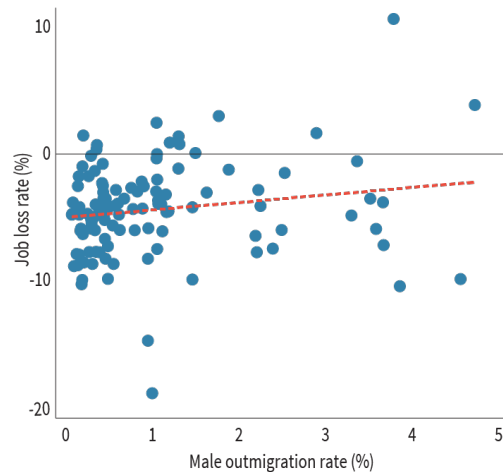
# However, the COVID crisis also re-emphasized the role of migration as a coping mechanism for managing shocks

- Data from the World Bank SAR-CPMS show that **districts with higher inflows of migrants had higher job recovery rates** in Bhutan, Nepal, Pakistan, and Sri Lanka
- Survey data from India also show that in early 2022, **out-migration rates for men were higher in districts that experienced more severe employment losses** during the COVID shock

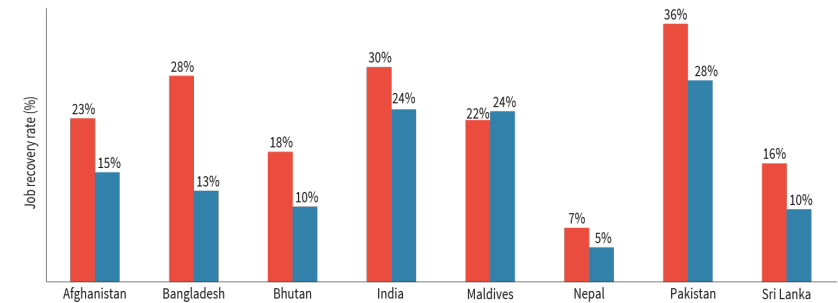
- **Job recovery rates were also higher among those who migrated**, 6-12 months into the pandemic, and remained so 20 months into the pandemic (World Bank SAR-CPMS)
- Migrants were also **less likely to be employed in a lower-skilled/ lower earnings job** vs. their pre-COVID job, 20 months into the pandemic (World Bank SAR-CPMS)



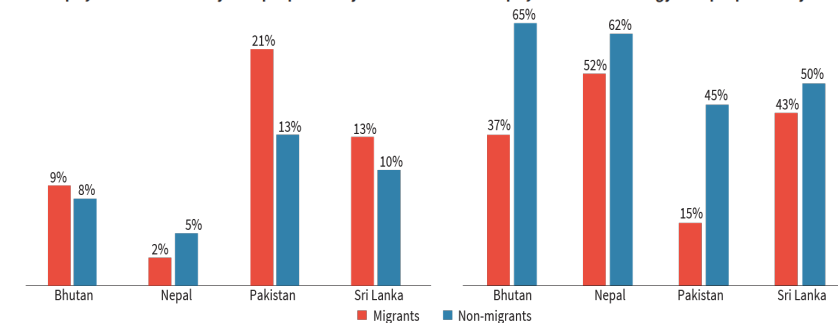
Source: Staff calculations based on SAR COVID-19 Phone Monitoring Survey, Second Round.



Source: Staff calculations based on the Indian Consumer Pyramid Household Survey (CPHS) using survey waves 15-25.



A. % Employed in a lower skilled job vs. pre-pandemic job

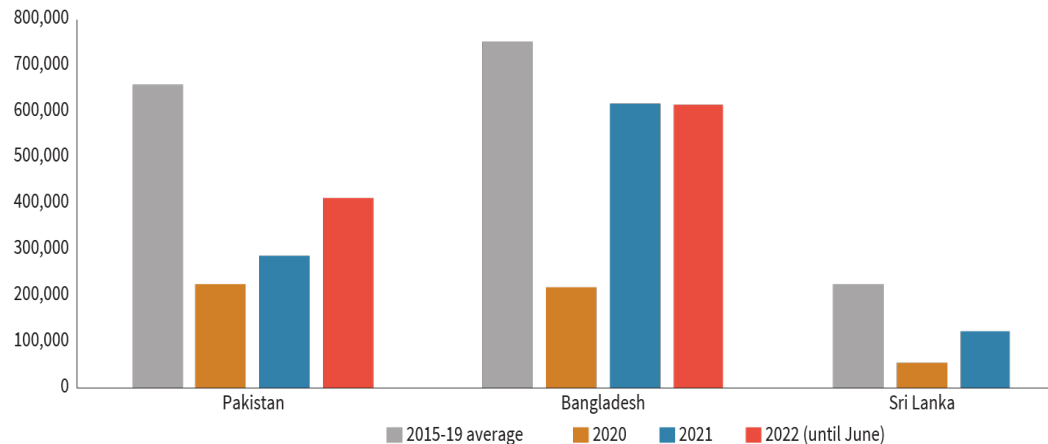


B. % Employed in a lower earning job vs. pre-pandemic job



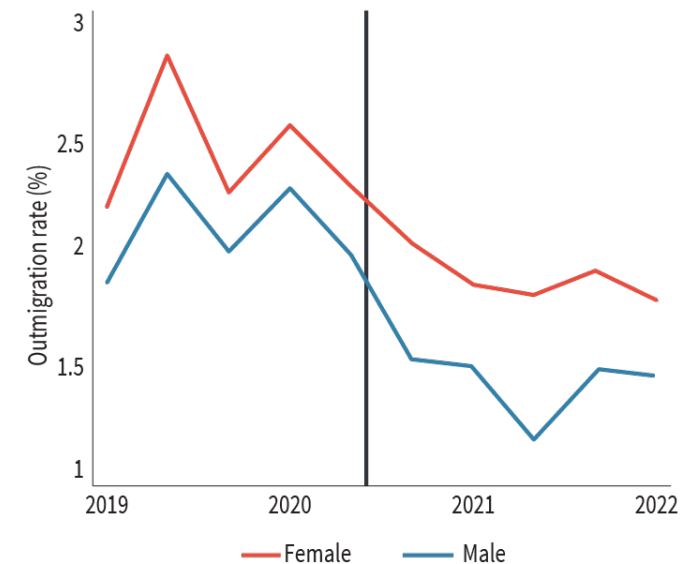
# While migration seems to be recovering, it remains slow and is still below pre-COVID levels

- National administrative records on registered overseas workers in the region show **promising signs of recovery in international migration**
- Data on the permits issued in the first half of 2022 indicate that that **overseas migration might rebound to pre-COVID levels or even beyond in Pakistan and Bangladesh**

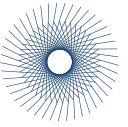


Source: Staff calculations based on data from Pakistani Bureau of Emigration and Overseas Employment; Bangladeshi Bureau of Manpower, Employment, and Training; Sri Lanka Bureau of Foreign Employment.

- In India, survey data on monthly internal and international outmigration show that the **monthly rate at which males emigrated started to recover in the second half of 2021** but was still below pre-pandemic levels in early 2022

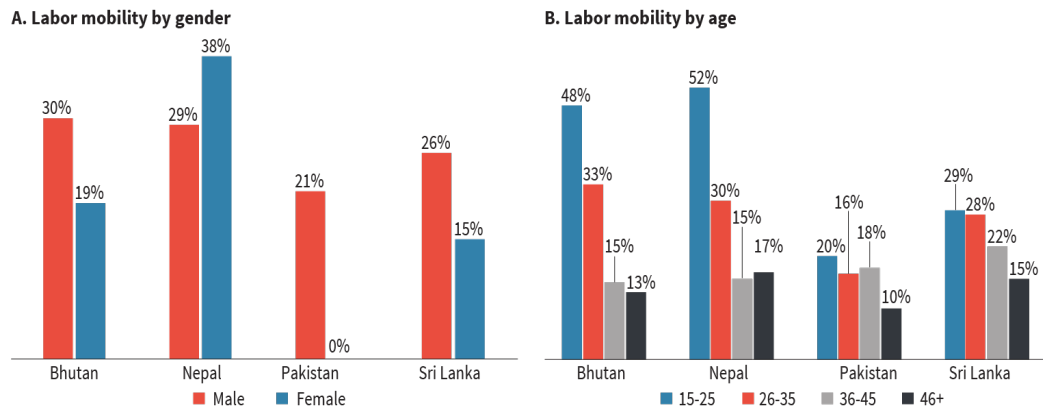


Source: Staff calculations based on the Indian Consumer Pyramid Household Survey (CPHS) using survey waves 15-25.

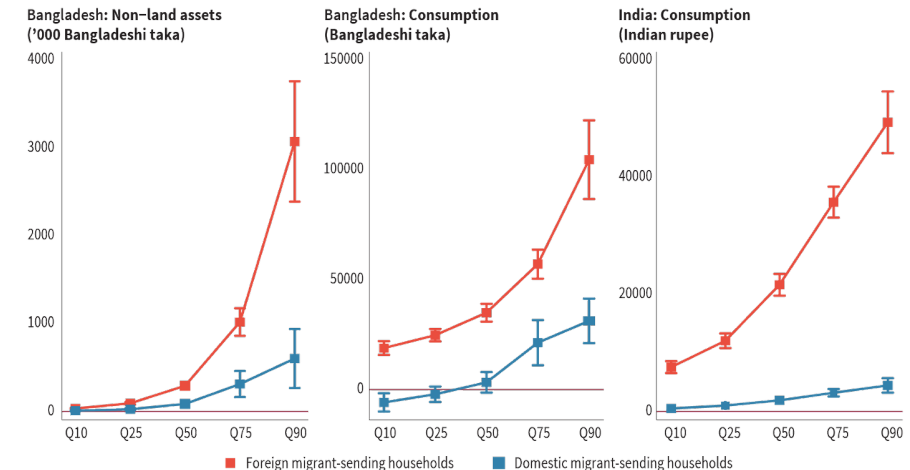


# This slow and uneven recovery in migration raises concerns about the scarring effect of COVID-19 on migration

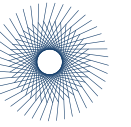
- Data from the World Bank SAR-CPMS show that **migration costs may have constrained specific demographic subgroups** from moving and subsequently recovering from job losses
- Twenty months into the pandemic, among those who lost their pre-pandemic jobs, **women and the elderly were still less likely to migrate**
- Even before the pandemic, there existed **significant heterogeneity among migrant households**: some migrant households were poorer or at least as vulnerable as non-migrant households in terms of consumption and wealth
- For such households, **financing new migration may become even harder** now, owing to income losses and the lingering uncertainty about labor markets, raising concerns about a scarring effect of COVID on migration



Source: Staff calculations based on SAR COVID-19 Phone Monitoring Survey, Second Round.



Source: Staff calculations based on the Bangladesh Household Income and Expenditure Survey (2016) and the India National Sample Survey (2007-08).

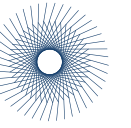


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# Policy priorities for South Asia include reducing frictions to labor mobility...

- **Bilateral and multilateral agreements** could reduce the high (often prohibitive) costs migrants pay to work abroad
  - South Korea's Employment Permit System (EPS) reduced migration costs from over US\$3,700 to ~US\$1,000 (Cho et al. 2018)
  - Bangladesh and Malaysia's government-to-government visa lottery program reduced migration costs for Bangladeshi workers by a factor of eight and their debt burden by 16 percentage points (Shrestha, Mobarak, and Sharif 2019)
- **Effective policy design to allow migrants to access existing schemes** could reduce indirect mobility frictions
  - India's One-Nation-One-Ration-Card scheme introduced interstate portability of ration card benefits
- **Strengthening the remittance infrastructure** could further unlock gains from migration and make it more attractive
  - Greater access to digital remittance technologies has been shown to result in greater migration in Bangladesh (Batista and Vicente 2022; Lee et al. 2021)
- **Information and training programs** could help potential migrants make better decisions about moving
  - Bangladesh, India, and Sri Lanka have programs that provide pre-decision and pre-departure information to help potential migrants make better decisions about whether to move, where to move, and how to navigate the migration and remittance-sending process (Ahmed and Bossavie 2022)

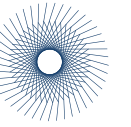




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# ...and de-risking migration

- **More flexible visa policies** could help host countries manage labor market shocks by facilitating labor mobility
  - South Korea's EPS relaxed sectoral regulations for temporary migrants, allowing them to work in agriculture, and extended the job search period for those seeking to change jobs (Moroz, Shrestha, and Testaverde 2020)
- **Migrant welfare funds and inclusion of migrant welfare policies in bilateral agreements** could also help de-risk international migration
  - Foreign workers under the EPS in South Korea were eligible to benefit from fiscal measures to support SMEs, including employment retention subsidies and paid leave subsidies (Moroz, Shrestha, and Testaverde 2020)
- **Comprehensively extending social protection systems** to the informal sector could also reduce risks for migrants with limited access to social protection programs
  - Nepal's 15<sup>th</sup> economic development plan includes universalization of social protection and expansion of social assistance to the informal sector (NPC 2020)
- **Measures to preserve access to urban housing and introduction of urban temporary workfare programs** inclusive of migrant workers could help prevent costly, unnecessary displacement of internal migrants during shocks
  - Some states in India such as Tamil Nadu and Rajasthan have introduced urban employment guarantee programs
  - A public sector nonprofit in Kerala has implemented a migrant hostel program to house interstate migrants



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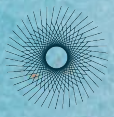
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# Thank you!