CAMBODIA ECONOMIC UPDATE

LIVING WITH COVID

SPECIAL FOCUS

THE IMPACT OF THE COVID-19 PANDEMIC ON LEARNING AND EARNING IN CAMBODIA

DECEMBER 2021

WORLD BANK GROUP

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ABBREVIATIONS

ASEAN	Association of Southeast Asian Nations
CCFTA	Cambodia-China Free Trade Agreement
CDP	Committee for Development Policy (of the United Nations)
CEU	Cambodia Economic Update
COVID-19	coronavirus disease 2019
CR	Cambodian riel
DFQF	duty-free, quota-free
EAP	East Asia and Pacific region
EMDEs	emerging market and developing economies
ECOSOC	Economic and Social Council
EU	European Union
FDI	foreign direct investment
FTA	free trade agreement
GDP	gross domestic product
GTF	garment, travel, and footwear
GSP	Generalized System of Preferences
HLO	Harmonized Learning Outcomes
ICT	information and communications technology
IDPoor	identification of poor
LAYs	learning-adjusted years of schooling
LCR	liquidity coverage ratio
LDC	least developed country
MDI	Microfinance Deposit-Taking Institution
MLF	Marginal Lending Facility
MoEYS	Ministry of Education, Youth, and Sports
NBC	National Bank of Cambodia
NPL	nonperforming loan
PPP	purchasing power parity
RCEP	Regional Comprehensive Economic Partnership
ROA	return on assets
ROE	return on equity
UK	United Kingdom
UN	United Nations
UNESCO	United Nations Educational, Scientific, and Cultural Organization
U.S.	United States
US$	United States dollar
WHO	World Health Organization
y/y	year-on-year

EXECUTIVE SUMMARY

Recent developments

Cambodia is now living with COVID-19. Since November 1, 2021, the authorities have relaxed travel restrictions, "reopening" the country for business while continuing to strictly enforce protective health measures. Coronavirus infections and mortalities receded in the fourth quarter of 2021, thanks mainly to the country's success in rolling out its vaccination program. More than 80 percent of the population received two doses of coronavirus vaccine as of end-November 2021. The required quarantine period for those who have been fully vaccinated has been fully lifted since November 15, 2021, as the country is planning to implement an economic recovery plan soon.

Real gross domestic product (GDP) is projected to grow 2.2 percent this year. This year's relatively weak growth is due to a resurgence of COVID-19 cases, which slowed the recovery, especially of the tourism, wholesale, and retail sectors during the second and third quarters of 2021. Traditional growth drivers, especially the garment, travel goods, footwear, and bicycle manufacturing industries, as well as agriculture, continue to underpin the economic recovery. The electrical, electronic, and vehicle parts manufacturing industries are gradually emerging, while the agroprocessing industries, in particular food and wood processing, and furniture are also picking up. The service sector, especially the travel, tourism, and hospitality industries, is improving more slowly, underpinned initially by a revival of domestic demand and domestic tourism. Construction activity, especially real estate, housing, and property market developments, which was booming during the pre-pandemic period, remains sluggish.

Despite a recovery of manufacturing exports and an expansion of agricultural commodity exports, the trade deficit has widened significantly. This was caused by rising imports of a few major items, especially gold used as a savings asset. Gold imports surged, reaching more US$4.08 billion during the first nine months of 2021, reflecting a hedge against price volatility and inflation, which is edging up. Widening external imbalances have put pressure on the exchange rate. In response, the central bank has intervened in the foreign exchange market by conducting open market operations. The current account deficit, which is partly affected by the collapse of travel and tourism receipts, has deteriorated substantially to an estimated 26.9 percent of GDP in 2021. However, it remains fully financed by foreign direct investment (FDI) and other investment inflows. Gross international reserves declined only marginally to US$19.3 billion (about ten months of imports) in September 2021, down from US$21.2 billion at the end of 2020. Caused mainly by higher oil prices, inflation has edged up, reaching 3.4 percent year-on-year (y/y) in August 2021, compared to 3.1 percent at the end of 2019, despite a broadly stable nominal exchange rate, which hovered around 4,100 Cambodian riel per U.S. dollar.

Financial conditions continued to be accommodative, supported by a relaxation of monetary policy. The central bank under its third-round monetary easing measures introduced in May 2021 decided, among others, to (i) maintain a reserve requirement ratio at 7 percent for both riel and U.S. dollar deposits and borrowings until further notice, and (ii) allow the banking and microfinance sectors to continue to restructure loans until the end of 2021. While remaining below its pre-pandemic level, Cambodia's broad money growth was strong at 15.3 percent y/y as of September 2021. Thanks to improved confidence in the banking system and continued capital inflows, foreign currency deposit growth, which significantly eased during the first half of 2020, has picked up since, contributing 11.5 percentage points of the 15.3 percentage points

of broad money growth in September 2021. Reflecting stronger credit demand, domestic credit growth also recovered, growing at 24.0 percent y/y in September 2021, but remained below its pre-pandemic growth rate of 27.0 percent in December 2019.

The outbreak has hit Cambodia's fiscal accounts. Slower revenue collection, along with increased fiscal support to offset economic and social impacts of the pandemic, is expected to worsen the deficit to 6.1 percent of GDP in 2021, up from 4.5 percent of GDP in 2020. The widening fiscal deficit requires an increased drawdown of government deposits (fiscal reserves), which declined to 17.6 percent of GDP (19.7 billion riels) in September 2021 from 23.7 percent of GDP (24.9 billion riels) at the end of 2020. To mitigate the negative impacts on poor and vulnerable households, the authorities have extended the COVID-19 cash transfer program until December 2021 under the program's seventh round, while introducing additional assistance. As of October 2021, 678,459 households or 19 percent of all households, have received the cash transfer from the government. On average, each poor and vulnerable household (identified under the IDPoor initiative) covered by the program receives about US$45 per month. In addition, the government has launched a one-off social assistance cash transfer to support non-IDPoor households affected by COVID-19. As of August 2021, about 121,397 eligible non-IDPoor households countrywide had received government support.

Poverty continues to remain higher than pre-pandemic. The results of a High-Frequency Phone Survey of Household shows that employment has yet to return to pre-pandemic levels. The negative impacts of the pandemic on non-farm family businesses remain substantial, caused mainly by weak consumer demand. Nearly half of households report having experienced declines in income between December 2020 and March 2021. This suggests that a certain proportion of households that are negatively affected by COVID-19 continue to suffer from income losses, which could potentially lead to an increase of poverty. Cambodia has recently redefined the poverty line, using the most recent Cambodia Socio-Economic Survey for 2019-20, cost-of-basic need, and common basket approach. The national poverty line is now Cambodian riel 10,951 per person per day. Under the new poverty line, about 17.8 percent of the population is identified as poor. Poverty rates vary considerably by areas of residence. Poverty rate is the lowest in Phnom Penh (4.2 percent), other urban areas (12.6 percent), and the highest in rural areas (22.8 percent).

Outlook

The economy is expected to continue to recover amid a rollback of COVID-19-related restrictions. Real GDP growth is projected to reach 4.5 percent in 2022. Over the medium term, growth is expected to trend back to potential. As the authorities have now relaxed travel restrictions, "reopening" the country, key sectors such as tourism, travel, hospitality, and wholesale and retail are starting to recover, propelling economic recovery in the medium term. In addition to the economic recovery plan that will be introduced soon, the newly introduced Law on Investment, the recently ratified Cambodia-China Free Trade Agreement and Regional Comprehensive Economic Partnership, and the recently signed Cambodia-Republic of Korea Free Trade agreement may help attract foreign direct investment inflows to the country in the coming years.

Challenges and risks

Risks remain tilted to the downside. Despite accelerated vaccination progress, risks of further disruptions remain high, given relatively high numbers of infections and mortality. The coronavirus continues to be unpredictable, and the possibility of new or existing variants of the virus spreading in the country could lead to a possible resurgence in new cases. A slowdown in global demand could hurt export-oriented sectors of the economy, while the tourism sector may recover even more slowly than expected, as consumers

may remain reluctant to travel far distances despite eased travel restrictions. In addition, high credit growth and concentration of domestic credit in the construction and real estate sector remain a key risk to Cambodia's financial stability.

Cambodia is expected to graduate from least developed country (LDC) status in the next several years. After graduating from the LDC category, Cambodia is expected to no longer benefit from LDC-specific international support measures. One of the main support measures for LDCs is preferential access to developed economies' markets under the Generalized System of Preferences (GSP), including "Everything But Arms." Of the 15 countries granting GSPs, at least five are Cambodia's main export markets, which include the United States, the European Union, the United Kingdom, Canada, and Japan.

Policy options

To jump-start the economic recovery, it is crucial to create enabling environments, underpinning key growth drivers to accelerate. The relaxation of travel restrictions is fundamental for a recovery of the tourism, travel, and hospitality industries that will boost job creation and help propel the economy. To this end, the immediate actions are required to promptly establish clear rules and regulations pertaining to new measures "living with COVID-19" under the "new normal," which will facilitate business, investment, and tourism activities. Introducing accommodative regulatory and fiscal measures, leveraging the newly introduced investment law to support a prompt revival of the tourism, travel, and hospitality industries will be an important next step. In this regard, a close collaboration between the public and private sector will be essential.

To attract FDI inflows, taking advantage of improved external demand conditions, it is crucial to promptly introduce necessary regulations and arrangements to smoothly implement the newly introduced Law on Investment. A sub-decree on the implementation of the new law, including several necessary (downstream) regulations and arrangements, such as the application procedures for registration of an investment project and the special procedures for applying for a work permit and employment, remain to be enacted. In addition, investor awareness and understanding of the new law, as well as of the recently ratified Cambodia-China Free Trade Agreement (CCFTA) and the Regional Comprehensive Economic Partnership, and the recently signed Cambodia-Republic of Korea Free Trade Agreement (CKFTA), need to be heightened.

As economic recovery takes shape and the pandemic subsides, it is important to start reprioritizing government fiscal intervention to rebuild fiscal space over the medium term. To this end, the ongoing public expenditure review exercise should help improve "value for money" of public expenditure going forward. To avoid depletion of government deposits, fiscal support (monetary assistance under loan restructuring measures) to the industries that have already recovered (or show no signs of recovering due to underlying structural demand issues) may be reconsidered. As discussed above, government deposits already declined by a quarter to 17.6 percent of GDP by September 2021. With additionally budgeted fiscal intervention in 2022, fiscal reserves will be substantially reduced further. Therefore, rebuilding the fiscal space needed to mitigate future shocks is necessary. To this end, the ongoing reforms of the tax system, including preparation for a new revenue mobilization strategy for 2024–28, will help.

Financial system soundness remains key to macroeconomic stability in Cambodia. Going forward, given a relatively modest recovery of the tourism, travel, and hospitality industries and the subdued construction and real estate sector, it is necessary to continue to closely monitor asset quality. A more cautious approach may be adopted to loans against property, which grew quickly during the pre-pandemic period. The country has a relatively large number of banks and microfinance institutions, a challenge in ensuring that the financial system is well supervised and regulated. It is crucial to continue to improve

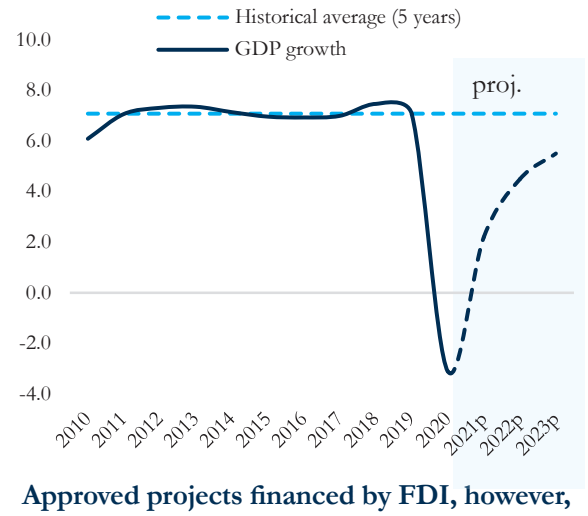
confidence in the banking system as deposits remained the dominant source (67 percent in 2020) of funds for banks. Looking ahead, the central bank is committed to staying vigilant and standing ready to introduce appropriate supportive measures. In the post-COVID-19 period, the withdrawal of any policy supports would be well communicated and on a gradual basis to achieve a balance between growth and stability.

Further investment in human capital will make an important contribution to improving productivity and competitiveness. Findings discussed in the special focus section below reveal that Cambodia suffers substantial learning and earning losses. Under the intermediate scenario, today's cohort of students in Cambodia will attain 1.5 fewer learning-adjusted years of schooling than the pre-pandemic baseline of 6.8 years because of school closures. The average student in today's cohort can expect to lose US$738 in purchasing power parity in annual earnings because of lost learning during the COVID-19 pandemic—a decline of 12 percent from the baseline. The present value of lifetime earnings lost because of the COVID-19 pandemic is US$31 billion. It is therefore recommended that teachers and administrators return to the all-important task of educating students. They need to act quickly to prevent dropouts, assess student learning, and implement new techniques for learning recovery to get students back on track. Meanwhile, Cambodia needs to retain and strengthen its remote learning infrastructure, which can be used to instruct students not in class on any given day under the new rotational system. In the future, when all students can return to school every day of the week, remote learning channels can supplement in-person learning. Beyond that, reopening teacher colleges provides an opportunity to strengthen teacher training and preparation for both in-person and remote teaching. As the situation stabilizes in the months and years ahead, Cambodia needs to "build back better," improving its education system for the benefit of students and the economy.

FIGURE ES.1. CAMBODIA'S RECENT DEVELOPMENTS AT A GLANCE

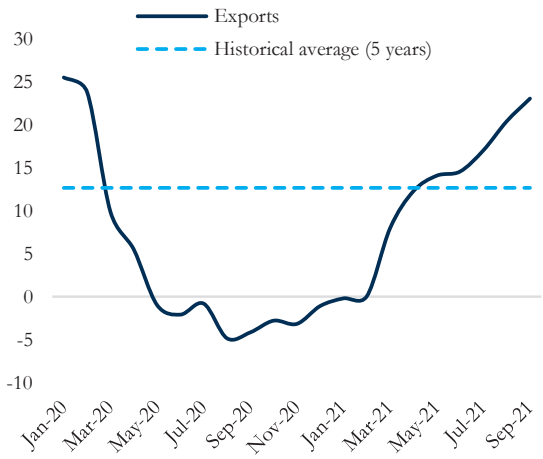
Real growth is expected to gradually recover…

Real growth (percent)



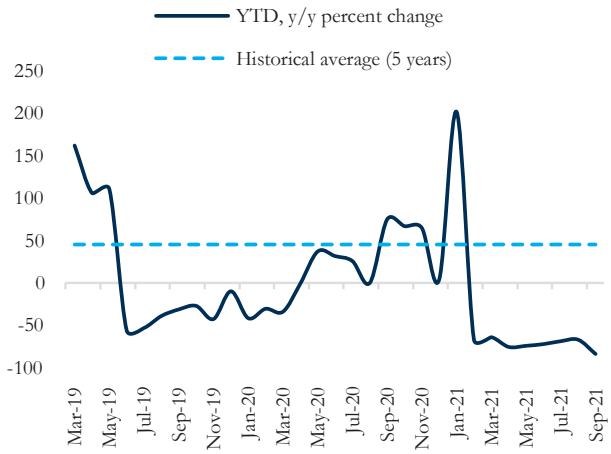
…goods (excluding gold) exports accelerated

(YTD, y/y, percent change)



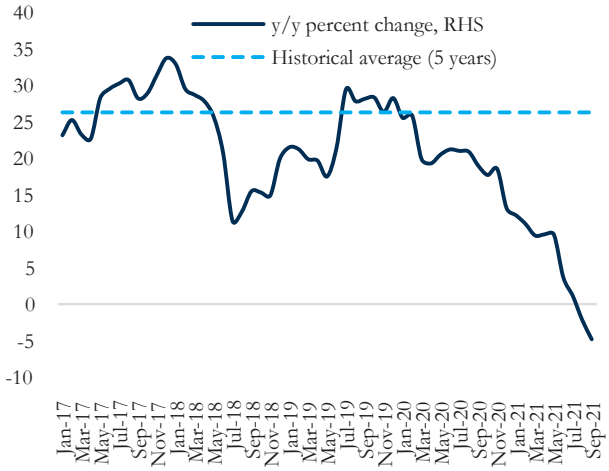
Approved projects financed by FDI, however, remained subdued…

(YTD, y/y percent change)



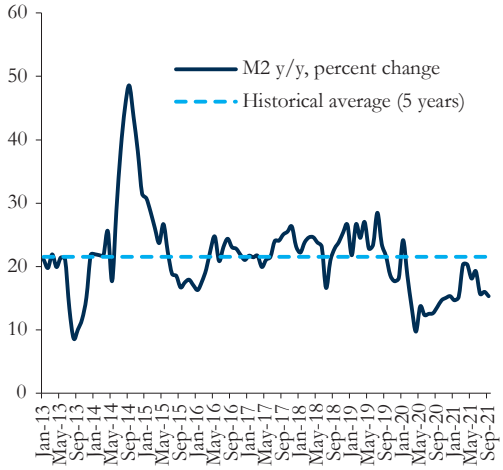
… gross international reserves marginally declined

(YTD, y/y percent change)



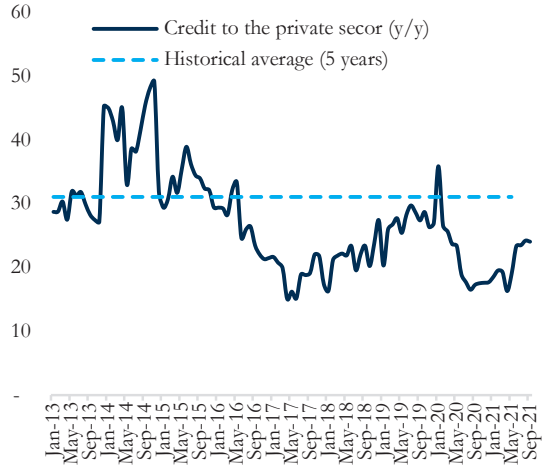
Broad money (M2) growth remained accommodative…

Broad money liabilities (y/y percent change)



…credit growth is trending upward as demand has strengthened

(y/y percent change)



Sources: Cambodian authorities; World Bank staff estimates and projections.
Note: e = estimates; proj./p = projection; YTD = year-to-date; y/y = year-on-year; RHS = right-hand scale..

Section I

Recent Economic Developments and Outlook

Recent Economic Developments and Outlook

Recent developments

Living with COVID-19

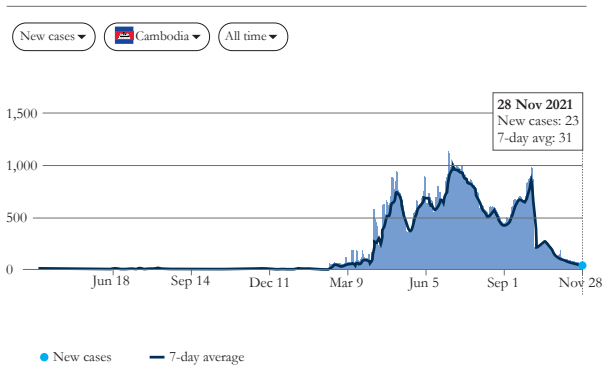
Cambodia is now adopting "living with COVID-19" measures under a "new normal." Infection rates and mortality receded after more than 80 percent of the total population received two doses of coronavirus vaccine. The authorities have relaxed travel restrictions while continuing to strictly follow protective health measures. Traditional growth drivers, especially the garment, travel goods, footwear, and bicycle manufacturing industries, as well as agriculture, continue to underpin the economic recovery. The electrical, electronic, and vehicle parts manufacturing industries are slowly emerging, while the agroprocessing industries, in particular food and wood processing, and furniture, are picking up. The service sector, especially the travel, tourism, hospitality, wholesale, and retail industries, is slowly recovering, underpinned initially by a revival of domestic demand and domestic tourism. Construction activity, especially real estate, housing, and property market developments, which was booming during the pre-pandemic period, remains sluggish.

Outbreaks lingered but showed signs of abating

Local outbreaks, which were raging in the past several months caused by the more transmissible Delta variant, are showing signs of abating. While remaining high, both daily infections and fatalities have receded (figure 1). As of November 29, 2021, there were 120,112 cases and 2,935 deaths. Once infections have been reduced, the restrictions are being phased out and the country will rely more on intensive testing-tracing-isolation and international screening/quarantining to prevent or detect further outbreaks early enough to control them. This approach has proved very effective and has been implemented. It has allowed domestic economic activity to resume relatively early while suffering the smaller economic costs of border controls.

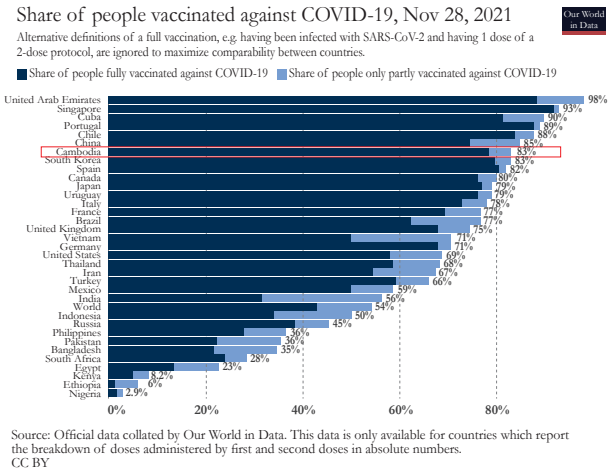
Nevertheless, the outbreak, which lingered during the second and third quarters of 2021, slowed the recovery, especially of the tourism, wholesale, and retail sectors. The important travel and tourism sector, which was estimated to have provided about 2 million jobs and contributed a quarter of GDP during the pre-pandemic period, virtually collapsed. Job losses

Figure 1: After resurging, coronavirus cases have declined
(new cases as of November 29, 2021)



Source: Johns Hopkins University Center for Systems Science and Engineering (JHU CSSE) COVID-19 Data.

Figure 2: Vaccinations accelerated
Share of people vaccinated against COVID-19 (November 28, 2021)



Source: Our World in Data.

have been magnified by an increased number of migrant workers who have returned home from abroad.

83.0 percent of the population has been fully vaccinated

While relying on social distancing measures to quell the current outbreak, the government has succeeded in rolling out its vaccination program. According to the authorities, as of end-November 2021, 13.3 million people, or 83.0 percent of total population of 16 million, have been fully vaccinated with at least two doses, which includes 1.7 million people aged 12 to 17 and 1.8 million aged 6 to 11. The authorities have been administering third doses of COVID-19 vaccine. Vaccination of five-year-old children started November 1, 2021. The authorities are planning to complete the vaccination program before the end of 2021, about six months ahead of their COVID-19 vaccination masterplan. As of end-October 2021, Cambodia received about 37 million doses, most of them Sinovac and Sinopharm vaccines purchased from and donated by China. Of the total Chinese vaccines, more than 70 percent was purchased.

Cambodia is one of best-performing countries for Coronavirus vaccinations. As of November 28, 2021, the country was ranked second in Asia and seventh in the world for the total share of fully and partly vaccinated people in its total population (figure 2).

The authorities have fully "reopened" Cambodia for business

Since November 2021, Cambodia has relaxed its stringent restrictions on domestic and international mobility, reopening the economy as the country is getting ready to launch a 2021–23 economic recovery plan. The required quarantine period for those who have been fully vaccinated has been fully lifted since November 15, 2021.[1] Unvaccinated travelers, however, continue to require a 14-day quarantine period.

All schools have been allowed to reopen since November 1, 2021. This happened after permission was granted to reopen all but primary schools on September 15, 2021. The early reopening of schools in September was made possible by the high vaccination rates among Cambodian teachers and youth aged 12 to 17. In Phnom Penh, 11,000 teachers and faculty (98 percent of the total), and 200,000 students aged 12 to 17 were vaccinated, of which 10,000 teachers and faculty (95 percent of total) and 140,000 students (70 percent of total) have been allowed to enter 228 public and private schools.[2] Only vaccinated students and teachers are allowed to return to schools.

The COVID-19 pandemic has caused tremendous damage to education systems in the world. Hundreds of millions of students—including those in Cambodia—have lost at least a full year of school. The Special Focus section of this Update details the impact of the COVID-19 pandemic on learning and earning in Cambodia and the tradeoffs policymakers face in managing it.

The region is witnessing a reversal of fortune

The coronavirus pandemic affects economic activity within a country directly through loss of earnings and illness, and indirectly by provoking restrictive public health measures.[3] The shock also affects the rest of the world and hence a specific country by affecting its international trade, FDI, remittances, and financial flows. The region is witnessing a reversal of fortune. In 2020, many East Asia and Pacific (EAP) countries had successfully contained the spread of the disease and domestic economic activity had revived, but the recession in the industrial world, which was still struggling with the disease, dampened exports. Now in 2021, it is the region which is being hit by the disease, while the industrial world is on the path to recovery.

An uneven recovery in the EAP region is now facing a setback. China's economy is projected to grow 8.5 percent in 2021, though growth momentum has eased. Overall regional growth is projected at 7.5 percent, reflecting the scale of China's economy. The rest of the region

1 Decision dated November 14, 2021, on required quarantine period for travelers who have been fully vaccinated, Ministry of Health.
2 See Prakas by Phnom Penh Municipality dated September 14, 2021.
3 World Bank 2021a.

Box 1:

Global economic developments and outlook[1, 2]

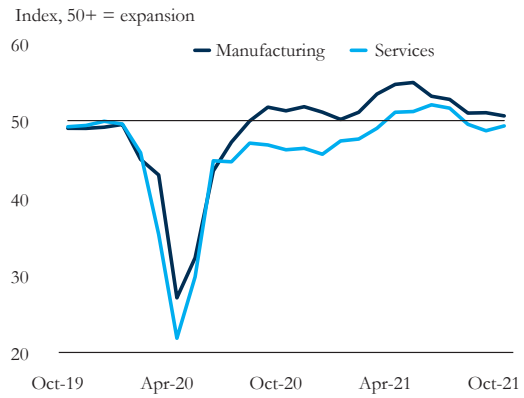
After moderating since the second quarter, incoming data suggest that global activity has stabilized. The global composite Purchasing Managers' Index (PMI) increased to 54.5 in October from 53.3 in September, reflecting a significant improvement in the services index (figure B.1.1). High-frequency indicators, however, point to a decline in global trade growth at the start of the fourth quarter amid persistent supply disruptions. After peaking in the first half of August, global COVID-19 case counts decreased. Since mid-October, however, global new daily cases have started to rise again, driven by a rapid upsurge across Europe, prompting tighter pandemic restrictions in many economies.

Global financing conditions remain broadly accommodative, with equity valuations in advanced economies climbing to all-time highs. In emerging market and developing economies (EMDEs), however, financing conditions continue to tighten amid persistent price pressures, and EMDE sovereign credit spreads remain elevated. Portfolio outflows from EMDEs accelerated in late October and early November amid growing concerns about inflation, growth, and high levels of government debt. Brent crude oil prices reached a seven-year high of US$86/barrel at the end of October (figure B.1.2). However, after reaching all-time highs, European natural gas prices and Australian coal prices declined sharply at the start of November.

According to the June 2021 *Global Economic Prospects* report, global growth is set to reach 5.6 percent in 2021, fueled by a robust rebound in some major economies. However, this recovery is uneven and largely reflects sharp rebounds in some major economies amid a highly unequal vaccine rollout, supply bottlenecks, and financial tightening. In many EMDEs, COVID-19 flareups, inflationary pressures, and diminished macroeconomic support are weighing on growth. Aggregate EMDE growth is forecast to reach 6 percent in 2021; however, excluding China, growth is projected to be a more modest 4.4 percent this year. In contrast to advanced economies, many EMDEs will not return to pre-pandemic trends over the forecast horizon.

The near-term global outlook is subject to considerable risks. The continued spread of COVID-19 amid unequal distribution of vaccines across countries opens the door to new, more virulent variants. In addition, continued supply bottlenecks could lead to additional disruptions to trade and contribute to further inflation surprises, increasing the risk that inflation expectations become unanchored. Meanwhile, sharp increases in debt levels have heightened the risk of financial stress. The pandemic is likely to have durable impact through multiple channels, including lower investment, weak confidence, and erosion of human capital. The long-term damage related to the pandemic will be particularly severe in economies that suffered most from extended outbreaks of COVID-19 and the collapse of global tourism and trade and those that suffered financial crises.

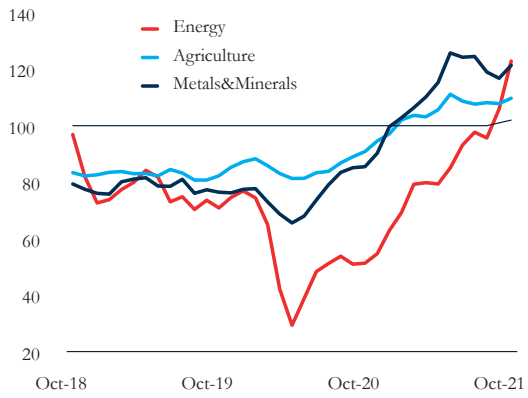
Figure B1.1. Manufacturing and services PMI



Source: Haver Analytics; World Bank.

Note: Last observation is October 2021.

Figure B1.2. Commodity prices (Index, nominal term, 2010 = 100)



Source: Haver Analytics; World Bank.

Note: Last observation is October 2021.

1 This box was prepared by Ekaterine Vashakmadze, Prospects Group.

2 This box draws on the World Bank's June 2021 *Global Economic Prospects* (GEP) report. The updated global forecasts will be published in the January 2022 GEP.

is anticipated to grow by 2.5 percent, compared to 4.4 percent forecast in the April 2021 EAP *Economic Update*, with significant heterogeneity across countries (see also box 1 on regional and global economic developments). While China, Indonesia, and Vietnam have already surpassed pre-pandemic levels of output, Malaysia and Mongolia will only do so in 2022, and the Philippines, Thailand, and many Pacific Island economies will remain below pre-pandemic levels of output even in 2023. As a result, employment has declined, poverty will persist, and inequality is increasing across several dimensions. The regional employment rate dropped by about 2 percentage points on average between 2019 and 2020. As many as 24 million people will not be able to escape poverty in 2021 in developing EAP, excluding China, because of COVID-19. While all households have suffered, poorer ones were more likely to lose income, sell off productive assets, suffer food insecurity, and lose schooling for children.

Cambodia is graduating from least developed country (LDC) status in the next several years

Despite negative impacts of the pandemic, this year, Cambodia met all three criteria—per capita gross national income, a human assets index, and an economic and environmental vulnerability index—for least developed country graduation for the first time in the Triennial Review conducted by the UN Committee for Development Policy (CDP).[4] Five countries met the eligibility criteria for the first time: Cambodia, Comoros, Djibouti, Senegal, and Zambia. The CDP is concerned about the risk that some of these countries may fail to reach the graduation thresholds at the 2024 triennial review, in particular owing to the impacts of COVID-19. It calls upon relevant United Nations entities to carefully monitor the development of these countries, including in relation to the least developed country criteria and the new supplementary graduation indicators. The CDP strongly encourages these countries and their international partners to build knowledge and awareness of the graduation process and its impacts.

At the next Triennial Review in 2024, if Cambodia meets graduation criteria for the second time, the CDP will review country statements, impact assessments, its vulnerability profile, and more. The CDP submits to the Economic and Social Council (ECOSOC) a recommendation for graduation or defers to the next Triennial Review. If graduation is recommended, the ECOSOC endorses the CDP's recommendation, the General Assembly takes note, and confirms the length of the preparatory period which will begin. When a country graduates from the LDC category, it no longer benefits from LDC-specific international support measures.[5] One of the main support measures of LDCs is preferential access to markets under the Generalized System of Preferences (GSP). Under the GSP, LDCs are basically given duty-free, quota-free (DFQF) market access.[6] Of the 15 countries granting GSP preferences,[7] at least five are Cambodia's main exports markets and include the United States, the European Union, the United Kingdom, Canada, and Japan. After graduation, Cambodia is expected to lose its preferential market access currently provided under DFQF. The country is accelerating its free trade negotiations with many major countries, the majority of which are its current main export partners and some of which are its potential export partners. So far, the country has signed free trade agreements with China and the Republic of Korea and plan to negotiate free trade agreements with Japan, the United Kingdom, India, the Eurasian Economic Union, and others.

Thanks to improved external demand conditions, goods exports accelerated

Cambodia's merchandise exports have accelerated further, fueled by improved external demand conditions. During the first nine months of 2021, goods (excluding gold) exports rose to US$12.6 billion, growing at 23.0 percent year on year (y/y), almost reaching its pre-

4 Committee for Development Policy Report on the twenty-third session (22–26 February 2021) Economic and Social Council Official Records, 2021 Supplement No. 13. While the Committee recommends the Lao People's Democratic Republic for graduation, it defers its decision on a possible recommendation for graduation for Myanmar until the 2024 triennial review.

5 See https://www.un.org/ldcportal/impacts-of-graduation/.

6 See https://www.customs.go.jp/english/c-answer_e/imtsukan/1501_e.htm.

7 See Generalized System of Preferences, UNCTAD. https://unctad.org/topic/trade-agreements/generalized-system-of-preferences.

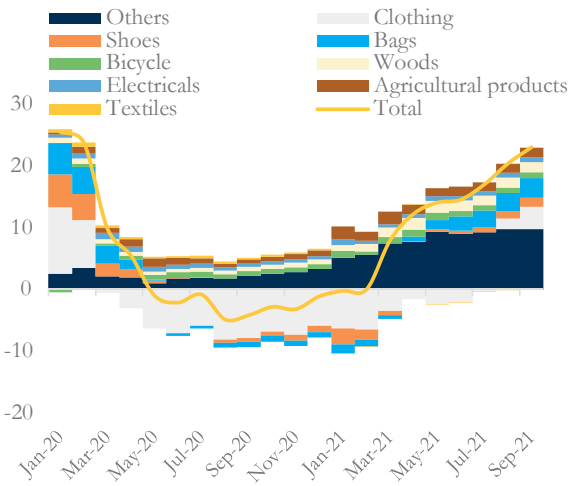
pandemic growth rate of 25.5 percent in January 2020 (figure 3). The top four manufacturing exports are garment, travel goods, footwear, and bicycle products, covering 67.5 percent of total merchandize exports. Despite its accelerated growth rate of 6.8 percent y/y, garment exports no longer account for the majority of goods exports but rather 45.9 percent of total goods exports, amounting to US$5.82 billion during the first nine months of 2021. Exports of travel goods surpassed those of footwear products and became the second-largest item, accounting for US$1.04 billion (8.2 percent of total), with a whopping y/y rise of 47.3 percent. Exports of footwear products is third, reaching US$1.0 billion (7.9 percent of total) or a 17.9 percent y/y increase. The fourth-largest manufacturing export product is bicycles, which amount to US$0.47 billion, with a y/y growth rate of 24.1 percent. The fifth- and sixth- largest exported products are agricultural commodities, and milled rice and rubber, amounting to US$285 million and US$266 million, respectively. The newly emerging manufactured products, which include electrical, electronic, vehicle parts, and cables combined, reached US$412 million, with a 23.1 percent y/y increase.

The Garment Manufacturers Association in Cambodia (GMAC) confirmed that most factories reported that they have enough orders. The GMAC added that there are some increases in orders compared to 2020. In this connection, imports of fabric mainly used for garment production has surged, growing at 25.1 percent y/y during the first nine months of 2021. The GMAC, however, stressed that there have been additional cost pressures in terms of (i) contribution to the pension fund, (ii) a possible increase in healthcare contribution to cover COVID-19 treatments for workers, and (iii) day-to-day expenses on occupational health and safety measures such as test kits, disinfectant, and masks, despite a marginal minimum wage increase to US$194 a month in 2022, up from US$192 a month in 2021.

Manufacturing exports to the United States, the largest exports market, surged

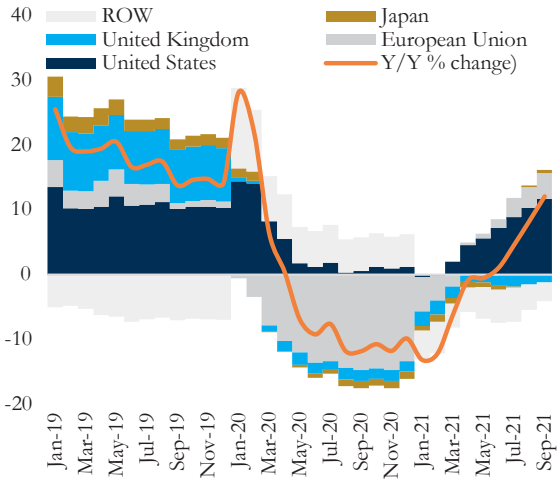
Goods exports to the United States, Cambodia's largest exports market, surged, rising by 31.9 percent y/y in September 2021 to US$ 3.4 billion (figure 4), despite expiration of legal authorization for the GSP program on December 31, 2020, pending U.S. congressional approval.[8] The United States continued to capture a rapidly rising share of Cambodia's garment, travel, and footwear (GTF) exports, reaching 42.8 percent of total in the first nine months of 2021, up from 36.7 percent in 2020 and 31.9 percent in 2019. Cambodia's exports to the U.S. market contributed 11.6 percentage points of the 12

Figure 3: Cambodia's goods exports[1] recovered (contribution to export growth, percentage point)



Source: Cambodian authorities.
Note: 1. Goods (excluding gold) exports.

Figure 4: Contribution of major markets to GTF exports growth (percentage point)



Source: Cambodian authorities.
Note: RoW = rest of the world.

8 See https://www.cbp.gov/trade/priority-issues/trade-agreements/special-trade-legislation/generalized-system-preferences.

percentage points of GTF exports growth during the first nine months of 2021.

Goods exports to the European Union (EU), Cambodia's second-largest exports market, also accelerated, growing at 15.0 percent to US$2.2 billion in the first nine months of 2021. This happened despite the impact of the partial withdrawal of the EU's Everything But Arms preferential treatment, effective August 12, 2020 (affecting approximately 20 percent of Cambodia's exports to the EU).[9] This is also in stark contrast to a 35 percent decline in GTF exports to the EU in 2020. The EU market accounted for 27.9 percent of Cambodia's total GTF exports, contributing 4.1 percentage points of the total 12.0 percentage points of GTF export growth in the first nine months of 2021. Contributions of exports to Japan, the United Kingdom (UK), and the rest of the world (ROW) to GTF exports growth during the same period were 0.4 percentage points, -1.2 percentage points, and -2.9 percentage points, respectively.

Likely due to travel restrictions, approved FDI remained weak

Approved FDI project value investing in the real sector remained relatively weak in 2021, likely due to travel restrictions. During the first nine months of 2021, approved (fixed asset) FDI project value totaled US$538 million or 83.6 percent y/y decline.[10] As foreign investor appetite to invest in the garment sector has returned, fueled by rising external demand, the largest approved FDI project value of US$146 went to garment manufacturing. Of the US$314 million approved FDI project value going to non-garment manufacturing, pulp and paper, solar energy, vehicle parts and electronics, travel goods, and footwear industries received US$75.6 million, US$53.9 million, US$41.2 million, US$28.1 million, and US$22.9 million, respectively. Approved FDI projects going to agriculture reached only US$32 million during the first nine months, down from US$100 million during the same period last year. China, which includes mainland China; Hong Kong Special Administrative Region (SAR), China; Macau SAR, China; and Taiwan, China, remains the largest foreign investor in Cambodia, accounting for about 90 percent of total approved FDI project value. Approved investment projects, except those from China, which may have proven to be the exception, given China's higher risk appetite and the close ties between China and Cambodia, have declined, likely caused by tightened international travel restrictions and continued high costs of logistics and energy. Unlike during the pre-pandemic period, foreign investors' appetite for investing in the real estate, tourism, retail, and wholesale sectors seems to have virtually ceased.

Table 1: Progress on Business Registration Reforms

Approval time			
Ministry	**License/permit/registration**	**Before**	**After**
Ministry of Industry, Science, Technology, and Innovation	Registration of small and medium-sized enterprises	15 working days	3 working days
Ministry of Tourism	Licensing for travel agencies, travel agents, restaurants, and hotels	28 working days	7 working days
Ministry of Posts and Telecommunications	Licensing for information and communications technology, and posts	30 working days	7 working days
Non-Bank Financial Services Authority	Licensing for real estate businesses and pawnshops	30 working days	7 working days

Source: Announcement on Phase 2 of the Business Registration System on Information Technology Platform, Ministry of Economy and Finance, September 1, 2021; https://www.registrationservices.gov.kh/wp-content/uploads/2021/08/Press-Release-for-OBR-Phase-II-Khmer-and-English.pdf.

9 For more details, please see https://trade.ec.europa.eu/doclib/press/index.cfm?id=2113.

10 The approved FDI project value excludes that of special economic zones (and project expansion).

Good progress is achieved under business registration reforms

In June 2020, the authorities successfully created a single Information Technology platform for business registration, which integrates regulatory requirements by the Ministry of Commerce, the General Department of Taxation of the Ministry of Economy and Finance, and the Ministry of Labor and Vocational Training under Phase 1 of the Business Registration System. Phase 2, which was introduced in September 2021, includes more classes of business licenses and permits available for application on the platform to be issued by more agencies, which include the Ministry of Industry, Science, Technology and Innovation; the Ministry of Tourism; the Ministry of Posts and Telecommunication; and the Non-Bank Financial Services Authority. As a result, approval times for most types of business registration has been substantially reduced from 15 to 30 days to only 3 to 7 days (see table 1).[11]

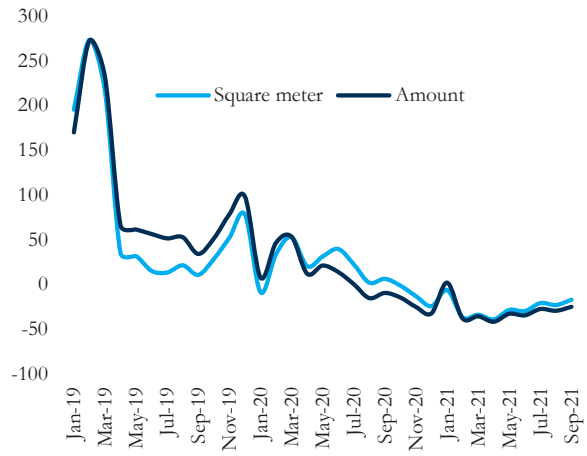
As businesses are formalized, they will be able to have better access to finance and to government technical support and fiscal incentives, while being able to establish backward linkages with the formal exports sector. The benefits of being formal for businesses may also include enforceable commercial contracts, legal protections, access to healthcare and pension systems, and more. From the government side, as businesses are registered, they will ultimately regularly pay taxes.

Large property development project activity remained subdued

Major commercial and residential development projects continued to be impacted by the pandemic, despite a small segment of the housing market—low and affordable residential property—remains resilient. Excess supply may have resulted in reduced foreign investor appetite for investing in property development projects. During the first nine months of 2021, approved construction permit value and area declined by 24.8 percent and 17.1 percent y/y, respectively (figure 5). The value of cement imports mainly used for the construction industry contracted by 29.6 percent in the first nine months of 2021 (figure 6). The value of steel imports barely grew, rising at 2.3 percent y/y after contracting by 34.5 percent in 2020. The value of construction equipment imports accelerated to 35.0 percent y/y, after contracting by 7.6 percent in 2020. The construction industry has been impacted by the pandemic, which creates widespread uncertainty. As a result, large property development projects were delayed and suspended.

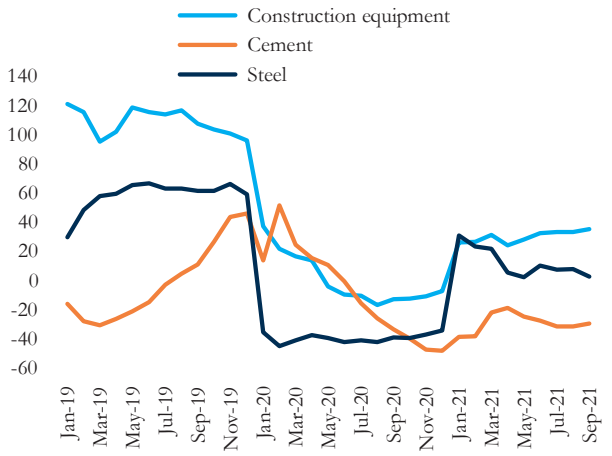
An unprecedented property development and real estate boom during the pre-pandemic period created excess supply. Thanks to Cambodia's liberal trade and investment policy, fueled by the prospect of a high investment return from tourism activities backed by a casino industry in Sihanoukville, external demand for the country's commercial and residential property ballooned, contributing to the pre-pandemic construction

Figure 5: Approved construction permits declined
(YTD, y/y percent change)



Source: Cambodian authorities.

Figure 6: Imports of basic construction materials and equipment remained subdued
(YTD, y/y percent change)



Source: Cambodian authorities.

11 See https://www.registrationservices.gov.kh/.

Box 2:

Cambodia: Summary of Investment Incentives under the Law on Investment

A new investment law was introduced in October 2021.

Article 26: Qualified Investment Project (QIP) which is an investment project that has received a registration certificate from the Council for the Development of Cambodia (CDC) or the Capital/Provincial Investment Sub-Committee has the following two basic incentive options:

Option 1	Option 2
• Corporate income tax (CIT) exemption from 3 to 9 years, depending on the sector and investment activities from the time of first income. Sectors and investment activities, as well as the period of CIT exemption, shall be determined in the Law on Finance Management and/or a sub-decree. After the expiration of the CIT exemption period, QIP shall be eligible to pay progressive CIT proportion relative to the total amount of CIT payable as follows: ✓ 25 percent for the first 2 years ✓ 50 percent for the next 2 years ✓ 75 percent for the last 2 years. • Receive exemption for prepayment on corporate income tax during corporate income tax exemption.	• Eligible to deduct capital expenditure through special depreciation as stated in the tax provisions in force. • Eligible for up to 200 percent deductible on other specific expenses for up to 9 years. Sectors and investment activities, and specific expenses as well as deductible periods shall be determined in the Law on Financial Management and/or a sub-decree. • Receive exemption for prepayment of corporate income tax for a particular period of time according to the sector and investment activity as defined in the Law on Financial management and/or a sub-decree.

Article 27: QIP is eligible to receive the following additional incentives:

- Receive a minimum tax exemption by having an independent audit report.
- Receive export tax exemption, except as otherwise provided in other laws and regulations.
- Export QIPs and supporting industry QIPs that support export QIPs are eligible to import construction materials, construction equipment, production equipment, and production inputs with tariffs, special tax, and value-added tax being the burden of the state.
- Domestic QIPs are eligible to import construction materials, construction equipment, and production equipment with customs duties, special tax, and value-added tax being the burden of the state. Incentives for production inputs shall be set out in the Law on Financial Management and/or a sub-decree.
- Receive value-added tax exemption for the purchase of locally produced inputs for QIP.
- Receive a deduction at the rate of 150 percent from the tax base for any of the following activities:
  - Research, development, and innovation
  - Provision of vocational and skills training to Cambodian workers
  - Construction of housing, canteens, restaurants, nurseries, and other health facilities for workers
  - Modernizing of machinery to serve the production chains
  - Provision of means of transportation for workers to travel to and from factories.
- Receive corporate income tax exemption for the expansion of a QIP, which shall be determined by a subdecree.

Article 28. Certain areas and investment activities that have high potential to contribute to national economic development may receive other special incentives set forth in the Law on Financial Management.

Article 12. The One-Stop-Service mechanism reviews investment project registration applications. If the proposed investment project is not on the Negative List, as set out separately in a sub-decree, a certificate of registration will be issued within no more than 20 business days.

Article 20. Investors' intellectual property is protected under the laws and regulations on intellectual property of the Kingdom of Cambodia.

Article 22. The CDC or the Capital/Provincial Investment Sub-Committee shall issue a certificate of investor status to the person involved in the investment project at the request of the investor to use for the application for a long-term temporary residence permit, work permit, and employment card, and for other necessary purposes.

Article 34. Within 30 days after receiving the written request, disputes can be resolved through a mediation mechanism of the CDC or of the Capital/Provincial Investment Sub-Committee; if not successful, disputes are resolved through (i) the national arbitration or international arbitration agreed by the parties, or (ii) a competent court of the Kingdom of Cambodia.

Source: Cambodia's Law on Investment (2021).

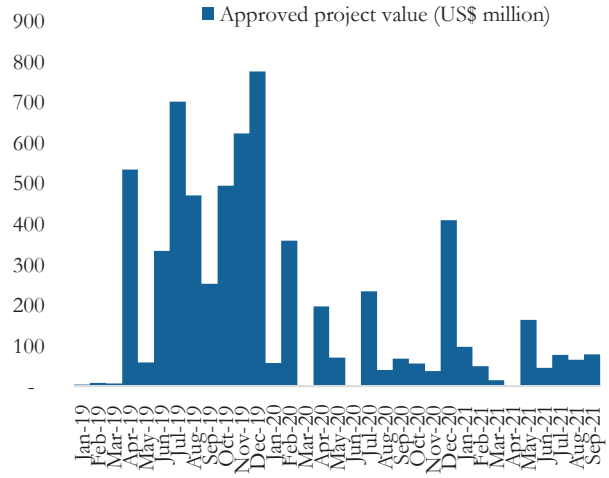
and real estate boom, financed in large part by FDI. When the pandemic hit, together with lockdowns and tightened international travel restrictions including a required 14-day quarantine period among others, external demand was interrupted, and most the FDI-financed property investment, especially in high-rise and large-scale development projects in major urban centers such as Phnom Penh and Sihanoukville, were suspended.

In Phnom Penh, the real estate industry indicated that completions of development projects continue to outpace take-up.[12] All segments of the property market have been hit hard by the pandemic. In the third quarter of 2021, the condominium market experienced a subdued quarter, with two-thirds of the anticipated completions being delayed into the new year. There was a mixture of issues, which include construction supply chain disruption, workforce availability crunches, and in some cases cash flow stresses brought about by slower than expected sales. In this regard, property developers were advised to pay attention to domestic demand and their cash flow. Imbalances continued in the office and retail segments of the property market. As stock vacancy rises, reductions in rental rates for the commercial segment grew.

The international gateway, the seaside province of Sihanoukville, where the country's largest seaport and an international airport are located, connecting to the capital city of Phnom Penh via an (under construction) expressway, experienced a rapid construction boom during the pre-pandemic period. Sihanoukville received US$4.2 billion of approved construction projects in 2019. As a result, the province was transformed into an investment boomtown, backed by a casino industry. When the authorities stopped issuing new casino permits in August 2019, the boom slowed and the province received only US$1.5 billion of approved construction projects in 2020. As the pandemic hit, the construction boom eased further. In the first nine months of 2021, approved construction permit value reached only US$594 million (figure 7).

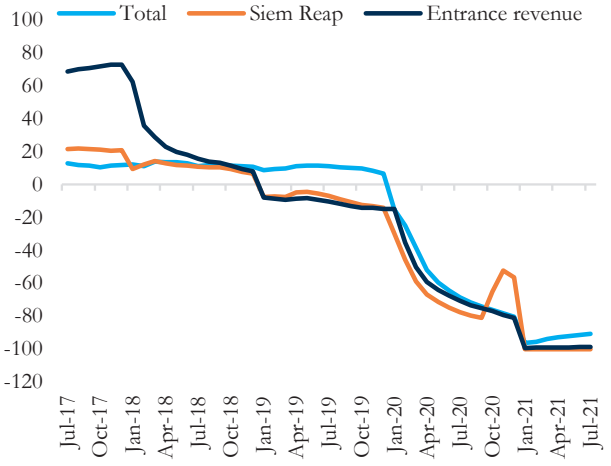
Unless the relaxation of travel restrictions and the prospect of a high investment return for holding property in Cambodia can help restore external demand for the country's large-scale and capital-intensive commercial and residential property building developments, the construction and real estate boom that the country witnessed during the pre-pandemic period, may not return anytime soon, given Cambodia's relatively small domestic market. After the moratorium on the new casino permits in 2019, a Law on Management of Commercial Gambling was promulgated in November 2020, the first article of which aims to boost the economy, bolster tourism, collect revenue, and establish social safety and security. In October 2021, the authorities issued a Prakas (regulation) on legal and regulatory requirements

Figure 7: Approved construction permits for Sihanoukville province eased
(US$ million)



Source: Cambodian authorities.

Figure 8: International arrivals and Angkor revenue collapsed
(YTD, y/y, percent change)



Source: Cambodian authorities.

12 Phnom Penh Market Update Q3, 2021, CBRE; https://images.cbre.com.kh/2021/10/Cambodia_Phnom-Penh_Figures_2021_Q3-1.pdf.

for obtaining, transferring, and extending casino and gambling licenses.[13]

Despite less favorable weather conditions, agricultural production marginally increased

As of August 2021, wet season rice cultivation reached 2.6 million hectares, or a 5.4 percent year-on-year increase.[14] Harvesting of (short-duration varieties) wet season rice has accelerated, producing a total of 1.4 million metric tons, or 54 percent of last year's total wet season paddy rice production. In 2021, wet season rice yield increased to 4.1 metric tons per hectare, up from 3.5 metric tons per hectare in 2020.

In 2020, total rice production only marginally expanded, reaching 10.9 million metric tons or a 0.5 percent increase.[15] Last year's rice cultivation faced less favorable weather conditions, with the late arrival of rainfalls, midseason droughts, and end-season floods. The cultivated (and harvested) area marginally increased, reaching 3.4 million hectares or a 2.3 percent increase in 2020, despite efforts to increase the cultivated area of wet season rice. The rice production yield for 2020 was flat at 3.3 metric tons per hectare. Rice remains Cambodia's major crop, and value added of crop production accounted for 57.4 percent of the country's agricultural GDP in 2020.

Non-rice agricultural production during the first seven months of 2021 was mixed. Rubber production expanded by 16 percent y/y in July 2021. During the first eight months of 2021, cassava and maize exports shrank to 0.4 million metric tons (a 4.6 percent y/y decline) and 0.1 million metric tons (a 21.3 percent y/y decline), respectively. Exports of cashew nuts, however, surged, reaching almost 1 million metric tons or a 340.6 percent y/y increase. Production and export of fresh bananas and mangos have been recently boosted by a new export market, China. In addition, the Cambodia-China Free Trade Agreement, which is expected to go into effect next year, will likely help boost Cambodia's agricultural production and exports, especially to the Chinese market. The country's agricultural production (and exports) has been expanding during the pandemic as demand increases. While the agriculture sector has been benefiting from increased labor availability and additional investment, agricultural commodity price volatility, especially of non-rice agricultural products produced for the domestic market, remains a critical constraint, as do higher electricity and logistics costs.

In addition, exports of heavy and relatively cheap cargo such as milled rice continued to be affected by high shipping costs, caused by temporary container shortages. According to the Cambodia Rice Federation, high shipping costs largely affected rice exports destined to Europe. During the first nine months of 2021, milled rice exports to the EU market declined by nearly 40 percent, compared to the same period last year. Total milled rice exports amounted to 410,698 metric tons or a 15.9 percent decline. While the trade safeguard measures imposed by the EU on Cambodian rice will end in January 2022,[16] saving rice exporters €125 per ton, the high ocean freight rate of €250 per metric ton will likely continue in the next 12 months or so.

A newly introduced investment law is expected to boost export competitiveness

A new investment law, which was introduced in October 2021, expects to help attract more FDI. In addition to a similar corporate income tax (CIT) exemption (tax holiday) from three to nine years offered under a previous law, the new law provides an additional six-year period of CIT reduction. After the expiration of the tax holiday period, the Qualified Investment Project (QIP) shall be eligible to pay a progressive CIT proportion relative to the total amount of CIT payable during the following six-year period as follows: (i) 25 percent for the first two years; (ii) 50 percent for the next two years; and (iii) 75 percent for the last two years (see box 2). In addition, the new Law on Investment may also provide other special incentives for certain areas and investment activities that have high potential to contribute to national economic development.

The new Law on Investment may also help improve worker productivity, given the

13 Prakas no. 002, date October 21, 2021.
14 Monthly report for August 2021, Ministry of Agriculture, Forestry and Fisheries.
15 Annual report for 2020, Ministry of Agriculture, Forestry and Fisheries.
16 The European Union imposed safeguard measures on rice from Cambodia. On January 18, 2019, the European Union reinstated the normal customs duty on Cambodia's rice products of €175 per ton in year one, progressively reducing it to €150 per ton in year two, and €125 per ton in year three; https://trade.ec.europa.eu/doclib/press/index.cfm?id=1970.

incentives it offers on the provision of skills training, housing, nurseries, health facilities, and transportation services to workers. Incentives provided to research, development, innovation, and machinery modernization may also promote new technology adoption and transfers. The provision of value-added tax exemption for the purchase of locally produced inputs for QIP may promote backward linkages between the FDI-led manufacturing exports sector with the domestic small and medium-sized enterprise sector.

Cambodian parliament ratified CCTFA and RCEP

In October 2021, the Cambodian parliament ratified the Cambodia-China Free Trade Agreement (CCFTA) and the Regional Comprehensive Economic Partnership (RCEP), which aim to increase the trade of goods by reducing and eliminating tariffs and non-tariff barriers. The CCFTA is Cambodia's first comprehensive bilateral FTA and China's first bilateral FTA with a member of the Association of Southeast Asian Nations (ASEAN). It has been reported that the CCFTA covers more than 10,800 tariff lines for Cambodia and about 9,530 tariff lines for China. The CCFTA goes beyond what was offered under the ASEAN-China FTA, covering an additional 340 tariff lines (4 percent of the total), which includes mostly chapters 1 to 10 of Cambodia's ASEAN Harmonized Tariff Nomenclature (AHTN), ranging from live animals/animal products to meat, fish, and cereals. After the CCFTA takes effect, about 98 percent of China's tariff lines will immediately go to zero tariff rates. Of the 340 commodities, 95 percent will be untaxed. Even before the effectiveness of the CCTFA, Cambodian agricultural commodity exports to the Chinese market are surging. During the first nine months of 2021, milled rice exports destined for the Chinese market rose by 37.7 percent, reaching 0.2 million metric tons or half of total milled rice exports, thanks to China's import quota which currently stands at 0.4 million metric tons a year.

The RCEP agreement is an unprecedented mega-regional trading arrangement that comprises a diverse mix of developed, developing, and least developed economies of the region. The agreement that would cover a market of 2.2 billion people, or almost 30 percent of the world's population, with a combined GDP of US$26.2 trillion or about 30 percent of global GDP, and accounts for nearly 28 percent of global trade.[17] The objectives of RCEP[18] are to (a) establish a modern, comprehensive, high-quality, and mutually beneficial economic partnership framework; (b) progressively liberalize and facilitate trade in goods among the Parties through, among others, progressive elimination of tariff and non-tariff barriers on all trade in goods among the Parties; (c) progressively liberalize trade in services among the Parties; and (d) create a liberal, facilitative, and competitive investment environment in the region.

Cambodia signed a free trade agreement with the Republic of Korea

The Cambodia-Republic of Korea Free Trade Agreement (CKFTA) was signed in October 2021. According to the Ministry of Commerce, the CKFTA was initiated during the visit of the Korean President to Cambodia in March 2019. There were 12 rounds of negotiations since the two countries started to negotiate the CKFTA in November 2019, but no details have been made public. According to the Ministry of Commerce, the CKFTA consists of 10 chapter and 131 articles. The CKFTA will go into effect 60 days after the two countries inform each other once it has been ratified. Under the CKFTA, Cambodia expects to boost its exports of garment, footwear, and travel goods, vehicle parts, and electronics, as well as agricultural commodities including rubber to the Republic of Korea.

Tourism activity is slowly picking up, thanks to the relaxation of travel restrictions

The relaxation of travel restrictions started in October 2021 has underpinned a slow recovery of the travel and tourism industry. According to the Ministry of Tourism, about 800,000 domestic tourists visited various tourist attraction sites across the country during the Pchum Ben holiday period covering October 2–7, 2021. However, positive impacts of the relaxation on international arrivals remain to be seen. To revive the tourism sector, the authorities in October 2021 introduced the Siem Reap tourism development masterplan

17 https://rcepsec.org/wp-content/uploads/2020/11/RCEP-Summit-4-Joint-Leaders-Statement-Min-Dec-on-India-2.pdf.
18 http://fta.mofcom.gov.cn/rcep/rceppdf/d1z_en.pdf.

for 2021–35. A US$150 million public investment project to develop the physical infrastructure, consisting of 38 roads with a total length of 108 kilometers in Siem Reap is expected to be ready by the end of this year.

Negative impacts of the pandemic on the travel and tourism industry have a lasting effect. The prospects for scarring from COVID-19 are substantial for Cambodia's tourism sector. After the collapse of international arrivals, large- to medium-sized hotels and resorts, especially those located at Cambodia's largest tourist attraction site, the Angkor Temple Complex in Siem Reap, were out of business. Subsequently, prolonged lockdowns and travel restrictions triggered by the longest and most severe local outbreak have decimated small businesses, which include guest houses, restaurants, gift shops, and entertainment services. International arrivals plummeted to 113,000, or a 90.6 percent y/y decline during the first seven months of 2021 (figure 8). Similarly, entrance fees collected from the Angkor Temple Complex plunged to US$236,000, or a 98.7 percent y/y decline.

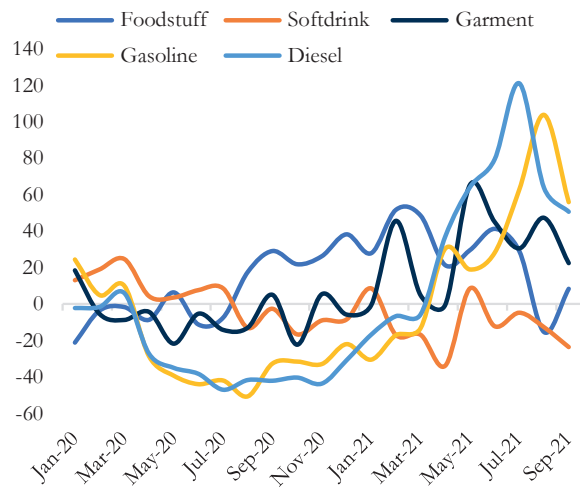
While remaining weak, domestic consumption marginally picked up

Domestic consumption is gradually picking up, underpinning the economic recovery, given that consumption accounts for about 70 percent of GDP. In the first nine months of 2021, imports of consumer goods such as garments, foodstuffs, cooking oil, and sugar accelerated, growing at 26.5 percent, 24.2 percent, 17.4 percent, 39.1 percent, respectively (figure 9). Imports of electronics also increased, growing at 3.6 percent. Imports of durables goods such as passenger cars, motorcycles, tractors, and trucks improved, growing at 1.0 percent, 12.3 percent, 53.9 percent, and 66.6 percent, respectively. Similarly, imports of gasoline, diesel, and natural gas have accelerated, growing at 15.7 percent, 35 percent, and 26.9 percent, respectively.

Inflation edged up as oil prices increased

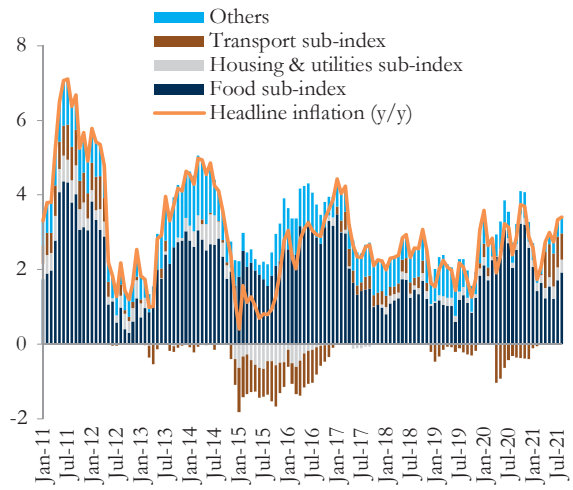
Headline inflation has picked up, caused largely by rising prices of petroleum products. Inflation rose to 3.4 percent y/y in August 2021, up from 2.4 percent during the same period last year and 2.9 percent at the end of 2020. Elevated prices of gasoline and diesel (and motorcycles) resulted in a rising transport subindex, which increased by 9.6 percent, up from a negative 4.1 percent during the same period last year. The contributions of the transport subindex to inflation therefore rose by 1 percentage point, reaching 0.7 percentage points, up from a negative 0.3 percentage points (figure 10). The contribution of the housing (and utilities) subindex to inflation also increased to 0.3 percentage points, up from 0.1 percentage points. The contribution of the subindex of all food items, which accounts for 43.2 percent of Cambodia's consumer price index (CPI) basket remained unchanged at 1.9 percent as elevated prices of meat, fish, vegetable, and dairy products were offset by depressed prices of cereals, in particular rice.

Figure 9: **Imports of consumer goods slowly recovered**
(y/y, percent change)



Source: Cambodian authorities.

Figure 10: **Inflation edged up**
(Contributions to 12-month inflation (percent)



Source: Cambodian authorities.

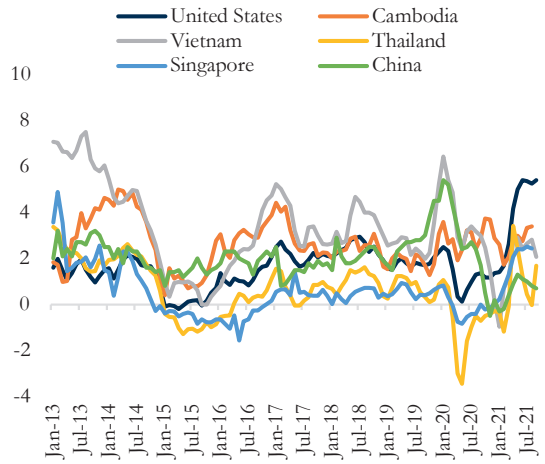
In Cambodia's main import partners, price pressures also marginally increased (figure 11). Inflation in the United States quickly rose to 5.4 percent y/y in August 2021, up from 1.3 percent during the same period last year. Given the economy is highly dollarized and the riel has been pegged to the dollar, rising inflation in the United States will likely lead to rising domestic price pressures, which often results in "imported" inflation. Similarly, the East Asia and Pacific (EAP) region has less to fear from inflation at home than inflationary pressures abroad.[19] While output gaps remain wide in most countries in the region, suggesting a lack of demand pressure on consumer prices (and the currencies of countries in the region have not depreciated significantly), faster recovery and inflation in industrial countries could induce higher interest rates there, and premature financial tightening in the lagging EAP region. Price pressures were also found in Singapore and Thailand. Inflation in Vietnam and China, however, remained subdued in August 2021. The risk of inflation is low in the near term for most countries in the region. Long-term inflation expectations in general remain well-anchored at levels within central bank target ranges.

The exchange rate has been under increased pressures caused by external imbalances

Rising external imbalances have put the exchange rate under increased pressure. Cambodia's external imbalances increased significantly this year. The trade deficit rose as imports surged, growing at 53.5 percent y/y during the first nine months of 2021. In addition, services exports have been impacted by the collapse of tourism receipts. As a result, the current account deficit has substantially deteriorated since the beginning of the year (see the balance-of-payments section below). To this end, the central bank's open market operations continued to underpin exchange rate stability, which in turn has helped anchor domestic retail prices denominated in local currency (see the monetary section below).

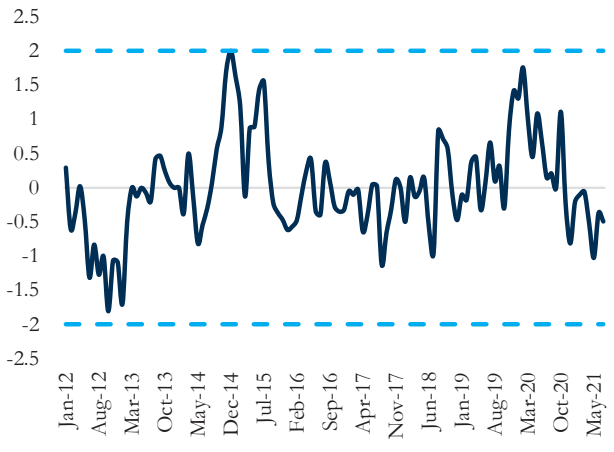
Thanks to the central bank's open market operations, nominal values of the Cambodian riel vis-à-vis the U.S. dollar remained broadly within the targeted ±2 percent range (figure 12). The exchange rate marginally depreciated to 4,074 riels per U.S. dollar in October 2021, compared to 4,060 riel per U.S. dollar during the same period last year. The riel versus Thai baht exchange rate marginally appreciated, reaching 122 riel per baht, down from 132 riel per baht. The Riel versus Chinese yuan exchange rate, however, depreciated to 636 riel per yuan, up from 606 riel per yuan. The riel versus Vietnamese dong exchange rate remained broadly unchanged at 0.17 riel per dong. Broadly stable exchange rates of the riel versus the U.S. dollar and a number of Cambodia's main trading partners in the region have helped anchor prices of Cambodia's main imported products.

Figure 11: **Inflation of Cambodia's main importing partners**
(y/y percent change)



Source: Haver Analytics.

Figure 12: **The nominal exchange rate was broadly stable, within a ±2 percent range**
(riel per U.S. dollar, y/y percent change)



Source: Cambodian authorities.

19 World Bank 2021.

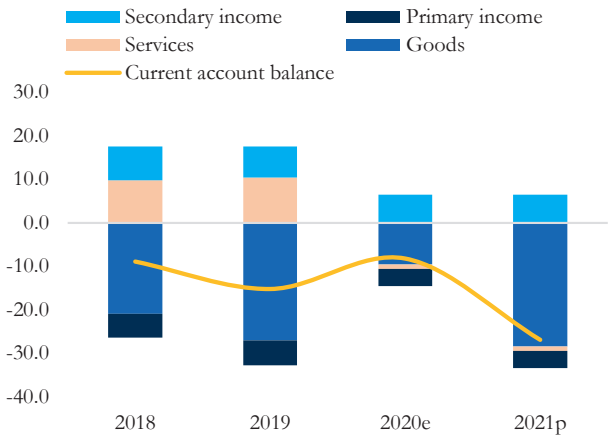
The current account deficit deteriorated as the trade deficit widened

In 2021, Cambodia's current account deficit deteriorated quickly as the trade deficit widened. The trade deficit has substantially widened, largely caused by a surge in imports, while goods (including gold) exports eased. In addition, the balance of payments has been further impacted by the collapse of tourism receipts, which has devastated the country's services exports.

During the first nine months of 2021, goods (including gold) exports marginally eased, reaching US$12.7 billion or 3.5 percent y/y decline. Goods (including gold) imports, however, skyrocketed, reaching US$20.6 billion or a 53.5 percent increase. The trade deficit has therefore significantly widened. Rising imports of a few major items, in particular gold[20] used as savings asset, and fabric used as inputs for garment production and exports, have been mainly behind the surge in imports. Gold imports shot up to US$4.0 billion in the first nine months of 2021, a more than tenfold increase, as gold traders increasingly hedged against volatility caused by the pandemic. Gold has been a traditional hedge against inflation, which is creeping up. Gold prices have remained favorable since the second half of 2020, and it seems to be an appropriate time to invest in it. Fabric imports, which have been a leading indicator for garment exports, have been fueled by rising demand for garment products as external conditions improved. In the first nine months of 2021, imports of fabric rose to US$3.5 billion or a 25.1 percent increase.

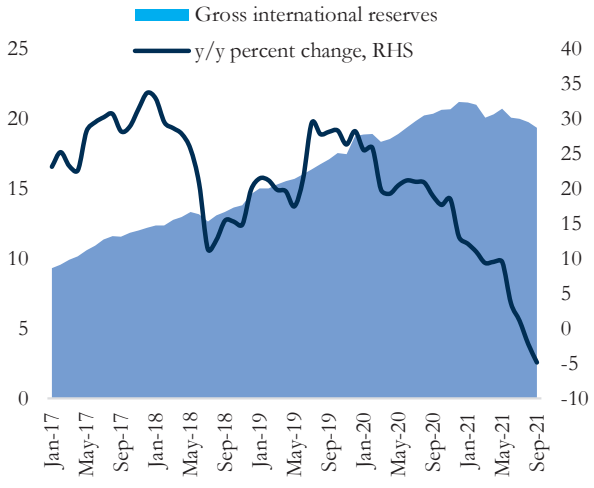
In addition, the country's service exports have been decimated by the collapse of tourism receipts. In 2020, service transactions were abruptly interrupted by the pandemic. As a result, for the first time in many years, the net exports of services registered a deficit of US$123 million in 2020, down from a surplus of US$2.8 billion in 2019. Service exports declined by 68 percent in 2020, compared to an increase of 11.6 percent in 2019, caused primarily by a sharp decline in travel exports, which contracted by 78.6 percent y/y.[21] During the first half of 2021, net exports of services registered a negative US$700 million, according to the central bank's balance-of-payments data. Given the widening trade deficit and the continued large negative net service exports, the current account deficit is projected to peak at 26.9 percent of GDP in 2021 (figure 13), up from 8.2 percent of GDP in 2020. While the deficit is projected to continue to be largely financed by capital and FDI inflows, international reserves have marginally declined, with increased

Figure 13: The current account deficit deteriorated quickly
(percent of GDP)



Source: World Bank staff estimates, and projections based on the data from the Cambodian authorities.
Note: e = estimates; p = projection.

Figure 14: Gross international reserves eased
(US$ billion)



Source: Cambodian authorities.
Note: RHS = right-hand scale.

20 A US$3 billion surge in gold exports helped boost goods exports in 2020, but a (projected) surge in gold imports of US$4.0 billion in 2021 worsens this year's trade (and current account) deficit.
21 Financial Stability Review for 2020, the National Bank of Cambodia.

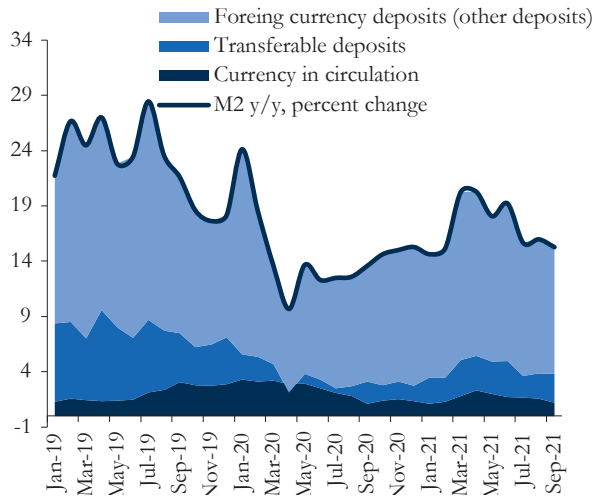
central bank open market operations. Gross international reserves declined only marginally to US$19.3 billion (about ten months of imports) in September 2021 (figure 14), down from US$21.2 billion at the end of 2020.

Monetary policy easing continued

The central bank's monetary policy easing continued to provide liquidity to banks and financial institutions to support economic recovery. In September 2021, the National Bank of Cambodia (NBC), Cambodia's central bank, introduced a Marginal Lending Facility (MLF), offering riel-denominated overnight loans that can be extended up to five days, using negotiable certificates of deposit as collateral.[22] The MLF was established to provide short-term liquidity demanded by the banking sector and to foster the development of the interbank market, while encouraging the use of local currency in the highly dollarized economy. The central bank under its third-round monetary easing measures introduced in May 2021 decided, among others, to (i) maintain a reserve requirement ratio at 7 percent for both riel and U.S. dollar deposits and borrowings until further notice; and (ii) allow the banking and microfinance sectors to continue to restructure loans until the end of 2021.[23] To help relieve the financial burden for individuals and businesses, banks and financial institutions have been allowed to conduct loan restructuring since 2020. By mid-2021, 367,239 borrower accounts (11.1 percent of total borrower accounts) amounting to US$5.5 billion (13.6 percent of total outstanding credits) were restructured. Given the high uncertainty regarding the strength of economic recovery, especially after the community outbreak in the second and third quarters of 2021, the NBC is committed to staying vigilant and standing ready to introduce more supportive measures that are in line with government policies, while preserving financial stability.[24]

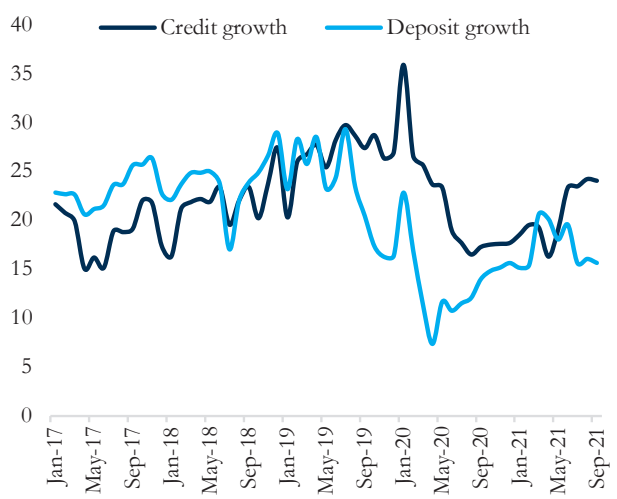
The central bank's exchange rate policy is one of its main policy instruments. The main objective of the policy is to achieve price stability. Continuing to implement the managed floating regime, the central bank intervenes in the foreign exchange market to maintain the exchange rate in accordance with the determined objective. The exchange rate has been under increased pressures due to rising external imbalances. In response, the central bank has intervened in the foreign exchange market by conducting open market operations. To this end, the central bank sold US$50 million in September and US$100 million in October 2021.[25] During the first half

Figure 15: Broad money (M2) growth recovered
Contribution to broad money growth (percentage point)



Source: Cambodian authorities.

Figure 16: Domestic credit growth improved
(y/y percent change)



Source: Cambodian authorities.

22 See https://www.nbc.org.kh/download_files/news_and_events/announ_kh/IntroducingMLF.pdf.
23 See May 21, 2021, announcement on policy easing measures (third round) by the National Bank of Cambodia.
24 National Bank of Cambodia, 2020 Financial Stability Review, May 2021. See https://www.nbc.org.kh/download_files/publication/fsr_eng/Final_FSR_2020_English.pdf.
25 Announcements dated September 6 and 21, and October 18 and 27, 2021, The National Bank of Cambodia. See https://www.nbc.org.kh/news_and_events/announcements_info.php?id=431.

of 2021, net sales of U.S. dollars was US$48.5 million, while net purchases of U.S. dollars was US$26.7 million.[26] In addition, the central bank continues to absorb liquidity from the market by issuing negotiable certificates of deposit in local currency and U.S. dollars under liquidity-providing collateralized operations (LPCO).

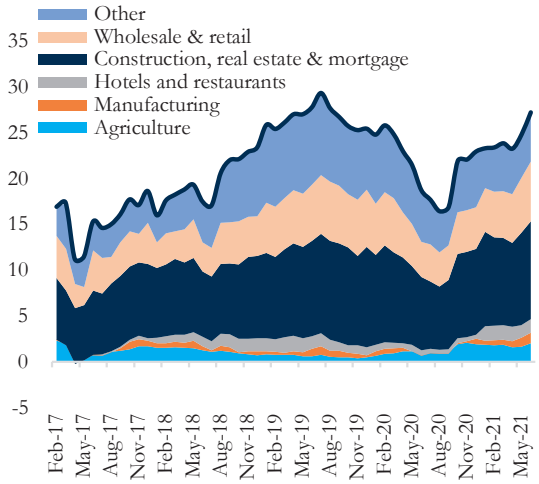
Broad money growth partly recovered

Thanks to improved confidence in the banking system and continued capital inflows, broad money (M2) growth recovered. While remaining below the pre-pandemic level, Cambodia's M2 growth was strong at 15.3 percent y/y as of September 2021 (figure 15). Foreign currency deposit growth, which significantly eased during the first half of 2020, has picked up since, mainly contributing to the partial recovery of broad money growth. Of the 15.3 percent broad money growth as of September 2020, the contribution of foreign currency deposits (and other deposits) accounted for 11.5 percentage points, while transferable deposits contributed 2.6 percentage points. The contribution of (local) currency in circulation to broad money growth eased, declining to 1.2 percentage points in September 2021, down from 2.9 percentage points in December 2019. This decline is due to the fact that the central bank cannot inject as much local currency into circulation as it did in the past, because the exchange rate has been under pressure, caused by the widening of Cambodia's trade and current account deficits, while the economy is highly dollarized.

Credit growth recovered, while deposit growth improved

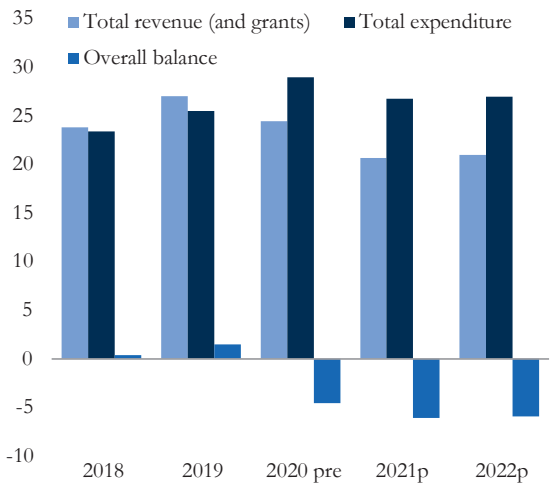
Domestic credit growth recovered, thanks to improved demand. Domestic credit grew at 24.0 percent y/y in September 2021 (figure 16), compared to 27.0 percent in December 2019 (and a five-year historical average of 31 percent). The credit-to-GDP ratio, therefore, increased further to 154.9 percent in September 2021, up from 136.0 percent in December 2020. Thanks to an overall recovery of demand for credits, credit expansion was across the board. According to the data on credit granted by banks classified by industry, domestic credit financing the construction and real estate sector started to pick up in the last quarter of 2020 and has accelerated since, reflecting a renewed appetite for domestic investment in the construction and real estate sector (figure 17). After hitting a 2.5-year low, dropping to 6.9 percentage points in August 2020, the contribution of the construction, real estate, and mortgage sectors to domestic credit growth once again accelerated, accounting for 10.7 percentage points in May 2021, marginally below its peak of 11 percentage points before

Figure 17: The contribution of construction to credit growth accelerated
(percentage point)



Source: Cambodian authorities.

Figure 18: The general government overall fiscal deficit widened
(% of GDP)



Source: Cambodian authorities.
Note: pre = preliminary; p = projection.

26 Semiannual reform for 2021, the National Bank of Cambodia. See https://www.nbc.org.kh/download_files/publication/annual_rep_kh/Semi_Annual_Report_2021_Final.pdf.

the pandemic. As of May 2021, there was US$11 billion (or 33 percent of total) in outstanding credit provided the construction, real estate, and mortgage sectors. The contributions of lending to wholesale and retail, agriculture, hotels and restaurants, and manufacturing to credit growth rose to 6.5 percentage points, 2 percentage points, 1.5 percentage points, and 1.2 percentage points, respectively, in May 2021, up from 4.5 percentage points, 1.9 percentage points, 0.5 percentage points, and 0.6 percentage points, respectively, in December 2020, reflecting an across-the-board expansion of credit financing all business activities.

Deposit growth also picked up, likely indicating increased confidence in the banking system, with continued capital inflows expanding at 15.6 percent y/y in September 2021, after hitting its lowest growth rate of 7.3 percent in April 2020.[27]

The latest financial stability review indicated that the financial and banking sector remained resilient

The central bank's Financial Stability Review for 2020 indicated that the financial and banking sector remained resilient due to its strong capital and liquidity positions, thanks to implementation of microprudential regulations in the past decades coupled with the intervention measures by the NBC that have built up the resilience of the banking system.[28] In 2020, the capital adequacy ratios of banks, Microfinance Deposit-Taking Institutions (MDIs), and microfinance institutions stood at 23.7 percent, 19.8 percent, and 38.9 percent, respectively, which were higher than the capital requirement of 15 percent. Similarly, the liquidity coverage ratios of banks and MDIs stood at 162.5 percent and 240.4 percent, respectively, which were also higher than the liquidity benchmark of 100 percent. In addition, the profitability of the banking system remained sustainable, with a marginal decline in return on assets (ROA) and return on equity (ROE) for banks to 1.7 percent and 8.7 percent in 2020, compared to 1.9 percent and 9.8 percent in 2019, respectively. Similarly, MDIs recorded the same ROA of 2.9 percent, although their ROE decreased from 17.7 percent to 14.8 percent. For microfinance institutions, the ROE and ROA decreased to 1.9 percent and 4.5 percent, down from 2.2 percent and 6.3 percent in 2019, respectively.

In 2020, the nonperforming loan (NPL) ratio for agriculture was the highest, registering at 5.6 percent, down from 7.4 percent in 2019. The NPL ratio for the manufacturing sector was second, at 4.2 percent. The NPL ratios for the construction, real estate, and mortgage sectors were surprisingly low, accounting for 2.1 percent, 1 percent, and 1.1 percent, respectively, despite high credit growth and a concentration of domestic credit in these sectors. The NPL ratio for the hotel and restaurant sector was 2.4 percent. The NPL ratios of other sectors, such as the retail and wholesale trades, remained below 2 percent. In the first half of 2021, the reported overall nonperforming loan ratios remained low at 2.5 percent and 2.0 percent for the banking sector and microfinance sectors, respectively.[29] However, given the continued loan restructuring process offered by banks and microfinance institutions, the reported nonperforming loan ratios may not correctly reflect the level of debt distress facing the banking and microfinance system.

Interest rates of U.S. dollar-denominated loans and deposits remained broadly stable as of May 2021. The (weighted average of) U.S. dollar-denominated term deposit rates marginally increased to 3.3 percent per year in May 2021, compared to 3.2 percent in December 2020. During the same period, the U.S. dollar-denominated term loan rates remained unaffected at 9.1 percent a year. Due to Cambodia's highly dollarized economy, the central bank cannot influence interest rates, especially those of U.S. dollar-denominated loans and deposits.[30]

The pandemic substantially impacted jobs and poverty

The COVID-19 pandemic continues to have an impact on economic activities across the country. The High-Frequency Phone Survey of Households shows that employment has yet to return to pre-pandemic levels (see Box 3 for

27 Due to the highly dollarized economy, the central bank's broad money (M2) data reported in the monetary survey is incomplete as it includes only local currency (not U.S. dollars) in circulation. The surge of imports, therefore, does not necessarily reflect a decline in M2 recorded in the survey.

28 Financial Stability Review for 2020, the National Bank of Cambodia, May 2021.

29 National Bank of Cambodia 2021.

30 However, the central bank introduced a lending rate cap at 18 percent per year in March 2017. See Prakas number B7-017-109 PK dated March 13, 2017; https://www.nbc.org.kh/download_files/legislation/prakas_eng/Prakas-on-Interest-Rate-Cap-Eng.pdf.

the detailed findings of the survey). The negative impacts of the COVID-19 pandemic on non-farm family businesses remain substantial due to weak consumer demand. Nearly half of households experienced declines in income between December 2020 and March 2021. The authorities have extended the COVID-19 cash transfer program for poor and vulnerable households (identified under the IDPoor initiative) until December 2021 under the program's seventh round,[31] while introducing additional assistance. In early June 2020, when the program began, there were only 560,000 eligible households. Since then, the total number of households receiving the cash transfer rose to more than 640,000 as of October 2020[32], and to 710,929 as of January 2021. As of October 2021, 678,459 households or 19 percent of all households, received the cash transfer from the government. On average, each poor and vulnerable household covered by the program receives about US$45 per month. In addition, the government has launched a one-off social assistance cash transfer to support non-IDPoor households affected by COVID-19. As of August 2021, about 121,397 eligible non-IDPoor households countrywide had received government support. The COVID-19 relief cash transfer program including the one-off social assistance cash transfer helps mitigate some of the negative impacts on poor and vulnerable households, but its coverage remains relatively narrow. Cambodia has recently redefined the poverty line, using the most recent Cambodia Socio-Economic Survey for 2019-20, cost-of-basic need, and common basket approach. The national poverty line is now Cambodian riel 10,951 per person per day. Under the new poverty line, about 17.8 percent of the population is identified as poor. Poverty rates vary considerably by areas of residence. Poverty rate is the lowest in Phnom Penh (4.2 percent), other urban areas (12.6 percent), and the highest in rural areas (22.8 percent).

Subdued domestic economic activity caused revenue collection to ease further

During the first eight months of 2021, domestic revenue declined by 3 percent, compared to the same period last year. Direct revenue (direct tax), which accounts for 38 percent of total domestic revenue and which has been hit hardest, contracted by about 12 percent, caused by falling profits and incomes of businesses (and workers). Some businesses, such as those that served the services sector, especially the travel, tourism and hospitality industries, have gone bankrupt. Indirect revenue, which accounts for about half of domestic revenue, declined by 7 percent due mainly to the decline in excises and special taxes collected from imported goods. Despite its initial recovery, consumption remained subdued, compared to the pre-pandemic period. Domestic demand for imported goods, in partly durable goods such as passage cars and motorcycles, and construction materials such as steel and cement, declined. Similarly, international trade and non-tax revenues, which accounted for 10 percent and 8 percent of total domestic revenue, respectively, shrank by 4.2 percent and 20 percent, respectively. Domestic revenue is expected to reach about 94 percent of total (estimated) collection in 2020.

Despite increased fiscal intervention, government expenditure remained contained

During the first eight months of 2021, government expenditure declined by 2.2 percent y/y. To save budgetary resources to finance necessary public health expenditures to fight the spread of the coronavirus, compensation of employees (the public sector wage), which rose quickly during the pre-pandemic period, has been frozen (since the 2021 budget). Spending on goods and services (non-wage) accelerated, increasing by 10.5 percent, caused mainly by the increase in social assistance and benefits including the cash transfer, and health supplies and equipment in response to the resurgence of COVID-19 cases. The government has adopted additional fiscal support, projected to increase to 4.9 percent of GDP or US$1,454 million in 2021, up from 2.5 percent of GDP or US$829 million in 2020, driven mainly by spending on COVID-19 prevention and treatment, which accounts for 2.9 percent of GDP in 2021 (table 2).[33]

While total capital spending remains moderate, domestically financed capital

31 See Decision on cash transfer for the seventh round dated October 11, 2021, Ministry of Economy Finance; https://nspc.gov.kh/Images/Decision_0001_2021_10_20_14_09_13.pdf.

32 Presentation by the Ministry of Social Affairs, Veterans and Youth Rehabilitation on October 22, 2020.

33 MEF presentation on budget framework for 2022 to the Parliament, August 17, 2021.

spending surged, rising by 42.2 percent during the first eight months as the government boosted public investment in physical infrastructure. Since 2020, domestically financed capital spending has exceeded externally financed capital spending.

A widening fiscal deficit as the pandemic reversed years of extraordinary revenue gains

Despite efforts to contain expenditure, the overall fiscal deficit has widened, caused by weak revenue collection. Still, the deficit is expected to be fully financed by the government's current savings/fiscal reserves (without resorting to domestic bank financing) and external borrowing. In 2021, the overall fiscal deficit is expected to reach 6.1 percent of GDP, up from (estimated) 4.5 percent of GDP in 2020 (figure 18). In 2021, total expenditure is projected to be contained at 26.7 percent of GDP, down from (an estimated) 28.4 percent of GDP in 2020, when the pandemic first hit the country. In contrast, domestic revenue (including grants) is expected to significantly decline to 20.7 percent of GDP in 2021, down from 23.9 percent of GDP in 2020 when impacts of the pandemic on revenue were lessened by ballooned profit taxes for 2019, which were collected in April 2020. Impacts of the pandemic have reversed years of extraordinary performance gains in revenue collection in Cambodia. The (projected) revenue-to-GDP ratio of 20.7 percent in 2021 is similar to that in 2016 (see Annex 1: Selected Indicators).

To finance the gap between revenue collection and financing requirements, the authorities continue to tap into their current savings (fiscal reserves) and to draw down government deposits in the banking system. While remaining solid, government deposits declined

Table 2: Government fiscal intervention
(percent of GDP)

Interventions	Description	2020		2021		2022
		Plan	Disbursed	Plan	Full-Year Estimate	Plan
Public Health and Social Intervention						
- Health Masterplan - Outbreak Prevention and Treatment	Scaling up health response by increasing prevention and detection facilities, clinical management and treatment as well as coordination and supporting system	0.39	0.11	0.10	2.48	1.00
Wage subsidy and skill training	Providing partial wage subsidies of $40 per month and techincal/soft skills training for furloughed workers in the tourism and garment industries	0.25	0.23	0.20	0.20	0.20
Cash for work	Providing jobs in rural areas through construction, upgrade, and maintenance of rural roads, drainage and small-scale irrigation	0.39	0.36	0.54	0.54	0.33
Cash Transfer	Providing monthly cash grants to poor and vulnerable individuals that are registered in the government's IDPoor database	1.16	1.12	0.67	1.12	0.94
Food support During Lockdown	Providing food support to local people during lockdown period	-	-	-	0.03	-
Economic Intervention						
Financing through ARDB	Providing low-interest loans for working capital and investment in agricultural sector through capital injections to Agricultural and Rural Development Bank	0.19	0.18	-	-	-
Co-Financing through SME Bank	Co-financing with commercial banks by providing low-interest loans for working capital and investment in 6 targeted SME sectors through newly established SME bank	0.19	0.18	-	-	-
Credit Guarantee Fund	Providing capital to establish the Credit Guarantee Corporation of Cambodia which helps bear risk-sharing with businesses	0.77	0.73	-	-	-
SME Financing Facility	Reserving contingent funds to provide any necessary financing to SME sector	1.16	0.11	0.90	0.50	-
Cash Transfer	Providing monthly cash grants to poor and vulnerable individuals that are registered in the government's IDPoor database			-	-	0.84
Food support During Lockdown	Providing food support to local people during lockdown period			-	-	0.08
Total Intervention Package		**4.50**	**3.02**	**2.41**	**4.87**	**3.39**

Source: Cambodian authorities.

Box 3:

Impacts of COVID-19 on households—results from the High-Frequency Phone Survey of Households[1]

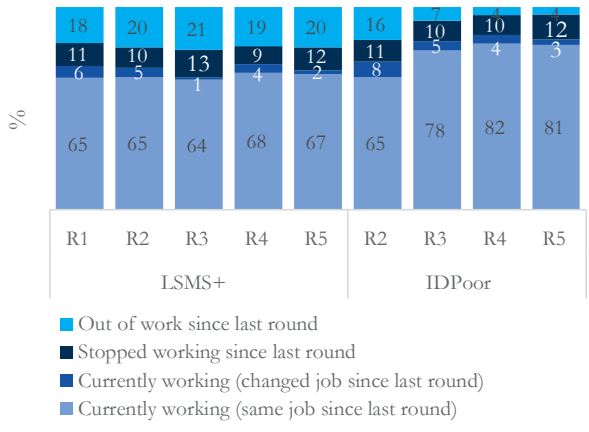
The High-Frequency Phone Survey of Households reveals that employment has yet to return to pre-pandemic levels. With 69 percent of respondents working in March 2021, employment remained relatively unchanged compared to December 2020, but below its pre-pandemic level when 82 percent of respondents were working. The share of respondents who stopped working since the last round and the share of respondents who had been out of work since the last interview also remained unchanged between December 2020 and March 2021 (figure B3.1), suggesting that employment outcomes have not worsened further. Seasonality in farming is the primary reason respondents stopped working.

The negative impacts of the COVID-19 pandemic on non-farm family businesses remain substantial, with weak consumer demand driving the losses in business revenues. In March 2021, one in two households operating non-farm businesses still reported having made "less" or "no revenues" relative to the previous month (figure B3.2). Although there was a significant reduction in the share of non-farm business households reporting having made "less" or "no revenues" since May 2020 (81 percent), there was no further reduction since October 2020 (54 percent). Meanwhile, the share of households reporting their business revenues "stayed the same" tripled between May 2020 and March 2021.

While widespread reductions in household income continue, there are signs of improvements, with fewer households experiencing declines. In March 2021, 45 percent of households experienced declines in income between December 2020 and March 2021. This compares to 48 percent of households that experienced declines between October and December, 51 percent between August and October, 63 percent between May and August, and 83 percent between the pre-COVID-19 outbreak and May.

Since the launch of the nationwide COVID-19 relief transfer program in June 2020, there has been a marked increase in the share of IDPoor households receiving social assistance from the government, mostly in the form of cash transfers. By March 2021, 95 percent of eligible IDPoor households had received relief cash transfers and most of them had received nine installments with an average of US$366. The relief transfer program has contributed to the economic well-being of beneficiary households. Around 38 percent of IDPoor households receiving the relief cash transfers report that the program has been "extremely important" for their household's economic well-being, while another 40 percent report that it has been "very important." As a result, the relief program has had an impact on the economic well-being of beneficiary households and made "a complete difference" for 42 percent of these households.

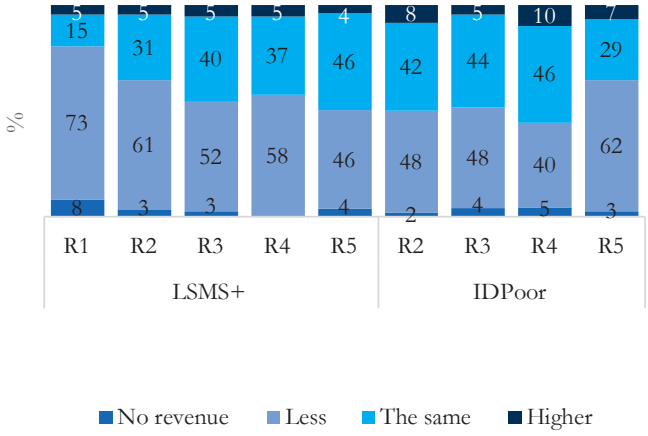
Figure B3.1. Respondents (LSMS+) or household's main earner (IDPoor) working in last 7 days



Source: High-Frequency Phone Survey of Households in Cambodia.

Note: R=round; LSMS+ = the Living Standards Measurement Study – Plus.

Figure B3.2. Changes in sales revenues in non-farm household businesses relative to last month



Source: High-Frequency Phone Survey of Households in Cambodia.

Note: R=round; LSMS+ = the Living Standards Measurement Study – Plus.

Note: 1. Karamba et al. (2021), "The Socioeconomic Impacts of COVID-19 on Households in Cambodia: Results from the High High-Frequency Phone Survey of Household Round 5 (01-21 March 2021)," Phnom Penh, Cambodia; or https://www.worldbank.org/en/country/cambodia/brief/monitoring-the-impact-of-covid-19-on-households-in-cambodia.

to 17.6 percent of GDP (or 19.7 trillion riels) by September 2021, down from 23.7 percent of GDP (or 24.9 trillion riels) at the end of 2020. During the past two decades, Cambodia first experienced a prolonged decline in government deposits during 2009–11, when the authorities introduced a fiscal stimulus to mitigate the negative impacts of the 2008–09 global financial crisis by boosting public expenditures, which rose to 23.0 percent of GDP in 2011, up from 16.1 percent of GDP in 2008. Cambodia has recently redefined the poverty line, using the most recent Cambodia Socio-Economic Survey for 2019-20, cost-of-basic need, and common basket approach. The national poverty line is now Cambodian riel 10,951 per person per day. Under the new poverty line, about 17.8 percent of the population is identified as poor. Poverty rates vary considerably by areas of residence. Poverty rate is the lowest in Phnom Penh (4.2 percent), other urban areas (12.6 percent), and the highest in rural areas (22.8 percent).

The authorities' success in domestic revenue mobilization under its Public Financial Management Reform Program (PFMRP) more than a decade before the pandemic resulted in a rapid increase in revenue collection. Several years after the PFMRP was introduced in late 2004, the authorities' cash position at the national treasury reversed from a chronic cash shortage to a cash surplus in the form of government deposits (fiscal reserves), which had been increasing since. The revenue-to-GDP ratio more than doubled, rising to 27.0 percent of GDP in 2019, up from 12.3 percent of GDP in 2005.

Despite rising public debt, risk of debt distress remains low

Cambodia's public debt-to-GDP ratio reached 36.0 percent of GDP, amounting to US$9.12 billion in outstanding debt by mid-2021.[34] As impacts of the pandemic continue, the gap between revenue collection and financing requirements is widening. To partly finance the widening gap, the country's public debt, which consists solely of external debt, is rising. According to the authorities' debt sustainability analysis, risk of debt distress, however, remains low, due largely to the authorities' borrowing principle of only contracting external debt on concessional terms. The preliminary result of the Debt Sustainability Analysis conducted by the authorities in 2020 shows that despite the Cambodian economy being impacted by the spread of COVID-19, Cambodia's public debt situation continues to remain "sustainable" and at "low risk" of debt distress. All the key debt indicators in 2021 are well below the thresholds, of which the main debt indicator, the Present Value of Public and Publicly Guaranteed Debt to GDP, is at 25.1 percent compared to the 40 percent threshold. The weighted average grant element remained relatively high—51.6 percent in 2019 and 46.5 percent in 2020—while weighted average interest rates were 0.81 percent in 2019 and 0.9 percent in 2020. Weighted average maturities are 28.5 years in 2019 and 26.3 years in 2020. In 2020, external borrowing was mainly for the public infrastructure sector, which accounted for 62.6 percent, while the remaining 37.4 percent was for other priority sectors.

Cambodia's largest official creditor is China. Total debt owed to China reached US$3.9 billion, or 43.0 percent of total debt stock by mid-2021. In recent years, Cambodia has grown increasingly dependent on Chinese loans for public investment and Chinese FDI for private investment. U.S. dollar-denominated debt remained the largest, accounting for 42.7 percent of total debt stock, followed by Special Drawing Right (SDR)-denominated debt, at 23.8 percent. Although China is Cambodia's top creditor, the country's public external debt denominated in Chinese yuan covered only 14.7 percent of total debt stock. The domestic debt market is being established. Cambodia is planning to issue local currency government securities soon. This will help gradually diversify financing sources with a shift toward public domestic debt, while promoting domestic savings. It also helps de-dollarize the economy. Cambodia has become a lower-middle-income economy. Concessional borrowing is, therefore, shrinking.

The draft 2022 budget supports continued fiscal expansion

The (draft) 2022 budget, approved by the cabinet in October 2021, is characterized by continued fiscal expansion.[35] Expenditure is

34 Cambodia Public Debt Statistical Bulletin, Volume 12, June 2021.
35 Summary of the draft 2022 budget dated October 22, 2021, Ministry of Economy and Finance.

targeted to increase by 8.4 percent y/y, to reach 27.9 percent of GDP, compared to 27.7 percent of GDP in the 2021 budget, of which current expenditure increases by 11.2 percent, reaching 16.7 percent of GDP, compared to 16.2 percent of GDP in the 2021 budget. Budgeted capital spending, however, remains largely contained, marginally increasing by 4.5 percent. As a percent of GDP, budgeted capital spending declines to 11.1 percent of GDP in the 2022 draft budget, down from 11.5 percent of GDP in the 2021 budget. Thanks to improved revenue collection targeted under the draft 2022 budget, a narrower overall fiscal deficit is budgeted (at 7.1 percent of GDP in the draft 2022 budget, down from 9.1 percent of GDP in the 2021 budget).

The 2022 budget also aims at implementing Cambodia's economic recovery plan, which is expected to be introduced soon. Under the government's Forth Rectangular Strategy within the context of the lingering COVID-19 outbreak, key priorities include efforts to contain the outbreak, job creation, restoration of people's incomes, domestic revenue mobilization, human resources development, physical infrastructure and agricultural development, social projection and public health system strengthening, and improvements in public service delivery, while pursuing continued structural reforms. The draft 2022 budget will support the Commune and Sangkat elections and Cambodia's regional and international commitments as the country holds the ASEAN chairmanship in 2022.

Outlook

Cambodia's real GDP growth is projected to reach 2.2 percent this year (table 3). This year's relatively weak growth is due to a resurgence of COVID-19 cases, which slowed the recovery, especially of the tourism, wholesale, and retail sectors during the second and third quarters of 2021. Traditional growth drivers, especially the garment, travel goods, footwear, and bicycle manufacturing industries, as well as agriculture, continue to underpin the economic recovery. The electrical, electronic, and vehicle parts manufacturing industries are gradually emerging, while the agroprocessing industries, in particular food and wood processing, and furniture, are picking up.

Going forward, lifting the required quarantine period in effect since November 15, 2021, will help attract foreign investors and tourists to Cambodia. The economy is therefore expected to continue to recover amid a rollback of COVID-19-related restrictions. Real growth is projected to reach 4.5 percent in 2022. Over the medium term, growth is expected to trend back to potential as a number of key sectors, which include tourism, travel, hospitality, wholesale, and retail, as well as construction and real estate, may start recovering, propelling a speedy recovery. The new investment law expects to help further attract FDI, while promoting backward linkages with domestic investment, supporting FDI-led manufacturing exports. Under Cambodia's economic recovery plan, continued investment climate and doing business reforms by leveraging of digital technologies are expected to help strengthen competitiveness.

In addition to the economic recovery plan, the newly introduced Law on Investment, the recently ratified Cambodia-China Free Trade Agreement, the Regional Comprehensive Economic Partnership (RCEP), and the recently signed Cambodia-Republic of Korea Free Trade Agreement may help attract foreign direct investment inflows to the country in the coming years.

Challenges and risks

Risks remain tilted to the downside. Despite accelerated vaccination progress, risks of further disruptions remain high, given the relatively high numbers of cases and mortality. COVID-19 continues to be unpredictable and the possibility of new or existing variants of the virus spreading in the country could lead to a possible resurgence in new cases. A slowdown in global demand could hurt export-oriented sectors of the economy, while the tourism sector may recover even more slowly than expected, as consumers may remain reluctant to travel far distances, despite eased travel restrictions.

In addition, high credit growth and concentration of domestic credit in the construction and real estate sector remains a key risk to Cambodia's financial stability. Unless the relaxation measures can help restore external demand for the country's capital-intensive property development projects, the construction

boom that the country witnessed during the pre-pandemic period, may not return anytime soon, given Cambodia's relatively small domestic market. Despite the fact that those developments have been financed in large part by FDI, its collapse, if it occurs, will have a far-reaching impact on the domestically financed property development industry, and eventually on the financial sector. Monetary and fiscal measures introduced to prop up property development activity may be able to help the industry stay afloat in the short term.

In the first half of 2021, reported nonperforming loan ratios remained low at 2.5 percent for the banking sector and 2.0 percent for the microfinance sector. However, given the continued loan restructuring process offered by banks and microfinance institutions, the reported nonperforming loan ratios may not correctly reflect the level of debt distress facing the banking and microfinance system. Loan restructuring measures allow banks and financial institutions to maintain the same credit classifications once loans are restructured.[36] By mid-2021, 367,239 borrowers' accounts (11.1 percent of total borrowers' accounts) amounting to US$5.5 billion (13.6 percent of total outstanding credit) had been restructured.

Cambodia is graduating from least developed country (LDC) status in the next several years. After graduating from the LDC category, Cambodia is expected to no longer benefit from LDC-specific international support measures.

Table 3: Macro outlook

National Accounts and Prices	2020pre	2021p	2022p	2023p
GDP at constant market prices (% change)	-3.1	2.2	4.5	5.5
Agriculture	0.4	1.0	1.3	1.5
Industry	-1.4	6.2	8.5	8.7
Services	-6.2	-1.5	1.8	3.6
Inflation, consumer prices (annual %, period average)	2.9	3.5	3.8	4.2
General Government (% of GDP)				
Revenue and grants	23.9	20.7	21.0	21.5
Expenditure and net lending	28.4	26.7	26.9	26.3
Overall balance (including grants)	-4.5	-6.1	-5.9	-4.8
Foreign financing	4.2	3.2	3.9	3.6
Net domestic financing (from current savings)	-0.7	1.7	0.9	0.0
Amortization	1.0	1.2	1.1	1.2
Money and credit				
Broad money (% change)	15.3	20.0	21.4	21.0
Credit to the private sector (% change)	17.7	23.2	25.8	28.1
External Sector (US$ million unless otherwise)				
Exports (goods and services)	15,518	17,987	21,318	24,504
Imports (goods and services)	16,974	23,969	24,764	26,918
Foreign direct investment, net inflows	3,485	3,307	3,745	3,800
Gross official reserves	21,228	20,869	21,570	23,788
(months of imports)	10.4	10.1	9.3	9.0
Current account (percent of GDP)	-8.2	-26.9	-16.9	-12.8
Exchange rate (Cambodian riel per US$ average)	4,077	4,070	4,100	4,100
Total public debt (% of GDP)	35.7	36.0	35.4	35.0
Memorandum items:				
Nominal GDP, US$ million	25,880	27,435	29,840	32,890

Source: Cambodian authorities and World Bank staff estimates and projections.

Note: pre = preliminary; p = projection.

36 Financial Stability Review for 2020, the National Bank of Cambodia, May 2021.

One of the main support measures for LDCs is preferential access to developed economies' markets under the Generalized System of Preferences (GSP), including "Everything But Arms." Of the 15 countries granting GSPs, at least five are Cambodia's main export markets, which include the United States, the European Union, the United Kingdom, Canada, and Japan.

Policy options

To jump-start economic recovery, it is crucial to create enabling environments, underpinning key growth drivers to accelerate. The relaxation of travel restrictions is fundamental for a recovery of the tourism, travel, and hospitality industries that will boost job creation and help propel the economy. To this end, immediate actions are required to promptly establish clear rules and regulations pertaining to new measures "living with COVID-19" under the "new normal," which will facilitate business, investment, and tourism activities. Introducing accommodative regulatory and fiscal measures, leveraging the newly introduced investment law to support a prompt revival of the tourism, travel, and hospitality industries will be an important next step. In this regard, close collaboration between the public and private sectors will be essential.

To attract FDI inflows, taking advantage of improved external demand conditions, it is crucial to promptly introduce necessary regulations and arrangements to smoothly implement the newly introduced Law on Investment. A sub-decree on the implementation of the new law, including a number of necessary (downstream) regulations and arrangements, such as the application procedures for registration of an investment project, and special procedures for applying for a work permit and employment, remain to be enacted. In addition, investor awareness and understanding of the new law, as well as the recently ratified Cambodia-China Free Trade Agreement, the Regional Comprehensive Economic Partnership, and the recently signed Cambodia-Republic of Korea Free Trade Agreement, need to be heightened.

As economic recovery takes shape and the pandemic subsides, it is important to start reprioritizing government fiscal intervention to rebuild fiscal space in the short to medium term. To this end, the ongoing public expenditure review exercise should help improve "value for money" of public expenditure going forward. To avoid depletion of government deposits, fiscal support (monetary assistance under loan restructuring measures) to the industries that have already recovered (or show no signs of recovering due to underlying structural demand issues) may be reconsidered. As discussed, government deposits already declined by a quarter to 17.6 percent of GDP by September 2021. With an additionally budgeted fiscal intervention in 2022, fiscal reserves will be substantially reduced further. Thus, rebuilding the fiscal space needed to mitigate future shocks is necessary. To this end, the ongoing tax system reforms, including preparation of a new revenue mobilization strategy for 2024–28, will help.

Finally, financial system soundness remains key to macroeconomic stability in Cambodia. Going forward, given a relatively modest recovery of the tourism, travel, and hospitality industries and the subdued construction and real estate sector, it is necessary to continue to closely monitor asset quality. A more cautious approach may be adopted to loans against property, which grew quickly during the pre-pandemic period. The country has a relatively large number of banks and microfinance institutions, creating a challenge in ensuring that the financial system is well supervised and regulated. It is crucial to continue to improve confidence in the banking system as deposits remained the dominant source (67 percent in 2020) of funds for banks. Looking ahead, the central bank is committed to staying vigilant and standing ready to introduce appropriate supportive measures. In the post-COVID-19 period, the withdrawal of any policy supports should be well communicated and on a gradual basis to achieve a balance between growth and stability.

Special Focus:

The Impact of the COVID-19 Pandemic on Learning and Earning in Cambodia

SPECIAL FOCUS: THE IMPACT OF THE COVID-19 PANDEMIC ON LEARNING AND EARNING IN CAMBODIA[37]

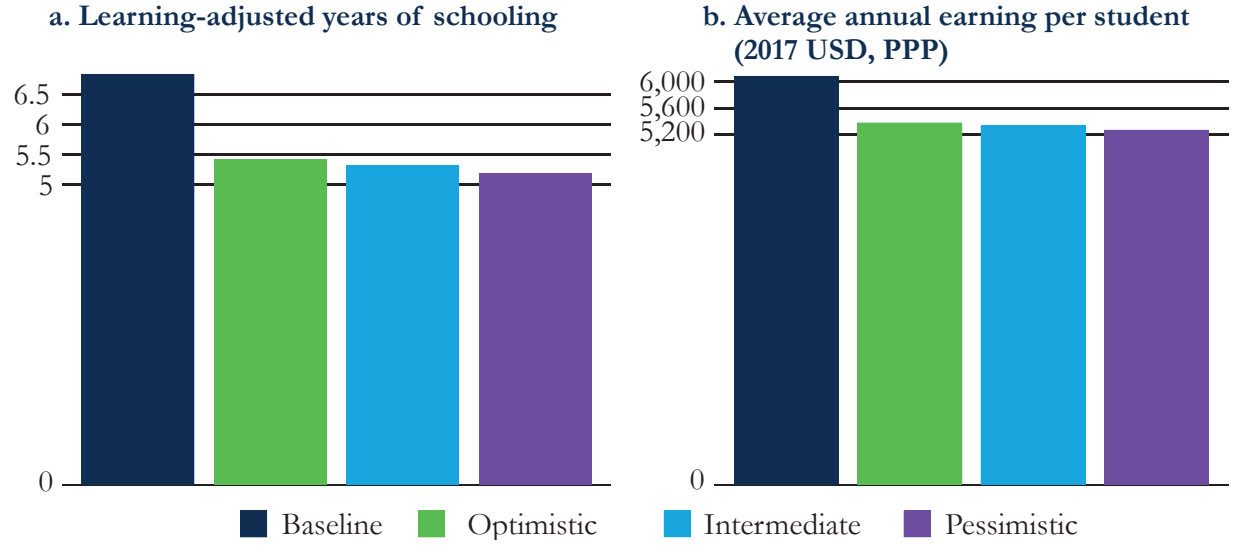
INTRODUCTION

The COVID-19 pandemic has caused tremendous damage to education systems, learning, and the lifetime earning potential of today's students. In February–March 2020, Cambodia joined 192 other countries that either fully or partially closed their schools. In a few weeks, more than 1.6 billion students were left without in-person instruction.[1] Hundreds of millions of students, including those in Cambodia, have been out of school for more than a full year. To mitigate the damage, most countries launched remote learning alternatives. But students, teachers, and parents had little time to prepare, thus reducing the effectiveness of the remote learning programs. Further, social inequality resulted in unequal access, increasing the divergence between rich and poor where remote learning programs were effective.

Cambodia's current cohort of students stands to lose 1.5 learning-adjusted years of schooling—15 percent of pre-pandemic expectations—unless drastic action is taken. This will have huge economic ramifications, reducing their expected annual incomes by US$738 in purchasing power parity (PPP) terms (figure S.1). This analysis, detailed below, builds on an earlier World Bank study that estimated a five-month shutdown would result in a global decline of 0.6 learning-adjusted years of schooling for today's cohort of students, translating to US$10 trillion in lost lifetime wages.[2] But some countries—including Cambodia—have already experienced far longer shutdowns, which means the ultimate learning and earning toll will be higher. The consequences fall heaviest on those least prepared to endure them and will be felt for decades to come.

Figure S1: Estimated learning and earning losses are substantial

Decline in learning-adjusted years of schooling and average annual incomes, by scenario



Sources: World Bank staff calculations based on Azevedo and others (2021).

Note: The modeling framework is described below. Scenario parameters are given in Table S.4. The intermediate scenario is intended to reflect the most likely outcome, based on the data available.

37 This Special Focus was prepared by Bradley Robert Larson. The author wishes to thank Toby Linden, Tara Beteille, Runsinarith Phim, Simeth Beng, and Fata No for their inputs and suggestions.

Policymakers and families face difficult tradeoffs when deciding when to resume in-person education. Despite the huge costs of keeping students at home, no one wants to risk their health and safety. The problem has become worse with the emergence of the Delta variant, which spreads more readily among children and vaccinated individuals.

This Special Focus details the pandemic's impact on education in Cambodia and the tradeoffs policymakers face in managing it. It is concerned primarily with K–12 education, since available data indicates that is where the impact has been felt the most. It first assesses the government's policy actions to date against international guidance and Cambodia's specific circumstances. It then describes the steps policymakers have taken to mitigate the impact of school closures on learning and measures the reach of the country's remote learning initiatives. Next, it attempts to quantify learning losses in Cambodia and estimates future earning losses that will result. Finally, it provides guidance and policy options to mitigate any additional short-term losses, safely return to in-person education, and "build back better," so that the education system can emerge stronger from the pandemic than it entered, students can recoup learning losses and secure future earnings, and the economy can resume the strong growth necessary to reach high-income status.

THE GOVERNMENT SUCCESSFULLY PREVENTED A MAJOR DISEASE OUTBREAK, BUT AT SIGNIFICANT COST TO THE EDUCATION SYSTEM AND STUDENTS

Authorities in Cambodia acted quickly to contain the spread of the coronavirus. The Royal Government of Cambodia led a whole-of-government response, with the Ministry of Health overseeing public health actions. The government's national action plan encompassed four objectives: reduce and delay transmission; minimize serious disease and reduce associated deaths; ensure ongoing essential health services, particularly during the outbreak's peak periods; and minimize the social and economic impact. A rapid response team of 3,000 members was set up to conduct case investigations and contact tracing. Official updates were transmitted through television, social media, and other channels, including targeted materials for at-risk groups. And Cambodia cooperated with United Nations agencies and other development partners in its response.[3]

Education has been severely affected by the pandemic and the government's efforts to contain it. On March 16, 2020, days after the World Health Organization (WHO) declared COVID-19 a global pandemic, the Ministry of Education, Youth, and Sports (MoEYS) closed all education institutions in the country as a preventive measure. This disrupted learning in all of the country's 13,482 schools—both public and private—and affected 3,210,285 students and 93,225 teachers (table S.1).[4]

In July 2020, the education minister formally endorsed the *Cambodia Education Response Plan to the COVID-19 Pandemic* to provide guidance to the education sector and stakeholders on how to prevent the spread of the disease, continue to support students while schools were closed, and eventually reopen schools. Notably, it envisaged a shorter shutdown than has prevailed, with three of its four key priorities for June 2020–December 2021 related to restarting or strengthening in-person education: 1) Staff and students are able to continue remote teaching and learning safely; 2) Students and education staff return to education institutions safely; 3) Staff and students are able to teach and learn in an adaptable learning environment; and 4) MoEYS systems at the national and subnational levels have increased resilience. According to the COVID-19 response plan, MoEYS would base its decision to reopen schools on guidance from the Royal Government of Cambodia. Partial reopening would precede full reopening, the process would have to be safe and consistent with the overall COVID-19 health response, and "all reasonable measures [would] be taken to protect students, teachers, staff, and their families."[5]

In August 2020, MoEYS announced a three-phase plan for reopening schools that adhered to the national strategy. In September, authorities allowed 20 private schools with high safety standards to reopen in Phnom Penh, Siem Reap, and Battambang. In October, authorities allowed all grade levels

Table S.1. Timeline of policy actions and related developments affecting schools and learning, 2020–2021

Date	Action
January 27, 2020	First confirmed case of COVID-19 in Cambodia
March 7, 2020	First local transmission of COVID-19 in Cambodia confirmed in Siem Reap; officials announce that schools in the province will close for 14 days
March 11, 2020	World Health Organization declares COVID-19 outbreak a global pandemic
March 16, 2020	Government of Cambodia closes all education institutions, including public and private schools; MoEYS announces teleworking arrangements
April 2020	MoEYS issues directive and operational guidelines for remote learning; elaborates management tasks; and requests funding for contract teachers
April 8, 2020	MoEYS postpones national exams at lower and upper secondary levels
May–June 2020	MoEYS suspends new teacher recruitment for 2020 and issues guidelines to teacher education institutes for e-learning training and capacity development
July 10, 2020	MoEYS issues guidance on health promotion to prepare for school reopening, with requirements for monitoring, case management, and reporting
July 15, 2020	The Minister of Education, Youth and Sport formally endorses the *Cambodia Education Response Plan* to the COVID-19 Pandemic
September 2020	20 private schools with high safety standards allowed to open in Phnom Penh, Siem Reap, and Battambang
October 2020	4 low-risk provinces—Kratie, Mondulkiri, Ratanakiri, and Stung Treng—allowed to reopen all grades; other provinces to reopen grades 9–12
November 2, 2020	Remaining schools reopen throughout the country
November 8, 2020	Schools in Phnom Penh and Kandal close for two weeks
November 29, 2020	Private schools closed for two weeks
January 11, 2021	Schools open for the delayed 2020–2021 academic year
February 4, 2021	Cambodia's Ministry of Health approves use of Sinopharm COVID-19 vaccine
February 20, 2021	Cambodia begins vaccinations with Sinopharm, Sinovac, and AstraZeneca
February 20, 2021	A large COVID-19 outbreak in the capital—known as the "February 20 incident"—results in school closures in Phnom Penh and Kandal
March 20, 2021	School closures are extended to the rest of the country
September 15, 2021	More than 200 schools opened in Phnom Penh
November 1, 2021	Schools across the country reopen; classrooms are limited to 15 students, and they are required to sit 1.5 meters apart to maintain social distancing

Sources: World Health Organization, "Cambodia: Coronavirus Disease 2019 (COVID-19) Situation Report," various dates, 2020–2021; MoEYS, Education Sector Working Group, and national and international partners, *Cambodia COVID-19 Joint Education Needs Assessment,* March 2021; World Bank, "The Socioeconomic Impacts of COVD-19 on Households in Cambodia: Results from the High-Frequency Phone Survey of Households Round 5 (1–21 March 2021)," June 2021.

to reopen in four low-risk provinces—Kratie, Mondulkiri, Ratanakiri, and Stung Treng; allowed grades 9–12 to reopen in the rest of the country; and allowed all public universities to reopen if they followed strict procedures and guidance from WHO and the Ministry of Health. Safety measures for grades K–12 included restricting class size to 20 students and seating students two meters apart. The country's remaining schools reopened completely on November 2, 2020.[6]

Schools closed again after what became known as the "February 20 incident." On that day, in 2021, four people left the hotel where they were quarantined. They dispersed across the city and frequented a popular night club. The incident resulted in the biggest community outbreak in Cambodia to that point, with 31 confirmed cases. By the end of the month, MoEYS issued a notification to close public and

private schools at all levels in Phnom Penh and Kandal province. On March 20, the order was extended to schools nationwide as a preventive measure.[7]

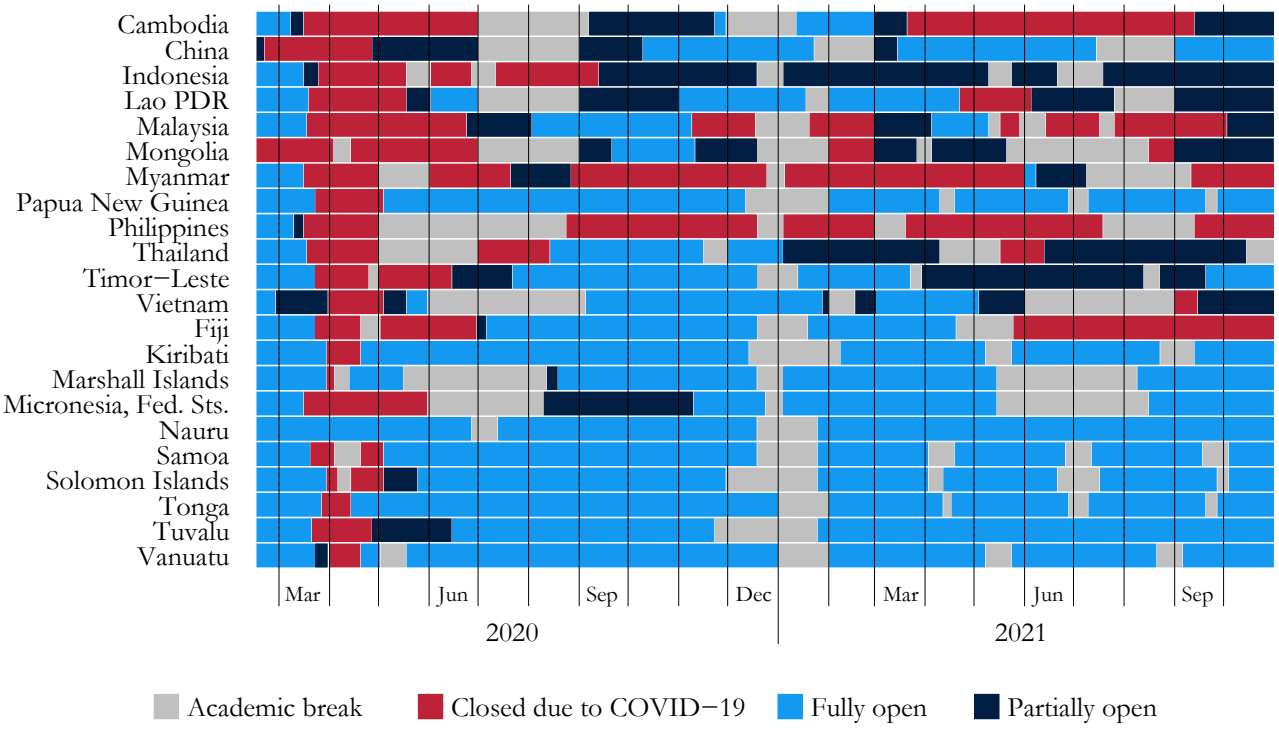
By mid-2021, most countries in Eurasia and Africa had fully reopened schools for in-person instruction. Most of the rest of the world offered some form of hybrid or mixed education, in which certain grades or regions remained closed, but many students could return to school.[8] In contrast, Cambodia had entered its worst phase of the pandemic. At the peak of the outbreak—in late June and early July of 2021—the country averaged nearly 1,000 new cases per day. As a consequence, Cambodia was among the relatively few countries in the world that persisted with remote-only education.[9]

The government started reopening schools again in late 2021. On September 15, around 200 low-risk secondary schools opened in Phnom Penh, allowing the return of nearly 140,000 vaccinated students and more than 10,000 vaccinated teachers. Finally, on November 1, schools reopened nationwide for the first time since March 2021. All schools are required to operate with strict adherence to the COVID-19 measures laid out by the MOH. Teachers must be fully vaccinated. Students have their temperatures checked and sanitize their hands when they enter the school. Only 15 students can be in a classroom at a time. And they are required to sit 1.5 meters apart to maintain social distancing.

In sum, Cambodia has been very cautious in its response to the COVID-19 pandemic, resulting in exceptionally long school closures. In EAP, only Myanmar and the Philippines kept schools closed a comparable duration (figure S.2).[10] This has two implications for Cambodia. On the one hand, the health and safety measures currently in force will likely improve resiliency and reduce the chances that future school closures are necessary. On the other hand, the long duration of school closures to date means that Cambodia faces a proportionately larger challenge in reintegrating students and recouping lost learning.

Figure S2: Cambodia kept its schools closed longer than most countries in developing EAP

Status of school closings in developing EAP, February 2020–October 2021



Sources: World Bank staff calculations using UNESCO, *Global monitoring of school closures caused by COVID-19*, November 30, 2021.

EDUCATION WILL ALSO SUFFER FROM THE PANDEMIC'S ECONOMIC AND HEALTH IMPACTS

The COVID-19 pandemic—and the government's response—also caused significant damage to the economy, which has a secondary negative impact on education. Demand collapsed for tourism and hospitality services, Cambodia's second-largest growth driver and a key source of foreign currency earnings. In 2020, tourist arrivals crashed to 980,055 from 5,034,903 the year before, and they remain low in 2021.[11] Export demand for garment, footwear, and travel goods also declined, undermining the largest formal employment industry and depriving the government of its main source of direct revenue. Before the pandemic, 82 percent of the population was employed, according to a World Bank survey. That rate dropped to 71 percent in May 2020 and 65 percent in October 2020.[12]

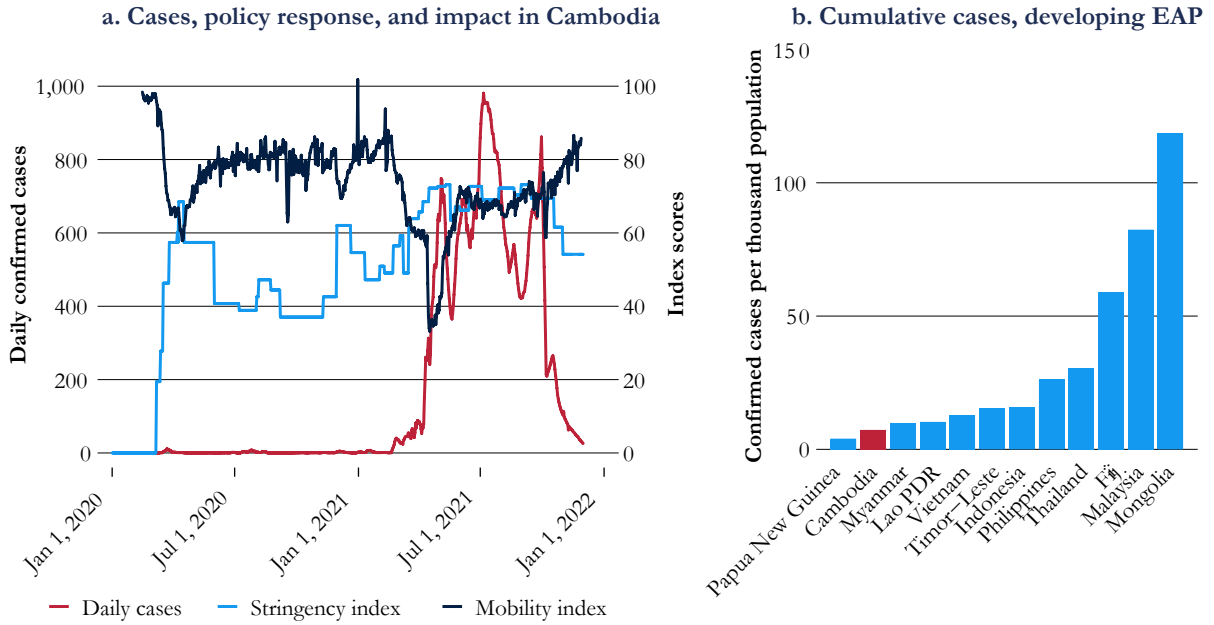
The national lockdowns also slowed the domestic economy. Overall mobility, measured anonymously by Google using mobile devices, negatively correlated with restrictions imposed by the government, measured by the Oxford stringency index (figure S.3, panel a).[13] When the first lockdowns were imposed after the pandemic was announced in March 2020, mobility dropped by 40 percent from the pre-pandemic norm. It stabilized at roughly 80 percent until infection rates started increasing in early 2021. Following the February 20 incident, the government imposed new restrictions that persisted through the rapid spread of the disease in mid-2021. Mobility dropped by half before stabilizing at roughly 70 percent of the pre-pandemic norm. Although the daily infection rates have fallen—and Cambodia has fared relatively well compared to its neighbors (figure S3, panel b)—mobility is only starting to recover.[14]

Income shocks and increased poverty will result in more dropouts

Poverty simulations based on macroeconomic projections show that the pandemic could increase poverty by 5.4 to 6.0 percentage points. This equates to 859,000 to 950,000 additional poor

Figure S3: Cambodia has had fewer cumulative COVID-19 cases per capita than most of its neighbors, but cases and government restrictions have been higher in recent months

New daily confirmed cases, policy stringency index, and mobility index, and cumulative confirmed cases by country



Sources: World Bank staff calculations using data from Johns Hopkins University 2021, Google 2021, and Oxford 2021.

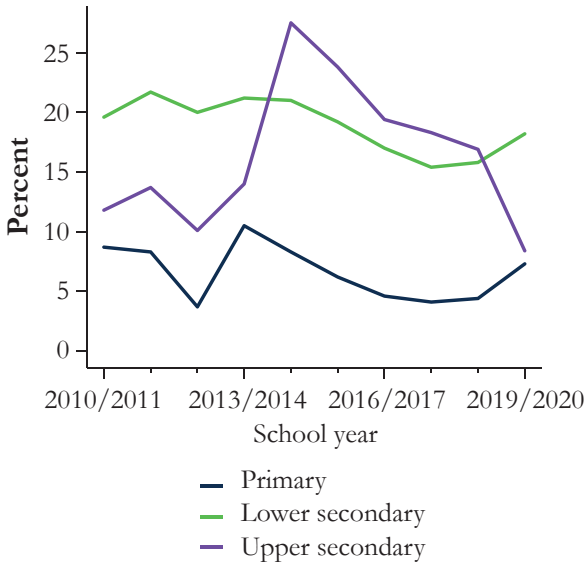
Note: Daily confirmed cases reflect the seven-day trailing average. The Oxford Government Response Tracker, known as the stringency index, measures common policy responses governments have taken in response to the pandemic. It comprises 17 indicators, such as school closures and travel restrictions. The Google mobility index measures physical movement at specific locations relative to a pre-pandemic average. Values are the percent change from a baseline equal to 100, averaging across retail, grocery, transit, park, and workplace locations. Economies with fewer than 1 cumulative case per 1,000 population are not shown: China, Kiribati, Marshall Islands, Samoa, Solomon Islands, and Vanuatu.

and a reversal of six years of progress against poverty. Households relying on nonagricultural wages, particularly construction workers, have been hit hardest.[15]

The big danger, from an education perspective, is that income shocks could result in families not being able to afford school or sending their children to work, yielding an increase in student dropouts. An early estimate for developing Asia estimated that half a million more students dropped out of school in 2020 because of the pandemic, out of 800 million preprimary, primary, and secondary school students.[16] In theory, older students should be more at risk for dropping out, because the alternative of paid work increases the opportunity cost of remaining in school. This has been generally true for Cambodia, but the pandemic appears to have had a bigger impact on younger students than older students. The national dropout rate increased in 2019/2020, reversing years of declining trends. Overall, males (7.7 percent) were more likely than females (6.8 percent) to drop out. For primary school, the dropout rate increased from 4.4 percent in 2018/2019 to 7.3 percent in 2019/2020 (figure S.4). Dropouts at early grade levels are more detrimental because of the higher amount of foregone learning. The lower-secondary dropout rate increased from 15.8 percent to 18.2 percent. Data for upper secondary shows a decline in the dropout rate from 16.9 percent to 8.4 percent from 2018/2019 to 2019/2020, but this is misleading. The MoEYS canceled the baccalaureate exams that grade 12 students typically take to graduate. Those who do not pass are counted as dropouts. The inability to administer exams—in addition to a general effort to keep students enrolled during the pandemic—means the dropout rate is artificially low.[17]

Figure S.4. Dropout rates increased during the pandemic

Dropout rates, by grade level, 2010/2011–2019/2020



Sources: World Bank staff calculations using data from MoEYS, Public Education Statistics & Indicators, 2011/2012–2020/2021.

Note: Primary comprises grades 1–6; lower secondary grades 7–9; and upper secondary grades 10–12.

Dropout rates for 2020/2021 will likely be higher than the historical average if baccalaureate exams are reinstated. According to MoEYS, approximately 50 to 75 percent of students at all levels—pre-primary, primary, lower secondary, and upper secondary—returned to school after the first reopening in 2020. This rate of return is on par with Thailand and Timor-Leste, but worse than Mongolia and Vietnam. It implies at least a 25 percent dropout rate if these students ultimately do not return.[18]

Poor nutrition makes it harder to learn

Nearly 10 percent of children under five suffer from acute malnutrition in Cambodia, and nearly a third of children under five suffer from chronic malnutrition. Acute malnutrition, also known as wasting, is characterized by a rapid deterioration in nutritional status and defined by a low weight for height. Chronic malnutrition, also known as stunting, is a form of growth failure that develops from inadequate nutrition over a long period of time.[19] It is associated with late enrollment and less school attainment, lower cognition, and worse executive function. Reversing cognitive impairment is especially difficult after age six, when children's brains become less malleable.[20]

The pandemic has made the situation worse, with the share of households that reduced food consumption to cope with the shock higher in Cambodia than other countries in the region, especially among those that lost income.[21] According to a survey conducted in August–September, 2020, 40 percent of households reported having less access to food than before the pandemic. The

impact was especially severe for preschool and primary students, those in nonformal education, and those with a valid ID Poor card, with around half of respondents in each category reporting less access to food.[22]

PRE-PANDEMIC LEARNING CHALLENGES

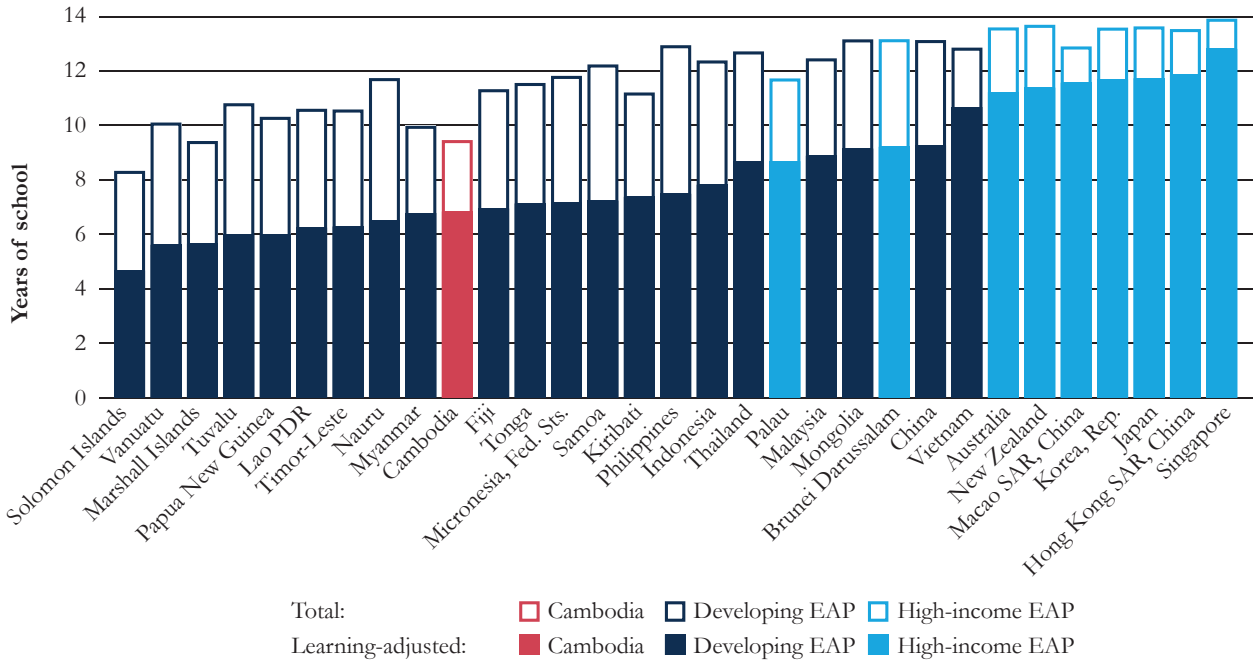
Developing countries around the world have made great strides in increasing student enrollment and educational attainment in recent decades. In recent years, Cambodia has made significant strides particularly in early childhood education, where the number of five-year-olds enrolled increased from 122,778 in 2016/2017 to 147,580 in 2019/2020. Over the same period, the primary gross completion rate increased from 82.5 percent to 88.2 percent.[23]

But despite more students going to school for more years, they are still not learning as much as they should. Nearly half of grade 2 students in Cambodia failed to answer a single reading comprehension question correctly about a passage they had just read. Nor did learning outcomes improve over much of the last decade. Students in grades 6 and 8 correctly answered only half of the questions on the National Student Assessments, conducted annually during 2013–2017. And there are deep inequities, with poor children less likely to be enrolled and less likely to reach competency even if they attend school.[24]

Measuring education using learning-adjusted years of schooling (LAYS) captures both the quantity and quality of schooling for the average student. Quantity is measured in total years of expected schooling and has long been a standard measure of schooling outcomes. Quality of schooling is captured in how well the average student performs on learning assessments relative to the average student in other countries. Essentially, learning-adjusted years of schooling is a product of the average years of schooling and a measure of learning relative to an international benchmark. The amount of learning the average student achieves with the same quantity of education can vary significantly across countries, and the gap between expected years and learning adjusted years is particularly large in developing countries.

Figure S.5. Cambodia's total years of expected schooling are among the lowest in mainland Asia, although relative quality is higher than its close peers

Total expected and learning-adjusted years of schooling, 2020



Source: World Bank staff calculations using data from World Bank. 2021c.

Cambodia's total expected years of schooling are among the lowest in mainland Asia. Learning-adjusted years of schooling is also low, but the gap between the two is relatively narrow compared to its close peers. That suggests that the quality of schooling students do attain is proportionately better—at least as measured by student performance on internationally comparable learning exams. Still, Cambodia has a long way to go to be regionally competitive, especially compared to the region's high-income countries, which perform better in total expected and learning-adjusted years of schooling compared to the region's developing countries (figure S.5). These quality gaps are important because learning and skills drive individual productivity, aggregate growth, and a host of other development outcomes.[25]

The learning crisis is a major contributor to human capital deficits across the developing world. According to the World Bank's Human Capital Index (HCI), the average child born just before the COVID-19 pandemic would be only 56 percent as productive by age 18 as the benchmark of a child who had a complete education and full health. A child born in Cambodia would be only 49 percent as productive.[26] As of 2019, more than half of children at late primary age are not proficient in reading, more than twice the regional average. And expenditure per child of primary-school age is US$261 (PPP) per year, barely 8 percent of the EAP average and 31 percent of the average for lower-middle income countries.[27]

EFFORTS TO MITIGATE THE IMPACT OF SCHOOL CLOSURES ON STUDENT LEARNING

Most countries around the world provided some form of remote learning when schools shut down. Modalities include both self-paced and instructor-led lessons delivered through a variety of means, including print-based homework, radio, TV, mobile phones, text messages, and internet-based—ranging, in general, from less to more interaction between students and teachers. Others employed a hybrid model, combining remote learning with in-person instruction where it was safe or remote learning was infeasible. Best practice also called for aligning content with existing curriculums, making use of existing materials, providing guidance and support to teachers and caregivers on how to support students, and creating offline options for settings with limited technology or connectivity.[28]

MoEYS launched remote learning programs across multiple channels

With the support of development partners, MoEYS acted quickly to prepare and deliver remote learning programs. The initial focus was students in grades 9–12 who would be taking the annual national examinations, and the first learning programs could only be accessed online. But as it became obvious schools would be closed for an extended period, MoEYS began developing programs for students in all grades, K–12. The content is intended to cover all subjects and development domains, and employs a hybrid approach, combining online synchronous learning, which happens in real time with interaction between teachers and students, with asynchronous learning, which lacks real-time interaction but allows for self-paced learning.[29]

To reach a broader swathe of the population, MoEYS also started to deliver the programs across more diverse channels. In early 2020, MoEYS launched a dedicated television channel (TVK2) for grades 9–12 and multilingual education radio-based programs designed for minority ethnic groups in preschool and grades 1–3 in the Northeastern provinces. Remote programs were offered online, through social media, over television and radio broadcasts, and through digital communication tools (table S.2). Among the most popular are *TVK-Education*, a television channel operated by MoEYS, and MoEYS E-learning (box S.1).[30]

Table S.2. Remote learning channels in Cambodia

Channel	Type	Target	Reach
MoEYS E-learning website	Online/mobile app	Highschool and below	100,000 installs
MoEYS Facebook	Social media	Highschool and below	3,669,000 followers
MoEYS YouTube	Online	Highschool and below	147,000 subscribers
Krou Cambodia	Social media	Highschool and below	928,000 followers
Komar Rien Koma Cheh	Social media	Early grades	29,600 followers
"Distance education application" on Google Play and Apple Store	Mobile app	Grades 9–12	
TVK2	Television/mobile app	Highschool and below	10,000 installs
Apsara TV	Television/social media	Grade 12 and Early grades	185,000 followers
Sky One TV-35	Television/mobile app	Grade 12	1,000 installs
Digital One TV-6	Television/mobile app	Grade 12	500,000 installs
Splus TV / Wiki TV	Television/mobile app	Grades 9–12	10,000 installs
Singmeng TV/ Wiki TV	Television/mobile app	Grades 9–12	50,000 installs
Zoom	Communication tools	All grades	
Google Meet	Communication tools	All grades	
Telegram	Communication tools	All grades	
WhatsApp	Communication tools	All grades	
BEEP platform	Online/social media	Lower secondary dropouts	13,000 followers
Multilingual radio-based programs	Radio	Preschool and early grades (ethnic minorities)	Kratie, Mondulkiri, and Ratanakiri provinces

Sources: MoEYS 2021; UNESCO 2021; Google Play Apps.

Box S.1.

Popular remote-learning channels in Cambodia

The Cambodian government and relevant stakeholders introduced several distance learning programs when the pandemic caused nationwide school closures. TVK2, or TVK-Education, is among the most popular. It was launched in April 2020 as a new channel of the state-owned National Television of Kampuchea. Originally targeted to students in grades 11–12 to help prepare them for exams, its mandate has since expanded to include younger grades and more diverse subjects, including hygiene and legislation. It was intended especially to reach students without access to the internet. As of September 2021, 1,000 video lessons had been produced, up from around 200 in mid-June 2020. In addition to being broadcast on the TVK2 channel, videos are available on MoEYS's official online and digital platforms (https://www.tvkhd.tv/category/education) and the Android Play and Apple App Stores.

Coverage is relatively good for students in grades 1–6, with 850 video lessons on mathematics and Khmer literacy, accessible both on the TVK2 channel official website and through the MoEYS online learning center. In contrast, only 153 video lessons are available to students in grades 7–12, on mathematics, Khmer literacy, chemistry, physics, history, and biology. These are supplemented by other learning materials, including textbook chapters. To access them, students need to create an account (https://elearning.moeys.gov.kh/?lang=en).

The government also unveiled a smart phone application to support student learning. It offers video content on different subjects for grades 9–12 and enables students to download any video they wish to keep as study materials. Students can use the app through their phone service or data plan. Given that approximately 1.5 million students remain unable to access the online platform, this App has the potential to promote equality and inclusiveness, as well as foster lifelong learning for marginalized students.

Sources: MoEYS 2021; Hanamaru Lab 2021; UNESCO 2021.

Overall, considerable effort has been made to develop and distribute remote learning programs. The subject matter is comprehensive and targets students at all grade levels and abilities. Video lessons are of high quality. Channels are diverse, including computer, mobile phone, television, and radio-based options, and MoEYS has made accommodations for students who cannot connect with those technologies—due to access, cost, or other factors—by instructing teachers to photocopy and distribute workbooks.[31]

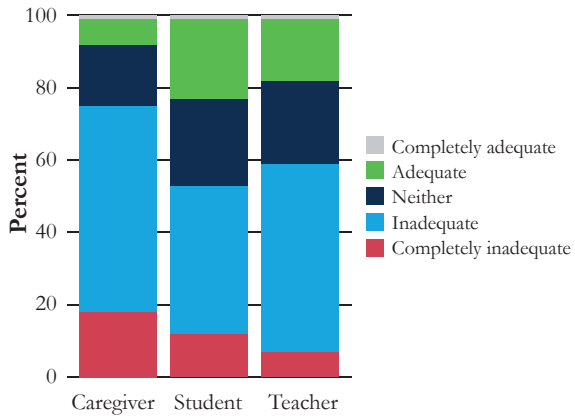
Teachers and caregivers had to transition to remote learning with little preparation or training

Teachers transitioned rapidly to remote learning in the early months of school closures. The great majority—89 percent—started teaching online using both prerecorded (asynchronous) and live (synchronous) methods. Approximately 85 percent also facilitated small-group learning, on average twice a month. These small groups typically comprised six to eight students who watched MoEYS videos together, with the teacher elaborating on the lesson. And 75 percent engaged in frequent communication with students through different channels, such as WhatsApp and Telegram, when schools were closed. Most students heard from teachers at least twice a week, but nearly one-fifth reported no contact at all.[32]

In addition to quality programming, teachers require appropriate training, monitoring, and support to be successful in delivering remote learning programs. To help teachers transition, many ministries of education provided special training and professional development activities, resources and lesson plans adapted to remote teaching, remote learning guidelines instructions and, in some cases, information and communications technology (ICT) devices and free connectivity. This was generally not the case in Cambodia, where teachers received much less support than their counterparts in other EAP countries for which data are available.[33]

Figure S.6. Caregivers, students, and teachers were not satisfied with the support they received in the transition to remote learning

Perceptions of adequacy (percent), by respondent type



Sources: World Bank staff calculations using data from MoEYS, Joint Needs Assessment, 2021.

Teachers in Cambodia have expressed concern about the level of support they received and how capable they were of delivering remote learning. In the early months of school closures, only 18 percent felt they received adequate support (figure S.6). Moreover, only 13 percent of teachers and 22 percent of local authorities felt they had enough capacity to perform their job functions when schools were closed. Preschool (92 percent) and primary school teachers (88 percent) were most likely to report partial or insufficient capacity to do their jobs. The most frequently cited capacity development needs reported by teachers were related to lesson planning and use of social media to support students and caregivers.[34] The situation may have improved as the school year progressed and teachers and administrators gained experience, but no data are available to verify.

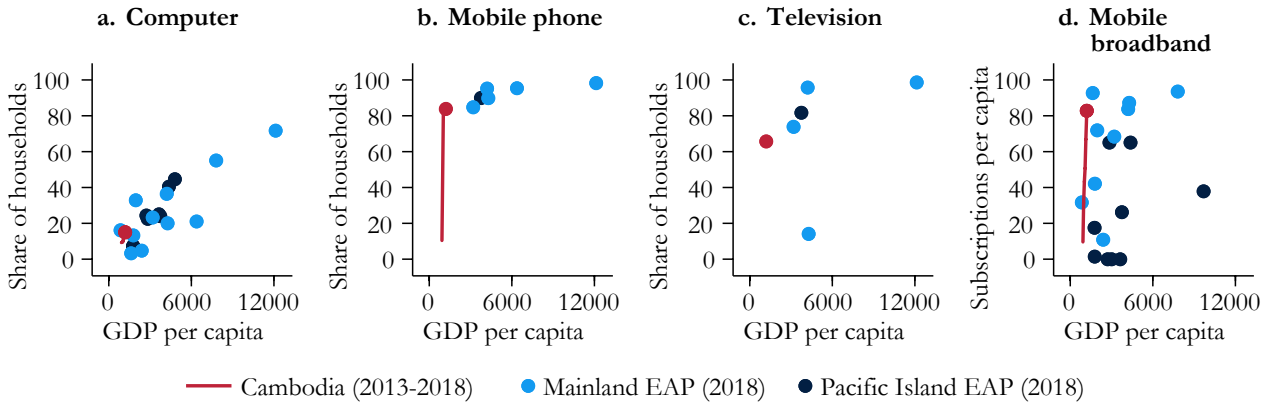
Finally, the lack of preparation for teachers, coupled with mobility and connectivity restrictions, meant that parents or caregivers were often primarily responsible for overseeing students' daily learning activities, and they were even more dissatisfied than teachers about the support they received. A great majority of parents and caregivers—91 percent—reported supporting home-based learning in the early months of school closures, but only 23 percent reported supporting distance learning all of the time. In general, parents and caregivers found it easier to support children in secondary school than in primary and preschool. And the more education parents and caregivers had the more they were

able to provide support for their students' remote learning.[35] However, only 8 percent found the support they received adequate (figure S.6), with little variation across gender, disability, and ID poor card status. About half of all parents and caregivers cited lack of time due to other responsibilities, lack of knowledge of learning content and materials, and inability to use technologies or devices as barriers to engagement with their students' remote learning.

Most students had access to ICT and learning materials, but still had trouble accessing remote learning programs

For students to benefit from remote learning programs, they need appropriate information and communications technology (ICT), access to reliable infrastructure, and basic learning materials to benefit from remote learning programs. In the EAP region, households in richer countries are more likely to have access to a computer, mobile phone, television, and radio, suggesting that the delivery of remote learning programs is easier—and more equitable—at higher income levels. But Cambodia is not far behind, and ICT and infrastructure do not appear to be critical barriers to participation in remote learning programs. The country seems to have a highly saturated, competitive telecommunications market, a liberal approach to spectrum assignment, and access to cheap handsets—which together contribute to low retail prices and high usage. During 2013–2018, household access to mobile phones increased from 10 percent of households to 84 percent, and the number of active mobile broadband subscriptions increased from 10 per capita to 83 per capita (figure S.7).[36] Within four years of its introduction, more than 80 percent of the population was covered by an LTE/WiMax network at speeds sufficient to watch streaming videos or communicate with teachers and fellow students. And as recently as 2017, the country was reported to have had the cheapest mobile internet prices and the third-highest mobile data usage in the world.[37]

Figure S.7. Household access to mobile phones has increased dramatically in Cambodia in recent years
Share of households with access to selected technologies and mobile broadband subscriptions per capita, Cambodia (2013–2018) compared to other EAP countries (2018)



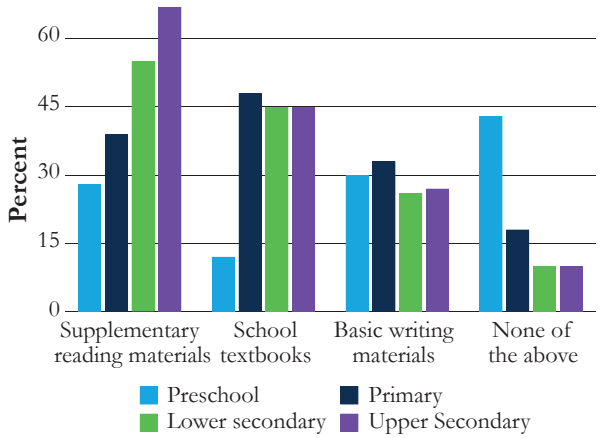
Sources: World Bank staff calculations using data from ITU 2021.

Note: GDP per capita in constant 2010 U.S. dollars. The proportion of households with computers is estimated. Countries with more than 100 subscriptions per capita not shown: Fiji (148), Malaysia (117), and Thailand (105).

Most students in Cambodia also have access to basic learning materials. These include school textbooks; supplementary reading materials like storybooks and reference materials; and basic writing materials, including paper, pens, and notebooks (figure S.8). However, in most cases, fewer students had access to basic learning materials than supply-side actors expected. For example, 34 percent of students (including teacher trainees) reported having access to school textbooks, far less than estimated by teachers

Figure S.8. Most students have access to basic learning materials

Access (percent of students), by grade level



Sources: World Bank staff calculations using data from MoEYS, Joint Needs Assessment, 2021.

Note: Basic writing materials include paper, pens, and notebooks. Supplementary reading materials include storybooks and reference materials.

(60 percent), school directors (83 percent), education administrators (79 percent), and local authorities (69 percent). Beyond reading and writing materials, 40 percent of students also had access to a workspace at home, with a desk, chair, and adequate lighting.[38]

Given the broad range of remote learning modalities, almost all students, caregivers, and educators have access to at least one resource that could allow them to participate in remote learning programs. The most common—as reported by the stakeholders themselves—are smartphones and television, which reinforces MoEYS's decision to focus its programming on those channels (table S.3).

Table S.3. Almost all students and caregivers have access to some form of ICT or other learning material

Percent of respondents with access to select ICT, applications, and infrastructure, by school level of students and caregivers and by type of educator

	Students and caregivers					Educators	
	Preschool	Primary	Lower secondary	Upper secondary	Total	Teacher	School director
Smartphone	60	61	70	84	69	86	83
Television	56	59	54	47	54	69	55
Electricity	61	50	46	52	53	67	47
Supplementary reading materials	28	39	55	67	47	n/a	n/a
Social media	39	34	47	60	45	66	55
Workspace at home	33	36	47	54	40	49	30
School textbooks	12	48	45	45	38	n/a	n/a
Basic writing materials	30	33	26	27	29	n/a	n/a
Internet access	21	18	29	36	26	39	28
Communication apps	8	7	23	39	21	43	39
Mobile phone	38	37	23	18	28	30	20
Radio	14	12	10	8	12	21	12
Computer/tablet	8	6	6	12	12	34	31
None of the above	4	4	1	1	3	0	2

Source: MoEYS, Education Sector Working Group, and national and international partners, *Cambodia COVID-19 Joint Education Needs Assessment,* March 2021, pp. 53–55.

Note: Social media include Facebook, Twitter, and YouTube. Communication applications include WhatsApp, Telegram, or Zoom. A workspace at home includes a desk and chair and is properly lighted. A mobile phone is a non-smart phone capable of SMS and calls. The student and caregiver total for supplementary reading materials, school textbooks, and basic writing materials is the simple average of the grade-level values.

On the other hand, the discrepancy between infrastructure in place, proxied by active mobile broadband subscriptions per capita, and internet access rates reported by students and caregivers is particularly stark. This may indicate that active mobile broadband subscriptions are not

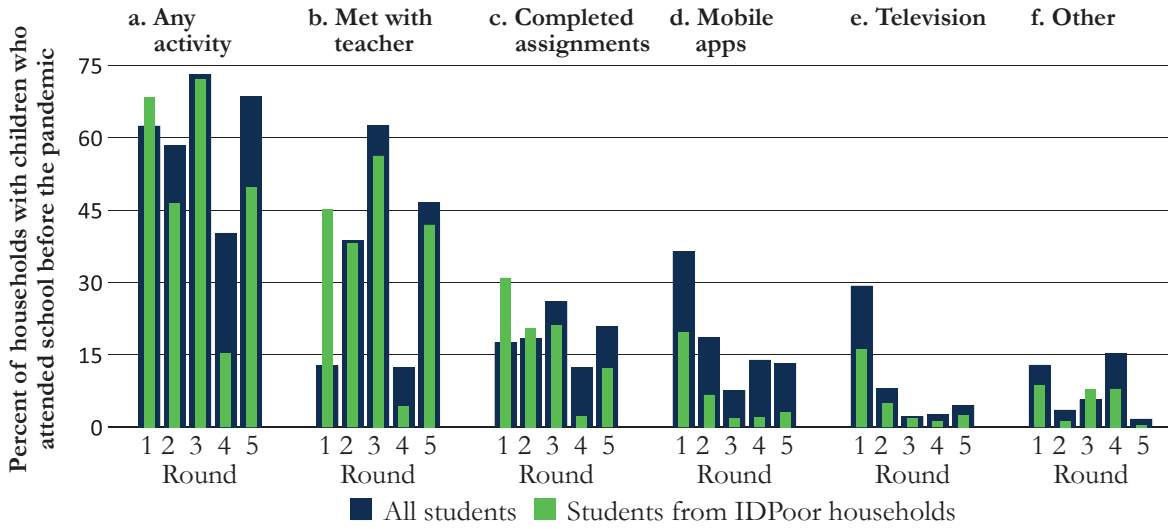
equitably distributed. It could also be attributable to prohibitive costs for some families—which would have worsened during the lockdown—and demand for services within households, even if they had an active subscription. Many families reported difficulty accessing the learning platforms. According to a survey conducted in August–September 2020, the most common challenge cited by respondents was poor internet connectivity (54 percent), followed by financial problems that made it difficult to purchase internet or phone credit (42 percent), the inconvenience of sharing devices (23 percent), lack of awareness of television or radio broadcasting schedules (22 percent), lack of time for learning activities due to daily chores or taking care of siblings (18 percent), and poor television or radio coverage (10 percent).[39]

Use of remote learning programs has been low

Despite the government's efforts, actual use of remote learning programs has been low since measurement began, and there has been a bias toward more traditional modes of learning. High-frequency phone surveys—conducted in five waves during May 2020–March 2021 for both nationally representative and ID Poor samples—indicate that students in most households had not taken advantage of mobile learning apps, educational television, or educational radio, or other remote learning programs in the week prior to being surveyed. However, a majority did participate in some form of educational activity in all but the fourth wave, when schools had temporarily reopened. The most popular activity was meeting with a teacher or tutor, followed by completing assignments (figure S.9). Meeting with a teacher could undermine the rationale for closing schools if safety measures are not followed and teachers or tutors spread COVID-19 among students.[40]

Figure S.9. Use of remote learning programs has been low and declining over time

Share of children engaged in educational activities, May 2020–March 2021, by type and socioeconomic status (percent of households with children who attended school before the pandemic)



Sources: World Bank staff calculations using data from the World Bank, Living Standards Measurement Study (LSMS), and ID Poor surveys, 2020–2021.

Note: The LSMS survey is nationally representative. Survey rounds were spaced two to three months apart: May 2020 (Round 1, LSMS); June 2020 (Round 1, ID Poor); August 2020 (Round 2, both samples); October 2020 (Round 3, both samples); December 2020 (Round 4, both samples); March 2021 (Round 5, both samples). Radio not shown.

Mobile apps were the most popular of the strictly remote learning alternatives. Student use, as measured by these surveys, peaked in the first round, in May–June 2020. At that time, 49 percent of the nationally representative sample used one of the three mobile options—mobile apps, television, and radio—collectively, compared to 28 percent of the ID Poor sample. Measured independently, the maximum topped out at 36 percent for mobile apps for the nationally representative sample and 16 percent of the ID Poor sample. For the most part, these remote learning alternatives became less used over time. In the latest round, March 2021, fewer than 14 percent of students used mobile learning apps, and all other options were in the single digits. The share of households with students who listened to

educational radio was negligible in all cases, never amounting to more than 2 percent and closer to zero percent in most rounds for both surveys.[41] These trends are corroborated with usage data from various platforms. For example, the most popular videos on MoEYS's YouTube channel predate the pandemic, and despite its 144,000 subscribers none of the videos released during the pandemic have more than 75,000 views.[42]

In most cases, students from ID Poor households were less likely to engage in educational activities. The big exceptions were meeting with a teacher and completing assignments at the start of the pandemic. In every case, students in ID Poor households were less likely than those in the average household to use a mobile learning alternative. This was especially true for mobile learning apps. However, there is evidence to suggest that remote learning alternatives provided an important substitute for traditional modes for students from ID Poor households. Except for the fourth round (conducted after schools had reopened the first time), the majority of students in ID Poor households who used remote learning activities had not met with a teacher or completed an assignment. There is no clear pattern for the population as a whole.[43]

Remote education is generally not as effective as in-person education

Studies have found that digital technology is generally associated with moderate learning gains. However, they work best when technologies supplement teaching, rather than replace it. The effectiveness of remote learning, in general, is more mixed, ranging from negative or negligible effects to unambiguously positive. Digital technologies do best when they supplement in-person education that pays attention to the students' social context and non-content aspects of learning. Meanwhile, remote learning can be effective for some subjects if the right conditions are in place, particularly for students who have trouble in traditional settings.[44] In contrast, most of the digitally enabled, remote learning programs offered during the pandemic—including in Cambodia—do not fit these ideal models.

There is very little quantitative evidence of the effectiveness of remote learning during the pandemic, especially in the developing world. Studies in high-income countries, which were quick to roll out remote alternatives and where access to digital technologies is high, show substantial learning losses.[45] They were made worse where a lack of preparation by school systems reduced the effectiveness of remote learning alternatives.[46] Parents in France and Italy, for example, thought their children learned more slowly during the 2020 lockdowns than when they were in school. There was a stronger negative impact on boys than girls, and on children whose parents had relatively less education.[47] And in Belgium, the school closures during the pandemic resulted in learning losses of 0.19 standard deviations in mathematics and 0.29 standard deviations in Dutch language compared to previous cohorts.[48]

The impact in the developing world has been less studied but is likely far worse. An analysis of five countries in Sub-Saharan Africa estimated a loss in oral reading fluency during the COVID-19 pandemic that ranged from half a year to over one year.[49] And the World Bank estimates that the pandemic could drastically increase learning poverty—the percentage of children who are unable to read and understand a simple text by age 10—to 70 percent in low- and middle-income countries, up from 53 percent before the pandemic began.[50]

MoEYS conducted no formal studies or assessments of the effectiveness of remote learning during the pandemic. In response to a survey administered by UNESCO, UNICEF, and the World Bank, officials acknowledged that students were not used to online study, and that it was not a good alternative to in-person education for preschool or primary students.[51] A small-scale survey of students and caregivers conducted in the early months of the lockdown found that 62 percent of respondents thought they were learning less than when schools were open.[52] However, since the first school closure, systematic learning assessments that would normally have been administered were postponed or canceled. Consequently, there are no hard data on learning losses due to the pandemic, either on average or for specific populations within the country. Conducting systematic learning assessments should be a top priority as schools reopen. Until then, learning losses can only be estimated given the available data on the use of remote learning programs and their perceived effectiveness.

LOST LEARNING WILL LOWER FUTURE EARNING

Despite the government's efforts to mitigate the damage, the potential impact of the COVID-19 pandemic on lifelong learning and earning is huge. Any interruption in schooling—including planned academic breaks—is detrimental. Forced interruptions that are not expected are worse because they disturb the scheduled curriculum, and the lack of planning and preparation undermines efforts to mitigate the damage.

The World Bank framework developed by Azevedo and others (2021) estimated that a five-month-long school closure could result in an average learning loss of 0.6 learning-adjusted years of schooling, dropping the worldwide average to 7.3 years from the pre-pandemic baseline of 7.9 years. Based on historical returns to education, this would result in a future, aggregate earnings loss equal to approximately US$10 trillion in present value terms—16 percent of the total investments made to educate the affected cohort of students. Learning achievement in EAP would suffer proportionately less than other regions, and most of the loss in earnings would be experienced by richer countries because of between-country earnings inequality. But poorer countries would suffer more as a share of spending on education.[53] The Asian Development Bank estimated US$1.25 trillion in total losses at present value for developing Asia (including South Asia) using the same model, equivalent to 5.4 percent of the region's 2020 GDP. These losses cover only private economic returns to education, not the positive externalities for society or the benefits to long-term health—which are large.[54]

School closures have dragged on far longer for some countries, including Cambodia, than these studies estimated, increasing the toll on students' present learning and future earning potential. As of November 2021, the average student returning to in-person education in Cambodia is estimated to lose 1.5 learning-adjusted years of schooling and US$738 (PPP) in annual earnings because of school closures that have already occurred. This intermediate estimate is based on Cambodia's history of school closures, students' access to and use of remote learning programs, and the learning effectiveness of the remote learning programs—detailed above. The optimistic and pessimistic scenarios are similarly severe (table S.4). These estimates assume students will not recoup learning losses through increased effort, government programs, or other means. Therefore, the scope is large for policy interventions to improve the situation. The logic and methodology behind the estimates are presented below.

Table S.4. Learning and earning losses are large in every scenario

Scenario	School closure (school years)	Use of remote alternatives (%)	Effectiveness of remote alternatives (%)	Learning loss (LAYS)	Annual income loss (US$, PPP)
Optimistic	1.4	30.2	40	1.4	694
Intermediate	1.4	19.7	30	1.5	738
Pessimistic	1.5	19.7	20	1.6	801

Source: World Bank staff calculations using the framework from Azevedo and others (2021).

Note: LAYS = learning-adjusted years of schooling; PPP = purchasing power parity.

Learning losses

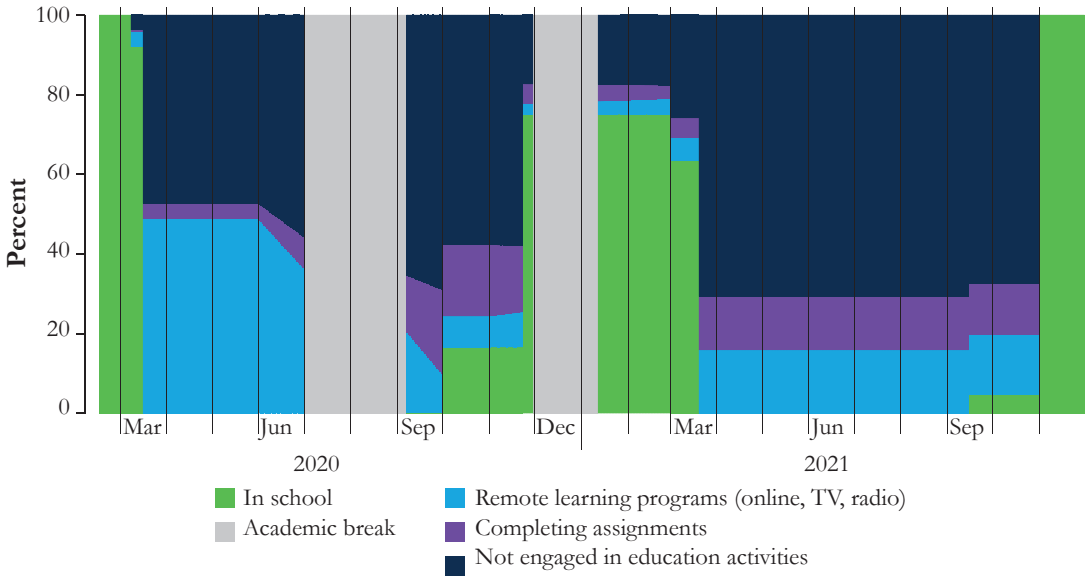
On average, today's cohort of students in Cambodia will attain 1.5 fewer learning-adjusted years of schooling than the pre-pandemic baseline of 6.8 years because of school closures under the intermediate scenario, using the latest available data and updated assumptions about the effectiveness of remote learning alternatives. Importantly, this assumes that schools will not close again and all students except those who dropped out because of income shocks will return. Under the optimistic scenario, which assumes remote learning alternatives were more effective and that schools will remain open going forward, today's cohort of students is expected to attain 1.4 fewer learning-adjusted years of schooling. And under the pessimistic scenario, which assumes lower remote learning effectiveness and another, relatively short, school closure, today's cohort of students is expected to attain 1.6 fewer learning-adjusted years of schooling.

These estimates are based on the World Bank framework developed by Azevedo and others (2021). The framework models learning loss due to school closure through two components: lost years of schooling (quantity effect) and harmonized test scores (quality effect). The reduction in quantity can be conceived of as the duration of time that students do not acquire new learning because they are not in school and is expressed as the share of the school year that students do not receive in-person instruction. It is also indirectly affected by the increase in the school dropout rate attributable to income shocks arising from the pandemic and government efforts to contain it. The reduction in quality can be conceived of as lost learning because of disengagement with the school system. In other words, students forget what they learned in the past because they are not in school, and each year of schooling acquired to date has therefore produced less learning overall. The reduction in quality is measured in terms of the Harmonized Learning Outcomes (HLO) score, which uses international learning assessments to create a global index of learning quality. In a typical school year, the average student gains 20 to 50 points on the HLO scale, with better school systems experiencing more gains.[55]

For Cambodia, the quantity effect is given by the duration of full and partial school closures as reported by UNESCO along with the dropout-income elasticity for children enrolled in school. It assumes that 25 percent of students did not return to in-person education when schools reopened after the first shutdown (as reported by MoEYS and discussed above), but that all students—except those who dropped out because of income shocks—will return as part of the latest full reopening on November 1, 2021. Those 25 percent of students who did not return are assumed to have done so due to health concerns—not disengagement—and therefore are counted as having participated in remote learning alternatives at prevailing rates when the larger share of students returned to in-person education.[56] Between the first school closure on March 8, 2020, and the full return to schools on November 1, 2021, 603 days elapsed. Not including academic breaks, 85 percent of student-days were spent out of school during this period. That amounts to 1.4 years of in-person education lost because of school closures under the intermediate and optimistic scenarios (figure S.10).[57] For illustrative purposes, another 10 percent of the 2020/2021 school year is assumed to be lost under the pessimistic scenario due to another school closure.

Figure S.10. A large share of the student population was not engaged in learning activities during school closures

Share of students engaged in learning activities, by type, for the 2019/2020 and 2020/2021 academic years



Sources: World Bank staff calculations using UNESCO, *Global monitoring of school closures caused by COVID-19*, November 30, 2021; World Bank, Living Standards Measurement Study (LSMS), and ID Poor surveys, 2020–2021.

Note: Student populations, by grade and province, used to calculate shares are based on the 2018/2019 school year. The share of a school year lost is equal to the area of the chart above that is not coded "in school" divided by the duration of a standard school year and excluding the academic breaks.

The quality effect assumes a learning a learning gain of 30 HLO points per year. This is in line with the assumptions used by Azevedo and others (2021), which are themselves based on empirical patterns showing that better-performing school systems yield bigger learning gains over the course of a year.[58]

Learning losses due to school closures are mitigated by remote learning alternatives depending on student use and learning effectiveness.[59] Although almost all students had access to some remote learning alternative (table S.3), relatively few of them took advantage of this access and regularly participated in remote learning (figure S.9). The intermediate and pessimistic scenario assumes an access rate of 19.7 percent—the average share of students who accessed at least one of three remote learning alternatives: online platforms, television, and radio. The optimistic scenario adds to that the average share of students who completed assignments from a teacher (without double counting), bringing the share to 30.2 percent. This is likely a conservative estimate given the declining trends observed.[60]

Determining the effectiveness of remote learning alternatives is more subjective since no formal assessments have been done and data are so scant. According to the survey administered in the early months of the lockdown, 62 percent of respondents thought they were learning less than when schools were open, implying that 38 percent thought they were learning as much. This value is almost certainly much too high for the entire period given the sharp declines in student participation; teacher, caregiver, and student reports that they were unprepared for remote learning; and subsequent research on the effectiveness of remote learning programs in high-income and developing countries. For this exercise, the optimistic scenario assumes that remote learning alternatives are 40 percent as effective as in-person education, the intermediate scenario assumes 30 percent, and the pessimistic scenario assumes 20 percent. These rates probably understate learning losses given the low amount of effort implied by the early needs-assessment survey.[61]

Earning losses

The framework developed by Azevedo and others (2021) also allows for estimating expected earnings losses due to the pandemic. This is calculated using the decline in learning-adjusted years of schooling, the private returns to education, and expected earnings information from the International Labor Organization and World Bank.[62] Around the world, each additional year of schooling increases a person's annual earnings by about 9 percent. Country-specific values range considerably but are generally higher in developing countries than high-income countries because the former have fewer mean years of schooling and returns are diminishing. Cambodia's private returns to education are 8.5 percent.[63]

Under the intermediate scenario, the average student in today's cohort can expect to lose US$738 (PPP) in annual earnings because of lost learning during the COVID-19 pandemic—a decline of 12 percent from the baseline of US$6,077 (PPP). Under the optimistic scenario, average annual losses are US$694 (PPP), and under the pessimistic scenario they are US$801 (PPP). The present value of lifetime earnings lost because of the COVID-19 pandemic is US$31 billion in the intermediate scenario, US$30 billion in the optimistic scenario, and US$34 billion in the pessimistic scenario.[64]

CAMBODIA NEEDS TO STEM THE LEARNING LOSS AND BUILD BACK BETTER

Cambodia has reopened its schools, but the pandemic and the government's efforts to combat it severely harmed the country's education system and its students. Few countries in the region closed their schools for such a long period of time. To mitigate learning losses, MoEYS offered a wide variety of distance learning programs, covering a broad array of subjects, targeted at various grade and skill levels, and sensitive to socioeconomic inequalities, minority status, and student disabilities. But it did not do a good enough job to prepare and guide students, teachers, and caregivers as they navigated remote learning on a wide scale for the first time. As a result, student participation was lower than desired, with lower-income households faring the worst. And for every hour that students invested, they

learned less than they would have in school. In sum, Cambodia experienced a massive loss of learning. Students who missed out—or, worse, dropped out—will earn substantially less in their lifetimes than they otherwise would have.[65]

There is much the government, school administrators, and teachers can do to help students avoid this grim future. The learning and earning loss estimates presented above assume that a lost year is lost forever. Instead, for example, a student who was in grade 5 when schools closed and is now returning with a fifth-grade learning level can invest extra years to make up for lost learning. Or, the government can invest extra time and resources, improve pedagogy, and better train and prepare teachers so students learn more in any given year. Either route could bridge the gap, so today's cohort emerges with the same number of learning-adjusted years of schooling as expected before the pandemic. Supply-side actors, caregivers, and students alike must invest more, change behaviors, and redouble their efforts to simply break even, and prevent this cohort of students from suffering a disadvantage compared to past and future generations.[66]

Cambodia's immediate need is therefore twofold: safely and effectively reopening schools while simultaneously improving the remote learning system in case schools are forced to shut down again. MoEYS has introduced robust safety and hygiene protocols in schools. Administrators and teachers must ensure they are enforced. Any community spread in schools would most likely result in another school closure. And, of course, teachers and administrators must return to the all-important task of educating students. They need to act quickly to prevent dropouts, assess student learning, and implement new techniques for learning recovery to get students back on track.

Meanwhile, Cambodia needs to retain and strengthen its remote learning infrastructure. MoEYS officials have already announced that they will continue the various remote learning channels, which can be used to instruct students not in class on any given day under the new rotational system. In the future, when all students can return to school every day of the week, remote learning channels can supplement in-person learning. Alternatively, they could again become the primary means of teaching if schools are forced to close again. Beyond that, reopening teacher training colleges provides an opportunity to strengthen teacher training and preparation for both in-person and remote teaching with a focus on new teaching pedagogies to reverse learning loss. And the return of students allows an opportunity to poll them on what worked and what did not, with the goal of improving participation and learning under any scenario.

As the situation stabilizes in the months and years ahead, Cambodia needs to "build back better," improving its education system for the benefit of students and the economy. In this way, today's cohort of students—and those that follow—can actually get ahead.

The policy recommendations below focus on ensuring a safe and effective return to schools; improving remote learning programs to mitigate learning loss and insure against another shutdown; assessing student learning and improving pedagogy and instruction to help students catch up; and making long-term investments to improve Cambodia's education system. Most of these recommendations are directed toward improving school systems and learning in the context of the pandemic. Others are part of a "build back better" agenda so that Cambodia emerges from this crisis stronger than it entered.[67]

Ensure a safe and effective return to schools

Cambodia's approach to reopening schools has promoted the health and safety of students and teachers. Officials prioritized geographic areas where risks are lower, rotated students on alternate days to reduce class size, imposed shifts in schools so there are fewer students and staff present at any given time, adjusted the physical arrangements of schools and classrooms to increase the capacity for social distancing, and adjusted school feeding programs to reduce congregations of students.

As long as COVID-19 remains a threat, a hybrid approach should be employed—rotating students so they spend half their time in class and half their time learning online or through other remote learning programs. Priority for full-time return to the classroom should be given to students in lower grades because remote learning alternatives are less effective at that level and the returns to education are higher.

With local and school-specific contexts in mind, the following steps to safely and effectively implement this hybrid learning model should be taken:

1. Continue to prioritize the vaccination of teachers and school staff, conduct health checks upon entering schools, and require face masks and social distancing inside the classroom
2. Audit school health and safety policies, conduct inspections to ensure they are followed, and ensure teachers and administrators are trained and prepared to enforce health protocols
3. Allow students with ongoing health concerns to continue studying at home instead of returning to the classroom
4. Group students in separate pods that rotate together through the school day or school week and ensure students from different pods do not mix to reduce the chance of transmission
5. Establish clear procedures for dealing with suspected positive cases, communication mechanisms with local health authorities, and standard operating procedures for any necessary health interventions.

Improve remote learning programs to mitigate learning loss and insure against another shutdown

The COVID-19 pandemic is not over. Although Cambodia's students are returning to school, the hybrid approach MoEYS is pursuing and the threat of future school closures means the remote learning programs launched in 2020 are still very relevant. However, the country's experience since March 2020 indicates room for improvement.

ICT and infrastructure proved to be a bigger obstacle than access and connectivity rates would imply. Heavy internet use during the pandemic tested the limits of networks in Cambodia. Students and teachers alike experienced internet outages during synchronous lectures and teaching sessions. Many families found it prohibitively expensive to connect. And others were restricted by competing demand for devices or time at home. At the national level, Cambodia has low prices and high data usage. This should make it relatively inexpensive from a fiscal standpoint to extend these benefits to lower-income families.

With local contexts and the needs of target populations in mind, the following steps should be taken to help students reliably connect to remote learning:

1. Ensure teachers have appropriate ICT and reliable, high-speed connectivity
2. Strengthen non-internet-based alternatives for remote locations, especially paper-based options
3. Build upon the video offerings already available to develop integrated and comprehensive massive open online courses (MOOCs) for core curriculums that can be delivered cheaply at a large scale.

Low digital literacy, unfamiliar pedagogy and distance learning practices, and increased stress from managing new modes of learning and competing demands at home severely undermined the quality of instruction and students' ability to learn remotely.

With local contexts, grade-level requirements, and teacher comfort levels in mind, the following steps should be taken to improve pedagogy, teacher performance, and student learning:

1. Distribute books, supplementary reading, and other basic learning materials to students
2. Encourage teachers to provide learning support to students and caregivers through phone calls or social media

3. Develop higher-quality programming for populations whose first language is not Khmer, and engage with community leaders and educators to encourage its use
4. Develop and implement effective remote pedagogy and appropriate training and support programs for teachers
5. Ensure teachers and school directors receive digital literacy training
6. Ensure that in-person and online learning complement each other by encouraging students to read, watch lectures, and study at home, and attend class for discussion and presentations.

Assess student learning and improve pedagogy and instruction to help students catch up

Learning losses are heterogenous across provinces, schools, and social groups. The first step in moving forward is determining where students stand. Schools at all levels need to administer systematic learning tests to determine what students know, understand, and can do relative to what had been expected prior to the pandemic. Learning assessments in the classroom will enable teachers to adjust their instruction and provide constructive feedback to students. Systemwide assessments can inform resource allocation. Teaching at the wrong level will prevent students from catching up and encourage them to drop out. And failing to allocate resources where they are needed most threatens to exacerbate inequality. Schools then need to monitor student progress with regular, low-risk assessments in the months and years that follow to keep them on track.[68]

With local contexts, student needs, and national learning goals in mind, the following steps should be taken to properly assess student learning:

1. Distribute guidelines to teachers on administering, scoring, and interpreting learning assessments
2. Soon after schools reopen, administer low-stakes exams to determine what students know, understand, and can do—at least in core subjects—and measure that against pre-pandemic expectations
3. Use classroom assessments to monitor progress throughout the school year toward specific learning goals and adjust curriculums, pacing, and resourcing as needed
4. Conduct large-scale diagnostic assessments of all students in all subjects during the school year and at the end of the school year to inform policymaking and resource allocation
5. Develop a post-pandemic student promotion policy and strategy and communicate it to teachers, students, and caregivers.

MoEYS already plans to increase in-person class time at all grade levels to make up learning losses.[69] Further initiatives should be based on the results of the systematic learning assessments, including adjusting pedagogy and reallocating resources, so that they are aligned with the specific needs of returning students. Disadvantaged students, for example, are likely to have experienced the greatest learning losses because of their inability to access or make use of alternative learning modalities. They will therefore need additional support.

With the results of learning assessments in mind, the following steps should be taken to adjust pedagogy and reallocate resources:

1. Identify at-risk students and schedule check-ins with caregivers
2. Create a structured learning plan with clear direction and realistic expectations
3. Develop standardized, detailed lesson plans for core subjects at the national level that can be shared with teachers
4. Implement remedial learning programs to help students catch up
5. Prioritize foundational skills—especially basic literacy and numeracy—since learning more advanced topics and concepts depends on foundational skills.

Make long-term investments to improve Cambodia's education system

When actions are underway to address the immediate needs of students and educators, Cambodia can begin to consider the future of learning in the country. Despite huge progress over past decades, public education in Cambodia still faces major challenges. Budget allocations to public education remain low by international and regional standards, despite recent increases to support teacher salaries. Funds are not clearly linked to desired results. Performance is not adequately monitored. And existing accountability mechanisms are not effective. As a result, teacher quality remains low, and students continue to perform poorly on national and international assessments.

MoEYS's medium- and long-term priorities include improving the quality of education and strengthening leadership and management. Doing so will support the government's Vision 2030 agenda and Phase 4 of the Rectangular Strategy. These priorities are reflected in the ministry's Continuous Professional Development (CPD) and Career Promotion (CP) guidelines, which were approved in October and launched on November 1, 2021, for implementation by central and subnational officials. The next steps are to integrate the Public Financial Management Reform Program into the Education Strategic Plan, develop a supporting Public Investment Program, and ensure information systems and policies are in place to manage implementation.

With the goal of improving learning for current and future students, the following reforms should be pursued:

1. Improve budget efficiency, so that funds allocated to education achieve their intended purpose
2. Ensure the next Education Strategic Plan is a results-based sector strategy that links education priorities and service targets with budget support and performance metrics, including implementation of the CPD and CP guidelines
3. Develop and implement a Public Investment Program that directs funding from the government and development partners to achieve the results laid out by the Education Strategic Plan
4. Modernize the education management information system to support results-based performance monitoring and evaluation and support the implementation of the Digital Economy and Society Framework
5. Develop a policy on school-based management that enables schools and communities to respond quickly to emerging needs, including maintaining teaching and learning during future school closures
6. Require schools to collect and report data on school, classroom, and student performance to subnational and national levels using off-the-shelf software
7. Scale up efforts to engage parents and communities in the education process, including through providing guidance on remote learning, ensuring paper-based assignments are distributed during school closures, and joining online lessons and serving as a teacher assistant for preschool and early grade primary school.

ANNEX. SELECTED INDICATORS

SELECTED INDICATORS	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020 E	2021 F
INCOME AND ECONOMIC GROWTH												
GDP growth (annual %)	6.1	7.1	7.3	7.4	7.1	7.0	6.9	7.0	7.5	7.1	-3.1	2.2
GDP per capita growth (annual %, real)	4.5	5.4	5.6	5.6	5.4	5.3	5.3	5.4	5.9	5.5	-4.4	0.9
GDP per capita (US$, nominal)	812.9	892	950	1,028	1,100	1,175	1,270	1,381	1,506	1,640	1,548	1,619
Private Consumption growth (annual %)	8.8	10.4	4.7	5.6	4.6	9.4	5.8	3.7	3.0	7.0	-0.8	1.2
Gross Investment (% of nominal GDP)	16.2	16.0	17.4	18.7	20.9	21.4	21.7	21.9	22.6	23.4	23.7	27.6
Gross Investment - Public (% of nominal GDP)[1]	9.6	10.7	9.1	9.1	8.2	6.9	6.7	6.8	6.7	7.7	11.4	10.8
MONEY AND PRICES												
Inflation, consumer prices (annual %, period average)[2]	2.6	3.4	1.4	2.2	1.2	1.8	3.5	3.3	3.1	3.2	2.9	3.5
Broad Money (% of GDP)[1]	41.6	39.1	50.1	55.5	67.1	72.4	79.2	88.2	100.7	107.7	137.5	142.0
Domestic Credit to the Private Sector (% of GDP)[1]	27.6	28.3	38.7	52.0	62.7	74.3	81.7	86.7	99.6	114.2	136.0	153.7
Nominal Exchange Rate (local currency per USD)	4,044.0	4,016.0	4,033.0	4,027.0	4,030.0	4,025.0	4,058.0	4,062.0	4,067.0	4,070.0	4,077.4	4,070.0
Real Exchange Rate Index (2015=100)	98.1	94.3	93.3	92.6	94.7	100.0	101.9	103.2	99.7	101.0	96.8	98.9
FISCAL												
Revenue (% of GDP)	17.7	17.6	17.7	18.2	20.0	19.7	20.9	21.9	23.8	27.0	23.9	20.7
Expenditure (% of GDP)	21.0	23.0	21.9	21.4	21.9	20.2	21.1	22.7	23.4	25.5	28.4	26.7
Interest Payments (% of GDP)	0.3	0.3	0.5	0.7	0.7	0.3	0.4	0.4	0.4	0.4	0.6	0.5
Non-Interest Expenditure (% of GDP)	20.7	22.7	21.4	20.7	21.2	19.9	20.7	22.3	23.0	25.1	27.8	26.2
Overall Fiscal Balance (% of GDP)	-3.3	-5.4	-4.2	-3.2	-1.9	-0.5	-0.2	-0.8	0.4	1.5	-4.5	-6.1
Primary Fiscal Balance (% of GDP)	-3.0	-5.1	-3.7	-2.5	-1.2	-0.2	0.2	-0.4	0.8	1.9	-3.9	-5.6
General Government Debt (% of GDP)	28.7	29.7	31.5	31.7	31.9	31.2	29.1	30.0	28.4	28.1	35.7	36.0
External Public Debt (% of GDP)[1]	27.1	26.9	30.4	31.5	31.4	31.2	29.1	30.2	28.7	28.1	35.7	36.0
EXTERNAL ACCOUNTS												
Export growth, G&S (nominal US$, annual %)	22.9	11.4	16.0	16.8	10.3	7.5	9.0	9.4	12.3	8.5	-5.1	15.9
Import growth, G&S (nominal US$, annual %)	19.1	11.4	14.2	16.9	8.8	7.6	9.0	7.8	9.3	17.4	-6.7	41.2
Merchandise exports (% of GDP)	38.3	38.8	41.6	44.6	45.4	45.4	45.5	45.2	46.0	46.0	48.7	57.8
Merchandise imports (% of GDP)	50.4	50.5	53.7	57.5	57.5	57.3	56.9	55.6	55.1	54.6	66.0	90.8
Services, net (% of GDP)	6.8	6.3	7.3	7.8	7.7	7.5	7.0	7.0	7.4	8.8	-0.4	-0.4
Current account balance (current US$ millions)	-1,165.3	-1,309.3	-1,390.7	-1,489.3	-1,899.7	-1,680.6	-1,756.6	-2,140.5	-2,180.1	-4,107.7	-2,125.1	-7,370.0
Current account balance (% of GDP)	-10.0	-10.1	-9.9	-9.6	-11.3	-9.2	-8.8	-9.7	-8.9	-15.2	-8.2	-26.9
Foreign Direct Investment, net inflows (% of GDP)	11.9	11.6	13.9	13.0	10.5	9.5	12.0	12.1	12.6	13.2	13.5	12.1
External debt, total (% of GDP)[1]	35.6	36.2	47.9	49.9	49.7	52.2	50.2	51.5	55.0	56.6	..	..
Multilateral debt (% of total external debt)[1]	..	..	..	..	..	..	..	..	..	..	..	..
Debt service ratio (% of exports goods and non-factor services)[1]	1.1	4.0	6.0	5.7	5.4	5.1	5.1	6.2	6.7	6.9	..	..
POPULATION, EMPLOYMENT AND POVERTY												
Population, total (millions)	14.3	14.5	14.8	15.0	15.3	15.5	15.8	16.0	16.2	16.5	16.7	16.9
Population Growth (annual %)	1.6	1.6	1.6	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.4	1.4
Unemployment Rate[1]	0.8	0.6	0.5	0.4	0.7	0.4	0.7	0.7	0.7	0.7	0.7	..
Inequality - Gini Coefficient[1]	..	..	..	..	..	..	..	..	..	..	..	..
Life Expectancy[1]	66.6	67.0	67.5	67.9	68.3	68.6	69.0	69.3	69.6	..	..	..
OTHER												
GDP (current LCU, millions)	47,047,985.0	52,068,693	56,616,800	62,219,524	67,740,436	73,422,702	81,241,866	89,830,525	99,544,275	109,916,799	105,522,011	111,660,573
GDP (current US$, millions)	11,634.0	12,965	14,038	15,451	16,809	18,242	20,020	22,115	24,476	27,030	25,880	27,435
GDP per capita LCU (real)	2,124,292.2	2,238,619	2,363,486	2,495,841	2,630,660	2,769,140	2,915,146	3,071,748	3,252,348	3,431,774	3,279,153	3,365,284
Doing Business Rank[3]	..	..	..	..	..	..	..	..	..	144	..	..
Human Development Index Ranking[4]	143.0	143	145	144	144	146	146	145	144	144	..	..
CPIA (overall rating)[1]	3.4	3.4	3.5	3.4	3.4	3.4	3.4	3.4	3.4	3.4	..	..
Economic Management[1]	4.0	3.8	3.8	3.8	3.8	4.0	4.0	4.0	4.2	4.2	..	..
Structural Policies[1]	3.3	3.5	3.7	3.7	3.7	3.5	3.5	3.3	3.3	3.3	..	..
Policies for Social Inclusion and Equity[1]	3.4	3.5	3.5	3.4	3.4	3.4	3.4	3.4	3.4	3.5	..	..
Public Sector Management and Institutions[1]	2.7	2.8	2.8	2.8	2.8	2.7	2.7	2.7	2.6	2.6	..	..

Notes: ".." indicates not available. E = estimate, F = forecast. Data from MFMOD unless otherwise noted

1/ World Development Indicators Database and World Bank Staff Estimates

2/ World Bank GEM database; MRV = Most recent value

3/ This indicator is ranked out of 190 countries (Doing Business 2019). Data are presented for survey year instead of publication year. Doing Business rankings change over time, due to both methodology and policy changes.

4/ The HDI ranking in 2001 is in relation to 175 countries and in 2010 in relation to 169 countries. Methodological enhancements in HDI calculations have resulted in notable improvements in the countries' rankings.

Sources: MFMOD Database, World Bank WDI and GEM databases, IMF.

Notes

1 Only 11 countries did not fully or partially close schools in February or March 2020: Burundi, Belarus, Brunei Darussalam, Cabo Verde, Nauru, Singapore, Sierra Leone, Suriname, Tajikistan, Turkmenistan, and South Africa.

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13 The Oxford Government Response Tracker, known as the stringency index, measures common policy responses governments have taken in response to the COVID-19 pandemic. It comprises 17 indicators, such as school closures and travel restrictions. The Google mobility index measures the physical movement of people at specific locations using anonymized data provided by mobile phone apps, including Google maps. Subindexes comprise retail, grocery, transit, park, and workplace locations. Values compare activity at a given location against a pre-pandemic benchmark, defined as the median value for that location over the period January 3–February 6, 2020, and are specific to the day of the week.

14 Staff calculations using data from Johns Hopkins University 2021, Google 2021, and Oxford 2021.

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56 The alternative scenario—that those 25 percent of students did not return because they were no longer engaged in education activities whatsoever—would result in more learning loss.

57 The data used to calculate school closures differ slightly from that reported by UNESCO for early March 2021, when schools in Phnom Penh and Kandal province were closed because of the "February 20 incident," but UNESCO reported the country's schools as "fully open."

58 Azevedo and others (2021) assume school productivity rates of 20 HLO points per year for low-income countries, 30 for lower-middle, 40 for upper-middle, and 50 for high-income countries. It is not possible to calculate a value specific to Cambodia, since it participates in only one internationally comparable learning assessment by which Cambodia can be indexed to other countries in the HLO database—the Early Grade Reading Assessment (EGRA), administered in grade 1 or grade 2—and therefore change over time cannot be observed.

59 The original model from Azevedo and others (2021) calculates this as a product of three components: (1) government supply (or expected coverage) of remote learning alternatives (as a percent of the student population), (2) the ability of students to access the alternatives (as a percent of students who can access the government-supplied alternatives), and (3) the effectiveness of the alternative (as a percent of the effectiveness of in-person education). This analysis uses the high-frequency survey results—interpolated between observations—to calculate participation in remote learning alternatives. The result is equivalent to the product of government supply and ability of students to access the remote alternatives from the framework developed by Azevedo and others (2021) and has the advantage of being grounded in country-specific data.

60 The data points used comprise four of the five high-frequency surveys conducted, excluding the fourth wave, when some students were back in school, and the early survey conducted for the joint needs assessment.

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