

CAMBODIA ECONOMIC UPDATE



CAMBODIA IN THE TIME OF COVID-19

SPECIAL FOCUS

Teacher Accountability and Student Learning Outcomes

MAY 2020



WORLD BANK GROUP



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ABBREVIATIONS

ASEAN	Association of Southeast Asian Nations
Bac	Baccalauréat
Brexit	Withdrawal of the United Kingdom from the European Union
CBOE	Chicago Board Options Exchange's
CEU	Cambodia Economic Update
CR	Cambodian riel
DOE	District Office of Education
DSA	debt sustainability analysis
EAP	debt sustainability analysis
EC	European Commission
EMDEs	emerging markets and developing economies
EU	European Union
FCD	foreign currency deposit
GDP	gross domestic product
HRMIS	Human Resource Management Information System
ILO	International Labor Organization
IMF	International Monetary Fund
KPIs	Key Performance Indicators
LPCO	Liquidity-Providing Collateralized Operation
MoEYS	Ministry of Education, Youth, and Sports
NBPTS	National Board for Professional Teaching Standards
NCD	negotiable certificate of deposit
NGS	New Generation School
NPL	nonperforming loan
OECD	Organisation for Economic Co-operation and Development
PMI	Purchasing Managers' Index
PISA	Program for International Student Assessment
POE	Provincial Office of Education
PTTC	Provincial Teacher Training Center
q/q	quarter-on-quarter
RTTC	Regional Teacher Training Center
SAAR	seasonally adjusted annual rate
SBM	School-Based Management
SMC	School Management Committee
SME	small and medium-sized enterprise
SSC	School Support Committee
UK	United Kingdom
U.S.	United States
US\$	United States dollar
VAT	value-added tax
VIX	Volatility Index
WBG	World Bank Group
WDI	World Development Indicators
WTTC	World Travel and Tourism Council
y/y or yoy	year-on-year

EXECUTIVE SUMMARY

The global epidemiological and economic crisis unleashed by COVID-19 poses the greatest threat to Cambodia's development in its 30 years of modern history. The three most affected sectors—tourism, manufacturing exports, and construction—contributed more than 70 percent of growth and 39.4 percent of total paid employment in 2019. Therefore, in the current year, Cambodia's economy is likely to register its slowest growth since 1994, contracting between -1 percent (baseline) and -2.9 percent (downside). Poverty could increase between 3 and 11 percentage points from a 50 percent income loss that lasts for six months for households engaged in tourism, wholesale and retail trade, garment, construction, or manufacturing. The fiscal deficit could reach its highest level in 22 years, and public debt is expected rise to 35 percent of gross domestic product (GDP) by 2022. The authorities have introduced emergency measures to contain the outbreak and provide fiscal assistance to affected households, workers, and enterprises. To facilitate a robust recovery, the government will need to continue to ensure macroeconomic and financial sector stability and accelerate trade and investment reforms as well as encourage faster adoption of digital technologies.

An unprecedented shock

In Cambodia, the first case of coronavirus was confirmed on January 27, 2020, and as of May 12, 2020, there are 122 cases.¹ The Cambodian authorities have taken swift action to detect and prevent local outbreaks by imposing a travel ban on visitors from severely infected countries, closing schools, urging citizens to avoid mass gatherings, and postponing mass celebrations of the Khmer New Year ceremony in mid-April, including an imposition of a lockdown during the three-day Khmer New Year celebration period (see box 1 for more details). In April 2020, a “State of Emergency” law was urgently adopted (and ready to be declared, if there are public health emergencies).

While Cambodia has so far avoided a health crisis, it has not been immune from the economic crisis sweeping the global economy. The growth impact of COVID-19 hinges on the

contagion, severity, and duration of the outbreak, the response of societies, and the magnitude and effectiveness of policy actions. The direct costs of preventive measures to contain a local outbreak currently appear manageable. However, the outbreak caused sharp decelerations in most of Cambodia's main engines of growth in the first quarter of 2020, including weakened tourism (and hospitality) and construction activity and, more recently, the export sector.

Transmission channels

The spillovers of COVID-19 are being felt largely through three key channels: tourism, exports, and foreign direct investment (FDI) (table ES.1). Cambodia has been heavily reliant on tourists from the East Asia and Pacific region, especially Chinese tourists, who account for 35 percent of total international arrivals. International arrivals rapidly declined after the COVID-19 outbreak in China. As the virus spread from China to the rest of the world, tourism activity has come to a standstill.

Table ES.1. Cambodia has strong economic linkages with countries affected by COVID-19

Top 5 markets for Cambodia's merchandise exports, tourist arrivals and FDI origins (2019, percent)

Exports		Tourism		FDI inflows	
U.S.	26.8	China	32.6	China	40.0
E.U.	25.0	Vietnam	12.9	Hong Kong, PRC SAR	10.9
Japan	7.7	Lao PDR	6.9	Korea, Rep.	7.8
Canada	6.2	Thailand	6.2	Singapore	7.1
UK	6.1	Korea, Rep.	4.9	Japan	6.2
ROW	38.2	ROW	36.5	ROW	28.0

Sources: U.S. Comtrade; Cambodian authorities; and World Bank staff estimates.

Note: Total merchandise exports = US\$25,199.39 million (2019); foreign arrivals = 6.61 million (2019); and FDI inflows = US\$2,845 million (2019e). ROW = rest of the world.

¹ World Health Organization; <https://www.who.int/cambodia/news/detail/12-05-2020-who-works-closely-with-the-royal-government-of-cambodia-in-the-fight-against-covid-19>.

The lack of external demand has been amplified by the fact that Cambodia's exports are significantly concentrated by both products and destinations. The key exported products include garments, footwear, travel goods, and rice. The combined U.S. and EU markets comprise about 52 percent of Cambodia's total merchandise exports. In addition, exports rely on imports of intermediate goods (raw materials for Cambodia's garment, footwear and travel goods industries) which earlier experienced supply chain disruptions. The collapse of global trade has significant negative direct and indirect impacts on Cambodia.

Finally, FDI inflows, which lately have gone largely to the construction sector, have originated from a small number of regional countries, especially China. The greater China region, which includes Hong Kong SAR, China, and Taiwan, China, accounts for more than 50 percent of total FDI inflows in recent years. It is estimated that about half of FDI inflows have gone to the construction and real estate sector. After the COVID-19 outbreak in China, the value of approved FDI projects significantly contracted.

i. Tourism—the hardest-hit sector

The demand for tourism and hospitality services has largely collapsed in recent months. The global response to contain the COVID-19 outbreak has resulted in prolonged international travel restrictions and internal lockdowns. During the first two months of 2020, tourist arrivals contracted by 25.1 percent (year-on-year [y/y])—the first contraction since the 2008–09 global financial crisis. Siem Reap, Cambodia's most popular tourist destination, experienced a 45.6 percent decline in tourist arrivals during the first quarter and a 99.6 percent reduction (y/y) in April 2020.²

Tourism (including hospitality) is the second-largest growth driver, estimated to have contributed about 18.7 percent of real GDP growth in 2019 (table ES.2).³ The tourism sector is an important foreign exchange earner, accounting for more than three-quarters of Cambodia's services exports, and about one-fifth of its total goods and services exports.

Table ES.2. Impacts of the COVID-19 outbreak on Cambodia's main growth drivers and employment

Drivers of growth	Tourism	Garment and footwear	Construction	Total
Contribution to GDP growth (2019, percent)	18.7	17.0	35.7	71.4
Direct employment ('000)	620	941	200	1,761
Percent of paid employment ¹	13.9	21.0	4.5	39.4
Percent of non-farm employment	11.2	17.0	3.6	31.9
Percent of total employment	7.1	10.7	2.3	20.1

Source: Cambodian authorities and World Bank staff estimates.

Note: ¹ Wage employment.

ii. The trade sector

The COVID-19 pandemic has also triggered an unprecedented export demand shock, after causing supply chain disruptions. As a result, a large part of garment, footwear, and travel goods orders from the two main destinations, namely the United States and EU, have either been frozen or cancelled. This occurred after Cambodia's manufacturing export industries experienced supply chain disruptions causing some garment factory closures in early March 2020. As shown in table ES.2, in 2019, the garment and footwear industry contributed to almost one-fifth of GDP growth. In addition, the EU has announced the withdrawal of tariff preferences and their replacement with the EU's standard tariffs (most-favored nation MFN), which will affect selected garment and footwear products, and all travel goods and sugar, amounting to around €1 billion or one-fifth of Cambodia's yearly exports to the EU.⁴

The latest updates from the industry show that most factories will have only limited orders after the first half of 2020. This is because some orders have been either frozen or cancelled. Consequently, about 130 garment and footwear factories (12 percent of total) have

² News Release on international tourist and Angkor revenue statistics, April 1, 2020, Angkor Enterprise.

³ According to the World Travel and Tourism Council (WTTC), in 2019 travel and tourism contributed an estimated 33 percent of Cambodia's GDP, while official national accounts data indicate that the share of the entire services sector in GDP was only 38.8 percent. According to the WTTC, travel and tourism account for 2.9 million jobs.

⁴ For more details, please see <https://trade.ec.europa.eu/doclib/press/index.cfm?id=2113>.

suspended operations either partially or fully since mid-April 2020, laying off close to 100,000 workers.⁵ Official data show that as of February 2020, the export garment, footwear, and travel goods industry consisted of 1,087 factories and employed 941,000 workers, representing 21.0 percent, 17.0 percent, and 10.7 percent of paid, non-farm, and total employment, respectively.⁶

The formal garment sector is the main source of government revenue, especially direct revenue. The sector is the largest formal and paid employment industry in the economy, although it is ranked third in terms of its contribution to real economic growth, providing about 17.0 percent of real GDP growth in 2019.

iii. Construction and FDI inflows

The construction (and real estate) sector has been the largest engine of growth in recent years. As illustrated in table ES.2, in 2019, construction and real estate contributed more than a third of GDP growth. Along with the export sector, it has been one of the main sources of government revenues from indirect and international trade taxes. Recently, the construction industry has been increasingly financed by FDI inflows. It is estimated that Cambodia received 40 percent of total FDI inflows from mainland China, with the majority of the inflows channeled to the construction sector.

During the first two months of 2020, both construction activity and (approved) FDI inflows significantly weakened. Imports of steel, which is largely used for construction, dipped by 47.4 percent (y/y) in the first two months of 2020. Likewise, approved FDI projects for the construction sector contracted by 40.2 percent (y/y) during the same period. This will greatly diminish economic growth, although its effect on employment is relatively muted, given that the latest construction boom is in large part of luxury high-rise buildings and is relatively capital intensive.

Economic and social impacts

Cambodia is expected to experience its lowest growth rate since 1994. The COVID-19 shock, propagated through falling global demand, supply

chain disruptions, and nationwide lockdowns, is hitting most of Cambodia's main drivers of growth hard. While real GDP growth was strong at 7.1 percent in 2019, it is projected to register a negative growth rate, ranging between -1.0 and -2.9 percent in 2020 (figure ES.1).

At least 1.76 million jobs are currently at risk due to the COVID-19 outbreak. The collapse of the growth drivers has not only hurt economic growth but has also caused unemployment to potentially soar to nearly 20 percent. It is estimated that the three main growth drivers—tourism, manufacturing exports, and construction—that account for 71 percent of growth and 20 percent of total employment have been most directly affected by COVID-19.

In the absence of significant mitigation measures, the COVID-19 pandemic could lead to a sharp increase in poverty. Poverty simulations show that poverty would increase between 1 and 5 percentage points from a 50 percent income loss that lasts for three months for households engaged in tourism, wholesale and retail trade, garment, construction, or manufacturing, or between 3 and 11 percentage points from an income loss that lasts for six months.⁷ Returning migrants from Thailand,⁸ and their households that relied on their remittances, are also likely to face significant income losses and an elevated risk of falling into poverty.

Possible spillover to the financial market

The spillover effects from a slowdown in the real sector to the banking and financial sector could be sizable. The tapering of capital inflows is triggering the easing of real estate market prices, likely ending the construction boom. With the current large outstanding credit to the construction, real estate, and mortgage sector (see the discussion of the monetary sector below for more details), nonperforming loans are expected to rise. The share of outstanding bank credit (excluding microfinance and shadow banking credits) financing to the combined construction, real estate, and mortgage businesses peaked at 31.1 percent or US\$7.7 billion (28.6 percent of GDP) by end-2019. A potential effect on the

⁵ Official press conference on April 27, 2020, on the quarantine of returning garment workers by the Ministry of Labor and Vocational Training.

⁶ February 2020 report, Ministry of Industry, Science, Technology and Innovation.

⁷ April 2020 East Asia and Pacific Economic Update, the World Bank.

⁸ It is estimated that as of April 2020, around 80,000 migrant workers have returned to Cambodia since the COVID-19 outbreak.

microfinance sector is through the losses of household incomes with rising laid-off workers from the tourism, garment, and construction sectors. Importantly, a real estate market correction has started, following a prolonged construction and property boom, increased credit provided to the construction/real estate/mortgage sector, and high outstanding credit.

Implementing monetary policy easing, the central bank reduced the reserve requirement ratio to 7 percent for both local and foreign currencies for six months starting in April 2020 from 8 percent for riel and 12.5 percent for foreign currencies. The central bank is advising commercial banks and micro-finance institutions to review loan repayments by households impacted by the COVID-19 outbreak. Delayed repayment and loan rescheduling may be considered. Globally, the outbreak has led to increased financial market volatility, including in equity markets across Asia. Currency markets and commodity prices are also being affected, with the recent collapse of oil prices.

Implications for domestic revenue and foreign exchange reserves

The COVID-19 outbreak is hitting Cambodia's revenue base. As mentioned above, the export and construction sectors are the main sources of direct revenues and indirect (and international trade) revenues, respectively. The least affected agriculture sector is tax-exempt. It is highly likely that revenue collection in 2020 will be significantly below the budget target. The overall fiscal deficit (including grants) is therefore projected to widen to 9.0 percent of GDP in 2020, down from a surplus of 0.5 percent in 2019 (see Annex 2 for Cambodia's key macroeconomic indicators). The shortfall in domestic revenue collection will require the authorities to dip into government savings, and the domestic financing need is projected to amount to 5.3 percent of GDP. In 2019, government savings stood at 20.2 percent of GDP (or 22.2 trillion riels) after several years of accumulation. Given the authorities' ample liquidity, recourse to domestic (central bank) financing to fill the widening overall fiscal deficit is not expected.

Cambodia's international reserves position is also projected to deteriorate, given that the

country's key foreign exchange earners, namely tourism and exports, are being hit hard by the outbreak, while FDI inflows are also slowing. In 2020, the country's foreign exchange reserves are expected to decline to US\$16.8 billion (6.8 months of prospective imports), down from US\$18.7 billion (7.6 months of prospective imports).

Outlook and risks

The coronavirus outbreak will severely impact the economy. The outbreak has caused sharp decelerations in most economic activities, and even collapses of some sectors underpinning Cambodia's economic growth. And the actual shape and pace of recovery remains highly uncertain and largely dependent on the course of the virus. In the base case scenario, which assumes a recovery in global growth with a gradual pickup in global demand when lockdowns are steadily eased in the second half of 2020, while domestic economic conditions improve without significant long-term adverse impact of the lockdowns on the corporate, banking sector or balance of payments, real growth is projected to contract by 1.0 percent in 2020. The economy is expected to recover sharply to register 6.0 percent growth in 2021, helped by a rebound in global demand. The downside scenario assumes global lockdowns and restrictions continue until the third quarter of 2020 with moderate to significant adverse effects resulting in liquidity problem becoming solvency problem affecting corporates and ultimately the balance of payments. Real GDP under the downside scenario is projected to contract by 2.9 percent in 2020 and sluggishly recover to reach 3.9 percent in 2021. However, the downside scenario does not capture potential financial risks possibly caused by macro-financial linkages.

The risks stemming from an overleveraged financial sector are rising. Several financial sector vulnerabilities could exacerbate the COVID-19 shock. These vulnerabilities include high credit concentration, related party lending risks, lack of consolidated cross-border supervision and gaps in implementation of risk-based supervision.⁹ Liquidity risks also remain elevated, as financial institutions rely on funding from abroad, including from parent banks (to banks). The concentration of FDI inflows in a few sectors (namely banking, construction and real estate) combined with bank

⁹ Staff report for the 2019 Article IV consultation, IMF. See <https://www.imf.org/en/Publications/CR/Issues/2019/12/23/Cambodia-2019-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-48912>

lending primarily in construction and real estate creates an additional source of risk.

Policy options

Policy options in response to the COVID-19 outbreak must aim to (i) provide immediate and urgent economic relief and public health protection, (ii) underpin an economic recovery in the short term, and (iii) foster macro-fiscal and social resilience in the medium term.

The most urgent step is to provide support to households to alleviate poverty. This includes leveraging existing programs and relief as well as targeting mechanisms to support the poor and vulnerable through social assistance to maintain their living conditions. This intervention policy is being implemented together with the wage subsidy measure (see box 1). To scale up Cambodia's existing social assistance and social insurance schemes, after providing immediate relief programs, it is crucial to strengthen the existing mechanism to identify the poor through its IDPoor program. It is critical to continue the current core public health response including case detection, isolation, contact tracing quarantine. In addition, hand hygiene, cough etiquette, and physical distancing should continue as important preventive measures. The authorities have responded well to the first wave of the outbreak. However, as the pandemic is still far from over, Cambodia needs to be ready to respond to a possible future outbreak.

Effective business continuity plans and use of digital technologies are needed to ensure uninterrupted provision of relief programs and service. The plans set out contingency measures to minimize disruptions to the organization's operations in case of crisis by leveraging emerging digital and information technologies. Depending on the magnitude and severity of impacts of the COVID-19 outbreak, phased implementation of the plans, which integrates all critical government (administration, finances, and health) functions should maintain minimum operations, enabling the uninterrupted provision of emergency food assistance, economic relief, and public health emergency assistance.

The effectiveness of government intervention will be essential to facilitate economic recovery. The COVID-19 pandemic will likely have major

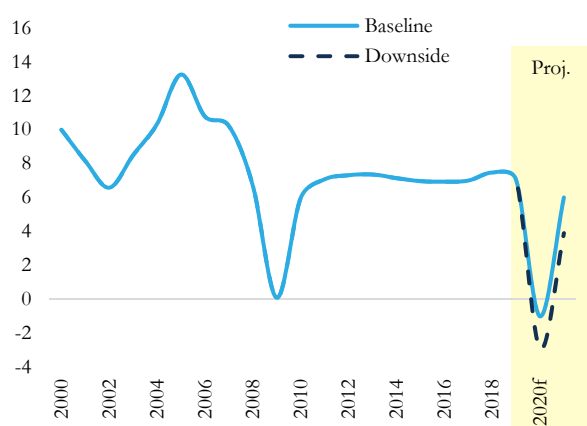
implications on how regional and global trade and investment will be conducted going forward, with expected major shifts in trade and migrant policies, and flow of goods and services. There is a need for the authorities to think about a future where strengthening domestic demand, protecting the local consumer purchasing power amid external shocks of public health and/or natural disasters, and increasing production for domestic consumption, are the way to move forward. In this regard, intervention measures recently introduced by the authorities include tax relief, and improved access by small businesses and household enterprises to cheaper credit using co-financing facilities between the newly established Small and Medium Enterprise Bank of Cambodia (SME Bank) and commercial lenders (banks and microfinances). Similarly, additional capital injection of US\$ 50 million for the Rural Development and Agriculture Bank has been provided to support agroprocessing firms and emerging agribusinesses. However, the success of the measures hinges on targeting appropriate small, medium, and large firms and enterprises that are efficient and viable but lack cheaper financing sources to create jobs, to run profitably, and to export. This should also include family and small firms operating in retail and low-end tourism, where large numbers of informal or semiformal firms might either be impacted by the pandemic or not.

The final step is to ensure economic and social resiliency in the medium term after the outbreak has been brought under control. Refocusing and reenergizing efforts and sources that might have been interrupted or diverted to cope with the COVID-19 outbreak to moving forward with key structural and sectoral reforms is crucial. In this connection, attention must be paid and efforts must be made to improve macro-fiscal resilience, address the vulnerabilities in the financial sector, strengthen external competitiveness and diversification to mitigate the impact of potential external shocks, while ensuring readily available social protection and relief programs that can be quickly activated and/or scaled up during an emergency. To achieve economic resiliency, it is necessary to further promote ease of doing business, the investment climate, and a reduction of energy and logistics costs to reintegrate with regional and global value chains after a period of interruption caused by the outbreak.

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

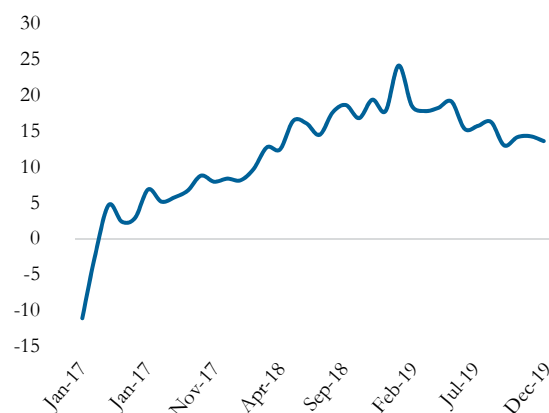
Real growth, which had been strong until last year, has been hit hard by the global COVID-19 outbreak...

Real growth (percent)



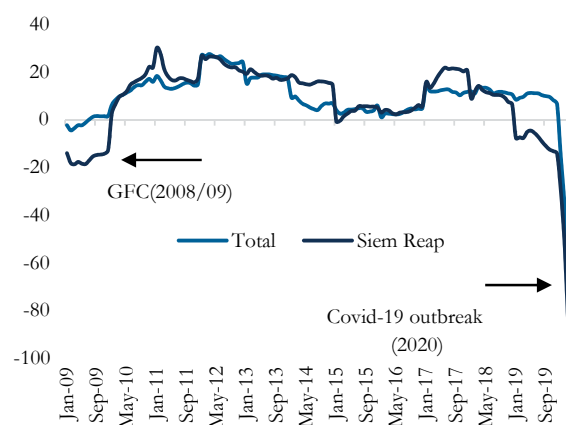
...as key exports, which started to ease last year, are being affected by external demand shocks...

Garment and footwear exports (y/y, percent change)



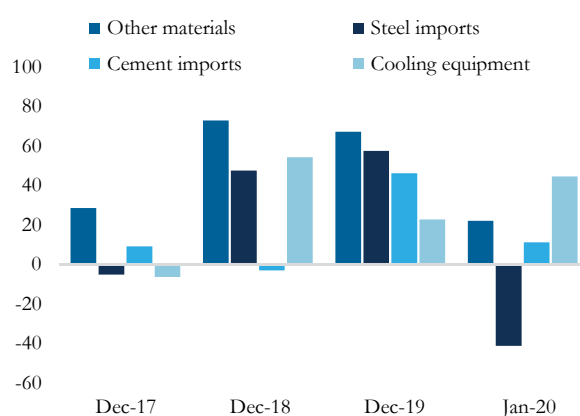
...and the tourism sector has collapsed due to international travel bans and internal lockdowns...

International arrivals (y/y percent change)



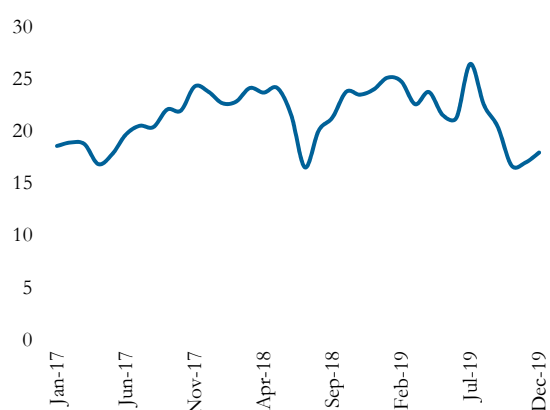
...construction activity eased, as reflected in the contraction of steel imports

Construction materials and steel imports (y/y, percent change)



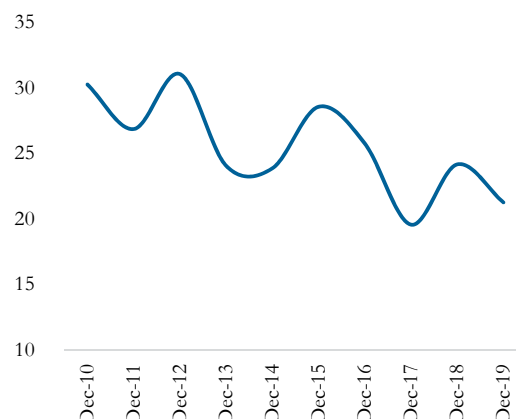
With the tapering of capital inflows, broad money growth slowed...

Broad money (y/y percent change)



...and growth of bank credit to the private sector decelerated

Credit to the private sector (y/y percent change)



Sources: Cambodian authorities; World Bank staff estimates and projections.

Note: GFC = global financial crisis.





Section I

Recent Economic Developments and Outlook

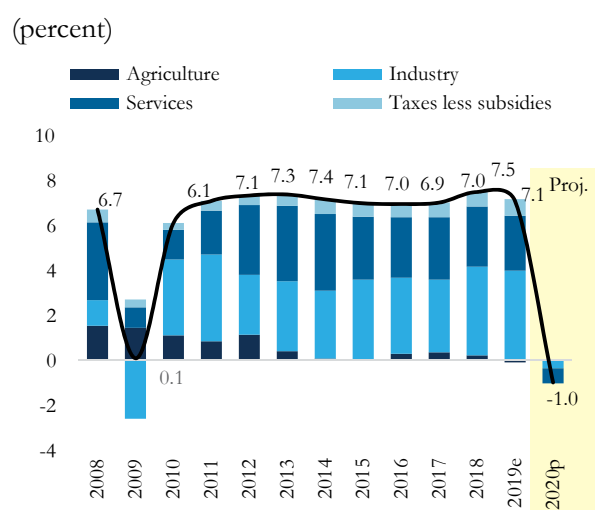
Recent Economic Developments and Outlook

Recent developments

Economic activity quickly diminished due to the global COVID-19 outbreak

Growth momentum quickly disappeared in early 2020 due to the global COVID-19 outbreak. Although growth was strong, reaching 7.1 percent in 2019 (figure 1), the outbreak caused sharp decelerations in most of Cambodia's main engines of growth in the first quarter of 2020, including weakened tourism (and hospitality) and construction activity and, more recently, the export sector. The tourism sector is the first and hardest-hit growth driver since the COVID-19 outbreak started in China. Then, external demand shocks caused by the global COVID-19 outbreak triggered the postponement and cancellation of garment and footwear orders. As a result, garment and footwear factories have started to partially or totally suspend their operations. Recently, the construction industry has been increasingly financed by foreign direct investment (FDI) inflows. It is estimated that Cambodia received 40 percent of its total FDI inflows and a majority of the inflows channeled to the construction sector from mainland China. During the first few months of 2020, both construction activity and (approved) FDI inflows weakened significantly.

Figure 1: Sector contribution to real growth



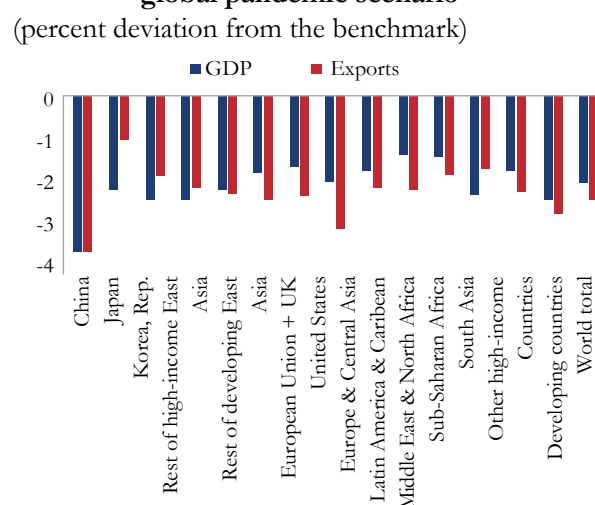
Source: Cambodian authorities and World Bank staff estimates.

Note: e = estimate; p/proj. = projection.

¹⁰ World Bank 2020.

The global COVID-19 outbreak has dramatically disrupted economic activity in the region and the world. In 2019, overall economic activity was cushioned by resilient private consumption and accommodative fiscal and monetary policies. More importantly, the world welcomed phase one of the trade deal signed between the United States and China in January 2020 after more than two years of escalating tariffs. However, global and regional growth momentum ceased abruptly as the COVID-19 pandemic intensified (see boxes 2 and 3 for recent global and regional developments and outlook). According to the World Bank's April 2020 East Asia and Pacific (EAP) Economic Update, global GDP was expected to decline by 2.1 percent, while developing countries' GDP was expected to decline by 2.5 percent and high-income countries by 1.9 percent (figure 2). The biggest GDP losses under the global pandemic scenario were expected in EAP countries due to their relatively deep integration through trade and direct impact on tourism.¹⁰ Since then, global and regional growth has been downgraded further. In China, growth projection has been revised down to 1.0 percent in 2020, compared to the pre-COVID projection of 5.9 percent.

Figure 2: GDP and export implications of the global pandemic scenario



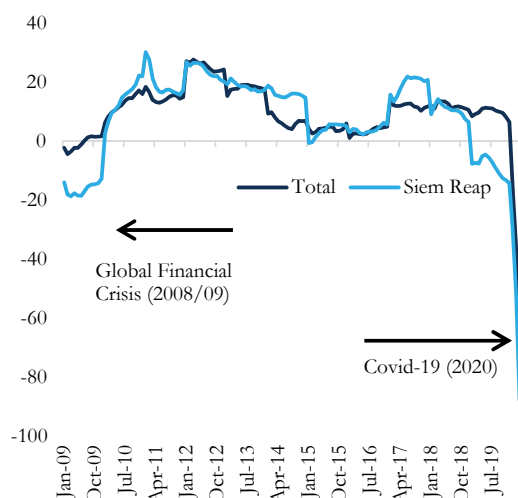
Source: World Bank 2020a.

After the start of the COVID-19 epidemic, the first case of coronavirus in Cambodia was confirmed on January 27, 2020. As of May 12, 2020, there were 122 cases. The Cambodian authorities have taken swift action to detect and prevent local outbreaks by imposing travel bans on visitors from severely infected countries, closing schools, urging citizens to avoid mass gatherings, and postponing mass celebrations of the Khmer New Year ceremony in mid-April, including an imposition of a lockdown during the three-day Khmer New Year celebration period. A “State of Emergency” law was urgently adopted.

While Cambodia has avoided a health crisis so far, it has not been immune from the economic crisis sweeping the global economy

The growth impact of COVID-19 hinges on the contagion, severity, and duration of the outbreak, the response of societies, and the magnitude and effectiveness of policy actions. The direct costs of preventive measures to contain a local outbreak currently appear manageable. However, the outbreak has caused a sharp deceleration in most of Cambodia’s main engines of growth in the first quarter of 2020, including weakened tourism (and hospitality) and construction activity and, more recently, the export sector.

Figure 3: Total international and Siem Reap arrivals (y/y, percent change)



Source: Cambodian authorities.

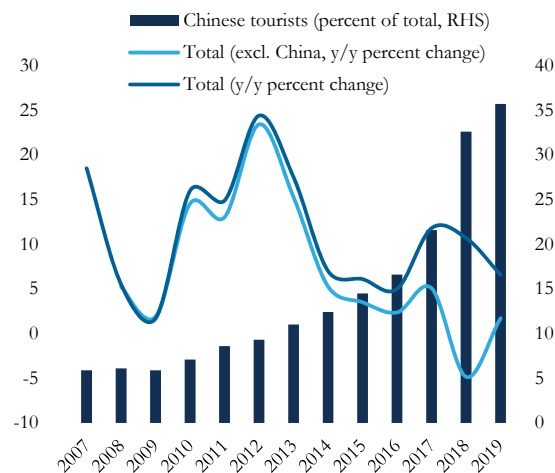
The tourism and hospitality industry has faced both a structural slowdown and severe impacts of the COVID-19 outbreak

Tourism is the hardest-hit sector. The demand for tourism and hospitality services has largely collapsed in recent months. The global response to contain the COVID-19 outbreak has resulted in prolonged international travel restrictions and internal lockdowns. During the first two months of 2020, tourist arrivals contracted by 25.1 percent (y/y)—the first contraction since the 2008–09 global financial crisis (figure 3). Siem Reap, Cambodia’s most popular tourist destination, experienced a 45.6 percent decline in tourist arrivals during the first quarter and a 99.6 percent (y/y) contraction in April 2020.¹¹

Tourism (including hospitality) is the second-largest growth driver, estimated to have contributed about 18.7 percent of real GDP growth in 2019.¹² The tourism sector is an important foreign exchange earner, accounting for more than three-quarters of Cambodia’s services exports, and about one-fifth of Cambodia’s total goods and services exports. In 2019, Cambodia welcomed 6.61 million visitors, a 6.6 percent increase over 2018.

The structural slowdown in the tourism sector has occurred over the past few years as

Figure 4: International arrivals (y/y, percent change)



Source: Cambodian authorities.

Note: RHS = right-hand scale.

¹¹ News Release on international tourist and Angkor revenue statistics, April 1, 2020, Angkor Enterprise.

¹² According to the World Travel and Tourism Council (WTTC), in 2019 travel and tourism contributed an estimated 33 percent of Cambodia’s GDP, while official national accounts data indicate that the share of the entire services sector in GDP was only 38.8 percent. According to the WTTC, travel and tourism account for 2.9 million jobs.

Box 1.

Cambodian public health measures and economic policy in response to the COVID-19 outbreak

Confirmed infected and recovered cases: The first case was confirmed in Sihanoukville in a 60-year-old Chinese man who arrived from Wuhan, Hubei, with his family on January 27, 2020. Between January 27 and April 17, 2020, the number of infections increased to 122, of which, 87.7 percent, recovered (figures B1.1 and B1.2). By May 16, 2020, all COVID-19 patient recovered. Most of the infected cases are imported. A geographic breakdown reveals that the top three locations where COVID-19 was found were Sihanoukville, Phnom Penh, and Kampong Cham, which had 32.5 percent, 22.8 percent, and 13.8 percent of the cases, respectively (figure B1.3).

Figure B1.1: Covid-19 cases

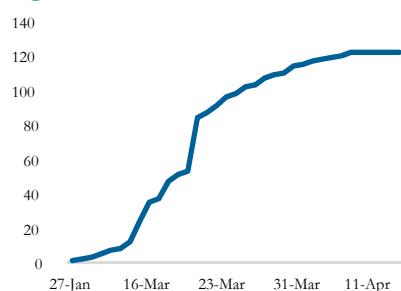


Figure B1.2: Covid-19 sources

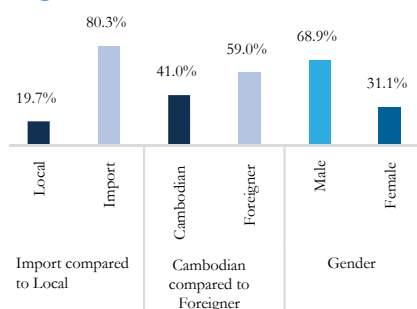
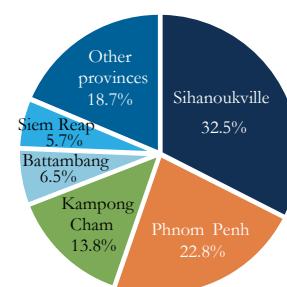


Figure B1.3: COVID-19 locations



Source: World Bank staff using Ministry of Health data.

Containing the outbreak: Three battles are being fought simultaneously: (i) measures against imported cases, covering over 80 percent of the cases by banning all entries from France, Germany, Italy, Spain, and the United States; (ii) raising awareness on self-protection, social distancing, early school break, a ban on gatherings, and especially a cancellation of Khmer New Year holidays together with temporary interprovincial travel restrictions, among others; and (iii) striving to offer effective treatment, which, in turn, resulted in the recovery of all infected patients. Preparing for a bigger battle, 3,000 rooms have been made available throughout the country with 422 additional staff mobilized.

Social and fiscal policy responses: Key policy measures which have been introduced include: (i) scaling up of existing social protection schemes through cash transfers to poor and vulnerable households; (ii) tax relief for the tourism and manufacturing export (garment/footwear/travel goods) sectors; (iii) retraining and upskilling programs for laid-off workers in the sectors; (iv) US\$ 70 wage subsidy (US\$40 paid by the Government and US\$30 paid by firm/factory) for suspended workers; (v) an exemption of the ownership transfer tax for property valued at US\$70,000 or less; (vi) additional capital injection of US\$ 50 million for the Rural Development and Agriculture Bank to support agroprocessing firms; (vii), establishment of a new SME Bank with an initial capitalization of US\$100 million; and (viii) improving the ease of doing business, trade facilitation, including customs post audit clearance.

Monetary policy responses: The central bank has introduced monetary policy easing. The reserve requirement rate was reduced to 7 percent for both local currency and foreign currency, down from 8 percent for local currency and 12.5 percent for foreign currency and domestic currency, respectively, from April 2020 onward. The benchmark rate of LPCO operations for all maturities was also reduced by 0.5 percent. The central bank also decided to postpone full implementation of the Capital Conservative Buffer and to maintain the 50 percent current requirement, cut the interest rate on negotiable certificates of deposit for both riels and U.S. dollars at an appropriate level, and reduce the minimum requirements of the Liquidity Coverage Ratio to an appropriate rate. Commercial banks (and microfinance institutions) have been advised to reschedule loan repayments by hard-hit borrowers including restaurants, hotels, guesthouses, beverage shops, and others.

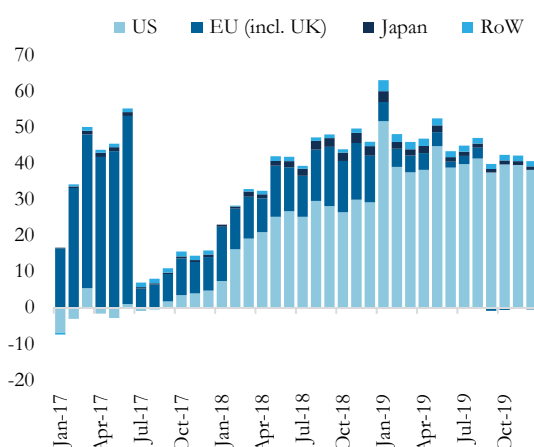
In order to implement the response measures mentioned above, the authorities have established the following interministerial working groups/task forces: (i) a task force to manage supplies and prices of strategic commodities; (ii) a budget policy on financing and social assistance; and (iii) a multidisciplinary working group to study and plan monetary and banking measures.

Note: This box was prepared by Runsinarith Phim and Sodeth Ly.

indicated by its low repeat visit rate of less than 20 percent. However, the sector initially received a substantial boost when the authorities' "China ready" initiative introduced in 2016 paid off. This has resulted in a significant rise in the share of Chinese visitors, which peaked at 35.7 percent in 2019, more than offsetting the overall decline of arrivals from the rest of the world. Excluding Chinese tourists, international arrivals decelerated sharply since 2014 and contracted in 2018 (figure 4). In 2019, arrivals from Cambodia's immediate neighbors, Vietnam, Thailand, and Lao PDR, continued to be the next three-largest destinations, capturing 13.7 percent, 7.1 percent, and 5.5 percent of total international arrivals, respectively. Arrivals from the East Asia and Pacific region as a whole account for about 80 percent of total arrivals.

In response, the authorities have introduced measures to support the tourism industry with tax relief (and social security contribution exemptions) to ease the cash flow crunch, while the central bank advised commercial banks (and microfinance institutions) to reschedule loan repayments by hard-hit borrowers including restaurants, hotels, guesthouses, beverage shops, and others.¹³ In addition, efforts have been made to restore the attractiveness of the temple complex, with conservation and rehabilitation

Figure 5: Destination of garment, footwear, and travel good exports
(y/y percent change)



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

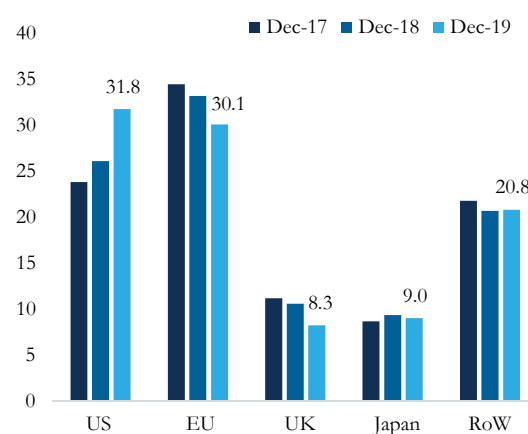
of the complex, and restoration of physical infrastructure including beautification projects to make its surrounding environment greener and better organized.¹⁴ The authorities are also studying the tourism master plan for the entire Siem Reap province and have identified new potential tourism products, particularly in Kulen Mountain, the Tonle Sap area, and the areas located within the temples of Angkor.

The COVID-19 pandemic has triggered an unprecedented export demand shock

An unprecedented export demand shock has resulted in the cancellation of a large part of garment, footwear, and travel goods orders from the two main destinations, the United States and EU. In addition, the EU has announced the withdrawal of tariff preferences and their replacement with the EU's standard tariffs (most-favored nation), which will affect selected garment and footwear products, as well as all travel goods and sugar, amounting to around €1 billion, or one-fifth of Cambodia's yearly exports to the EU.¹⁵

The latest updates from the industry show that most factories will have only limited orders after the first half of 2020. This is because some orders have been either frozen or cancelled. Consequently, about 130 garment and

Figure 6: Cambodia's main exports by major destination
(percent share)



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

¹³ National Bank of Cambodia circular dated March 27, 2020, on credit restructuring during the COVID-19 outbreak.

¹⁴ See Apsara authorities' website; <http://apsaraauthority.gov.kh/?page=front&lg=en>.

¹⁵ For more details, please see <https://trade.ec.europa.eu/doclib/press/index.cfm?id=2113>.

footwear factories (12 percent of the total) have partially or fully suspended operations since mid-April 2020, laying off nearly 100,000 workers.¹⁶ The official data showed that as of February 2020, the export garment, footwear, and travel goods industry consisted of 1,087 factories and employed 941,000 workers, representing 21.0 percent, 17.0 percent, and 10.7 percent of paid, non-farm, and total employment, respectively.¹⁷ The formal manufacturing export sector is the main source of government revenues, especially direct revenues. The sector is the largest formal and paid employment industry in the economy, although it is ranked third in terms of its contribution to real economic growth, providing about 17.0 percent of real GDP growth in 2019.

Garment, footwear, and travel goods export growth decelerated quickly in the first quarter of 2020

Due to the global COVID-19 outbreak, garment, footwear, and travel goods export grew only 7.5 percent in the first quarter of 2020, down from 17.7 percent in 2019. Before the COVID-19 outbreak, growth of combined garment, footwear, and travel goods exports marginally decelerated to 13.6 percent in 2019, down from 17.7 percent in 2018. This was driven by a contraction of combined garment, footwear,

and travel goods exports to the EU (including the UK) market by 0.5 percent (figure 5), falling for the first time since the 2008–09 global financial crisis. Rising exports to the U.S. market helped partly offset the contraction of exports to the EU market.

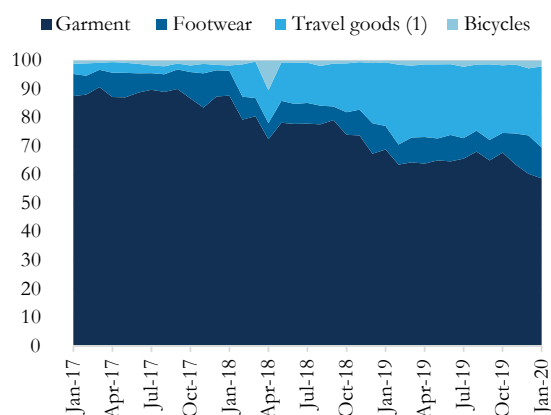
Exports of travel goods (and other textile products) outpaced those of footwear in 2019

Cambodia's total exports of travel goods (and other textile products) rapidly expanded, reaching US\$1.29 billion (96.3 percent growth) in 2019, greatly outpacing the acceleration of total footwear exports, which reached US\$1.26 billion (21.6 percent growth). The rapid expansion of travel goods exports is largely a result of the duty-free and quota-free access to the U.S. market granted in 2016.

The United States became the largest market for Cambodia's combined garment, travel goods, and footwear exports

The United States is now the largest market for Cambodia's garment, travel goods, and footwear exports. In 2019, the share of the U.S. market rose to 31.8 percent (figure 6). The EU market (excluding the UK) is second, accounting for 30.1 percent of the total. As depicted in figure 5, the exports of garment, travel goods, and

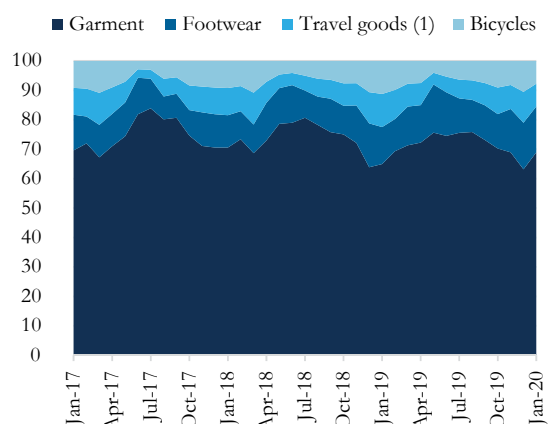
Figure 7: Cambodia's main export products to the U.S. market
(percent share)



Source: Cambodian authorities.

Note: (1) Travel goods and other textile products.

Figure 8: Cambodia's main export products to the EU market
(percent share)



Source: Cambodian authorities.

Note: (1) Travel goods and other textile products.

¹⁶ April 27, 2020, Ministry of Labor and Vocational Training press conference on the quarantine of returning garment workers.

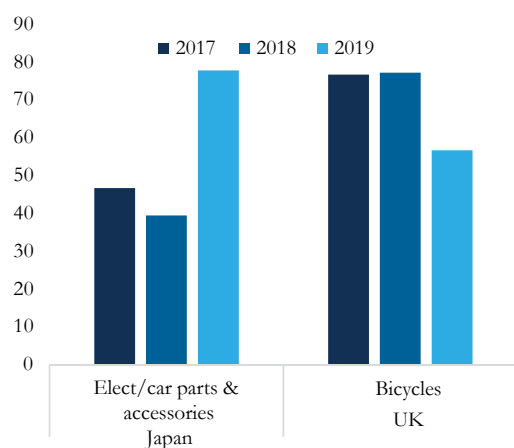
¹⁷ February 2020 report, Ministry of Industry, Science, Technology and Innovation.

footwear products to the U.S. market accelerated to 38.1 percent y/y in 2019, up from 29.1 percent in 2018. Disaggregating the export data to the U.S. market shows that garment exports remained strong last year, reaching US\$2.3 billion, or a 16.8 percent increase. Boosted by the duty-free and quota-free access, exports of travel goods (and other textile products) skyrocketed, becoming the second-largest export items after garments, amounting US\$860 million in 2019, or a 143.5 percent increase. The exports of footwear products ranked third, amounting to US\$300 million, increasing by 60.1 percent in 2019. In the U.S. market, the share of garment exports shrank to 60 percent in January 2020, down from 88.6 percent in January 2017, caused largely by the accelerating growth of travel goods exports (figure 7). In this regard, the share of travel goods (and other textile product exports) rose to 29 percent, up from 3.6 percent during the same period.

Garment exports to the EU market contracted for the first time since the 2008–09 global financial crisis

Disaggregating Cambodia's exports to the EU (excluding the UK) market shows that in 2019, garment exports contracted by 0.7 percent, reaching US\$2.61 billion in 2019, down from US\$2.63 billion in 2018. The contraction happened for the first time since the 2008–09 global financial crisis. In contrast,

Figure 9: Cambodia's rising exports of electronic and vehicle parts and accessories to Japan (US\$ million)



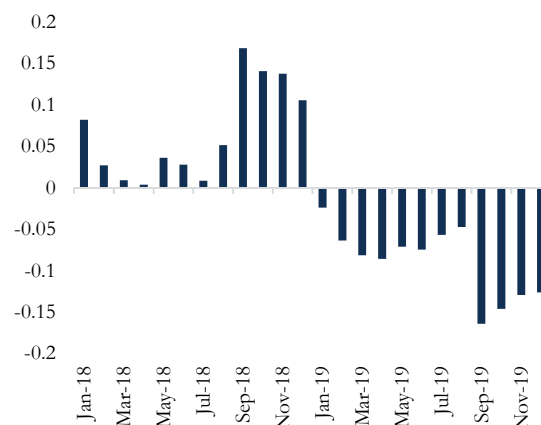
Source: Cambodian authorities.

footwear exports to the EU market remained solid, accounting for US\$478.8 million at a 19.7 percent growth rate. As a result, the share of garment exports shrank to 78 percent in January 2020, down from 84.4 percent in January 2017 (figure 8). Cambodia's travel goods exports to the EU market remained relatively small, at US\$155.5 million (only 18 percent of those to the U.S. market). The combined U.S. and EU markets represent almost the entire travel goods exports from Cambodia, while its garment and footwear exports to the EU market were 15 percent and 60 percent larger than those of the U.S. market, respectively.

The Japanese market appears promising for Cambodia's exports of electronic and vehicle parts and accessories

The next two largest markets for Cambodian exports were Japan (US\$1.05 billion) and the United Kingdom (US\$945 million) in 2019. While the two markets captured similar values of Cambodia's garment exports of about US\$800 million, the Japanese market seems very promising for Cambodia's exports of electronic and vehicle parts and accessories (figure 9). Cambodia's exports of electronic and vehicle parts and accessories to Japan rose to US\$77.8 million in 2019, up from US\$39.4 million in 2018. This should be further promoted in order to diversify beyond garments.

Figure 10: Cambodia's main export products to the UK market (year to date, y/y percent change)



Source: Cambodian authorities.

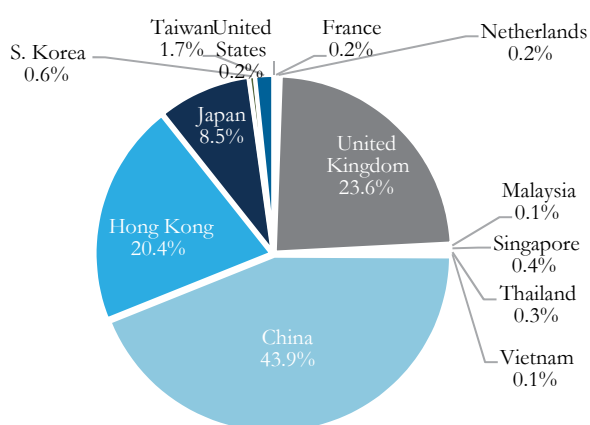
In contrast, bicycle exports to the UK market declined last year. Combined exports of garment, footwear, bicycles, and travel goods to the UK have been in decline since early 2019, and at the end of 2019, exports contracted by 12.6 percent y/y (figure 10), reaching US\$950 million. The United Kingdom left the European Union on January 31, 2020.¹⁸ In that connection, Cambodia will likely need to negotiate with the UK to ascertain whether the UK, after Brexit, will continue to provide duty-free and quota-free access to Cambodia's exports, as it did before Brexit under the Everything But Arms scheme.

Approved FDI project value contracted by 52.2 percent in the first two months of 2020

The value of approved FDI projects sharply contracted during the first two months of 2020. In 2019, the value of approved FDI projects already contracted by 9.6 percent (y/y). Of the total approved FDI project values of US\$3.5 billion in 2019, roughly 43 percent came from China, which continued to be number one source of FDI (figure 11). While during the past several years most FDI inflows had been from the East Asia region, last year, the second-largest approved FDI value originated from the United Kingdom, which comprised 23.6 percent of the total, followed by Hong Kong SAR, China, with 20.4 percent of total.

The majority of approved FDI continued to go to the construction and real estate sector

Figure 11: Approved FDI by country of origin
(percent share, 2019)



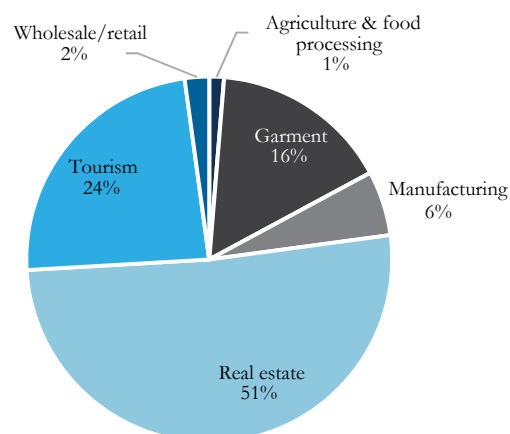
Source: Cambodian authorities and World Bank staff estimates.

In 2019, the construction and real estate sector received the largest share of 51 percent of total approved FDI project value, followed by 24 percent to the tourism sector (largely investment in construction activity, such as building hotels and resorts), and 16 percent to manufacturing (garment, footwear, and travel goods)(figure 12). Investment continues to be biased toward the non-tradeable sectors, because the export sectors, except the garment, footwear, and travel goods industry, remain less attractive. This highlights the need for more effort to promote the country's competitiveness beyond the garment and footwear industry.

In early 2020, construction activity weakened significantly due to the global COVID-19 outbreak

Given the contraction of construction materials imports, especially steel imports, construction activity is expected to have decelerated significantly. Imports of steel, which is largely used in the construction sector, dipped by 47.6 percent (y/y) in the first three months of 2020, while approved FDI project value going to the construction (and tourism) sector contracted by 40.2 percent during the same period. In 2019, the value of the combined steel, cement, and other basic construction material imports declined to 730 billion riels (US\$179 million), down from 830 billion riels (US\$204 million) in 2018 (figure 13). In contrast, the

Figure 12: Approved FDI project values
(percent of total, 2019)



Source: Cambodian authorities and World Bank staff estimates.

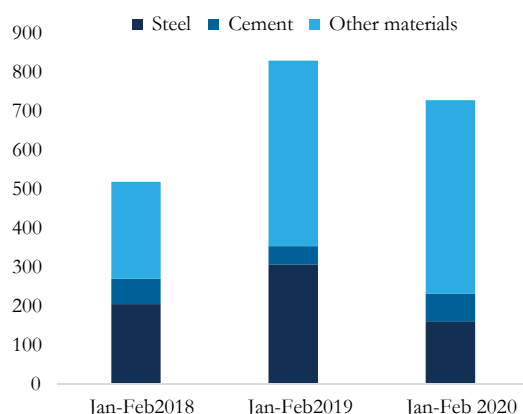
¹⁸ See https://ec.europa.eu/info/european-union-and-united-kingdom-forging-new-partnership_en.

approved construction permit value skyrocketed, reaching US\$11.4 billion (4,793 projects) in 2019, up from US\$5.7 billion (3,294 projects) (figure 14) in 2018, reflecting a continued strong investment appetite. During the first two months of 2020, the approved construction permit value and areas grew at 46 percent and 33 percent, respectively, reflecting a shift toward investment in luxury commercial and residential building.

The easing of the construction and real estate sector is greatly diminishing economic growth. The construction (and real estate) sector has been the largest engine of growth in recent years. In 2019, construction and real estate contributed more than a third of GDP growth. Along with the export sector, the construction industry has been one of the main sources of government revenue from indirect and international trade taxes. Recently, the construction industry has been increasingly financed by FDI inflow. It is estimated that Cambodia received 40 percent of total FDI inflows from mainland China and the majority of the inflows channeled to the construction sector. Construction activity significantly weakened after suspension of large development projects financed by FDI inflows, which are currently interrupted by the global COVID-19 outbreak.

The end of the construction and real estate boom is likely to have a relatively muted impact

Figure 13: Import of basic construction materials (billions of riels)



Source: Cambodian authorities.

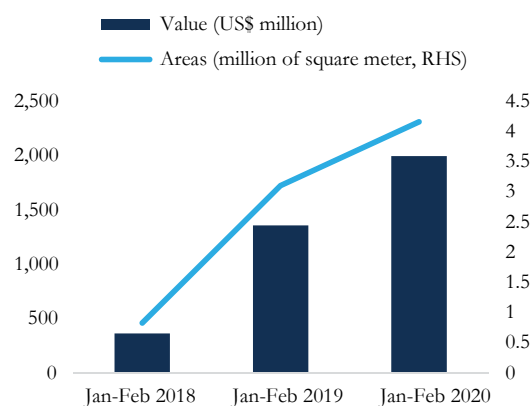
on jobs, given that the latest construction boom consists in large part of work on luxury high-rise buildings and is relatively capital intensive. Unlike the garment, footwear, and travel goods sector, the construction (and real estate) sector provides roughly about 200,000 jobs, so its social impact is relatively mild when the construction booms end.

As part of the COVID-19 response, the authorities have granted an exemption of the ownership transfer tax for property valued at US\$70,000 or less.¹⁹ However, the COVID-19 outbreak has resulted in unprecedented demand shocks, while the property market already appears well saturated after almost a decade-long construction and real estate boom.

The global COVID-19 outbreak disrupted domestic demand and consumption

Imports of consumable and durable goods contracted in early 2020. During the first quarter of 2020, import of foodstuffs and motorcycles contracted by 11.4 percent and 3.8 percent, respectively. Reflecting the downturn of the travel and tourism industry, imports of buses, aviation fuel, and fuel oil declined by 17.8 percent, 40.7 percent, and 22.3 percent, respectively. In 2019, the demand for consumable goods such as foodstuff, beverages, and petroleum products was robust. Consumer appetite for durable goods, however, faded. In 2019, imports of gasoline

Figure 14: Approved construction permits (US\$ million)



Source: Cambodian authorities.

¹⁹ Letter 1313, Ministry of Economy and Finance, February 25, 2020.

and diesel rose by 49.4 percent and 65.3 percent, respectively. Imports of foodstuff, electronics, and medicines also increased, rising by 30.6 percent, 14.8 percent, and 14.4 percent, respectively. In contrast, imports of passenger cars significantly moderated to 13.9 percent in 2019, down from 72.7 percent in 2018. Similarly, the growth of imports of motorcycles decelerated to 11.4 percent, down from 21.4 percent in 2018.

The current account deficit remained stable and fully financed by FDI last year

The current account deficit is estimated to have remained at 8.8 percent of GDP as both exports and imports eased last year. As discussed above, Cambodia's key merchandise exports eased in 2019 due mainly the contraction of exports to the EU market. Likewise, merchandise imports, especially durable goods imports, decelerated as domestic demand started to weaken. In 2019, despite experiencing relatively slow growth, exports of total goods and services are estimated to have remained solid, accounting for 61.4 percent of GDP, slightly lower than 2018's 61.6 percent of GDP, of which service exports, consisting largely of tourism receipts, covered 15.2 percent of GDP, slightly below 2018's 15.5 percent of GDP. Goods and services imports also declined, accounting for 62.8 percent of GDP, down from 63.3 percent in 2018.

FDI inflows decelerated in 2019

Figure 15: Agricultural growth
(at constant 2000 prices, percent)



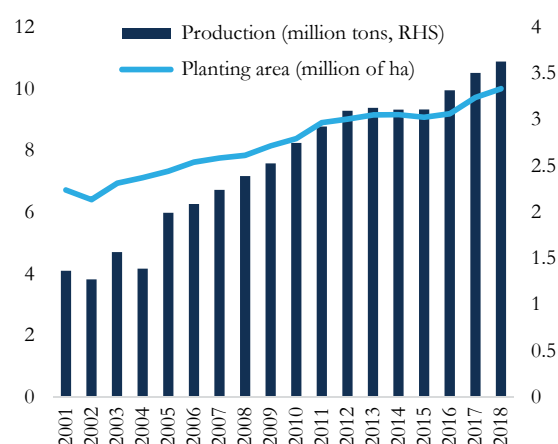
Source: Cambodian authorities.

While remaining strong, FDI inflows are estimated to have slowed to 10.8 percent of GDP in 2019, down from 12.6 percent of GDP in 2018 when the inflows peaked. Strong FDI inflows and the injection of local currency allowed the central bank to continue to accumulate increased international reserves, which reached US\$18.7 billion by December 2019, or 28.3 percent growth y/y, covering more than seven months of prospective imports. Efforts to promote the use of local currency, the Cambodian riel, in Cambodia's highly dollarized economy by the central bank paid off. Riels in circulation grew at 31.3 percent y/y in 2019, up from 11.5 percent in 2018, while the riel versus U.S. dollar exchange rate remained stable (see a more detailed discussion on the measures to promote the local currency in the monetary sector below).

However, like domestic revenue collection, Cambodia's international reserves position is also projected to shrink this year, given the country's key foreign exchange earning sectors, tourism and exports, are being hit hard by the outbreak, while FDI inflows are also slowing. In 2020, the country's foreign exchange reserves are expected to decline to US\$16.8 billion (6.8 months of prospective imports), down from US\$18.7 billion (7.6 months of prospective imports).

The agriculture sector's contribution to GDP growth contracted in 2019

Figure 16: Rice cultivated area and production



Source: Cambodian authorities.

Note: RHS = right-hand scale.

Agriculture's contribution to GDP growth contracted for the first time last year since 2004 (figure 15). During the past several years, agricultural expansion has decelerated. Agriculture's contribution to GDP ceased to increase as rice production was hit by a prolonged drought lasting from 2013 to 2015 (figure 16), resulting in a large number of Cambodian farmers migrating to find employment in the neighboring countries, particularly Thailand, where wages were several times higher. Thanks to improved weather conditions, the agriculture sector started to expand again during the period 2016–18.

Crop production, especially rice, continues to account for the majority (60 percent) of agricultural GDP. Cambodia had been relatively less successful in diversifying agricultural products to higher-value-added crops, fisheries, and livestock due largely to relatively slow adoption of modern agricultural technology, including input use and irrigation.²⁰ Sustaining agricultural growth will have to come from yield improvements. As yield has now reached around 3.3 metric tons per hectare, further improvements will be increasingly difficult, unlike a decade or more ago when yield was low at about 2.0 metric tons per hectare. Moreover, land cultivation area expansion is constrained by Cambodia's limited arable land.

Recent efforts to modernize the agriculture sector have intensified as Cambodia endeavors to increase productivity within its major crops.

In this regard, there are signs that the sector is slowly modernizing by leveraging advanced cultivation techniques and new seeds made possible by technology diffusion via foreign direct investment. While it is still too early to draw conclusions, Cambodia's exported agricultural products have slowly expanded to include new products such as bananas and mangos to destinations beyond its immediate neighbors, Thailand and Vietnam.

This year's rice production has been slow due largely to less favorable weather conditions. Like rainy season rice production, this year's dry

season rice cultivation has been relatively slow.²¹ As a result, total rice production during the 2019–20 harvesting season reached 10.885 million metric tons, marginally lower than the 10.892 million tons produced during the 2018–19 harvesting season.²² In addition, yield also marginally declined by 0.5 percent, reaching 3.09 metric tons per hectare.

The agriculture sector is unlikely to be able to substantially absorb laid-off workers from the tourism and export sectors

The weak performance of the agriculture sector will make it harder for the sector to absorb laid-off workers from the tourism and export sectors. The global COVID-19 outbreak has already severely impacted the services sector, especially the hospitality and tourism industry, which provides 620,000 jobs. The transport and travel industries are on the brink of collapse because of overseas travel restrictions and urban center lockdowns triggered by the outbreak. The downfall of the tourism and hospitality industry is impacting jobs and incomes of workers and businesses of the tourism and hospitality industry. In this connection, the authorities have introduced a wage subsidy of US\$40 a month for unemployed people across the tourism sector (and then the export sector) including workers in hotels, guesthouses, and restaurants, and tour operators.²³ This should partly help prevent them from falling back into poverty.

In the absence of significant mitigation measures, the COVID-19 pandemic could lead to a sharp increase in poverty. Poverty simulations show that poverty would increase between 1 and 5 percentage points from a 50 percent income loss that lasts for three months for households engaged in tourism, wholesale and retail trade, garment, construction, or manufacturing, or between 3 and 11 percentage points from an income loss that lasts six months.

Returning migrant workers will put further pressure on Cambodia's shrinking job market

²⁰ See World Bank 2015a.

²¹ MAFF 2020a.

²² MAFF 2020b. 2019–20 Annual report, Ministry of Agriculture, Forestry and Fisheries.

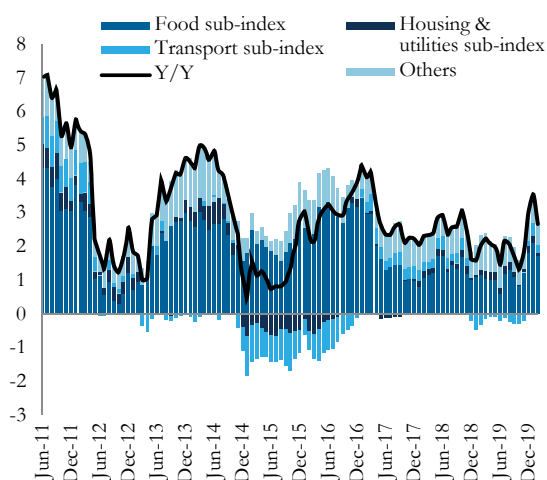
²³ The Ministry of Tourism reportedly announced US\$2.4 million in wage subsidies for the approximately 30,000 workers who have lost their jobs out of the almost 630,000 who work in the tourism sector, due to the ongoing COVID-19 crisis. See <https://www.khmertimeskh.com/711331/covid-19-unemployment-response-now-extended-to-tourism-workers/>.

Returning migrants from Thailand,²⁴ and their households that relied on their remittances, are also likely to face significant income losses and elevated risk of falling into poverty. Remittance inflows are expected to slow substantially as migrant workers have returned (and those who remain abroad may have less income due to the global economic slowdown) to Cambodia (see box 2). Given that the agriculture sector provides livelihoods for most of the poor, further efforts to diversify the agriculture sector and rural households' incomes, as well as to promote agroprocessing, are needed to continue reducing poverty, which is concentrated in the rural areas.

Reflecting the impact of the COVID-19 outbreak, inflation was subdued in the first quarter of 2020

Inflation, which inched up to 3.1 percent by end-2019, mainly due to elevated food prices (figure 17), has since eased. By March 2020, inflation decelerated to 2.8 percent y/y due mainly to sluggish demand and domestic consumption caused by the COVID-19 outbreak. All sub-indexes of Cambodia's Consumer Price Index basket, except the food sub-index, eased as domestic demand collapsed. By the end of 2019, the food and non-alcoholic beverage sub-index of Cambodia's inflation basket rose to 3.4

Figure 17: Inflation, which inched up by end-2019, has since eased
(Contributions to 12-month inflation (percent))



Source: Cambodian authorities.

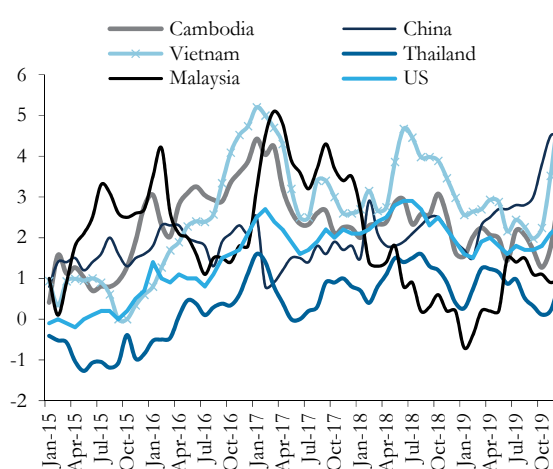
percent, compared with 1.9 percent in December 2018. During the same period, other sub-indexes, namely including housing and utilities as well as transport and telecommunications, also edged up, rising to 1.6 percent and 1.7 percent, up from 0.4 percent and -2.4 percent, respectively.

Similarly, regional inflation has eased, after edging up slightly in late 2019 (figure 18). Inflation in the East Asia and Pacific region eased, with low inflation expectations caused by a sharp tightening in financial conditions as the COVID-19 outbreak expanded across the region and the world. To respond to slowing economic activity amid subdued inflation, East Asia and Pacific region countries Malaysia, the Philippines, Thailand, and Indonesia moved toward accommodative monetary policies.²⁵

Broad money growth declined as foreign currency deposits slowed

Due largely to the deceleration of foreign currency deposits caused by a tapering of capital inflows, broad money growth eased to 18.0 percent by the end of 2019, compared to 24.0 percent in 2018. While foreign currency deposits remained the largest contributor to broad money growth, the contribution almost halved to 12.7 percentage points by end-2019, down from 22.06 percentage points in 2018, caused by the

Figure 18: Inflationary pressures have picked up in regional and major economies
(end of period, y/y, percent)



Source: World Bank 2019d (October), World Bank, Washington, DC.

²⁴ An estimated 80,000 migrant workers have returned to Cambodia since the COVID-19 outbreak as of April 2020.

²⁵ World Bank 2020.

Box 2.

Recent global developments

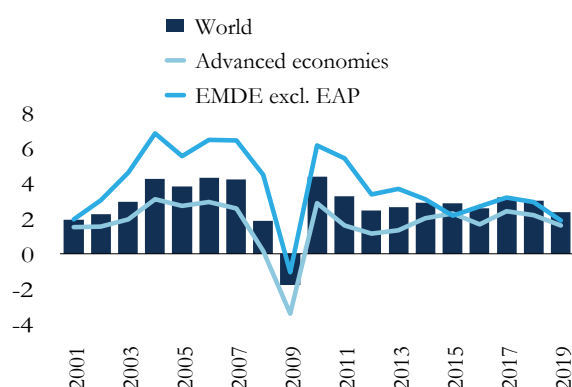
Global growth declined to 2.4 percent in 2019, the slowest growth rate since the 2008–09 global financial crisis (figure B2.1). Global growth remained weak in 2019-Q4, reflecting mixed performance in major economies. The U.S. economy grew 2.1 percent in 2019-Q4 (quarter-on-quarter seasonally adjusted annual rate [q/q SAAR]), but growth in the Euro Area fell to 0.4 percent in 2019-Q4 (q/q SAAR), its slowest pace since 2013. Activity in Japan contracted 7.1 percent in 2019-Q4 (q/q SAAR) due to the increase in the value-added tax from 8 to 10 percent on October 1st and the impact of Typhoon Hagibis.

At the start of 2020, the global economy was showing incipient signs of recovery. The global composite Purchasing Managers' Index (PMI) rose to a 10-month high of 52.2 and the manufacturing PMI reached a nine-month high of 50.4 in January 2020. Global goods trade registered its first positive growth in December 2019 following six months of consecutive contraction, and indicators in January, such as the PMI New Export Orders index, suggested a nascent recovery in global trade, spurred by reduced trade policy uncertainty amid progress in U.S.-China trade negotiations.

However, a pickup in global economic activity has been disrupted by the global pandemic and various mitigation measures implemented first in China and later in the rest of the world to slow the spread of the coronavirus. In China, output contracted sharply in the first quarter. New cases peaked in mid-February and activity started to recover in March following a relaxation of the domestic lockdown. In the rest of the world, activity deteriorated sharply in the latter part of 2020-Q1. The global composite PMI excluding China fell by 12.5 points to 37.6 in March. This was the steepest single-month decline ever recorded, which brought the index to its lowest level since January 2009 (figure B2.2).

Figure B2.1: Global economic growth rates, 2010–19

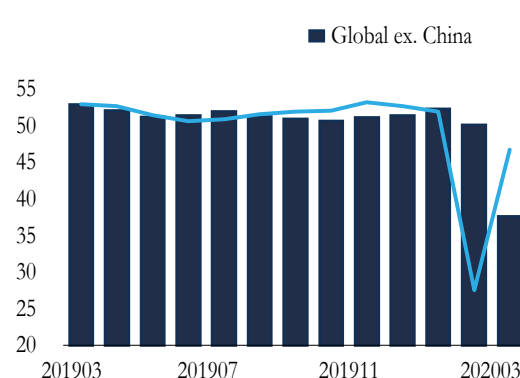
(percent)



Source: Haver Analytics; World Bank.

Figure B2.2: Composite PMI, 2019-20

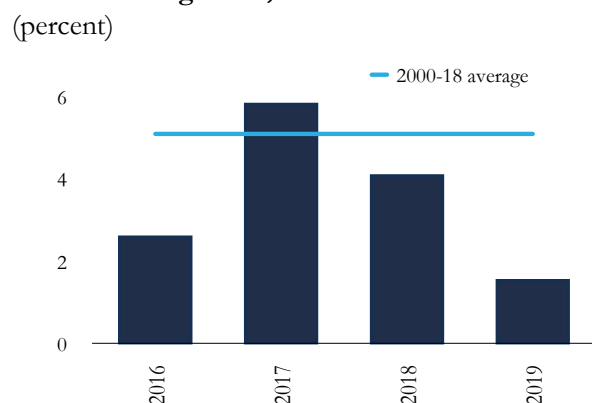
Index, 50+=expansion



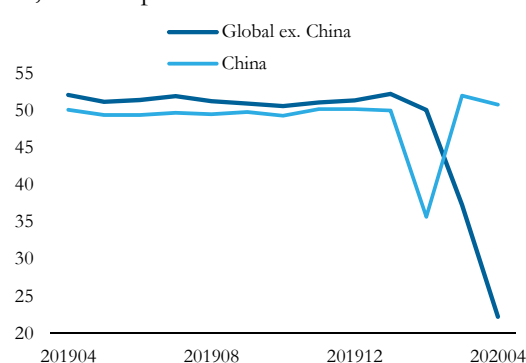
Source: Haver Analytics; World Bank.

Preliminary data point to a sharp contraction in global trade, reflecting major disruptions in international travel, tourism, and supply chains. The outbreak hit global trade just as it was recovering from its multiyear low level in 2019 weighed down by trade tensions and subdued global economic growth. Activity at ports fell in February to multiyear low levels (figure B2.3). The travel restrictions and risk aversion have weighed on global tourism and travel. The global New Export Orders index registered 46.6 percent in March, a decrease of 3.7 percentage points compared to the February reading of 45.2 percent (figure B2.4). Manufacturers' stocks of purchases fell in March, while suppliers' delivery times continued to rise, pointing to bottlenecks in supply chains.

Global financing conditions abruptly tightened. Global equity markets have fallen sharply as the coronavirus outbreak has accelerated globally. Flight-to-safety flows pushed the yield of the benchmark 10-year U.S. Treasury below 1 percent for the first time ever on March 4th, while spreads on higher-risk debt have widened. Markets remain highly volatile, with the Chicago

Figure B2.3: Global trade, 2016-19 Global trade growth, volumes

Source: Haver Analytics; World Bank.

Figure B2.4: Global new export orders, 2019-20 Index, 50+=expansion

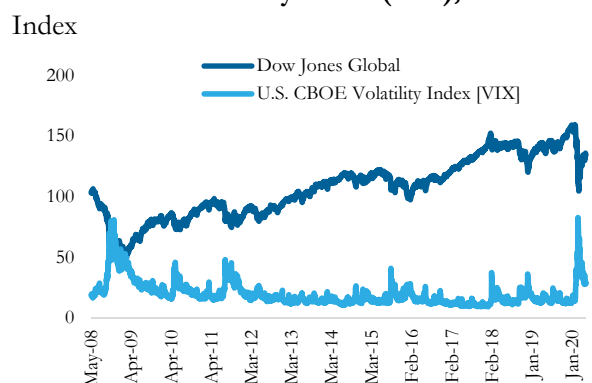
Source: Haver Analytics; World Bank.

Notes: Dow Jones global index (December 31 1991=100). United States CBOE volatility index [VIX].

Board Options Exchange's (CBOE) Volatility Index (VIX) tripling in March, on average (figure B2.5). Central banks around the world have aggressively eased monetary policy and provided liquidity support to avoid shortages in credit markets. In a pair of emergency meetings, the Federal Reserve cut its policy interest rates to close to zero.

Emerging markets and developing economies (EMDEs) have experienced large capital outflows amid flight to safety. EMDE assets have been under significant pressure. Capital outflows from EMDEs exceed the worst period of the global financial crisis. Spreads on sovereign and corporate bonds have risen as a result, and most EMDEs have experienced drastic falls in domestic stock market indexes and currency values. Stock markets in the largest EMDEs have fallen by about a quarter, on average, since the start of the year. Markets expect central banks to provide significant additional monetary easing in the near term.

Commodity prices have fallen sharply. Oil prices have fallen more than 60 percent since January 20th (the date human-to-human transmission of the coronavirus was first publicly confirmed), with West Texas Intermediate (WTI), the U.S. benchmark, dropping to around US\$20 per barrel in mid-March. Containment measures taken to control the outbreak have resulted in a sharp decline in travel and therefore oil demand. The fall in oil prices has been exacerbated by the collapse of the production agreement between the Organization of the Petroleum Exporting Countries (OPEC) and its partners, including Russia. Industrial metals prices have also declined, with significant falls for copper and zinc (approximately -25 percent). Agricultural prices have been less affected, with the price of the three main grains down by 6 to 11 percent (figure B2.6).

Figure B2.5: Dow Jones Global Index and United States CBOE Volatility Index (VIX), 2007–20

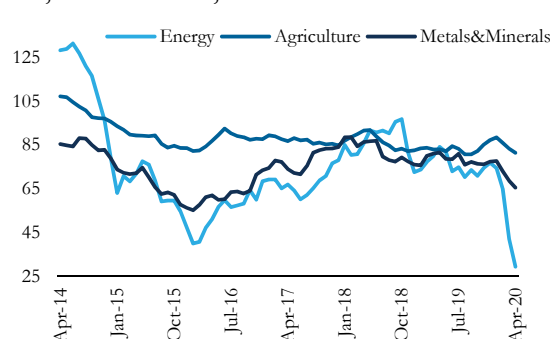
Source: Haver Analytics; World Bank.

Notes: Dow Jones global index (December 31 1991=100). United States CBOE volatility index [VIX].

Note: This box was prepared by Ekaterine Vashakmadze, PG.

Figure B2.6: Commodity price indexes, 2014–20

Index, nominal term, 2010=100



Source: Haver analytics; World Bank.

tapering of capital inflows. Thanks to the initial success of the authorities' policy to promote the use of the local currency, the contribution of riels in circulation to broad money growth almost tripled, rising to 3.2 percentage points, up from 1.2 percentage points in 2018. Likewise, the contribution of riel deposits in broad money growth also edged up, rising to 2.0 percentage points, up from 0.6 percentage points during the same period (figure 19).

Pressure on the exchange rate is rising

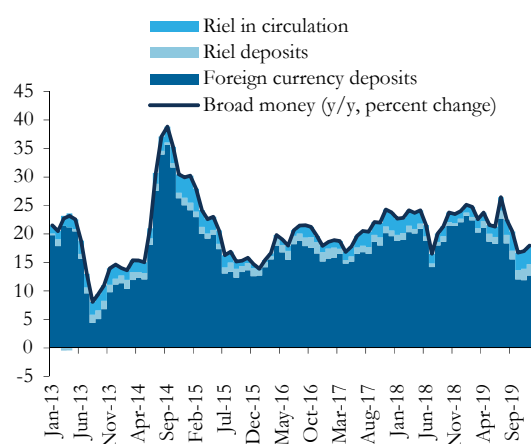
As the central bank has increasingly injected local currency, pressure on the exchange rate has risen, likely reflecting the tapering of capital inflows (figure 20) in the highly dollarized economy. This is a new challenge in the time of the global COVID-19 outbreak, when the tapering of capital inflows together with the decline of Cambodia's foreign exchange earnings caused by the downturn of the tourism and export sectors are building up pressure on the country's foreign reserves. As the central bank conducts prudent market operations to stabilize the exchange rate, the demand for U.S. dollars will likely increase. Without additional foreign exchange injection, the riel is likely to depreciate against the dollar. Recently, a facility called the Liquidity-Providing Collateralized Operation (LPCO) has helped

establish a benchmark rate of local currency borrowing and a supported rising demand for local currency as the central bank has succeeded in its efforts to promote the use of local currency. As a result, claims on deposit money banks rose to almost 4,000 trillion riels by the end of 2019, up from 470 trillion riels at the end of 2018. This partly helped accumulate gross international reserves, which reached US\$18.7 billion, or a 28.0 percent y/y growth, up from 20.0 percent in 2018. However, Cambodia's international reserves position in 2020 is also projected to deteriorate, given the country's key foreign exchange earners, tourism and exports, are being hit hard by the outbreak, while FDI inflows are also slowing.

During the first 11 months of 2019, 3.4 trillion riels were supplied by the central bank to mainly commercial banks. This was equivalent to US\$838 million, an almost fourfold increase compared to 2018.²⁶ The LPCO carried interest rates of 2.81 percent, 2.84 percent, and 3.08 percent for 3 months, 6 months, and 12 months, respectively. Due largely to the tapering of capital inflows, the riel has slightly depreciated against the U.S. dollar. The riel-to-U.S. dollar exchange rate reached 4,099 to 1 by April 2020, compared with riel 4,018 to 1 at the end of 2018. In April 2020, the riel also marginally appreciated against the Thai baht but

Figure 19: Contribution to broad money growth

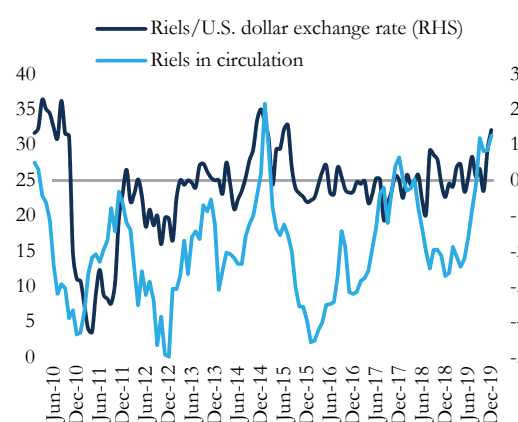
(percentage points)



Source: Cambodian authorities.

Figure 20: Riel in circulation and riel compared to the U.S. dollar exchange rate

(y/y, percent change)



Source: Cambodian authorities.

Note: RHS = Right-hand scale.

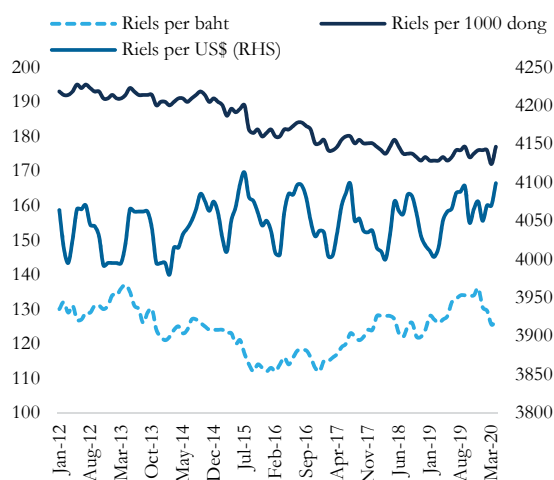
²⁶ National Bank of Cambodia 2019.

depreciated against the Vietnamese dong (figure 21). Against the currencies of Cambodia's main export markets (besides the United States), the riel marginally appreciated against the euro, the Canadian dollar, and the British pound. In 2019, Cambodia's nominal and real effective exchange rate appreciated, which indicates a relatively appreciated value of local currency against the weighted basket of currencies of Cambodia's trading partners.

By the end of 2019, growth of (net) bank credit to businesses eased for the first time since mid-2018

For the first time since mid-2018, growth of net domestic bank credit²⁷ to the private sector decelerated to 21.3 percent in 2019, down from 24.2 percent in 2018. Based on the data on bank credit classified by business undertaking, the deceleration in bank credit was due mainly to the decline in bank credit to (i) the hospitality industry (hotels and restaurants), (ii) the manufacturing sector, and (iii) the agriculture sector (figure 22). In 2019, the reported nonperforming loan ratios were 2.2 percent and 1.1 percent for the banking sector and microfinance sectors, respectively.²⁸ In 2019, the contribution of hospitality (hotels and restaurants), agriculture, and manufacturing businesses to bank credit growth eased to 0.9 percent, 0.5 percent, and 0.2 percent, down from

Figure 21: Nominal exchange rate



Source: Cambodian authorities.

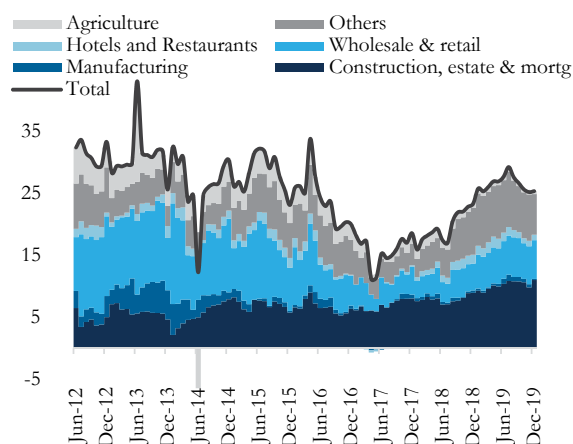
Note: RHS = right-hand scale.

1.4 percent, 0.7 percent, and 0.4 percent in 2018, respectively.

Rising domestic bank credit to the construction, real estate, and mortgage sector, however, continued

Bank credit growth continued to be driven largely by rapidly rising loans to construction, real estate, and mortgage businesses. The contribution of the combined construction, real estate, and mortgage businesses to bank credit growth accelerated, reaching 11.0 percentage points, up from 9 percentage points at the end of 2018. Similarly, the share of bank credit going to the combined construction, real estate, and mortgage businesses in outstanding bank credit rose further to 31.1 percent or US\$7.7 billion by the end of 2019, compared to 27.9 percent or US\$5.6 billion at the end of 2018. This is much larger than the 22.8 percent share when the construction boom went bust triggered by the 2008–09 global financial crisis. In addition, the share of bank credit to the private sector was only 24.4 percent of GDP in 2009 (when the global financial crisis hit the economy), compared to 83.4 percent of GDP in 2019, as financial deepening rapidly expanded in recent years. This indicates a substantial increase in risks associated with spillovers from the real sector to the banking sector.

Figure 22: Contribution to growth of domestic credit (percentage points)



Source: Cambodian authorities.

²⁷ Net bank credit is total domestic bank credit to the private sector excluding (i) loans from the monetary authorities to deposit money bank, and (ii) interbank loans by deposit money bank.

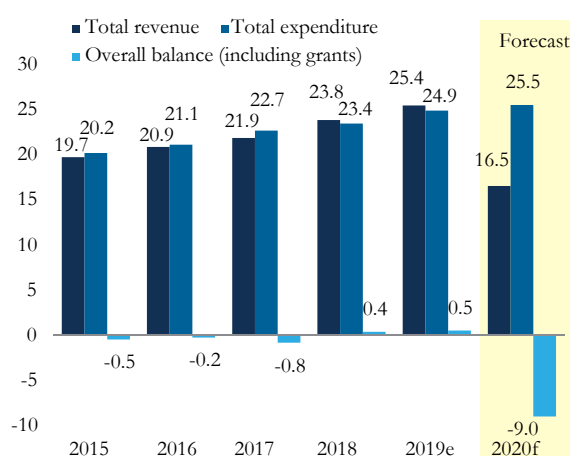
²⁸ National Bank of Cambodia 2019.

Short-term interest rates of riel and U.S. dollar deposits and loans (except the riel lending interest rate) **remain relatively stable.** By the end of 2019, the short-term (12-month) interest rates of riel and U.S. dollar deposits were at 4.34 percent and 5.42 percent, respectively, compared to 4.38 percent and 5.87 percent, respectively, at the end of 2018. During the same period, the short-term interest rate for U.S. dollar loans was 9.51 percent, compared to 9.74 percent. However, the short-term interest rate of riel loans significantly declined to 10.62 percent by the end of 2019, down from 13.5 percent at the end of 2018, thanks to the initial success of the central bank's policy to promote the use of local currency, discussed above.

In response to the COVID-19 outbreak, the National Bank of Cambodia (NBC), conducted monetary policy easing, and several measures have been introduced. In March 2020, the reserve requirement rate was reduced to 7 percent for both local currency and foreign currency, down from 8 percent for local currency and 12.5 percent for foreign currency and domestic currency, respectively, from April

Figure 23: The outbreak is projected to hit hard this year's fiscal performance after budget surpluses

General government operations (percent of GDP)



Sources: Budget settlement laws; World Bank staff estimates and forecast.

Note: e = estimates; f = forecast.

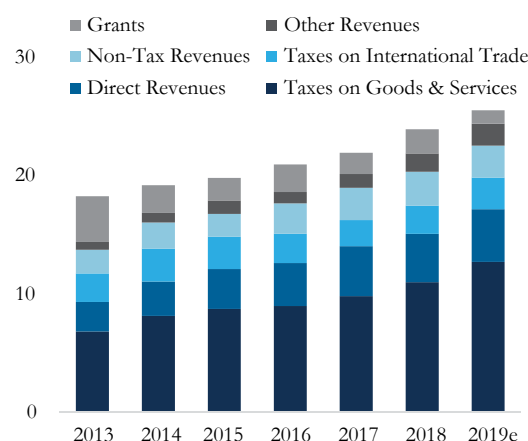
2020 onward. The benchmark rate of LPCO operations (see the more detailed discussion on LPCO operations, above) for all maturities was also reduced by 0.5 percent. The NBC also decided to postpone full implementation of the Capital Conservative Buffer and to maintain the 50 percent current requirement, cut the interest rate on negotiable certificates of deposit for both riels and U.S. dollars at an appropriate level, and reduce the minimum requirements of the Liquidity Coverage Ratio to an appropriate rate.²⁹

Implications for domestic revenues

The COVID-19 outbreak is hitting Cambodia's revenue base. The export and construction sectors are the main source of direct revenue and indirect (and international trade) revenue, respectively. The least affected agriculture sector is tax-exempt. It is highly likely that revenue collection in 2020 will be significantly below the budget target. The overall fiscal deficit (including grants) is therefore projected to widen to 9.0 percent of GDP in 2020 (figure 23), down from a surplus of 0.5 percent in 2019 (see Annex 2 for Cambodia's key macroeconomic indicators). The shortfall in domestic revenue collection will

Figure 24: Revenue (including grants) peaked in 2019

(percent of GDP)



Sources: Cambodian authorities; World Bank staff estimates.

Note: e = estimates.

²⁹ The capital conservation buffer is designed to ensure that institutions build capital buffers under normal financial situations that can be drawn down when losses occur. When the buffer is drawn down, the institutions shall rebuild it as soon as possible. If the institution cannot rebuild it immediately, it shall submit to the National Bank of Cambodia a "capital management plan" explaining the methods and determining the date it intends to build its capital conservation buffer. See NBC's Prakas dated February 22, 2018. https://www.nbc.org.kh/download_files/legislation/prakas_eng/3.Prakas_on_Capital_Buffer_in_BFIs_ENG.pdf.

require the authorities to dip into government savings, and the domestic financing need is projected to amount to about 5 percent of GDP. In 2019, government savings stood at 20.2 percent of GDP (or 22.2 trillion riels) after several years of accumulation. Given the authorities' ample liquidity, recourse to domestic (central bank) financing to fill the widening overall fiscal deficit is not expected.

Revenue collection peaked last year

In 2019, total revenue (including grants) accelerated and peaked at 25.4 percent of GDP (figure 24), thanks to continued improvements in revenue administration. Total revenue (and grants) is estimated to have reached 27.8 trillion riels or US\$6.9 billion. The largest contribution came from taxes on goods and services, consisting mainly of the value-added and excise taxes from domestic businesses and goods (motor vehicles and machinery, petroleum products, and construction materials) imports, which rose to 12.6 percent of GDP (a 27.1 percent y/y increase) in 2019, up from 10.9 percent of GDP in 2018. Revenue from direct taxes was next, rising to 4.4 percent of GDP (a 20.4 percent y/y increase), up from 4.0 percent during the same period. Revenue from the international trade tax (mainly customs duties and fees) picked up only marginally, reaching 2.7 percent of GDP in 2019, up from 2.4 percent in 2018 due to commitments under the ASEAN Free Trade Agreement.

In the first two months of 2020, revenue collection initially remained resilient, despite the COVID-19 outbreak, which has significantly weakened domestic economic activity and imports. Central government revenues collected during the first two months of 2020 grew at 22.7 percent y/y due mainly to the continued increase in taxes on goods and services and non-tax revenues, while direct revenues and taxes on international trade were flat.

Expenditure performance also accelerated last year

Similarly, public outlay disbursement accelerated last year. Thanks mainly to

increased spending on goods and services (non-wage recurrent spending), overall public outlay rose and is estimated to have reached 24.9 percent of GDP, compared to 23.4 percent of GDP in 2018 (figure 25). Wages and compensation, which had been rapidly rising during the past several years, (due to the authorities' across-the-board increase of the monthly minimum wage of civil servants to at least 1.0 million riel, equivalent to US\$250), declined, and are estimated to reach 7.0 percent of GDP. The decline was due in part to a reclassification. Budgetary expenditures of social benefits, which consist mainly of social security and social assistance, which were earlier classified under the wage and compensation category, have now been split.

Disbursement of capital expenditure is estimated to have slowed last year. As a result of slower disbursements of externally financed public investment, capital expenditure is estimated to have reached only 6.4 percent of GDP in 2019, down from 6.7 percent in 2018. Cambodia continues to depend on development partners to finance its capital investment. Due to rising public outlay, the share of externally financed capital spending in total capital spending shrank to 57 percent in 2019, down from 65 percent in 2018.

During the first two months of 2020, expenditure performance accelerated quickly, thanks for the authorities' prompt response to the COVID-19 outbreak. The central government's disbursement during the first two months grew faster than in recent years, rising 33.7 percent y/y as disbursements of capital spending surged, increasing by almost 50 percent y/y.

In response to the COVID-19 outbreak, the 2020 budget was announced by the authorities as an austerity budget

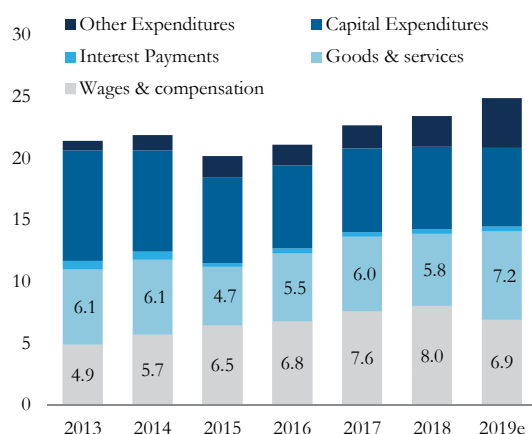
In April 2020, in response to the COVID-19 outbreak, the authorities pronounced the 2020 budget an austerity budget, with actual public outlays expected to shrink to 25.5 percent of GDP, down from 26.9 percent in the original 2020 budget. A spending cut from the budgeted spending on goods and services (non-wage

recurrent spending) amounting to US\$918 million was announced in April 2020.³⁰ The savings generated from the budget cut are to be used to finance rising demands for economic and social intervention. At the beginning of the year, the 2020 budget was introduced as a stimulus budget to mitigate expected negative impacts of Everything But Arms withdrawal.

To finance the widening fiscal deficit, public debt is expected to rise to 35 percent of GDP by 2022

While Cambodia's public debt-to-GDP ratio remained stable at below 30 percent of GDP until 2019, it is projected to increase quickly, starting from this year, as the country's overall fiscal deficit is widening. Cambodia's debt-to-GDP ratio is expected to reach 35 percent by the end of 2022. In 2020, the authorities are planning to dip into government savings, and domestic financing is projected to amount to 5.3 percent of GDP. In 2019, government savings stood at 20.2 percent of GDP (or 22.2 trillion riels) after several years of accumulation. Given the authorities' ample liquidity, recourse to central bank financing to finance the widening overall fiscal deficit is not expected.

Figure 25: Public outlays also increased, driven by expenditures on goods and services (percent of GDP)



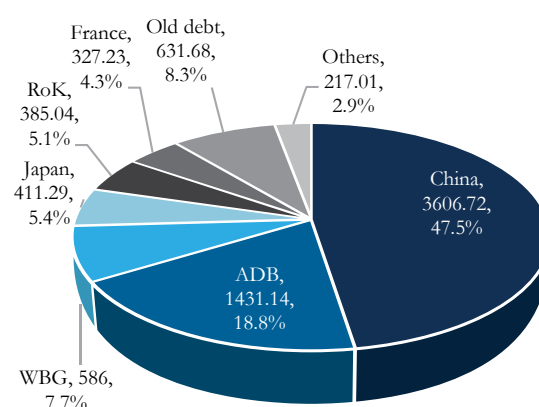
Source: Cambodian authorities and World Bank staff estimates.
Note: e = estimates.

In 2019, the Debt Sustainability Analysis (DSA) using the joint IMF/WB Debt Sustainability Framework for Low Income Countries (LIC-DSF) showed that Cambodia remained at low risk of external debt distress.³¹ However, the baseline has changed since the DSA conducted in 2019. With the fiscal deficit estimated at 9 percent and 99.6 percent of the debt external (and in an external currency), financing needs from abroad will be large and exchange rate will come under further pressure.

By the end of 2019, Cambodia had a total outstanding public debt of US\$7.6 billion (figure 26),³² of which 0.04 percent or US\$2.74 million is public domestic debt. Overall, the borrowing terms remained highly concessional, with a (weighted average) interest rate, maturity, and grade period of 0.8 percent, 28.51 years, and 7.87 years, respectively. By major currency, outstanding debt in U.S. dollars is the largest, accounting for 43.9 percent of total outstanding debt. Special Drawing Rights and Chinese yuan are next, covering 25.9 percent and 14.6 percent, respectively.

China remains the largest creditor, accounting for almost half of Cambodia's outstanding debt

Figure 26: Cambodia's outstanding public debt, by creditor (US\$ million and percent of total)



Source: Cambodian authorities.
Note: ADB = Asian Development Bank; RoK = Republic of Korea; WBG = World Bank Group.

³⁰ Instruction circular dated April 8, 2020, Ministry of Economy and Finance.

³¹ IMF staff report for the 2019 Article IV consultation - Debt Sustainability Analysis. <https://www.imf.org/en/Publications/CR/Issues/2019/12/23/Cambodia-2019-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-48912>.

³² Cambodia Public Debt Statistical Bulletin, Vol. 9, March 2020, Ministry of Economy and Finance.

By the end of 2019, Cambodia's public outstanding debt owed to China was US\$3.6 billion. This represents 47.4 percent of the total or 66 percent of bilateral debt. The second- and third-largest creditors are multilaterals, namely the Asian Development Bank and the World Bank, covering 18.8 percent and 7.7 percent of total outstanding debt, respectively. Japan became Cambodia's fourth-largest creditor, accounting for 5.4 percent of total debt, displacing the Republic of Korea, which was the fifth-largest creditor, capturing 5.0 percent of total outstanding debt in 2019. Old debts accounted for 8.3 percent of total outstanding debt (of which 1.8 percent has been rescheduled).

Outlook

The economy is being hit hard by the COVID-19 outbreak

Cambodia's small, open economy has been hit hard by the global COVID-19 outbreak. As discussed, the outbreak caused sharp decelerations in most economic activities, and even collapses of some that have so far underpinned Cambodia's economic growth. The partial withdrawal of the EU's "Everything But Arms" trade preferential treatment has placed an additional burden on Cambodia's manufacturing export sector.

In addition, potential spillover effects on the microfinance sector are also worrisome. Data from the 2017 Cambodia Socioeconomic Survey revealed that about 40 percent of rural households were indebted. Given the rapid financial deepening the country has experienced in the recent past, the current indebtedness rate of Cambodia's rural households is likely to be higher than 40 percent. As the garment, footwear, and travel goods industries largely employ rural migrant (female) workers, rural households are likely to be disproportionately affected by losses of income due to garment, footwear, and travel good factory closures. The Cambodia Socioeconomic Survey also showed that outstanding loans and credits from the microfinance (and credit operating) sector accounted for 52.3 percent of debt owed by rural households.³³

The collapse of the growth drivers has not only hurt economic growth but has also caused unemployment to potentially soar to nearly 20 percent. The at least 1.76 million jobs currently at risk due to the COVID-19 outbreak represent direct jobs only. The implications for jobs are much greater, if indirect jobs (employment that is an output of additional activities made possible by the tourism, export, and construction sectors), induced jobs (additional jobs created from the wider beneficial effects of the three sectors), and second-order impacts are included.

Under the baseline scenario, real growth is projected to contract by 1.0 percent in 2020

Growth under the baseline scenario is projected to contract by 1.0 percent in 2020 and to quickly recover to 6.0 percent in 2021, helped by a rebound in global demand (table 1). The base case scenario assumes a recovery in global growth with a gradual pickup in global demand when lockdowns are steadily eased in the second half of 2020, while domestic economic conditions improve without significant long-term adverse impact of the lockdowns on the corporate, banking sector or balance of payments. Specifically, the baseline scenario assumes moderate contractions of Cambodia's main economic pillars/drivers. First, the services sector, in particular the tourism and hospitality industry, has already been severely affected and is projected to pick up marginally during the second half of 2020, boosted in part by the lifting of travel restrictions and lockdowns, resulting in very weak growth of the services sector. External demand shocks are intensifying and likely to lead to the downfall of the garment, footwear, and travel goods sector in the third quarter of this year. However, the export sector is expected to slowly recover in the fourth quarter of 2020 onward as the global economy was showing incipient signs of recovery from a post-crisis dip prior to the recent coronavirus outbreak (see box 3 for more details). FDI inflows are projected to slowly return in the second half of this year.

³³ Cambodia Socioeconomic Survey 2017, National Institute of Statistics, Ministry of Planning; <https://www.nis.gov.kh/nis/CSES/Final%20Report%20CSES%202017.pdf>.

Box 3.

Global and regional outlook and risks

The global economy was showing incipient signs of recovery from a post-global financial crisis dip prior to the recent coronavirus outbreak. The recovery has been supported by reduced trade policy uncertainty and a rebound in global trade flows and investment. The World Bank's January 2020 Global Economic Prospects projections envisaged global growth edging up to 2.5 percent in 2020 and firming thereafter, reaching 2.7 percent by 2022, predicated on a gradual recovery of investment and trade and a rebound in several major economies that have been gradually emerging from recessions or sharp slowdowns. Prior to the outbreak, growth in advanced economies was forecast to slow to 1.4 percent in 2020 before recovering insignificantly to 1.5 percent in 2021–22. EMDE growth was expected to pick up to 4.1 percent in 2020 and stabilize at 4.4 percent in 2021–22, with the pace of the recovery restrained by soft global demand and structural constraints (World Bank 2020a).

The recovery has been interrupted by the coronavirus outbreak. The rapid spread of the coronavirus beyond China has caused significant disruptions to the outlook for the global economy and triggered sharp revisions to consensus GDP growth forecasts in major economies and in most of EMDEs. The pandemic is profoundly affecting the East Asia and Pacific (EAP) economies, but the depth and duration of the shock are highly uncertain (World Bank 2020b). The net impact of the shock on growth outcomes will depend on the duration and depth of the outbreak, external spillovers, and the magnitude and effectiveness of mitigation measures.

The recently published World Bank East Asia and Pacific Economic Update presented two scenarios of the regional outlook. In the baseline scenario, a sharp contraction is followed by a sustained recovery, lowering regional GDP growth in 2020 to 2.1 percent, from 5.8 percent in 2019. In this scenario, regional growth stabilizes around its trend level by late 2021. This scenario assumes that the containment of the pandemic allows a sustained recovery of activity, initially in China and later in the rest of the world. The lower case scenario projects a deeper contraction followed by a sluggish recovery. Under this scenario, the pandemic lasts longer and has more severe effects than assumed under the base case scenario.

In the baseline scenario, growth in the developing EAP region is projected to slow from an estimated 5.8 percent in 2019 to 2.1 percent in 2020. In the lower case scenario, output will contract by 0.5 percent. Growth in China is projected to decline to 2.3 percent in 2020 in the baseline scenario from 6.1 percent in 2019, whereas in the lower case scenario it could be as low as 0.1 percent. Growth in EAP excluding China is projected to slow from 4.8 percent in 2019 to 1.3 percent in 2020 in the baseline scenario and plummet to -2.8 percent in the lower case scenario. Barring new unexpected shocks and durable financial market stress, the deeper the slowdown, the more rapid the recovery can be expected in 2021.

For many countries, the likely financial shocks will significantly exacerbate the economic impact. The most significant effects on both the current and future performance of these countries are likely to originate in financial markets, given the likely magnitude of the financial shock and their existing vulnerabilities. Developing EAP economies are vulnerable in different ways; for example, in China, Vietnam, Malaysia, and Thailand they are vulnerable through elevated domestic debt; in Cambodia, Lao PDR, Malaysia, Mongolia, and Papua New Guinea through external debt; and in Malaysia and Thailand through heavy reliance on short-term debt.

Global economic conditions are expected to remain challenging over the forecast period. Global financing conditions are expected to remain extremely complex and volatile. According to the WTO, world trade is expected to fall by 13 to 32 percent in 2020 and will likely exceed the trade slump during the 2008–09 global financial crisis. The ongoing coronavirus outbreak has put additional downward pressure on commodity prices, particularly for energy, which will be further amplified by a surplus of oil supply as OPEC+ members resume full capacity of oil production. The recent fall in oil prices also reflects expectations that demand will be weaker than previously envisioned, as the coronavirus outbreak has already reduced global economic activity as well as air travel and shipping, major sources of oil demand. Other industrial commodity prices have weakened in response to the coronavirus outbreak, with copper prices down by over 20 percent since early January. Overall, metals prices are expected to decline in 2020, reflecting subdued industrial commodity demand, particularly from China. Agricultural prices are envisioned to stabilize in 2020, after declining in the second half of 2019 due to improved supply conditions.

The balance of risks to the outlook is firmly tilted to the downside. The main risks include the possibility that the pandemic lingers and has devastating and lasting economic impact on the global economy. In addition, despite large policy support packages, financial market turmoil in advanced economies may persist for several months and cause further capital outflows from the EMDEs. Tighter financing conditions further reduce EMDE growth. This could exacerbate existing balance sheet weaknesses in the highly leveraged economies and could even lead to defaults and financial crises in most vulnerable countries. Global trade could remain depressed for an extended period, causing a disintegration of global and regional value chains. Trade policy uncertainty also continues to represent a risk to the outlook.

Note: This box was prepared by Ekaterine Vashakmadze, PG.

Table 1: The macro outlook under the baseline and downside scenarios

Real GDP growth, at constant prices (y/y, percent change)			
	2020	2021	2022
Baseline scenario			
Agriculture	0.3	0.4	0.5
Industry	-1.0	9.2	9.3
Services	-1.7	5.8	5.8
GDP growth	-1.0	6.0	6.3
Downside scenario			
Agriculture	0.3	0.4	0.5
Industry	-2.1	7.2	9.3
Services	-3.9	7.8	6.1
GDP growth	-2.9	3.9	6.3

Source: World Bank staff projections.

Under the downside scenario, real GDP is projected to contract by 2.9 percent in 2020

Real GDP is projected to contract by 2.9 percent in 2020 under the downside scenario. The downside scenario assumes global lockdowns and restrictions continue until the third quarter of 2020 with moderate to significant adverse effects resulting in liquidity problem becoming solvency problem affecting corporates and ultimately the balance of payments. As economic recovery under the downside or lowercase scenario is projected to be sluggish, real growth is therefore expected to reach 3.9 percent in 2021. Specifically, Cambodia's near-term growth outlook under the downside scenario includes a large contraction of tourism and hospitality industry activity, with sustained deflated foreign tourist arrivals due to the lingering COVID-19 global outbreak for the rest of 2020. The downside scenario also assumes a sizable contraction of Cambodia's industrial sector caused by an extended demand shock and a drastic slowdown in FDI due to prolonged financial market turmoil, whereby construction activity remains subdued for the rest of the year. However, the downside scenario does not capture potential financial risks possibly caused by macro-financial linkages.

The risks stemming from an overleveraged financial sector are rising. Several financial sector vulnerabilities could exacerbate the COVID-19 shock. These vulnerabilities include high credit concentration, related party lending risks, lack of consolidated cross-border supervision and gaps in implementation of risk-based supervision.³⁴ Liquidity risks also remain elevated, as financial institutions rely on funding from abroad, including from parent banks (to banks). The concentration of FDI inflows in a few sectors (namely banking, construction and real estate) combined with bank lending primarily in construction and real estate creates an additional source of risk.

Policy options

Policy options in response to the COVID-19 outbreak must aim to (i) provide immediate and urgent economic relief and public health protection, (ii) underpin an economic recovery in the short term, and (iii) foster macro-fiscal and social resilience in the medium term. The most urgent step is to provide support to households to alleviate poverty. This includes leveraging existing programs and relief as well as targeting mechanisms to support the poor and vulnerable through social assistance to maintain their living conditions. This intervention policy is being implemented together with the wage subsidy measure (see box 1). To scale up Cambodia's existing social assistance and social insurance schemes, after providing immediate relief programs, it is crucial to strengthen the existing mechanism to identify the poor through its IDPoor program. It is critical to continue the current core public health response including case detection, isolation, contact tracing quarantine. In addition, hand hygiene, cough etiquette, and physical distancing should continue as important preventive measures. The authorities have responded well to the first wave of the outbreak. However, as the pandemic is still far from over, Cambodia needs to be ready to respond to a possible future outbreak.

³⁴ Staff report for the 2019 Article IV consultation, IMF. See <https://www.imf.org/en/Publications/CR/Issues/2019/12/23/Cambodia-2019-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-48912>

Effective business continuity plans and use of digital technologies are needed to ensure uninterrupted provision of relief programs and service. The plans set out contingency measures to minimize disruptions to the organization's operations in case of crisis by leveraging emerging digital and information technologies. Depending on the magnitude and severity of impacts of the COVID-19 outbreak, phased implementation of the plans, which integrates all critical government (administration, finances, and health) functions should maintain minimum operations, enabling the uninterrupted provision of emergency food assistance, economic relief, and public health emergency assistance.

The effectiveness of government intervention will be essential to facilitate economic recovery. The COVID-19 pandemic will likely have major implications on how regional and global trade and investment will be conducted going forward, with expected major shifts in trade and migrant policies, and flow of goods and services. There is a need for the authorities to think about a future where strengthening domestic demand, protecting the local consumer purchasing power amid external shocks of public health and/or natural disasters, and increasing production for domestic consumption, are the way to move forward. In this regard, intervention measures recently introduced by the authorities include tax relief, and improved access by small businesses and household enterprises to cheaper credit using co-financing facilities between the newly established Small and Medium Enterprise Bank of Cambodia (SME Bank) and commercial

lenders (banks and microfinances). Similarly, additional capital injection of US\$ 50 million for the Rural Development and Agriculture Bank has been provided to support agroprocessing firms and emerging agribusinesses. However, the success of the measures hinges on targeting appropriate small, medium, and large firms and enterprises that are efficient and viable but lack cheaper financing sources to create jobs, to run profitably, and to export. This should also include family and small firms operating in retail and low-end tourism, where large numbers of informal or semiformal firms might either be impacted by the pandemic or not.

The final step is to ensure economic and social resiliency in the medium term after the outbreak has been brought under control. Refocusing and reenergizing efforts and sources that might have been interrupted or diverted to cope with the COVID-19 outbreak to moving forward with key structural and sectoral reforms is crucial. In this connection, attention must be paid and efforts must be made to improve macro-fiscal resilience, address the vulnerabilities in the financial sector, strengthen external competitiveness and diversification to mitigate the impact of potential external shocks, while ensuring readily available social protection and relief programs that can be quickly activated and/or scaled up during an emergency. To achieve economic resiliency, it is necessary to further promote ease of doing business, the investment climate, and a reduction of energy and logistics costs to reintegrate with regional and global value chains after a period of interruption caused by the outbreak.





Special Focus:

Teacher Accountability and Student Learning Outcomes



Special focus: Teacher Accountability and Student Learning Outcomes³⁵

Case Studies of Selected School Models

Strengthening Accountability to Improve the Quality of Education³⁶

Introduction

It is widely recognized that education is the key for human development and sustainable growth. The Royal Government of Cambodia has implemented key reforms to bring education to the next level, albeit from a low base, leading to significantly increased access to education over the last two decades. Consistent efforts have also been made to improve the quality of the education system and education services by increasing education expenditure and important step has been taken to improve standard of living for education staff. As a result, the average starting salary of teachers approximately tripled from 2013 to 2019.

However, achieving quality in terms of student learning outcomes remains a major challenge. Overall, student learning outcomes remained low and did not improve from 2013 to 2017, according to the National Student Assessments conducted from 2013 to 2017. The National Student Assessments are considered scientific studies to evaluate student learning outcomes at grades 3, 6, 8, and 11. The assessments suggest that students in grades 6 and 8 can answer only about half the questions correctly.

The government introduced two new school models in its public school system, the New Generation School (NGS) and School-Based Management (SBM), with the aim of raising school accountability and bringing the quality of learning to the next level. NGS receives additional investment linked to new standards of

accountability and governance. SBM focuses on strengthening accountability toward community. The two new school models have shown that introducing a new level of accountability systems has led to higher learning outcomes.

The provision of quality education services is important to encourage community participation, which in turn will further improve the education system. Education impacts the life of both students and parents, whose main interests are their children's educational attainment. When parents' participation is required to improve their children's education attainment, parents have a natural tendency to do so. Active citizens/community's participation encourage more accountability and ultimately contribute to the improvement of the whole education system.

Efforts at improving quality of education is also impacted by Covid-19 pandemic. Covid-19 is a public health emergency, which has severe economic and social impacts. Education sector is not spared from its impacts. Students learning and various form of assessments are interrupted by the shutdown of schools. Interruption to student learning is likely to have impact on quality of learning and human capital growth of the affected cohort.³⁷ Quality of learning is related to instructional hours provided. Amount of learning time lost due to school closure has implication for skill growth with variation across the affected groups including the vulnerable and disadvantaged communities. This necessitates further investment in technology and reforms in education to support continuity of quality learning during lockdown and beyond (See box S.1 for more discussion on Covid-19's impacts on reform effort in education sector).

³⁵ This special focus section was prepared by a team co-led by Sokbunthoeun So (Senior Public Sector Specialist) and Donna Andrews (Senior Public Sector Specialist). Core team members include Khy Touk (Consultant), Sokunpanha You (Consultant), Pisith Phlong (Consultant), Fata No (Consultant), and Sodeth Ly (Senior Economist). The authors thank Simeth Beng for thoughtful suggestions and advice. A Multi-Donor Trust Fund on Public Financial Management and Service Delivery contributed by Australia and the European Union, which finance the preparation of this special focus section, is gratefully acknowledged.

³⁶ Unless otherwise noted, the analysis in this special focus section is based on findings from the World Bank's study on "Accountability, Incentives and Learning Outcomes: Case Study of Selected School Models."

³⁷ See Simon Burgess and Hans Henrik Sievertsen, "Schools, skills, and learning: The impact of COVID-19 on education" CEPR Policy Portal <https://voxeu.org/article/impact-covid-19-education>

Box S.1

Covid-19 pandemic and its impact on education sector

The Royal Government of Cambodia has taken important steps including school closure to prevent the spread of Covid-19. Enabling remote learning has been the main alternative for various schools and educational institutions. Initiatives including online, TV or radio based learnings were put in place to support continuity of students' learnings in public and private schools.

The Covid 19 pandemic has negatively impacted the education sector reform efforts. The closure of schools during the Covid 19 pandemic is likely to further impact the education sector in the medium and longer term, if no mitigation is put in place.

First, student learning is likely to lag behind due to learning loss during school closure. Despite the mitigation measures, distance learning has proved to be a challenge to keep the level of learning attainment. For example, while it is helpful to make e-lesson video for students, this kind of lessons could reach only those students who are able to absorb the learning independently or those students whose parents are able to provide support in their learning. Most students lack materials to be able to benefit from such kind of distance learning. TV and radio based learnings do not provide sufficient interaction during the learning sessions. Given that parents' engagement in

student learning is limited as experience showed, it is very likely that students do not learn at the expected level.

Second, student drop-out rate may increase in the medium term (2 to 3 years). The economic impact on community in combination with school closure as well as learning loss are likely to make the students drop-out rate higher. As experience showed, students drop-out rate increased when community livelihood is more vulnerable and students lag far behind their learnings.

Third, assessment of student learning outcomes was delayed. The National Student Assessments in 2020 was delayed. This delay will result in inadequate information for the government in updating the policy to improve students' learning outcomes.

Fourth, teacher effectiveness may be lower after Covid 19 pandemic due to discontinuity of teaching activities. With ineffective accountability in place and limited capacity of teachers in working from distance, teachers are not likely to be able to communicate with parents and provide distance support to student during school closure. Policy initiative could be introduced to help teachers prepared for supporting students who are lagged behind as a result of school closures.

Sources: The Covid-19 Pandemic: Shocks to Education and Policy Response, World Bank, May 2020.
Continuous learning guideline for the "Distance Learning" and "E-learning" Programme for students from Pre-Primary, Primary and Secondary Education, World Bank 2020.
Concept paper on "Higher Education Improvement Project" World Bank, May 2020.



This special focus section discusses accountability of public schools as well as the new selected school models. Drawing on NGS and SBM's experience, recommendations are offered to improve the quality of education in Cambodia. Additional recommendations to address impact of Covid-19 on education sector are also provided.

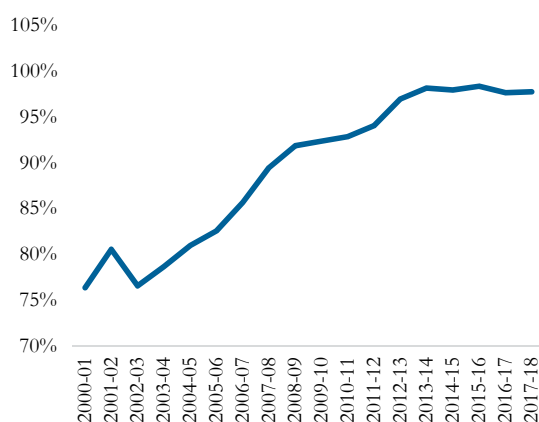
Efforts to bring the education sector to the next level

1. Access to education has been expanded

The education sector plays a crucial role in national development. The general education system requires 12 years of study, including 6 years of primary school, 3 years of lower secondary school, and 3 years of upper secondary school. In 2018, Cambodia had 13,113 schools across the country, providing education services to approximately 3 million students representing 18.75 percent of the population. The sector employed 120,155 staff of which around 99.5 percent (119,804) are teachers.³⁸

In recognizing the importance of developing the education sector, the Royal Government of Cambodia introduced a series of policies in the 2000s, including the Education Strategic

Figure S.1: Net enrollment rate at primary level has surged over the last two decades, thanks to government policy to expand access to education



Source: MoEYS.

³⁸ Ministry of Education, Youth, and Sports (MoEYS).

³⁹ ESP 2019–2023, June 2019; MoEYS.

⁴⁰ Budget Law, 2020.

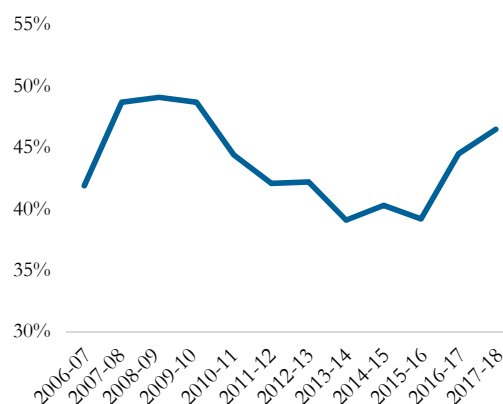
Plan, Education for All National Plan, National Policy on Child Care, and Child Friendly School policy to prioritize early childhood education and improve access, efficiency, and quality of basic education for nine years. As a result, there has been a notable improvement in access to education. The net enrollment rate in primary school reached 97.8 percent in 2018, up from 76.4 percent in 2000 (figure S.1). The secondary school net enrollment rate rose from 16.6 percent in 2000 to 35.1 percent in 2011 and to 59 percent in 2018. The completion rate at the lower secondary level reached 46.5 percent in 2018 (figure S.2).³⁹

2. Salaries for teachers and education staff have been increased

The government relies on teachers to deliver education services. As part of the agenda to credibly increase the salary of government officials across the board, the government has taken the important step of increasing spending on education, and in particular for teacher salaries. Spending on education as a proportion of total government expenditure surged from 10 percent in 2014 to an estimated 13 percent in 2019, reaching 2.9 percent of GDP in 2019, compared with 2 percent in 2014.⁴⁰

Figure S.2: The completion rate in lower secondary

(percent)



Source: MoEYS.

According to the 2020 Budget Law, spending on education⁴¹ in nominal terms nearly tripled from US\$343 million in 2014 to US\$848 million in 2019.⁴² The increase is mainly attributable to a rise in government personnel wages, which accounted for approximately 80 percent of total expenditures. Within the same period, the starting salary for teachers approximately tripled; for primary teachers it quadrupled (from US\$888 to US\$3,600 per year); for lower secondary teachers it tripled (from US\$1,259 to US\$3,876 per year); and for higher secondary teachers it increased by 2.3 times (from US\$1,814 to US\$4,222) (figure S.3).

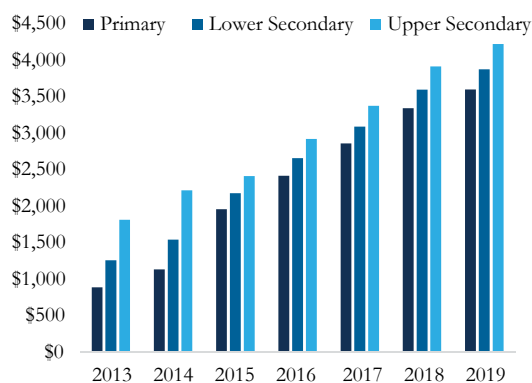
Teacher salaries have been mainly driven by two main components: the basic salary and a functional allowance. For example, the base salary for primary school teachers tripled, reaching US\$1,860 per year in 2019 from US\$684 in 2013. The functional allowance has been the key factor driving teacher pay increases (figure S.3). Improvements have also been made in how often teachers are paid. Whereas they were previously paid on a monthly basis, they are now paid biweekly with direct transfers to their bank accounts.

3. However, student learning outcomes have not improved

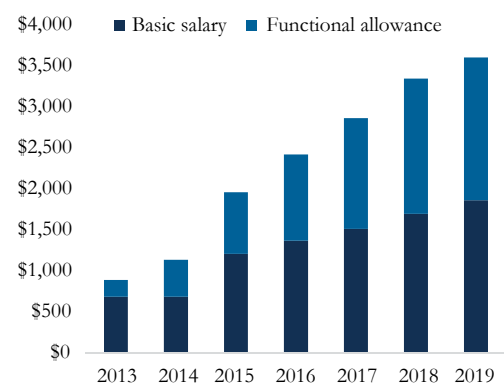
Despite a significant increase in teacher salaries, student learning outcomes showed no substantial improvement from 2013 to 2017. The 2018 Ministry of Education, Youth, and Sports (MoEYS) study on *Education in Cambodia: Findings from Cambodia's experience in PISA for Development* found that the performance of students in Cambodia was yet to reach the level expected. Only a low percentage of Cambodian students age 15 achieve a minimum level of proficiency⁴³—8 percent in reading and 10 percent in mathematics. Students in Cambodia performed below the ASEAN average scores in reading, mathematics, and science. On average, the PISA-D scores for Cambodia were 321 for reading, 325 for mathematics, and 330 for science, which are lower than the ASEAN average scores of 430 for reading, 435 for mathematics, and 439 for science. Less than 2 percent of Cambodian students performed at the average competency level of Organization for Economic Co-operation and Development (OECD) countries. In reading, they performed significantly lower than the PISA-D average (346 points).⁴⁴

Figure S.3: The starting salary for teachers tripled between 2013 to 2019, driven mainly by a surge in functional allowance

Panel A. Starting annual salaries for primary and secondary teachers



Panel B. Starting annual salaries for primary teachers



Source: Compilation from Ministry of Civil Service data.

Note: Salaries and allowances that are paid from MoEYS' budget: (1) basic salary is determined by a teacher's civil service rank. Each teacher is appointed at particular civil service rank in accordance with criteria set out by a royal decree; and (2) teachers also receive a functional allowance which, as the name suggests, is determined by their position and the education level at which they teach.

⁴¹ Spending on education includes recurrent and capital spending. The capital expenditures for the education sector were incurred starting from 2015.

⁴² Ibid.

⁴³ PISA-D defines the minimum level of proficiency as the level at which students are able to tackle tasks that require at least a minimal ability and disposition to think autonomously.

⁴⁴ Education in Cambodia: Findings from Cambodia's experience in PISA for Development, MoEYS, 2018.

The National Student Assessments conducted by MoEYS revealed that the performance of students at grade 6 and grade 8 requires substantial improvement to meet the expected level in three main subjects: Khmer, mathematics, and physics.⁴⁵ Overall, students in grade 6 and grade 8 could only answer around half of the questions correctly during the standards tests arranged by MoEYS. This result did not improve between 2013 and 2017. The study reflected similar results in terms of scaled scores, which were centered around mean value (500 scaled score). Over the same period, no significant difference in scaled score was seen for

grade 8 students in all three subjects. For grade 6, students slightly improved in mathematics in 2016 compared to 2013, though their achievement in Khmer remained unchanged (table S.1).

In terms of student performance, the percentage of students in grade 8 who are proficient in Khmer reading and mathematics was low, although the proportion slightly increased from 2014 to 2017. In Khmer reading, the percentage of students at the proficient level increased from 31 percent in 2014 to 34 percent in 2017 while, in mathematics, it increased from 10 percent in 2014 to 12 percent in 2017.

Table S.1: On average, a Cambodian student can answer only half of questions correctly

Grades			6		8	
Years Assessed			2013	2016	2014	2017
Subjects	Khmer	Percent Correct	46	52	56	54
		Scaled Score	504	504	500	495
	Mathematics	Percent Correct	43	48	44	47
		Scaled Score	489	519	500	494
	Physics	Percent Correct	N/A	N/A	53	46
		Scaled Score	N/A	N/A	500	497

Source: National Student Assessment, MoEYS

Note: Scaled scores were converted with a mean of 500 and standard deviation of 100. N/A = not available.

The percentage of students that passed the Baccalauréat exams (Bac II) remarkably increased from 45 percent in 2014 to 62 percent in 2016, when the government started implementing rigorously strict exams. The passing rate of Bac II exams showed further improvement in subsequent years, from 62 percent in 2016 to 68 percent in 2019.

Salary increase is necessary to improve the standard of living of teachers but is not a sufficient condition to improve student learning outcomes. In addition to monetary incentives, accountability mechanisms along with other non-monetary incentives can be useful. The government has introduced two new school models—New Generation School and School-Based Management. Both school models have shown improvement in the quality of student learning.

The NGS model introduced a new type of institutional setting to ensure high accountability mechanisms. NGS was established in 2015 as a charter school with separate management systems from public schools. NGS was expanded to cover 11 schools in 2019—seven secondary and four primary schools. Students admitted to NGSs were selected through a competitive process, which gives NGS a head start in quality enhancement in terms of student learning outcomes. For example, only 234 students out of 1,264 applicants were admitted to Preah Sisowath NGS High School in 2019. The parents of NGS enrollees can provide monetary contribution to NGS schools accredited by the NGS National Board of Directors. To date, four out of 11 schools that have been accredited can receive parental contributions.

⁴⁵ The assessment was carried out to assess performance of students in grade 3, grade 6, grade 8, and grade 11 from 2013 to 2017.

The SBM model is embedded in the public-school system and focuses on improving accountability via community involvement and participation. Since 2017, there have been one hundred lower-secondary SBM schools. Unlike NGS, SBM does not prescreen students from primary schools, which provides an equal opportunity for every student to be admitted. Entrance exams at lower secondary schools

were conducted for students from satellite primary schools and all applicants were admitted. Parents provided some voluntary in kind or cash contributions for school operations (table S.2).

Among important features of these two school models are autonomy to manage its own operations, higher (improved) level of school accountability, use of performance-based management, and emphasis on promotion of teacher quality.

Table S.2: Characteristics of New Generation School and School-Based Management

New Generation School-NGS	School Based Management- SBM
<ul style="list-style-type: none"> Established in 2015, with 11 schools—4 primary schools and 7 secondary schools—were entitled under the NGS program. Three forms of NGS establishment: (i) building a new school (ii) establishing within an existing public school but with separate management, and (iii) contracting schools that lost students to private schools. Admission: Prior screening of students through competitive examination. Financing: <ul style="list-style-type: none"> Huge proportion of government investment Private donors Contribution from parents. Four out of 11 schools can accept parental contributions after three years of NGS implementation and having been accredited. 	<ul style="list-style-type: none"> Piloted in 2017, under a Secondary Education Improvement Project Embed in public schools: selected 100 public lower secondary schools are required to apply governance and accountability systems of SBM. Admission: No prior screening of students. Tests were conducted at entrance to secondary level for the awareness of student proficiency only. Financing: <ul style="list-style-type: none"> Government investment in (i) school operations, and (ii) teacher capacity upgrade. Parents' contribution on voluntarily basis.

Source: NGS policy, NGS operations guide, SBM operations guides, and interview with NGS and SBM schools

4. New Generation School introduced a new level of accountability and autonomy and quality of education services

a. NGS showed promising student learning outcomes

Five years after its establishment, the NGS has shown some results, with two high schools performing at higher standards. Positive results can be seen in two main areas: (i) Bac II exam outcomes: currently, only Preah Sisowath NGS High School and Hun Sen Kampong Cham High School have students in grade 12 who were taking the exams; and (ii) critical thinking test results, which measures the level of competency

to think outside the box. The percentage of students passing Bac II exams increased for both schools between 2018 and 2019—from 89 percent to 94 percent for Preah Sisowath NGS High School and from 74 percent to 84 percent for Hun Sen Kampong Cham High School. Over the same period, the percentage of students passing Bac II exams at the national level was flat. The proportion of students at both NGS schools having passed Bac II exams was consistently greater than that of average public schools. The proportion of students that obtained a grade of A was substantially higher for both schools in 2019 compared to the other public schools (figure S.4). This higher attainment can also be attributed partly

to the competitive selection process for student admission (see also Annex 1 for a summary of advantages, disadvantages, and policy options for moving forward with the New Generation School model). One argument was that since admission to NGS is based on competitive selection, there are clear endogeneity issues that do not allow a useful comparison across school models in terms of student performance attributed to the program. However, the improvements in student performance under the NGS school model after years of implementation of the key principles listed below clearly indicate its strengths.

Overall, students at both NGS schools are achieving proficiency in terms of critical thinking, with an average mean score between 61 percent and 65 percent in 2019. Critical thinking tests results showed improvements in the mean scores of both schools from 2016 to 2019. Of the six areas covered in test questions, Preah Sisowath NGS High School improved in four areas, while Hun Sen Kampong Cham High School improved in five areas. The mean score of Preah Sisowath NGS High School improved by 7 percent over the period, while the mean score of Hun Sen Kampong Cham High School improved by 26 percent (table S.3).

- b. **Stricter accountability through a new level of institution setting has brought student learning outcomes to the next level**

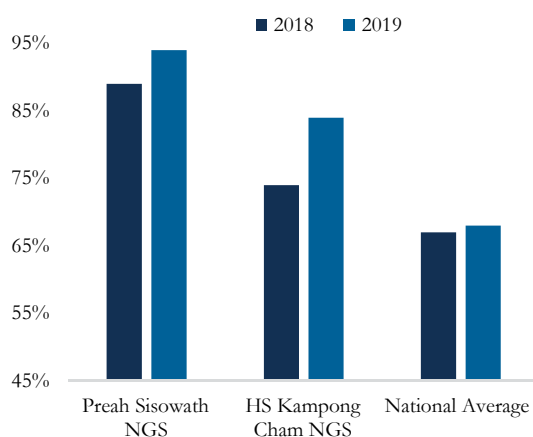
The question, then, is why has the effective governance and accountability systems of NGS made it possible for NGS to raise the standards of learning outcomes over time?

First, the governance structure of NGS was designed to strengthen the institutional role of the schools, which later ensured the effectiveness of the services delivered. NGS has set up a National Board of Directors with the role of ensuring that (i) the NGS program performs as required by the performance matrix agreed upon with MoEYS and MEF, (ii) the budget is properly used, and (iii) quality assurance—a set of accreditation requirements—is strictly enforced for schools to maintain their NGS title. All schools with an NGS title had to comply with a rigorous accreditation process, which required schools to achieve 24 criteria. The rigorousness of the accreditation process encouraged schools to comply. Achieving accreditation means that NGS schools are eligible to receive government funding and are allowed to receive monetary contributions from parents. These two factors are important for sustained school operations.

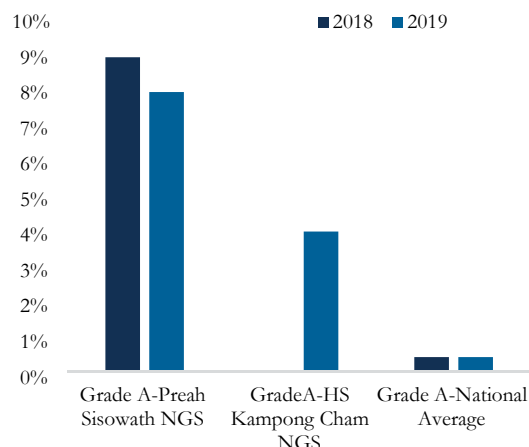
Second, at the operations level, the NGS accountability system strictly requires a high level of performance from school directors, staff, and teachers. This is done through the enforcement of clearly delineated roles and responsibilities of school management, teachers, and other staff. For teachers, for example, an

Figure S.4: NGS students tend to outperform average public schools in Bac II exams

Panel A. Percentage of students that passed Bac II exams



Panel B. Percentage of students that passed Bac II exams with a grade of A



Source: MoEYS.

Table S.3: NGS students improved in critical thinking tests
(same cohort test grade 7 and grade 10) from 2016 to 2019

	Figural Series (Prediction)	Logical Sequences	Classification	Analogies	Concept Analysis	Textual Analysis	Total Mean Score
Preah Sisowath NGS							
Baseline G7	64%	57%	60%	59%	44%	71%	59%
Post-test G10	73%	54%	72%	66%	66%	64%	66%
Change	9%	-3%	12%	7%	22%	-7%	7%
HS Kampong Cham NGS							
Baseline G7	50%	56%	46%	14%	30%	13%	35%
Post-test G10	74%	49%	73%	69%	66%	33%	61%
Change	24%	-7%	27%	55%	36%	20%	26%

Source: NGS annual report.

employment contract is signed on a yearly basis with assigned roles and responsibilities stipulated under terms of reference. The continuity of this contract is based on satisfactory performance. Failure to perform as expected means that teachers will be transferred back to their original (regular public) school.

Third, an appraisal system was put in place to track the performance of all staff, including directors and teachers. At the beginning of the year, Key Performance Indicators (KPIs) are set for each teacher and director, setting out targeted achievements. The KPIs help teachers break down the achievements into the detailed work required to achieve the targets. This encourages teachers and staff to reach the level of expected performance. The KPIs set for teachers help them improve behavior, increase effort, focus on the quality of teaching, participate in professional learning, update their teaching approach, and develop a professional career, all of which contribute to improving the quality of student learning over time.

Fourth, transparency and the proper use of the budget allows NGS to effectively invest in improving human resources and providing additional financial incentives for teachers. For example, teacher and staff salary supplement in Preah Sisowath NGS High School accounted for 12 percent of total school

budget, while capacity building accounted for 13 percent in 2019.⁴⁶ A salary supplement for teachers of US\$1,800 to US\$2,400 per year encourages teachers to strengthen their teaching professionalism by providing full instructional hours and abandon private tutoring for their own students for extra income. As a result, the learning hours for students increased to 40 hours per week compared to only 30 to 35 hours at other public schools. These additional hours have contributed to higher learning outcomes for students.

5. School-Based Management improved accountability for community

a. Student learning outcomes have been improved despite the inception stage of SBM

Even as a nascent school model in Cambodia, SBM, known as the community school model, was introduced in 2017 and was piloted in 100 lower secondary schools. The SBM pilot is showing promising preliminary results. The improvement of student learning outcomes has been proved, as noted in the progress of students in grades 7, 8, and 9, the three grades in lower secondary school. Students in SBM schools showed improvement in their performance in Khmer essays and mathematics, while the number of students who score F in both subjects declined (figure S.5). For a summary of advantages, disadvantages, and policy options for moving forward with the

⁴⁶ NGS budget.

School-Based Management model, please see Annex 1.

The standard tests applied by SBM schools have motivated students to put more effort into learning. The changes mean that students no longer face easy questions during monthly tests and now must respond to extensive sets of questions that cover many areas in the subjects they are required to learn. These practices have contributed to improvements in the results of Bac II exams in schools where SBM was voluntarily applied in both the lower and upper secondary level. The model not only improves student learning outcomes, but also has spillover effects on nearby schools. After seeing the positive examples of SBM target schools, 186 upper secondary schools and 259 primary schools have of their own initiative applied SBM practices.⁴⁷

b. Community-held schools are accountable for learning outcomes

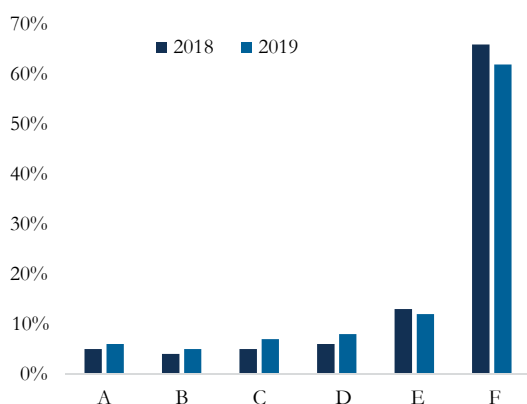
SBM schools are community-centric/ community-owned schools, as the community provides support and ensures that the education services provided by their schools are responsive to their needs. This key principle dictates the characteristics which, in practice, make SBM stand out among public schools in delivering quality education services. What are

those characteristics and why are they important for improving learning quality?

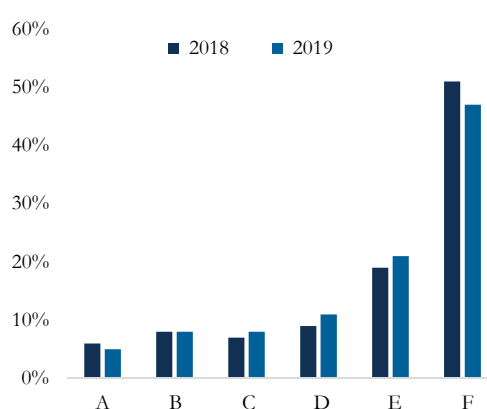
Regular public schools face three main challenges: inadequate accountability to the community, the lack of an effective school development plan that reflects priorities of schools and that supports learning outcomes, and limited use of performance evaluation. Despite some communication between schools and their communities, being accountable to the community is a limited practice. School management and staff are primarily accountable for responding to the demands within their lines of institutional hierarchy and have little engagement with the community. As a result, the education services do not respond directly to the needs of the community. While most public schools develop their plans on an annual basis, these plans do not capture the reality of school priorities, as they tend to focus on the physical structures, and limited priority is given to improvements in student learning. Performance evaluation in public schools is limited, despite the existence of a performance evaluation framework. KPIs are not widely applied, and with an ineffective evaluation system in place, directors and teachers have a tendency to minimize their efforts. Some do not execute their tasks within school working hours and, instead turn to opportunities to teach

Figure S.5: SBM students improved their performance in Khmer essays and mathematics from 2018 to 2019

Panel A. Student achievement in mathematics at grades 7, 8, and 9



Panel B. Student achievement in Khmer essays at grade 7, 8, and 9



Source: SBM assessment in 2019.

Note: The grading system classified A as Excellent; B as Very Good; C as Good; D as Satisfactory; E as Limited Achievement; F as Fail.

⁴⁷ SBM annual assessment.

extra classes, provide private tutoring, or teach at private schools for additional income.

Accountability, learning outcomes/teaching quality focus, and the use of performance evaluations are key features of SBM, which make it distinct from regular public schools. School Management Committees (SMCs), elected by the community, play an important role in ensuring school accountability. The committees represent the interests of the community by holding schools accountable for responding to their needs and ensuring that schools perform up to the expected standards. School plans, both annual operational and improvement plans, which identify priority actions, are required to be approved by the SMC. This provides the opportunity for the SMC to demand that the school integrate their needs as a priority and deliver on them. Both three-year and annual plans for SBM schools are rigorously developed in close consultation with the SMC to ensure that the school priorities reflect the community's needs. SBM plans are developed to respond to school performance standards, which prioritize student learning outcomes as well as teaching quality, including the adoption of new teaching approaches and exposing students to new knowledge, on-the-job training for teachers, and school infrastructure environment. SBM sets targets for directors, teachers, and staff on a yearly basis, and KPIs are used for performance assessment. Implementation of the plans is also closely monitored by the SMC. Monitoring and assessment are conducted on an annual basis, and schools are held accountable for their performance.

Transparency in the school plans, school operational activities, and student learning outcomes create space for community engagement and demand for improvement, particularly in the case of unsatisfactory performance by school staff. As school plans and student learning outcomes are posted in public places as part of transparency processes and operational activities, and as student results are communicated to the community on a regular basis, the community is well informed. In the case of the unsatisfactory performance of school directors or staff, the SMC can exert its

influence to request administrative measures for nonperforming staff be taken to the relevant and competent national and subnational authorities.

SBM schools resolve learning outcome issues by providing additional learning hours for slow learners and introducing standardized tests that are strictly conducted on a monthly basis (like Bac II exams). During the entrance exams, SBM can identify learners who are behind their peers and help them to progress despite their relatively low performance. Additional learning hours are provided to learners who are behind. Student weaknesses and strengths are communicated to parents so that they may help students improve their learning at home. In this way, the kind of challenge in which test questions are prepared during extra classes that teachers offer for a fee and where students who have joined the extra classes could potentially guess the answers is overcome in SBM schools.

SBM has improved the effectiveness of teaching by upgrading the capacity of teachers and, where possible, making use of parent contributions to provide incentives for additional hours of teaching. Some if not all SBM schools turned to parent contributions to provide financial incentives for teachers to teach additional hours, which increased learning hours to as high as 40 to 45 hours per week. For example, Bun Rany Hun Sen Koh Dach High School managed to raise funds from the community to provide financial incentives for teachers to teach additional hours. Teachers from the school received around US\$2,000 a year in addition to their annual salary. This differs from practices in various public schools in which instructional hours are reduced due to double shift teaching and teachers spending time finding additional income informally by teaching extra classes and private tutoring. The consistent effort to improve teacher capacity and the ability of SBM to provide full instructional hours has made formal teaching more effective.

Main challenges to improving student learning outcomes in public schools

1. School governance and accountability to the community remained ineffective

Strengthening good governance and accountability are important steps toward improving school effectiveness. Ensuring effective school governance and accountability builds trust with the community, leading to greater participation and support. With active participation from the community, schools will have more operational and financial support to make student learning more effective.

However, governance and accountability at public schools are ineffective (box S.2). Although guidelines on School Support Committees (SSCs) were issued in January 2002 by the MoEYS to operate and engage with the community, implementation at the school level was superficial. The head of the SSC was not elected in many of the schools or was elected with the consent of school directors in some schools. Having seen examples of SBM where SMCs formed part of the governance structure, some public schools have changed their governance structure by shifting from an SSC to an SMC. SMC's mandate is to hold school directors and/or teachers accountable for school results, including student learning outcomes, while SSC is only responsible for providing support to school management and communicating with community in the areas of school planning, student affairs, coordinating with donors. However, in practice, SMCs established in those schools did not fulfill their major role, which is to hold school directors and teachers accountable for their performance.

Governance and accountability mechanisms should build community trust by fostering more roles and voices from the community in school operations. The following recommendations can be drawn from SBM and NGS experience:

a. Empowering School Management Committees

SBM experience shows that having an effective School Management Committee (SMC) helps schools deliver what it promised to the community. More and more public schools intend to integrate an SMC as part of the governance structure of the school. However, having just an

SMC is not enough. The SMC's mandate needs to represent the voice of the community and must be independent from school leadership and management to ensure that schools can respond to their needs. Furthermore, the SMC role should be to hold school management accountable for their performance, and this should be strictly enforced.

b. Promoting transparency of school operations

As mentioned before, without the transparency of school operations and information on how school funds were used, one cannot build trust of the community. The priority should be on bringing school transparency to the next level. This means that all information related to school plans, operations, and budgets should be publicly available and communicated on a regular basis to the community. In the case of SBM, publicly posting student learning outcomes on a regular basis creates an environment where the issues are known and the strategy to address them is laid out, while for NGS, transparency has helped schools enhance the effectiveness of meeting the expected outcomes that schools had promised.

c. Enhancing quality assurance

Monitoring procedures are in place at the school level to inspect teaching and ensure that students are achieving the expected level for their grade. A mechanism to link inspection with student learning outcomes should be established. Under SBM, the use of standardized tests for students and adequate monitoring of learning based on the test results is of significant help for schools to track the effectiveness of teacher and student performance.

d. Strengthening the accountability of district authority

District authority can play an important role in enhancing education services at the district level, particularly in addressing the shortage and surplus of teachers. District Offices of Education (DOEs), in particular, who are responsible for overseeing the operations of primary and lower secondary schools, have a key

Box S.2

Why is school governance and accountability not effective in public schools?

The low level of effectiveness of school governance and accountability in public schools is attributable to four main reasons.

1. **Ineffective school leadership.** Anecdotal evidence shows that schools with poor leadership have a tendency to have low effectiveness. For example, many school directors not only poorly managed the school operations but tolerated poor practices by teachers, such as arriving late, unexplained absences, and inconsistent monitoring of teaching effectiveness. Many school directors also downplayed the roles of the SSC and SMC in holding schools accountable for results.
2. **Inappropriate budget use practices.** Sources and uses of funds are significant to ensure the effectiveness of school operations. A lack of transparency could have two possible effects: (a) conflicts between teachers and school directors over budget spending; and (b) school directors have no executive power over their staff, even in instances of the inappropriate use of funds. This results in poor teacher discipline and low teaching effectiveness.
3. **Inadequate attention from teachers in fulfilling their tasks.** Although the roles and responsibilities of teachers were clearly articulated in teacher standards, performing the tasks that are required by the MoEYS was only done to a limited extent. These ineffective teaching practices were mainly attributable to inconsistent monitoring of teaching quality at the national and subnational level and the perception among teachers of a low salary despite the significant increases over the past six years.
4. **Lack of support to improve, despite a willingness.** There were some schools that had not performed well on governance and accountability, yet they had a willingness to do better. These schools faced challenges of limited knowledge, resources, and political capital, and they mostly struggled to engage with the community on how to improve school operations.

Source: Findings of World Bank study, “Accountability, Incentives and Learning Outcomes: Case Study of Selected School Models” (World Bank 2020b).



role to play. By effectively reallocating teachers within the district, it makes for faster and less complex administrative procedures and helps in responding to community needs. In addition, active participation of and commitment from district authorities to help address poorly performing primary school students who are admitted to lower secondary schools will be critical to overall learning outcomes.

2. Teacher incentives are not based on performance, and that may lead to a widening gap in education quality between public and private schools

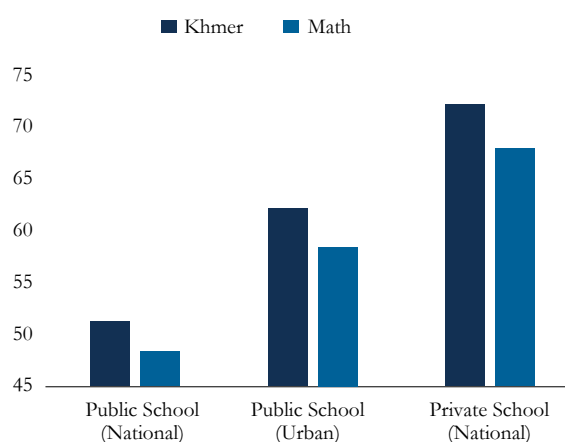
Salary and rank are important tools for the government to incentivize civil servants to perform their duties. Since 2013, the government has tripled civil servant salaries. Allowances such as pedagogic allowances; hardship allowances for those working in remote areas; allowances for teaching overtime, double shifts, or multiple grades/classes; and family allowances are provided to teachers. In addition, teachers are generally promoted to one higher civil service rank every two years. This has not resulted in improved performance.

Across-the-board salary increases, although helpful to raise the standard of living for teachers, were not effective in improving the

quality of education without accountability mechanisms. Teacher performance evaluation is guided by the MoEYS; however, the evaluation is not widely conducted by public schools, as few schools are aware of the evaluation process or forms. In addition, the performance evaluation focuses on making sure teachers follow the teaching protocol rather than assessing the quality of teaching to ensure improved quality of learning. Ineffective performance evaluation and inconsistent quality assurance reduce the need for accountability toward quality of teaching and learning.

Private schools, while employing teachers from public schools, performed better. The 2017 National Student Assessments showed that average students at private schools can correctly answer Khmer and mathematics questions twice as often as students at public schools (figure S.6). Effective governance, accountability systems, and rigorous quality assurance contribute to higher learning outcomes in private schools, despite relatively lower pay per hour for teachers. For example, remuneration in two important private schools in Phnom Penh starts from US\$1.90 per hour for primary school teachers and US\$3.50 to US\$4.00 per hour for secondary school teachers (figure S.7), while the starting salary in public schools is estimated at US\$3.75 per hour for

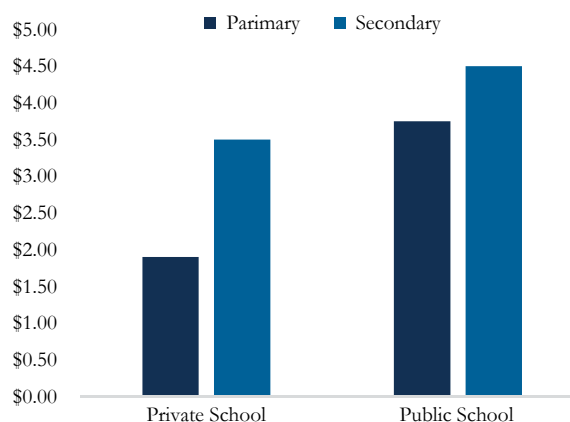
Figure S.6: Students in grade 6 at private schools performed better compared with students in public schools in 2017
(percentage of correct answers)



Source: National Student Assessment, MoEYS.

Note: The starting salary per hour of private schools is based on interview with two important education groups of Khmer General Knowledge. In practice, private schools tend to offer a starting salary and that increased over time based on teacher performance.

Figure S.7: Starting per hour salary of private school teachers compared to public school teachers for primary and secondary levels



Source: World Bank staff.

primary school teachers and US\$4.50 per hour for secondary school teachers.⁴⁸

It is likely that the across-the-board salary increases have made the gap of education quality between public and private schools larger. Private schools are now also under pressure to increase their salaries to catch up with the public sector, contributing to the increasing cost of education. Within a very competitive market, private schools—which make use of teachers who are also teaching at public schools—will need to justify the higher costs, by being pushed to increase education quality. First, to compete, private schools build the capacity of their teachers. Second, they ensure that teacher performance is up to their expected standards, and teachers are under pressure to perform better at private schools.

Without effective intervention, the quality gap is likely to expand in the future. Introducing performance-based salary increases, establishing an effective performance evaluation system, and implementing teacher career pathways will maximize the benefit of resources spent on education and contribute to the improvement of learning effectiveness in public schools.

a. Linking salary increase and promotion with performance

Schemes where salary increases are based on performance seem difficult to implement in government agencies, and particularly in public schools. First, inadequate institutional capacity to implement performance evaluation fairly and consistently across the entire sector is a challenge. Second, there could be potential resistance to the implementation of such a performance-based system. An effective performance evaluation system would mean that teachers are required to fully comply with teaching standards. This would also require them to forego any second jobs such as private tutoring, teaching at private schools, or teaching extra classes for a fee, which affects their ability to receive additional sources of income other than their basic salary (see box S.3). NGS and SBM experience suggests

that schools could potentially create a reasonable performance system that is acceptable for most, if not all, staff if performance targets are clearly set, implemented consistently, and monitored fairly and transparently.

b. Enforcing teacher standards

NGS and SBM experience shows that linking incentives and salary increases with performance can be implemented through strong political support at the national level, effective school accountability systems, and greater school autonomy in operations management. While it is not easy to introduce performance-based incentives, the cost of not doing so is likely to be higher. As mentioned, salary increases will have limited impact on the quality of education, and poor learning outcomes are likely to continue, at least in the medium term. It is, therefore, essential to ensure effective implementation of performance management for public schools by (i) enforcing teaching standards that require teachers to comply with their full-time teaching responsibilities including teaching and preparation; (ii) removing any conflict of interest; in the case of NGS, teachers are not allowed to teach extra classes to their own students for a fee; and (iii) introducing fair and transparent administrative procedures for underperforming teachers.

c. Establishing effective Key Performance Indicators (KPIs)

KPIs should not only measure the performance of individual teachers or staff, but should also cover the performance of both schools and officials at the national and subnational level who are responsible for overseeing school performance. The one important factor that KPIs often overlook is student learning outcomes.

d. Implementing teacher career pathways

As in other careers, in addition to financial incentives, growing professionally is an important incentive for teachers. Teacher career pathways are being prepared under the Teacher Policy Action Plan.⁴⁹ This career mapping, which needs to clearly articulate core competencies for

⁴⁸ Effective salary per hour based on interview with two important private schools in Phnom Penh.

⁴⁹ ESP 2019–2023.

Box S.3

Evidence on teacher responsiveness to monetary incentives

The Talent Transfer Initiative in the United States, an experiment that offered payments to teachers totaling US\$20,000 over two years, was designed to encourage highly effective teachers to move from advantaged schools to less-advantaged schools.^a The take-up rate for this program was quite low, with only 5 percent of teachers accepting the offer, but the majority of teachers who did transfer to high-poverty schools remained in them while they received the extra compensation.

Several other high-quality studies focus on the benefits of programs designed to improve the retention of specific kinds of teachers in schools serving disadvantaged students. Clotfelter et al. (2008) analyze a short-lived North Carolina program that provided a US\$1,800 bonus to math, science, and special education teachers serving in high-poverty or low-achieving schools. They estimate that this bonus reduced teacher turnover from 30 percent to 25 percent. Cowan and Goldhaber (2015) find similar retention effects in an investigation of a program in Washington State that pays teachers who hold a National Board for Professional Teaching Standards (NBPTS) credential a US\$5,000 supplement for teaching in a high-poverty school, on top of US\$5,000 for being NBPTS certified. The observed reduction in attrition implied an elasticity of about 4.3, similar to the estimate in Clotfelter et al. (2008).

Springer, Swain, and Rodriguez (2016) assess a program in Tennessee that paid a US\$5,000 bonus to highly rated teachers in low-achieving schools. They find that receipt of the bonus improved retention among teachers in tested grades and subjects, with effect sizes similar to those in the previously discussed studies. They also compare the costs of the Tennessee retention bonus to other widely used interventions such as summer school and reductions in class size, concluding that the Tennessee bonus appears to be a relatively cost-effective way to increase student achievement. A study by Falch (2010) examines the effect of a wage premium paid in Norwegian schools with chronic labor shortages and finds an implied labor supply elasticity of 1.4 in response to this school-targeted pay increase. Importantly, this estimate reflects both the retention of current teachers and success in recruiting new hires, in contrast to previous, higher estimates reflecting only effects on retention.

However, in some developing Asian countries, without strong teacher evaluation, support for professional development, and a clear accountability system, incentives do not improve student learning outcomes.

Source: Dee and Goldhaber 2017.

Note: This box was prepared by Runsinarith Phim and Fata No.

^a Glazerman et al. 2013. ^b “Learning: To Realize Education’s Promise,” World Bank, Washington, DC, 2018. ^c See Barrera-Orsorio and Raju 2017.

^d McAleavy, Ha, and Fitzpatrick 2018. ^e World Bank 2018.

In Indonesia, the Teacher Law of 2005 provides a teacher who has completed the certification process the professional allowance of 100 percent of their basic salary. The result was much larger budget outlays on salaries, but no increase in teacher skills or student learning. By observing the results on PISA from 2003 to 2015, Indonesia will not reach the OECD average score in mathematics for another 48 years, and in reading, for another 73 years. The only achievement reported so far on doubling teacher salaries was a higher level of job satisfaction and a lower percentage of teachers with second jobs.^b

Similarly, in Pakistan, piloted performance pay incentives had no positive effect on exam scores, and the absence of positive impacts on test scores was probably due to weaknesses in the program’s incentive structure and/or limitations in the program’s administrative data. The government piloted performance pay incentives for teachers with increases of (i) 13 percent of their yearly basic salary, if they were in a school that increased average exam scores by 10 points (though with no change in enrollment and an exam participation rate of 95 percent), (ii) 11 percent if they were in a school that increased enrollment by 10 percent with no change in average exam scores and an exam participation rate, (iii) 10 percent in a school that did not increase average exam scores or enrollment but increased the exam participation rate to 99 percent, and (iv) 9.4 percent in a school that did not change any of the three indicators. Bonus values for head teachers were double the incentives for teachers. The results showed that there was an increase in student enrollment and exam participation rates in the second and third year, but no positive effect on exam scores.^c

In Vietnam, cultural norms and government policy were crucial to promote and attract competent candidates into the teaching profession. Teaching is a low-paid profession compared to other jobs requiring similar or even lower qualifications. An experienced teacher who served for 39 years received around US\$439 per month, while new teachers were paid less than US\$200 per month. Vietnamese teachers normally voiced their complaints over the low salary, while the government continued to raise their salary. However, a strong school-based governance system, teacher evaluation, and informal professional learning opportunities were reportedly claimed as successful practices to help teachers perform their tasks professionally.^d As a result, 15-year-old Vietnamese students performed better than average OECD students on the PISA 2015.^e

steps of career growth, should be coordinated and linked to a capacity building plan. The pathway should consider (i) mapping underperforming teachers for retraining and redeployment to school administration career, (ii) preparing action plans for early retirement for underperformed elderly teachers, and (iii) promoting high-performance teachers to grow professionally in teaching career. Career growth can be usefully linked to salary increase.

3. Both the surplus and shortage of teachers negatively affect student learning

Effectively deploying teachers can save around 10 percent of the personnel wage bill every year.⁵⁰ Both the surplus and shortage of teachers have affected almost every aspect of education development. It compounds the impact of ineffective governance and accountability mechanisms on student learning outcomes. Shortages of teachers increases class size and results in an unreasonable workload for teachers and makes learning less effective. Some schools in rural areas have class sizes as big as 60 students per teacher. A surplus of teachers in urban schools has also resulted in resource inefficiencies because teachers will use their free time to seek additional income, teaching extra classes for a fee outside of school, while at the same time receiving the same salary as those who are actively teaching in schools.⁵¹ There has been an effort over the past two years to redeploy teachers from schools with surplus staff to schools with a deficit of teachers. Developing career pathways for teachers would complement the effort to redeploy redundant teachers. However, this issue remains a significant challenge as there continues to be a shortage of teachers in rural areas and a surplus of teachers in urban areas.⁵²

a. Improving quality of data submission to the HRMIS

Improving the quality of staff data in the Human Resource Management Information System (HRMIS) will help address the surplus and shortage of teachers. An improved HRMIS provides important information for education management purpose in general and a tool for supporting education service continuity planning in crisis situation such as Covid-19 pandemic. Although the existing HRMIS was designed to track the demand for teachers in schools, the data in the HRMIS do not reflect the true state of demand for teachers⁵³ in schools in a timely manner. In some cases, the data from schools were either not submitted or were submitted late. As a result, new teacher recruitment numbers were based on the previous years' data projections, and these data were not realistic.⁵⁴ Steps could be taken to (i) train Provincial Office of Education (POE) and District Office of Education (DOE) personnel and school directors on staffing level norms and approaches for calculating the shortage and surplus of teachers, (ii) introduce compulsory requirements for schools to submit reliable data to the HRMIS system on time, and (iii) monitor data quality through a strict verifying mechanism.

b. Improving the transparency of placement of newly recruited teachers

Improving the transparency of newly recruited teacher deployment at the provincial level will improve the quality of selection at entry and appropriate placement. POEs have the authority to deploy teachers to schools where teachers are needed the most. In practice, however, the deployment under the POE jurisdiction has some shortcomings. There have been many cases in which newly trained teachers were deployed to rural schools and either did not even show up, as the POE only sent their names to the rural schools, or they showed up but transferred out to an urban school shortly thereafter. The 1996 Common Statute of Civil Servants requires that education staff (teaching or non-teaching) can

⁵⁰ "Improving effectiveness of public finance," Cambodia Public Expenditure Review, World Bank, 2019.

⁵¹ "Teacher Management and Redeployment: Issues and Practical Way Forward," MoEYS 2018.

⁵² See Cambodia Public Expenditure Review, World Bank, 2019.

⁵³ As the process requires, estimating the demand for teachers starts at the school level. Estimates are sent to the District Office of Education (DOE), to the Provincial Office of Education (POE), all the way up to the Department of Personnel of MoEYS. The estimate of the number of teachers needed on a yearly basis is negotiated with the Ministry of Civil Service to set quotas for teacher recruitment. The MoEYS then recruits teachers and trains them at the National Institute of Education and deploys them to schools through the POE and DOE.

⁵⁴ "Teacher Management and Redeployment: Issues and Practical Way Forward," MoEYS, 2018.

only transfer between schools after the completion of four years of service. However, in practice, the transfer was possible because there is no oversight or monitoring of these decisions. There is no official mechanism to communicate these issues to a higher ministerial level, so school directors fail to stop the transferring practices. Disclosing information publicly on teacher placement and transfers with justification is useful to ensure proper placement of teachers and to strengthen accountability. A complaint mechanism could also be established to collect feedback on the irregularity of teacher placement and transfers.

c. Reallocating teachers from surplus schools to ones with shortages

The redeployment scheme where teachers are transferred from urban to rural areas faces several key challenges. Transfers are carried out on a voluntary basis and there seem to be insufficient incentives or inadequate compelling reasons for teachers to move despite the MoEYS initiative to redeploy teachers. There is a reasonably good standard of living in urban areas, including urban infrastructure and health services, and teachers have a tendency to settle in urban areas and raise their families there. There are also more opportunities for teachers to receive additional income in urban areas, including teaching at private schools, teaching extra classes, or home tutoring.

DOEs and school directors could collaborate to transfer teachers within their own jurisdictions to balance out the shortage and surplus of teachers. Surplus teachers at the primary level could be encouraged to teach at the preschool level to respond to the higher need for preschool teachers, with some level of incentives. Surplus teachers close to retirement age could be considered for early retirement or transitioned to work as administrative staff.

4. Low level of government investment for professional development of school directors and teachers

To provide teachers with the skills they need to achieve a high quality of teaching, more investment is needed to improve pre-service training and to upgrade the capacity of in-service teachers. The government had significantly increased education expenditures, with the main focus on increasing salary over the last five years. Yet, relatively low investment has been made to improve the capacity of teachers. NGS and SBM experience shows that the additional investment to build teacher capacity can contribute to increased learning outcomes.⁵⁵ However, the additional investment could have an impact on student learning outcomes provided that proper governance and accountability mechanisms are in place.

Having high-quality teachers is a prerequisite to ensure that education is of high quality over the medium and long term. The government has upgraded a teacher training center to a Teacher Education College in Battambang province to provide four-year training. Additional investment is also made in the New Generation Pedagogical Research Center at the National Institute of Education in 2019. It is important that entrance exams for Teacher Training Centers continue to be strictly enforced, and candidates are required to hold at least a bachelor's degree to be eligible to take entrance exams. Training centers should collaborate to ensure synergy on training topics and maximize the resources that are available. Greater effort could also be made to upgrade the capacity of trainers and trainees at Provincial Teacher Training Centers (PTTC) and Regional Teacher Training Centers (RTTC). See table S.4 for policy options to improve the quality of education.

It is equally important that the capacity of in-service school directors and teachers is upgraded, given that limited professional development and in-service training is provided to school directors and teachers. As of 2018, only 27 percent of in-service teachers reported having received professional training.⁵⁶

⁵⁵ NGSs received an additional investment of US\$370 per student per year for secondary schools and SBM received US\$70 per student per year in addition to a School Improvement Grant (SIG) and a School Operations Budget (SOB) for overall investment in 2019. This estimate is based on investments in SBM operations and capacity upgrade for teachers.

⁵⁶ Education in Cambodia: Findings from Cambodia experience in PISA for Development, MoYES, 2018.

Table S.4. Policy options to improve the quality of education

Challenges	Short-term policy options (1 to 2 years)	Medium-term policy options (More than 3 years)
Student learning outcomes remain poor, caused largely by ineffective school accountability to the community.	<p>Introduce new levels of accountability for the community through (i) empowering roles of the School Management Committee to hold school management and teachers accountable for student learning outcomes, (ii) promoting transparency of school operations, and (iii) enhancing quality assurance at the school level.</p> <p>Strengthen the accountability of district authorities to ensure that schools within their jurisdictions perform at the required level. Capacity building could be provided to the Provincial Office of Education (POE) and the District Office of Education (DOE) to effectively oversee primary and secondary schools.</p>	Enforce school effectiveness standards that require DOE, POE, and school management to ensure the performance of schools.
Increasing across-the-board salaries for teachers is of limited impact on learning outcomes. Yet doing so is likely to make the education quality gap higher between public and private schools.	<p>Introduce performance-based incentive schemes for school directors, teachers, and education staff. Salary increase and promotion should be based on performance.</p> <p>Establish effective KPIs to evaluate performance of school directors, teachers, and education staff.</p>	Implement career pathway for teachers. The pathway should consider (i) encouraging early retirement for underperformed elderly teachers, (ii) mapping underperforming teachers to administrative work, and (iii) promoting high-performing teachers with career growth.
Both the surplus and shortage of teachers have made student learning less effective, and proper allocation of teachers would help government cut 10 percent of salaries spent on redundant teachers.	Reallocate teachers from schools with a surplus of teachers to schools with a shortage of teachers within district and provincial jurisdiction.	Discourage transfer of teachers by requiring public disclosure of teacher transfers with justification and introducing a school feedback mechanism.
Underinvestment in capacity upgrade for teachers seems to prolong low quality of learning in the medium term.	Increase government investment for professional development coaching and in-service training for teachers.	Upgrade capacity of trainers and trainees at Teacher Training Centers.

Conclusion

Government efforts to reform the education sector over the last two decades have achieved some success and lessons learned to further improve the sector. Experiences from NGS and SBM suggested that quality of education could be improved by focusing on the followings:

First, strengthening accountability in public schools. Accountability is a prerequisite for improving the quality of student learning. In public schools, accountability is yet to be effective. While it is not easy to strengthen the accountability mechanisms in public schools, NGS and SBM experience shows that it can be done by strictly enforcing institutional guidelines, allowing a reasonable level of school autonomy in operational management, and active community engagement in school operations. Accountability at school level is also critical for the government to effectively implement its policy reforms efforts to respond to the impacts of Covid 19 pandemic. Faster adoption of accountability mechanism at school level for implementing the existing and additional reform initiatives to address the challenges is beneficial.

Second, linking salary increase and promotion to performance. It is imperative that incentives schemes for teachers and education staff are based on performance. Credible salary increases help provide incentives to teachers and ensure an acceptable standard of living while carrying out their duties. However, increasing salaries across the board without a mechanism to ensure satisfactory performance may not be effective. The gap in education quality between public and private schools is likely to continue to widen. Introducing performance-based incentives for teachers strengthens public schools to effectively execute their functions and this will also be very important in post-Covid-19 recovery effort.

Third, strengthening capacity and quality of teachers. Because the government relies on teachers to deliver education services, ineffective pre-service and in-service training impacts the quality of education in the long term. Some improvement has been made by strengthening the requirements to enroll at the Provincial Teacher Training Center and Regional Teacher Training Center. In addition, continuing to strengthen the professional practice of in-service teachers will help improve the quality of teaching in general. Specifically, teachers should be trained and prepared for supporting slow learners. This will help to reduce the impact of learning loss from school closure during the Covid-19 pandemic and beyond.

Two additional initiatives could be useful in addressing Covid-19's impact on education quality:

- Initiatives to reduce drop out rate by supporting slow learners as a result of learning loss. With students not able to catch up, drop-out rate is likely to increase in the medium term. An initiative to support students who are lagged behind will help students to compensate learning loss during the school closure.
- Rigorous monitoring mechanism to track the effectiveness of school's response in post Covid-19 recovery effort. Student learning outcomes should be an important measure as a part of the monitoring framework. This could be backed by the continuation of student assessment to provide the status of student learning outcomes as measurement of progress.

Education reforms have a long-term horizon. It takes government investment, time, and perseverance to implement education reforms to yield positive results. However, the grim truth is that poor accountability in public schools magnifies Cambodia's long-standing low-quality learning, which the reforms aim to address. More active community engagement can help address this underlying accountability issue and enable education reforms to progress more smoothly and deliver the quality education services most needed by the community.

Annex 1: Advantages, disadvantages, and policy options for each school model

New General School (NGS) Model

Advantages	Disadvantages	Policy options
<ul style="list-style-type: none"> • Effective institutional setting. National Board of Directors, Provincial Board of Directors, and School Support Committee to ensure quality. • Effective appraisal system. All staff/teachers perform their duties effectively with the introduction of KPIs. • Professional teachers. Continuous trainings and professional development. ICT tools were also provided for quality teaching. • More trusted by parents. Rising demand. Entrance exam at Preah Sisowath High school, for example, received 1,264 applicants for 234 available spaces. Parent annual contribution US\$280 per student (2019). • High standards of learning including ICT, inquiry-based learning. • Small class size. 35 students per teacher as part of quality assurance process. • Incentives for teachers. Salary supplement, plus incentives for leading learning club. • Teacher capacity building. Scholarship to teachers who co-pay 30% of tuition fees; study visits to other schools in the region. 	<ul style="list-style-type: none"> • Selected only qualified students. Only students passed the entrance tests are admitted to NGS schools. • Relatively high government investment required. Investment cost per student for secondary school reached US\$ 370 per year. • Scaling up NGS operations requires high government investment. 	<ul style="list-style-type: none"> • Continue to focus on quality of learning and gradually scale-up. It takes time to build trust with parents (only 4 out of 11 NGSs can accept parent contributions, important sources of revenue to cover operations costs on top of government investment). • Gradually increase parent contributions. Once the value is consistently assured for students over time, parents' willingness to pay will follow. • Strengthen knowledge management. The operations fully taken on by MoEYS beyond advisory services, it will ensure operational sustainability, which requires effective management.

School Based Management (SBM) Model

Advantages	Disadvantages	Policy options
<ul style="list-style-type: none"> • Provides equal opportunity for students to enroll. Poor-performing students from satellite primary schools (20% at basics in reading and mathematics) are also admitted and additional teaching hours provided to support slow learners. • Accountability for community. School Management Committee representing community to demand better learnings (exam results regularly posted at public places). • Lower government investment. Average annual government investment US\$70 per student in 2019. • Improved learning outcomes. Students who passed the standard tests for mathematics increased from 56% in 2018 to 69% in 2019 and for Khmer essay from 49% in 2018 to 53% in 2019. Additional hours of teaching for slow learners. • Strict standard tests. Strict standard tests to strengthen student learning. • Upgrading teacher capacity. Scholarship for teachers to study at Royal University of Phnom Penh (full tuition fees and travel allowance). 	<ul style="list-style-type: none"> • Insufficient teachers. Teacher shortage in SBM schools due to ineffective transfer and deployment of teachers. • Low professional learning for teachers. Despite teacher capacity upgraded, level of professional development for teachers need to be provided. 	<ul style="list-style-type: none"> • Increase teachers' professional learning. • Allocate teachers from surplus schools to ones with shortages. DOE and POEs could work together with schools within their own jurisdictions. • Collaborate with DOE, POE and primary schools to address slow learners. SBM, in collaboration with DOE and POE, could develop program to support satellite primary schools to improve student learning outcomes.

Private School Model

Advantages	Disadvantages	Policy options
<ul style="list-style-type: none"> • A well-structured education group. Many private schools structured as education groups with headquarters overseeing their operations of branch schools. • Selected teachers and appraisal system in place. Demand-driven. KPIs are in place to evaluate teacher performance. • Low student-teacher ratio. 25 to 30 students per teacher in classroom. • Rely on their own quality assurance unit. Most private schools have their own quality assurance unit, rather than depending on public quality assurance services. • Capacity building for teachers. Continuous capacity building for teachers. 	<ul style="list-style-type: none"> • Raising costs of education. This is to catch up with market when salary of public schools teachers increased, private schools tends to increase salary to be on par with market. • Rely on teachers from public schools. Most of teachers in private schools work part-time, while also working for public schools. This affects teaching quality of public schools. • Tuition fees. Private schools charge tuition fees from US\$500 to US\$1500 per year per students, depending on school. 	<ul style="list-style-type: none"> • Consider limiting private schools from employing teachers from public school. Teachers working at private schools should be encouraged to work fulltime, rather than part-time. • In the long-term, big private schools should be encouraged to establish their own teacher training center. At present, all the teachers were trained by PTTC or RTTC.

Annex 2: Cambodia's key indicators under the baseline scenario

	2017	2018	2019e	2020p	2021f	2022f
Output and Economic Growth						
Real GDP growth, at constant market prices (y/y, percent change)	7.0	7.5	7.1	-1.0	6.0	6.3
Private Consumption	3.7	3.0	7.0	2.1	5.0	5.4
Government Consumption	23.5	5.1	-9.1	6.7	-16.7	10.8
Gross Fixed Capital Investment	6.1	6.1	10.7	4.8	13.2	7.4
Exports, Goods and Services	5.3	5.3	7.8	-16.0	7.0	7.5
Imports, Goods and Services	4.1	4.1	6.0	-11.0	6.9	7.1
Real GDP growth, at constant factor prices (y/y, percent change)	6.8	7.4	6.8	-1.0	6.0	6.3
Agriculture	1.7	1.1	-0.5	0.3	0.4	0.5
Industry	9.7	11.6	11.3	-1.0	9.2	9.3
Services	7.0	6.8	6.2	-1.7	5.8	5.8
Money and Prices						
GDP deflator (annual %, period average)	3.3	3.1	2.7	1.6	2.6	2.4
Broad money (% of GDP)	88.2	100.7	95.2	109.5	123.7	139.8
Domestic bank credit to private sector (% of GDP)	86.7	99.6	83.4	91.8	102.3	113.6
Nominal Exchange Rate (local currency per USD)	4,062	4,067	4,070	4,081	4,014	4,054
Nominal Effective Exchange Rate (2015=100)	-0.1	-0.7	1.8	0.5	2.2	-0.5
Real Effective Exchange Rate (2015=100)	1.3	-3.3	0.9	-2.4	1.0	-2.4
Short-term interest rate (% p.a.)	11.7	9.7	8.0	7.8	7.0	6.8
Fiscal						
Revenue and grants (% of GDP)	21.9	23.8	25.4	16.6	17.3	20.2
Expenditure and net lending (% of GDP)	22.7	23.4	24.9	25.6	25.0	24.7
Overall balance (% of GDP)	-0.8	0.4	0.5	-9.0	-7.6	-4.5
Primary Balance (% of GDP)	-0.4	0.8	0.9	-8.5	-7.1	-4.0
General Government Debt (% of GDP)	30.3	30.0	29.0	31.6	33.4	35.3
External Accounts						
Exports, GNFS (nominal US\$, annual %)	9.4	12.3	9.5	-15.1	10.6	8.4
Imports, GNFS (nominal US\$, annual %)	7.8	9.3	9.0	-10.3	10.0	7.4
Current account balance (current US\$ millions)	-9.7	-8.9	-8.8	-14.2	-13.7	-13.5
Foreign Direct Investment, net inflows (current US\$ millions)	2,673.1	3,088.8	2,845.1	2,328.1	2,764.3	3,087.1
Gross international reserves (US\$ million)	12,168.7	14,597.8	18,732.8	16,859.5	17,702.5	19,118.7
(prospective months of imports of g&s)	7.5	6.3	7.6	6.9	6.8	6.8
Memo: Nominal GDP (US\$ million)	22,115	24,476	26,888	26,969	29,806	32,120
GDP per capita (US\$, nominal)	1,376.1	1,500.5	1,624.6	1,606.8	1,751.9	1,863.4
GNI per capita, Atlas method (current US\$)	1,240.0	1,390.0				

Sources: Cambodian authorities, IMF, and World Bank staff estimates and projections

Note: e = estimates, f = forecast, p = projection

^{1/} Goods and Non-Factor Services (GNFS)

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