CAMBODIA ECONOMIC UPDATE

RECENT ECONOMIC DEVELOPMENTS AND OUTLOOK

SELECTED ISSUE

Investing in Cambodia's Future:

Early Childhood Health and Nutrition

MAY 2019

WORLD BANK GROUP

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Recent economic developments and outlook

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The CEU, produced biannually, provides up-to-date information on macroeconomic developments in Cambodia. It is distributed and discussed widely including among Cambodian authorities, development partners, the private sector, think tanks, civil society organizations and academia.

For information about the World Bank and its activities in Cambodia, please visit our website at www.worldbank.org/cambodia.

To be included in the email distribution list of the CEU and related publications, please contact Socheat Ath (sath@worldbank.org). For questions on the content of this publication, please contact Saroeun Bou (sbou@worldbank.org).

ABBREVIATIONS

AFTA	ASEAN Free Trade Agreement
ASEAN	Association of Southeast Asian Nations
CEU	Cambodia Economic Update
CDHS	Cambodia Demographic and Health Survey
CR	Cambodian riel
C/S	commune/sangkat
EAP	East Asia and Pacific
EBA	Everything But Arms
EC	European Commission
EMDEs	emerging markets and developing economies
EU	European Union
FCD	foreign currency deposit
FDI	foreign direct investment
GDP	gross domestic product
GVC	global value chain
HIV/AIDS	human immunodeficiency virus/ acquired immunodeficiency syndrome
HS	Harmonized system
IDP	Industrial Development Policy
IMF	International Monetary Fund
LPCO	Liquidity-Providing Collateralized Operation
MCH	Maternal and Child Health
MDI	microfinance deposit-taking institution
MEF	Ministry of Economy and Finance
MFI	microfinance institution
MOEYS	Ministry of Education, Youth and Sport
MOH	Ministry of Health
MOP	Ministry of Planning
NCD	negotiable certificate of deposit
NIS	National Institute of Statistics
NPL	nonperforming loan
RGC	Royal Government of Cambodia
RMS	Revenue Mobilization Strategy
RS	Rectangular Strategy
SDR	Special Drawing Rights
SME	small and medium-sized enterprise
TVET	Technical and Vocational Education Training
TEU	twenty-foot equivalent unit
UK	United Kingdom
UNAIDS	Joint United Nations Program on HIV/AIDS
UNICEF	United Nations Children's Fund
US	United States
US$	United States dollar
VAT	value-added tax
WBG	World Bank Group
WHO	World Health Organization
YTD	year-to-date
y/y or yoy	year-on-year

EXECUTIVE SUMMARY

Recent developments

Preliminary estimates show real growth achieved a four-year high of 7.5 percent in 2018, compared to 7.0 percent in 2017. Driven primarily by rapid expansion of exports and robust internal demand, the economy performed better-than-expected. Exports burgeoned as external demand, especially in the United States and European Union markets, strengthened. Garment and footwear exports which account for more than two-thirds of total merchandise exports, recorded a five-year high, rising by 17.6 percent in 2018, up from 8.3 percent in 2017.

Upbeat consumer confidence led to a surge in imports. Motor vehicles and steel imports, which gauge domestic consumption and construction demands, rose by 50 percent and 48 percent, respectively.

The current account deficit widened to 10.4 percent of GDP in 2018, from 9.7 percent of GDP in 2017, but remained fully financed by foreign direct investment (FDI). FDI is estimated to have reached a record high of more than US$3.0 billion or 13.4 percent of GDP in 2018. Burgeoning exports and strong FDI inflows have contributed to further accumulation of gross international reserves, which in 2018 reached US$10.1 billion or about six months of prospective imports.

Three-quarters of the (approved) FDI inflows originated from China. In recent years, foreign investment from China has surged, mainly directed towards construction (infrastructure, commercial and residential real estate), tourism and, to a lesser extent, manufacturing and agriculture. The seaside provincial town of Sihanoukville has emerged as the hotspot of the current construction boom.

Improved confidence in the banking system has resulted in rising foreign currency deposits. Foreign currency deposits grew 26.5 percent in 2018, up from 23.6 percent in 2017. Bank credit to the private sector once again edged up, growing at 24.2 percent in 2018, compared to 19.6 percent in 2017. Bank lending to the construction and real estate sectors continues to drive domestic credit expansion, contributing about 40 percent of credit growth. This is followed by the wholesale and retail sector, which captured one-fifth of domestic lending growth.

Inflation has moderated, underpinned in part by a stable exchange rate. The easing of petroleum prices since the fourth quarter of 2018 more than offset the increase in food prices. As a result, inflation declined to 1.6 percent as of December 2018, from 2.2 percent in 2017. The Cambodian riel (CR), which is pegged to the US dollar, has remained stable, at CR 4,018 per US dollar at the end of 2018, compared to CR 4,037 in 2017.

A rapidly rising public payroll exerted pressures on the fiscal position, but better-than-expected revenue performance contained the fiscal deficit. In 2018, despite a rising wage bill, together with an initial boost in domestically financed capital spending, the overall deficit remained contained. The deficit (including grants) is estimated to have reached 1.9 percent of GDP in 2018, compared with 1.6 percent of GDP in 2017.

Cambodia's debt distress level remained low, according to the 2018 World Bank/IMF Debt Sustainability Analysis. This is due to the concessional profile of the public debt and low deficit in the past. After several years of fiscal consolidation, the authorities have accumulated rising government deposits, which stood at 14.9 percent of GDP in 2018.

Outlook

After experiencing accelerated growth of 7.5 percent in 2018, the economy is expected to return to its long-term potential of about 7 percent. As exports moderate in line with deceleration in global demand (see box 1), real growth is projected to ease to 7 percent in 2019. The robust economic growth is expected to result in continued poverty reduction.

The longer-term outlook, however, depends on the country's ability to productively absorb rising FDI inflows, while promoting domestic investment. In this regard, cheaper energy and logistics costs, availability of a skilled workforce, and improved supply chain links will be essential to remain competitive. In the short term, filling the skills gaps is needed, while addressing the human capital deficiency must start now to underpin Cambodia's long-term aspirations. Please see the detailed discussion on Cambodia's skills gaps and human capital deficiency in the selected issue section.

Risks and challenges

Heightened uncertainty has intensified the risks. In February, the EU started the process that could lead to the temporary suspension of Cambodia's preferential access under the Everything But Arms (EBA) scheme. The EU market currently accounts for more than a third of Cambodia's key exports, mainly consisting of garments, footwear, and bicycles. Therefore, losing EBA preferences, which currently provide Cambodia duty-free and quota-free access to the EU, would likely result in slower exports and growth.

A slowdown in China and an overextended financial sector pose downside risks to Cambodia's growth prospects. Given Cambodia's heavy reliance on capital inflows and tourists from China, a sharp slowdown in the Chinese economy could dampen growth prospects. The prolonged expansion of domestic credit growth, which has been largely behind the construction and real estate boom, has overextended the financial sector. As construction and real estate typically are more prone to boom and bust cycles, rising domestic credit going to the construction sector increases the financial sector's vulnerability.

It is urgent that measures are taken to mitigate the potential negative impacts of EBA suspension. Cambodia ranks at a low 185 out of 190 economies globally on ease of starting a business, according to Doing Business 2019.[1] Trade costs weigh heavily on Cambodia's export structure and exporting firms' performance. The contribution of transport and logistics to the total exported value added reached 14 percent, double the corresponding number in Thailand and 3.5 times that of Malaysia or Vietnam. The supply chain links between foreign

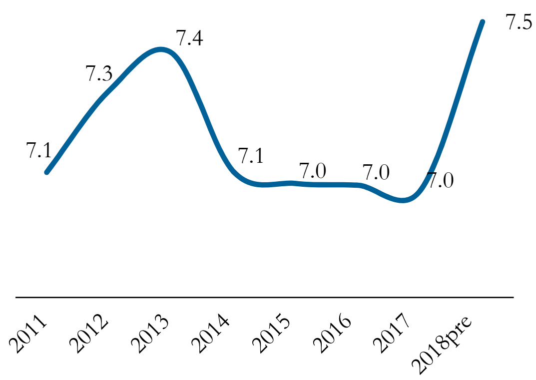
[1] See Doing Business 2019, the World Bank.

and domestic firms are weak. Addressing these challenges will require embarking on structural reforms, especially those that can help improve the investment climate, and reducing costs of doing business, including the introduction of competitive energy prices and lower logistic costs. See box 2 for cost-cutting and trade facilitation measures introduced in March 2019 by the authorities.

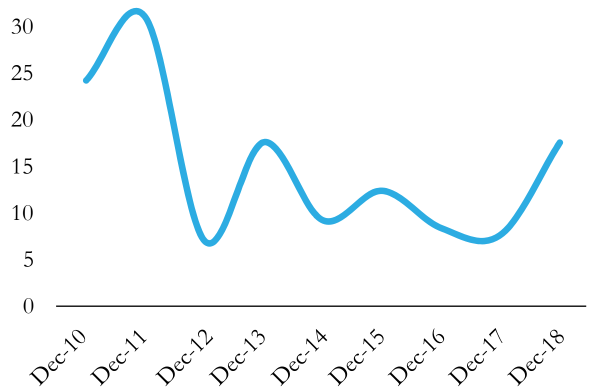
Authorities could consider introducing additional macroprudential measures such as limiting banks' exposure to construction and real estate. Given prolonged expansion of domestic credit growth, which has been largely behind the construction and real estate boom, strengthening oversight capacity and crisis preparedness in the financial sector is an important first step. The recent surge in FDI inflows has sustained a prolonged construction boom, while masking the financial sector's vulnerability after years of rapid lending growth. However, such large foreign capital inflows may not be sustained, especially in a context of increasing global uncertainty and slowdown in China. The drying up of foreign investment in construction sector could result in a collapse in prices and expose financial sector vulnerabilities.

CAMBODIA'S RECENT DEVELOPMENTS AT A GLANCE

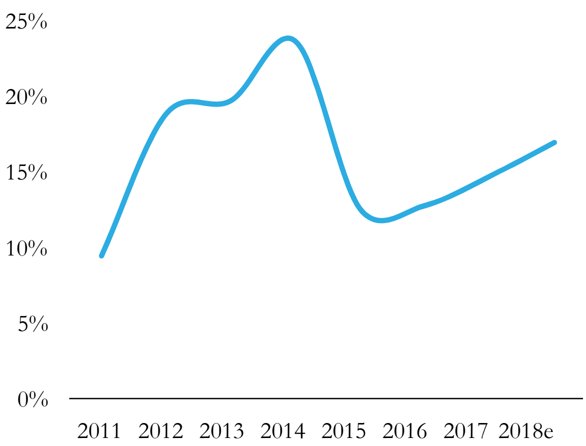
Real growth quickly accelerated…
Real growth (percent)



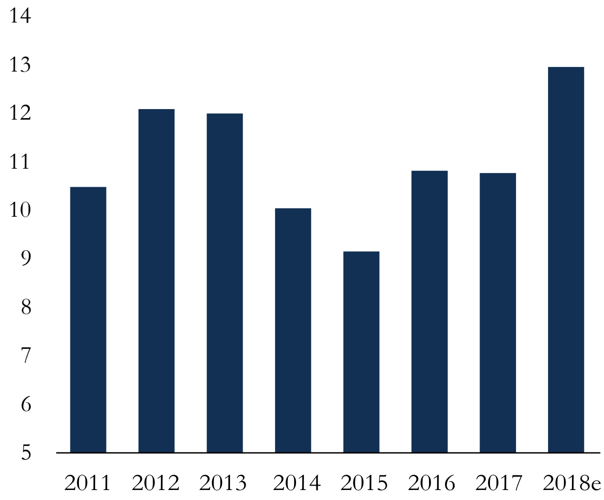
… as key exports burgeoned and
Garment exports (y/y, percent change)



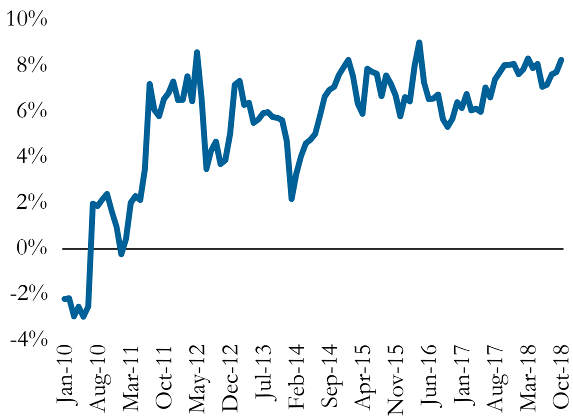
… construction sector expanded…
(change at current prices)



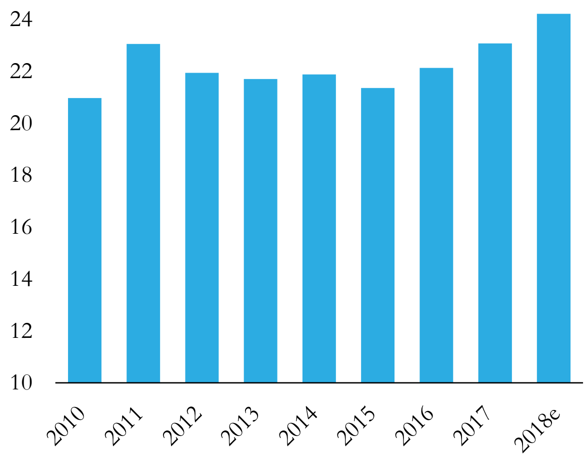
…underpinned by a record high FDI
(percent of GDP)



Lending to construction sector rose
(contribution to credit growth of lending to construction and real estate sector, percentage points)



Fiscal expansion fueled domestic demand
General government expenditures (percent of GDP)



Sources: Cambodian authorities and World Bank staff estimates and projections.
Note: e = estimates; pre = preliminary.

SECTION 1

Recent Economic Developments and Outlook

Recent Economic Developments and Outlook

Recent developments

The economy performed better than expected last year

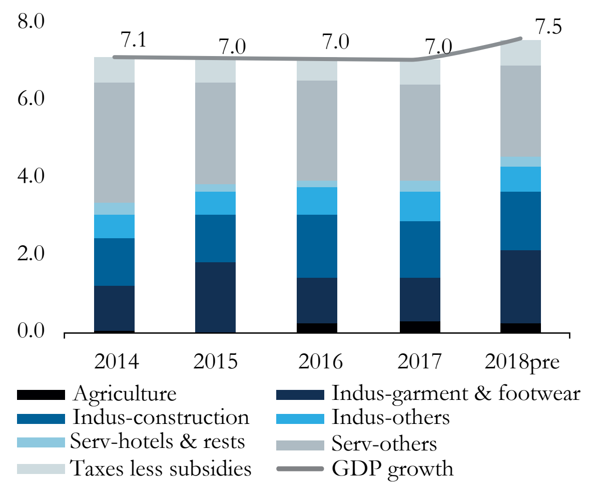
Preliminary estimates show real growth achieved a four-year high of 7.5 percent in 2018, compared to 7.0 percent in 2017 (figure 1). Growth was driven by both exports and robust domestic demand. Cambodia was the fastest growing country in East Asia, and among the few countries that performed better than previous forecasts in 2018 (along with Mongolia and Vietnam).

Growth in the developing East Asia and Pacific region remained resilient despite deteriorating global conditions. The resilience in the region was driven by robust domestic demand, which was supported by benign inflationary pressure, strong labor market outcomes and, in some cases, fiscal stimulus. Poverty continued to fall on the back of resilient growth outcomes, which have been largely driven by exports, albeit at a slower pace than in the past. However, global economic headwinds from unresolved trade tensions and moderating global demand remain.

Key exports burgeoned

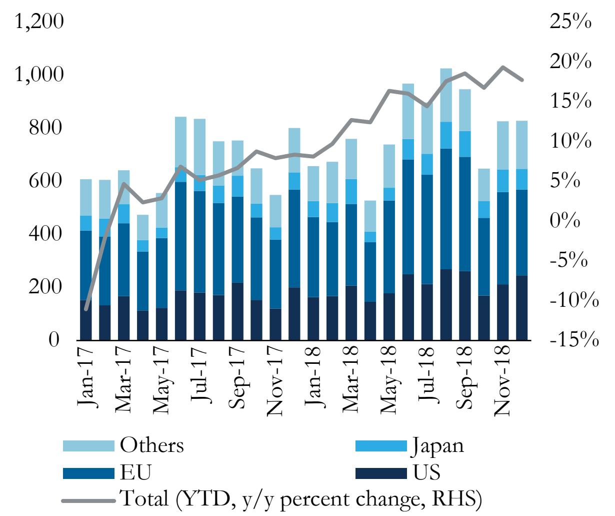
Exports, the mainstay of Cambodia's economy, burgeoned as external demand strengthened. Garment and footwear exports accelerated, growing at 17.7 percent in 2018, up from 8.4 percent in 2017 (figure 2). Cambodia benefited from robust growth in high-income economies, especially in the U.S. U.S. growth picked up in 2018 to 2.9 percent, bolstered by fiscal stimulus and deregulation measures.[2] U.S. retail trade also expanded last year.[3] The retail trade (excluding autos) accelerated to 5.3 percent in 2018, from 4.5 percent in 2017.[4] The expansion of trade preferences to cover travel goods, effective since June 2016, helped bolster Cambodia's exports to the U.S. market. Cambodia's exports to the EU market slightly strengthened, although Euro Area growth slowed in 2018 to 1.8 percent, amid weakening external demand. Thanks to strong retail sales in the United States, Cambodia's exports expanded at 29 percent in 2018, up from 4.6 percent in 2017 (figure 3). Cambodia's exports destined for the EU market also rose, growing at 12.9 percent in 2018, compared to 9.3 percent in 2017. The share of the US market for Cambodia's garments and footwear

FIGURE 1: Contribution to real growth (percentage point)



Source: Cambodian authorities.
Note: pre=preliminary.

FIGURE 2: Garment and footwear exports by main destination (US$ million)



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

2 April 2019 East Asia and Pacific Economic Update, the World Bank

3 Monetary Policy Outlook for 2019, Speech by Vice Chairman Richard H. Clarida, Board of Governors of the Federal Reserve System https://www.federalreserve.gov/newsevents/speech/clarida20190110a.htm

4 Retail Trade, ex Auto: U.S. Total, Not Seasonally Adjusted Sales, US Census Bureau.

exports rose to 29.7 percent in 2018, up from 25.0 percent in 2017, while the share of the EU market declined to 39.1 percent, down from 46.0 percent during the same period.

Rapid growth of investment in travel goods helped boost export

Rapid increase of projects investing in the production of travel goods has been facilitated by duty-free access to the US market. On June 30, 2016, the Office of the U.S. Trade Representative (USTR) announced a major expansion of trade preferences. Under the new changes to the U.S. Generalized System of Preferences (GSP), Cambodia (and other least developed beneficiary developing countries) producing travel goods such as luggage, backpacks, handbags, and wallets will be able to export those products to the United States duty free.[5] The expanded GSP by the US has boosted (approved) FDI project investments going to the travel goods sector, amounting to US$120 million in the first two months of 2019, up from US$50 million in 2018.

Upbeat investor confidence underpinned construction boom

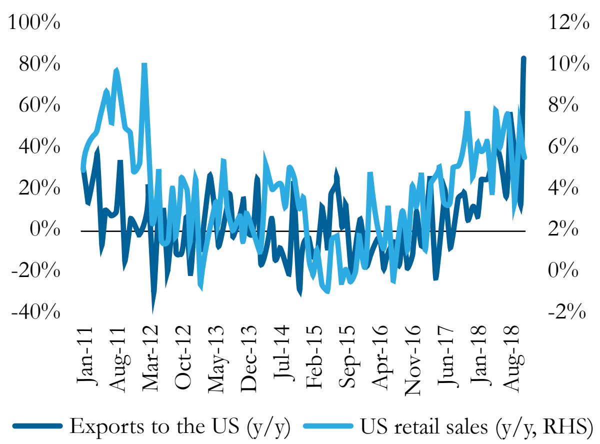
Private investment, largely driven by FDI inflows, climbed to new highs. In 2018, the value of approved investment projects increased to US$5.8 billion, of which two thirds was FDI. FDI inflows have grown by 24.8 percent, reaching a record high of more than US$3.0 billion, or 13.4 percent of GDP, in 2018 (figure 4).[6] In the real sector, private investment continued in the construction, real estate, and tourism sectors, which together accounted for about 60 percent of total (approved) investment in 2018. Supported by the construction boom, key manufacturing activities such as building material, furniture, metal, and plastic products have also quickly flourished.

The non-garment manufacturing sector captures about 20 percent of total investment. Three quarters of the (approved) FDI originated from China.

Domestic demand was strong

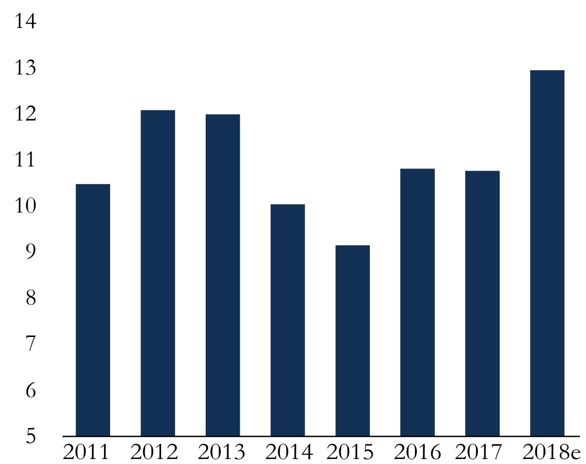
Rapidly rising domestic demand was met by a surge in imports. Strong consumption demand fueled household purchases of durable goods. The imports of motor vehicles increased by 52.9 percent in 2018 (figure 5) and was accompanied by soaring fuel imports. Gasoline and diesel imports rose by 30 percent each. Reflecting a rapid expansion of construction activity, the imports of steel, cooling equipment, and other construction materials, skyrocketed, reaching 47.6 percent, 54.3 percent and

FIGURE 3: U.S. retail sales and Cambodia's exports to the United States



Source: Cambodian authorities.
Note: The EU market in 2014 included UK. RHS = Right-hand scale

FIGURE 4: Foreign direct investment
(percent of GDP)



Source: Cambodian authorities and bank's staff estimate.

[5] For more detail, see https://kh.usembassy.gov/duty-free-access-travel-goods-made-cambodia/
[6] Annual Report, 2018, the National Bank of Cambodia

73.0 percent respectively (figure 6). As discussed above, the construction boom has concentrated in the capital city of Phnom Penh and more recently in the seaside town of Sihanoukville. The economy has been increasingly dependent on the construction sector, consequently risks associated with construction boom have been rising.

The current account deficit was fully financed by FDI inflows

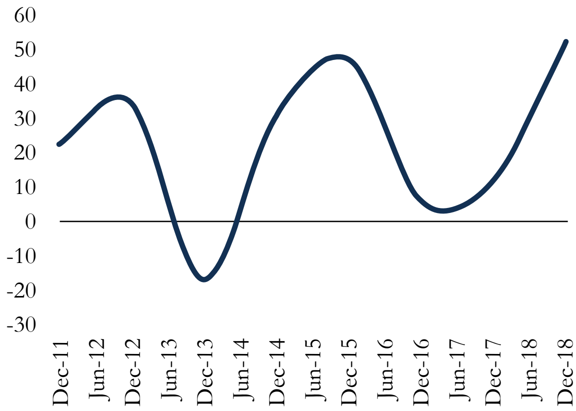
The current account deficit is estimated to have widened to 10.4 percent of GDP in 2018, compared to 9.7 percent of GDP in 2017. Healthy exports continued to partly offset the surge in import demand. In 2018, merchandize exports were estimated to have reached US$11.2 billion, while merchandize imports rose to US$13.8 billion. Rising net services was largely boosted by travel service receipts with the expansion of the tourism sector. Current transfers were supported by workers' remittances (net), estimated to reach about US$1.0 billion. As a result, the widened current account deficit remained fully financed by FDI inflows. The better-than-expected export performance and record high FDI inflows also allowed the central bank to accumulate more international reserves, which reached US$10.1 billion by end-2018, covering about six months of prospective imports.

FDI inflows helped sustain vibrant construction activity

In 2018, approved residential and commercial development projects (excluding mega projects of US$1 billion or more) **amounted to US$4.6 billion,** or a 14 percent increase. Sihanoukville, the largest seaside town in Cambodia, has become a newly emerging high-rise construction hotspot with bustling construction activities, which are largely financed by Chinese investors.

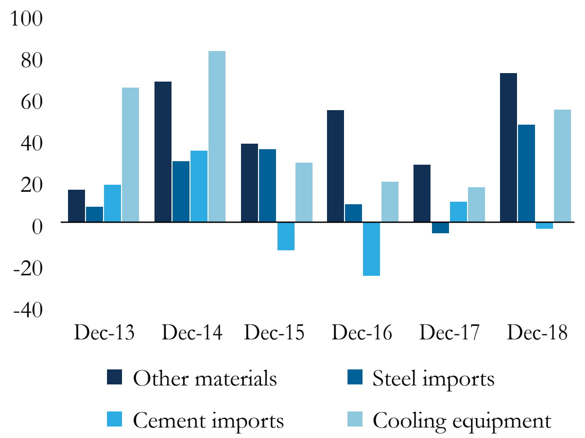
The most rapid increase in high-rise building numbers in the provincial capital of Sihanoukville was recorded in 2018 when 238 buildings were approved, up from 188 buildings in 2017. Sihanoukville, together with Phnom Penh, accounts for 1,217 buildings of five stories and above.[7] The rising popularity of coastal zones, especially Sihanoukville province, with their share of tourists rising to 10 percent of total destination arrivals in 2018 (compared to only 5.5 percent in 2010), boosted by rehabilitation and expansion of a nearby international airport helps drive the construction boom there. In 2018, total approved investment projects for Sihanoukville alone reached US$1.03 billion, of which 43 percent is for the manufacturing sector. In addition, to improve connectivity between Sihanoukville and Phnom Penh, an expressway costing US$1.87 billion under BOT is being constructed.[8]

FIGURE 5: Motor vehicle imports accelerated
(y/y, percent change)



Source: Cambodian authorities.

FIGURE 6: Construction materials and steel imports
(y/y, percent change)



Source: Cambodian authorities.

7 2018 Annual Progress Report and 2019 Performance Objectives dated February 7, 2019, Ministry of Land, Urbanization and Construction.
8 For Phnom Penh - Sihanoukville expressway, see http://www.mpwt.gov.kh/kh/public-works/expressways

The number of Chinese visitors has already reached more than 2 million, a target set for 2020

Growth of international tourist arrivals was sustained at 10.7 percent year-on-year in 2018, slightly lower than 11.8 percent in 2017, thanks mainly to the rising number of Chinese visitors (figure 7). Arrivals from China are number one; its 2.03 million visitors account for 32.6 percent of total visitor arrivals. This means the authorities achieved their target two years earlier. Under its China Ready strategy, which was issued in 2016, the authorities targeted receiving 2 million Chinese visitors by 2020. Arrivals from Vietnam, Lao PDR, and Thailand are next, capturing 12.9 percent, 6.9 percent, and 6.2 percent of total arrivals, respectively. Reflecting increased Chinese investors in Cambodia, a large proportion of Chinese visitors reportedly visited the country for business purposes.

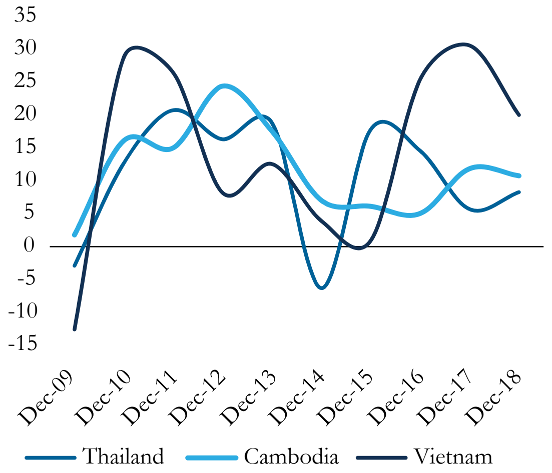
Almost a quarter of arrivals from China came for business purposes

In 2018, almost a quarter of arrivals from China reported coming to Cambodia for business purposes (figure 8). Thanks to the rapid increase in air travel, the three main international gateways —Phnom Penh, Siem Reap and Sihanoukville airports—served more than 10 million passengers or a 25 percent increase in 2018 (figure 8). In 2018, the three airports received more than 4 million foreign travelers, or 65.8 percent of total international arrivals, and served 89 destinations of which 57 are within China. Of the 65.8 percent, Phnom Penh (35 airlines with 34 international destinations of which 21 are in China) and Siem Reap (32 airlines with 46 international destinations of which 29 are in China) international airports received 31 percent of total international arrivals each. Sihanoukville airport (10 airlines with 9 international destinations of which 7 are in China) obtained the remaining 3.8 percent. The three platforms combined serve about 700 regular flights per week.[9]

Only 5 percent of tourists visiting Vietnam, and 13.5 percent visiting Thailand, extended their visits to Cambodia

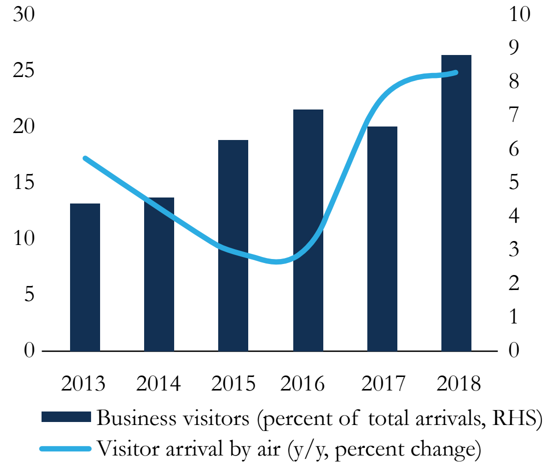
However, substantial untapped potential remains, given that only about 5 percent of tourists visiting Vietnam and 13.5 percent visiting Thailand, extended their visits to Cambodia.[10] In 2018, while Cambodia received 6.2 million foreign tourists (a 10.7 percent year-on-year increase), Thailand received 38.3 million (an 8.2 percent year-on-year increase) and Vietnam 15.5 million (a 20 percent year-on-year increase).

FIGURE 7: Tourist arrivals to Cambodia, Thailand, and Vietnam (y/y, percent change)



Source: Cambodian authorities.

FIGURE 8: Air and business visitor arrivals to Cambodia (y/y, percent change)



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

[9] See https://corp.cambodia-airports.aero/

[10] 34.7 percent and 31.2 percent of foreign tourists come to Cambodia via Thailand and Vietnam, respectively, according to the 20017 Annual Report of the Ministry of Tourism.

Making inroads into this growing market located at Cambodia's doorstep may be difficult to tap and is likely to require more investment and improved coordination. Several initiatives have been introduced to improve and upgrade tourism services such as "clean city-clean resorts-good services", street food standards, public places with free Wi-Fi, and green belt and smart city initiatives. However, investing more toward providing sufficient and well-functioning public tourism infrastructure, and improving cooperation between commercial and public entities are needed.

Development and provision of tourism infrastructure is seen as a prerequisite to become a popular tourist destination. An attractive tourist destination not only relies on its natural resources, but also on its available infrastructure, facilities, and services.[11] For instance, Vietnam is spending as much as US$24 billion during 2016-20, of which the state budget accounts for 8 to 10 percent, focusing on building and upgrading tourism and transport infrastructure in provinces with key tourist landmarks.[12] Tourist arrivals to Vietnam surged during the past three years, rising 56 percent, to 15.5 million in 2018, up from 9.9 million in 2016. Until 2015, Vietnam attracted about 6 million tourists a year.

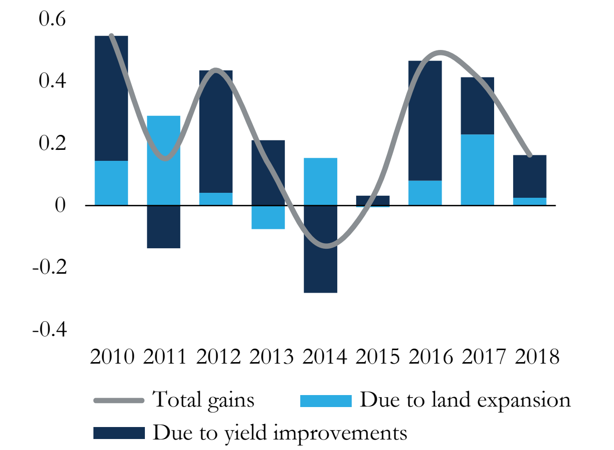
Weather conditions were less favorable for agriculture production

Weather conditions were less favorable last year. Production was affected by midseason drought and floods in some parts of the country.[13] Nevertheless, agricultural gross value added (at current prices) continued to increase at 4.4 percent in 2018, reaching 21,913 billion riels (or 22.0 percent of GDP). Rice production, which accounts for about half of agricultural GDP, grew by 3.5 percent, reaching 10.8 million metric tons, lower than the 5.7 percent growth rate in 2017 (figure 9), of which 2.0 percentage points were contributed by dry season rice and 1.5 percentage point by wet season rice production.

In 2018, the increase in yields accounted for 57 percent of rice production increase, while the rest was due to expansion of harvested land. In 2017, 93.2 percent of the rice production increase was contributed by land expansion, with better weather conditions. Thus, in 2018, the improvements in yields reflect better or more efficient use of agricultural inputs. Yields of wet and dry season rice production increased by 1.7 percent and 1.0 percent, respectively.

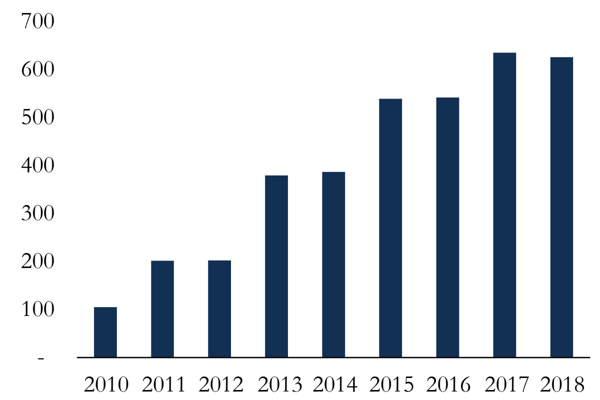
Total rice cultivated area rose to 3.3 million hectares or 3.0 percent largely due to the increase in cultivated area of rainy season rice. Rainy season rice's cultivated areas rose to 2.74 million hectares in 2018 (or a 3.4 percent increase), up from 2.65 million hectares in 2017. Dry season

FIGURE 9: Contribution from annual wet season rice production increased modestly
(in million metric tons)



Source: Cambodian authorities.

FIGURE 10: Milled rice exports were flat
(in thousand tons)



Source: Cambodian authorities.

11 Abdullah, S., Abdul Razak A., Jaafar M., 2014. Public Tourism Infrastructure: Challenges in the Development and Maintenance Activities.
12 Decision No. 201/QD-TTg of January 22, 2013, approving the master plan on development of Vietnam's tourism through 2020, with a vision toward 2030.
13 Annual report, 2018 achievements and 2019 targets, Ministry of Agriculture, Forestry and Fisheries, March 2018.

rice's cultivated area, however, remained at 0.59 million hectares, likely reflecting challenges in the expanding irrigation system for rice production during dry seasons.

Official statistics indicate that Cambodia's paddy rice surplus reached 5.8 million metric tons, or 3.7 million metric tons milled rice equivalent. Cambodia, however, exports its rice surplus mostly in the form of paddy rice, while milled rice exports accounted for 0.6 million tons (or 16.7 percent of total surplus) (figure 10).

Cambodia's fragrant rice exports accounted for about 79 percent of total milled rice exports in 2018. White long grain rice accounted for 17 percent and long grain parboiled rice 4 percent.[14] The fragrant rice once again won the World's Best Rice Award in 2018 in the World's Best Rice Contest organized annually by The Rice Trader.[15] Since 2009, Cambodian Jasmine rice has been competing globally, especially against Thai Jasmin rice, for the annual title of World's Best Rice. So far, Cambodia has won four awards, in 2012, 2013, 2014, and 2018, while Thai rice received five awards. U.S. rice and Myanmar rice received one award each.

The EU imposed safeguard measures on rice from Cambodia and Myanmar

The European Commission (EC) imposed safeguard measures on Cambodia's rice. According to the EC, an investigation confirmed a significant increase in imports of Indica rice from Cambodia and Myanmar into the EU that was causing economic damage to European producers. In response, the EC decided to re-introduce import duties, which will be steadily reduced over a period of three years. Effective January 18, 2019, the EU reinstated the normal customs duties of €175 per ton in year one, progressively reducing it to €150 per ton in year two and €125 per ton in year three.[16] As a result, in February 2019, Cambodia's milled rice exports to the EU reached only 10,080 tons or a 57.8 percent month-on-month decline. Cambodia exported 270,000 tons (or 43 percent of total milled rice exports) to the EU market in 2018.

In contrast, China has increased its import quota for Cambodia's rice to 400,000 tons in 2019, up from 300,0000 in 2018. In 2018, actual milled rice exports to China (which includes the mainland, Hong Kong SAR, China; and Macau SAR, China), however, reached 170,154 tons, or 27 percent of total milled rice exports. This is reportedly due to the slow process of granting permission (by Chinese customs) to export to China. The Chinese market, like the EU market, bought largely fragrant rice from Cambodia.

Overall, the decline of Cambodia's rice exports to the EU was more than offset by the increase in the country's rice exports to the Chinese market. In February 2019, when the safeguard measures were fully applied, rice exports to the EU declined by 57.8 percent month-on-month. In contrast, Cambodia's rice exports to the Chinese market grew by 45.6 percent. As a result, Cambodia's milled rice exports managed to increase by 2 percent during the first two months of 2019. Official data show that Cambodia received US$413.5 million from its milled rice exports in 2018.[17]

During the last decade or so, there has been some progress on quality differentiation and branding. As Cambodia is located within the neighborhood of commodity giants, Malaysia, Thailand, and Vietnam, the country has been strategically working toward quality differentiation (rice, pepper), sustainability premiums ("green"), and improved food safety ("clean"), while advancing agroprocessing (cashews, starch). In this regard, authorities have introduced the "Malys Angkor" rice brand as well as Geographical Indication (GI) products such as Kampot pepper and Mondulkiri Coffee. Cassava processing plants are being built. However, diversification toward production of animal products and fisheries remains less successful despite rising demand and prices. Rising income and urbanization with a rapid expansion of the tourism sector is changing household food consumption, particularly regarding its consumption of animal products. This is also true for exports as the Asian middle class, especially in China, expands. In this

14 Report on Cambodian Rice Export Status in 2018, Secretariat for One Window Service for Rice Export.
15 https://thericetrader.com/conferences/2018-WRC-Hanoi/worlds-best-rice/
16 Press release, European Commission, January 19, 2019. See http://europa.eu/rapid/press-release_IP-19-427_en.htm
17 In 2018, the export value was associated with 567,500 tons of milled rice exports (customs data), but Cambodia Rice Federation recorded 626,200 tons of milled rice exports.

regard, a national strategy to promote agricultural diversification could play a crucial role.

Poverty reduction continued, but the bottom 40 percent are doing less well than before

While poverty continues to decline, the drivers of poverty reduction are changing. Poverty estimates for 2015-17 are currently under review by the authorities, but preliminary indications are that poverty continues to decline. Though impressive gains continued to be made, the reduction in poverty during 2013-17 was less than during 2009-13, mainly because economic growth benefited the non-poor more, while urban poverty stagnated compared to the earlier period. Consumption per capita for the bottom 40 percent grew at 13 percent during 2013-17, while it expanded at 22 percent for the top 60 percent. The non-agricultural wage played a more significant role in reducing poverty during 2013-17, compared to 2009-13 period when household agriculture was the primary driver of poverty reduction.

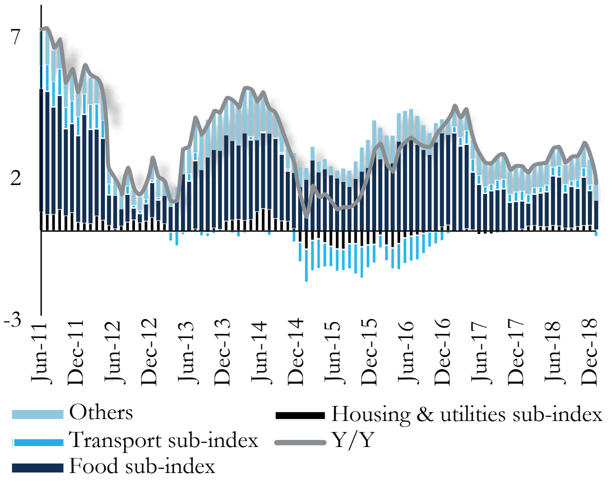
Declining monetary poverty is reflected in improvements of household living conditions. For example, the ownership of electric fans increased by 37 percentage points during 2013-17, access to electricity rose by 27 percentage points and access to improved sanitation rose by 24 percentage points. Access to improved sanitation and electricity increased faster than during2009-13. However, there are still many households that are only just above the poverty line and have limited ability to absorb shocks, even small ones. Any negative shock reducing consumption per capita by Cambodian riel 2,000 (US$0.50) would double the poverty rate.

Inflation was subdued as easing of petroleum prices more than offset food price increases

Inflation has been at four-year low. In 2018, inflation moderated as the easing of petroleum prices since the fourth quarter of 2018 more than offset the increase in food prices. Consumer Price Index eased to 1.6 percent in 2018, down from 2.2 percent in December 2017 (figure 11), thanks largely to the moderation of the transport component (subindex) as retail prices of gasoline and diesel declined, and helped by the easing of international oil prices toward the end of 2018. Given the high level of dollarization in Cambodia, the appreciation of US dollar in the second-half of 2018 has also been a contributing factor to keeping inflation low.

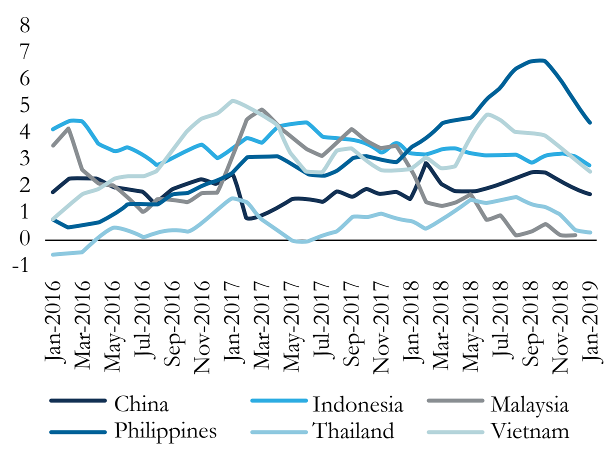
In July 2018, to stabilize the retail prices of petroleum products against the gradual rise in international oil prices, the authorities introduced a reduction in a special tax (one of four taxes: custom duties, value-added tax, excise and special tax) levied on imported petroleum products. The special tax on gasoline was cut to 15 percent (from 35 percent), on diesel to 5.5 percent

FIGURE 11: **Contributions to 12-month inflation**
(percent)



Source: Cambodian authorities.

FIGURE 12: **Inflationary pressures have eased markedly in major economies…**
Headline inflation (end of period year-over-year, percent)



Source: April 2019 East Asia and Pacific Economic Update, the World Bank.

(from 15 percent), and on kerosene to 5 percent (from 15 percent).[18] The reported revenue forgone is US$30 million a year. While Cambodia imports all petroleum products and has a full inflation "pass-through" from international oil prices to domestic retail prices, the authorities regularly issue bi-monthly retail gasoline and diesel prices for compliance by formal petroleum product retailers.

In the East Asia and Pacific region, inflationary pressures were also subdued in the large economies, many of which are Cambodia's trading partners. Most of the region's large economies recorded moderating inflation outcomes (figure 12).[19] As China, Thailand and Vietnam are Cambodia's main trading partners, so subdued inflation in those countries helped contain inflationary pressure in Cambodia. Many major regional economies tightened monetary policy in response to exchange rate depreciation and U.S. monetary policy normalization. Given that inflation in most of these economies had been well contained, the tighter policy stances kept prices further subdued.

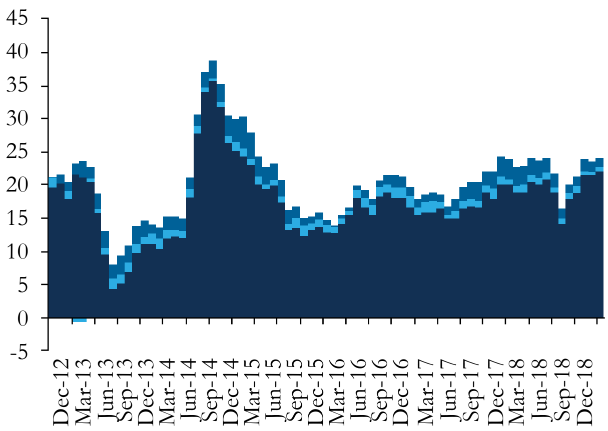
FDI inflows underpinned foreign currency deposits

Although broad money growth remained at 24.0 percent in 2018, foreign currency deposits (FCD) surged at the expense of riel deposits and riel in circulation. FCD grew at 26.5 percent in 2018, up from 23.6 percent in 2017. It contributed 22.1 percentage points of 24.0 percent broad money growth (figure 13). Reflecting increased dollarization, as a share of broad money in 2018, FCD accounted for 84.8 percent, up from 83.1 percent in 2017.

Accumulation of gross international reserves (GIR) decelerated with slower injection of local currency in the market by the central bank. The central bank purchased US$875 million in 2018, a 9 percent decline from 2017. Consequently, GIR accumulation decelerated to 16.0 percent in 2018, down from 30 percent in 2017. Nevertheless, GIR reached US$10.1 billion or six months of prospective imports coverage in 2018. Riel in circulation growth decelerated to 11.5 percent in 2018, down from 28.2 percent in 2017 as the local currency was under increased pressures because of rising demand for imports (figure 14).

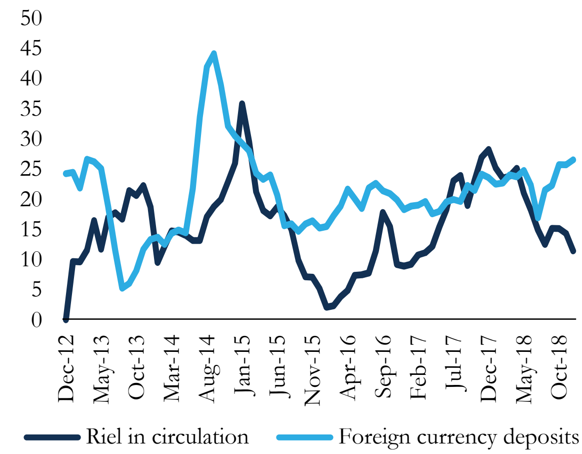
However, the riel versus the U.S. dollar exchange rate, which depreciated in the third quarter of 2018, stabilized toward the end of 2018. The exchange rate was CR 4,018 per U.S. dollar in December 2018, compared to CR 4,037 in 2017. The riel also slightly depreciated against the Thai baht, but appreciated against the Vietnamese dong and Chinese yuan. Against the currencies of its main export markets (besides the United States), the riel appreciated against the euro, the Canadian dollar, and the British pound.

FIGURE 13: Contribution to broad money growth
(percentage points)



Source: Cambodian authorities.

FIGURE 14: Riel in circulation decelerated
(y/y, percent change)



Source: Cambodian authorities.

18 http://cnv.org.kh/petroleum-price-decrease-0-03-first-july/
19 April 2019 East Asia and Pacific Economic Update, April 2019, the World Bank Group, Washington, DC.

Promoting the use of local currency has been underpinned by the success of the Liquidity-Providing Collateralized Operations (LPCO) introduced in October 2016 to establish a benchmark rate of local currency borrowing. The LPCO facility, which requires negotiable certificates of deposit (NCDs) as collateral to obtain the local currency (together with the requirement to increase riel-denominated loans to at least 10 percent of the total loan portfolio by the end of 2019) has allowed the central bank to inject local currency while maintaining a relatively stable riel-U.S. dollar exchange rate.[20] The introduction has led to a gradual reduction of the riel lending rate.

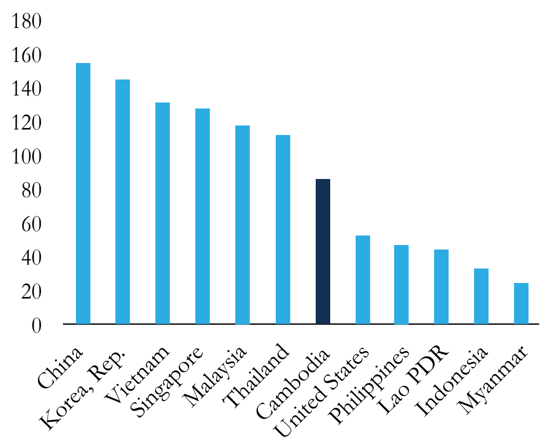
Short-term interest rates continued to gradually decline, albeit from an elevated level. The weighted average of the U.S. dollar lending rate of banks dropped to 11.08 percent per year in September 2018, down from 11.7 percent per year at the end of 2017. However, the average lending rates of microfinance institutions are substantially higher than of banks. Deposit interest rates remained largely unchanged. The weighted average of the U.S. dollar deposit interest rate (12-month maturity) stayed at 4.42 percent per year in September 2018.

Driven by the booming economic activity, lending to the private sector once again accelerated, after moderating in late 2017 and early of 2018. Credit growth reached 24.4 percent in 2018, up from 19.6 percent in 2017. Cambodia has experienced a rapid acceleration of bank lending growth, especially during the post-global financial crisis period. This period is associated with the construction and real estate boom. Cross-country comparison shows that Cambodia's bank credit as a percent of GDP overtook that of Indonesia and the Philippines, despite the country's nascent banking sector (figure 15).

There was a recent shift of domestic credit to finance the services sector

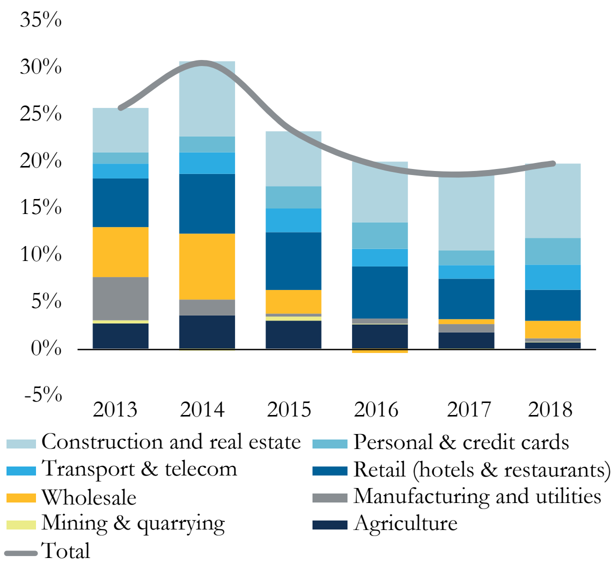
Recently, it appears that domestic credit going to the services sector has been rising. This includes wholesale, transports and telecommunications, and personal consumption purposes (figure 16). The trend underscores rising consumption and construction demands, increasingly catered to by relatively large wholesale businesses witnessed in the surge in imports of durable goods such as motor vehicles and construction materials. In contrast, domestic credit going to the agriculture sector, manufacturing activities, or retail services (including the food sector) shrank.

FIGURE 15: Cambodia's banking sector credit to private sector is relatively high
(domestic credit, percent of GDP, 2017)



Source: World Development Indicators, World Bank.

FIGURE 16: Contribution to domestic credit growth
(percentage points)



Source: Cambodian authorities.

[20] See Cambodia Economic Update, April 2018, for a detailed discussion on the introduction of the LPCO under the monetary sector.

Total outstanding loans financed by the banking and microfinance sectors reached more than 100 percent of GDP, or 104.2 trillion riels in 2018. Of which 80 percent was provided by the banking sector and the remaining 20 percent by the microfinance sector. This, however, excludes credit provided by the "shadow banking" system introduced by real estate developers, rental and leasing firms, pawn shops, and informal lenders. Therefore, the magnitude of total credit provided to the economy is much greater.

Reported nonperforming loan (NPL) ratios for the banking sector marginally deteriorated. Reported NPL ratios for the banking sector rose to 2.8 percent in 2018, compared with 2.3 percent at the end of 2017.[21] NPL in the agriculture sector was the highest at 8 percent, followed by construction and manufacturing at about 4 percent each. Reported NPLs for the microfinance sector improved, declining to 1.0 percent in 2018, compared with 2.0 percent in 2017. Still, the reported NPL ratios need to be carefully interpreted as there are inconsistencies in loan classifications and a continuous rolling over and refinancing of loans.

The recent surge in FDI inflows sustained the construction boom

The recent surge in FDI inflows not only sustained the construction boom further but also masked the financial sector's vulnerability. The contribution of credit provided to the construction, real estate and mortgage sectors accounted for 8 percentage points, or 40 percent of total domestic credit growth. Construction and real estate typically are more prone to boom and bust cycles and a slowdown in FDI inflows may then unmask the banking sector's exposure and vulnerabilities.

Nevertheless, continued efforts have been made to maintain the stability of the financial sector, while promoting the use of local currency by trying to make inroads into dollarization. Macroprudential measures have been introduced including liquidity coverage ratio introduced in 2015 and steadily increasing until 2020, coupled with strengthened monitoring of currency and maturity mismatches.[22] New minimum capital requirements were fully in place by the first quarter of 2018. The central bank conducted stress test which showed that banking and financial institutions are resilient, except for a few institutions that need to be carefully monitored.

Revenue is estimated to have reached a new high in 2018

Domestic revenue (including grants) is estimated to have reached a record high of 22.3 percent of GDP in 2018, thanks improved tax administration (figure 17). Taxes on goods and services (indirect taxes) continued to be the main source of domestic revenue, contributing about half of the total collection last year, of which the VAT and excise taxes (on imports) account for 70 percent. Meanwhile, direct taxes improved significantly during the past several years, reaching 4.3 percent of GDP in 2018, up from 4.2 percent in 2017, partly thanks to better revenue administration. In particular, among other measures, e-tax services covering tax returns, tax registrations and e-VAT, as well as the use of the banking system for tax payments have been introduced.

In addition, driven by rising imports, trade tax collection is estimated to have accelerated last year, contributing 2.4 percent of GDP, or a 20 percent year-on-year increase (figure 18), up from 2.2 percent in 2017. This happened despite the commitment under the ASEAN Free Trade Agreement (AFTA).

A newly introduced initiative to improve non-tax revenue administration includes the introduction of a non-tax revenue management information system (NRMIS). This, together with inter-ministerial Prakases (agreements) and a standardized receipting system have helped improve non-tax revenue administration and sustain non-tax revenue collection. Non-tax (and others) revenue are estimated to contribute 3.7 percent of GDP in 2018, up from 3.5 percent in 2017.

21 2018 Annual Report, the National Bank of Cambodia.

22 Annual Reports for 2017 and 2018, the National Bank of Cambodia

The next revenue mobilization strategy aims at modernizing administration

The authorities are planning to introduce the next Revenue Mobilization Strategy (RMS) covering 2019-23, targeting modernization of tax and customs administration and policy. This largely consists of income and consumption tax reforms. The new RMS will identify new source of revenues for optimum revenue collection, promoting innovation and ensuring level playing fields and equity. Revised tax incentives are expected to support capital acquisition and innovation, while the introduction of a personal income tax helps ensure equity. Excises will be designed to address externalities and unfair competition. While the 2014-18 RMS targeted an increase of 0.5 percent of GDP in (current) revenue collection per year, initial discussions show that the new RMS aims at a lower target, an additional 0.3 percent of GDP revenue increase per year.

The public wage bill is estimated to have reached 8.6 percent of GDP in 2018

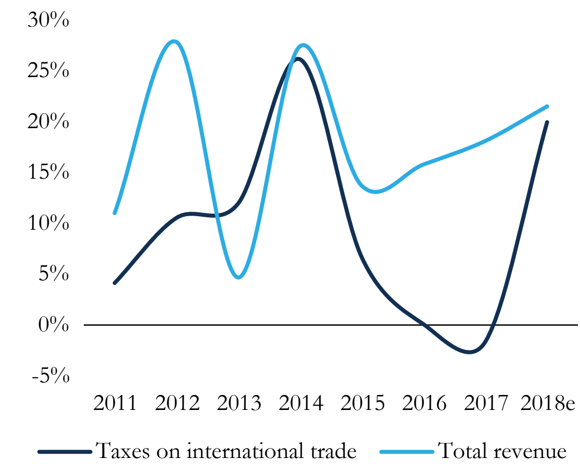
The public sector wage bill is estimated to have increased to 8.6 percent of GDP in 2018 (figures 19 and 20). This represents a tripling of civil servants' minimum wage, compared to the level in 2013, having reached the target of 1 million riels a month by 2018. Further expansion of the wage bill is not likely to be sustainable in the long run, and there is a need to accelerate the critical tasks on public administration reforms to improve public service delivery. As the country embarks on structural reforms, those critical tasks, which include improving the investment climate, reducing costs of doing business, introducing competitive energy prices and lowering logistic costs require enhanced public sector productivity and more efficient public service delivery. This is also crucial to underpin private sector development role in driving growth and reducing poverty.

While last year's fiscal expansion boosted public investment, exceptional revenue performance contained fiscal deficit. Fiscal deficit (including grants) marginally rose to 1.9 percent of GDP in 2018, compared to 1.6 percent in 2017. The deficit, however, remained to be fully financed external funds. Fiscal expansion in 2018 served as a stimulus, partly underpinning robust consumption growth. Public outlay is estimated to have increased to 24.2 percent of GDP in 2018, up from 23.1 percent in 2017 (figure 21). Despite the authorities' fiscal expansion last year, government's overall fiscal position remains strong. After years of fiscal consolidation, government has accumulated substantial deposits at the central bank. The deposits, which currently stand at 14.9 percent of GDP, can be used by

FIGURE 17: Main components
(percent of GDP)

Source: Cambodian authorities.
Note: e = estimates.

FIGURE 18: Trade tax collection accelerated last year (y/y, percent change)



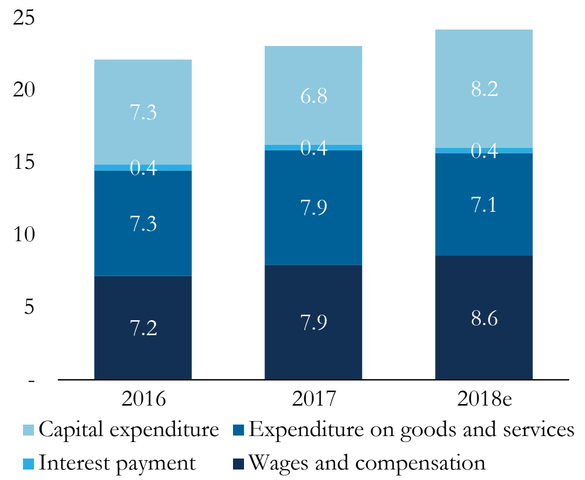
Source: Cambodian authorities.
Note: e = estimates.

the authorities as a fiscal buffer (figure 22), given that the monetary policy continues to be constrained by Cambodia's highly dollarized economy.[23]

The debt distress level remained low as per the 2018 World Bank/IMF Debt Sustainabilty Analysis

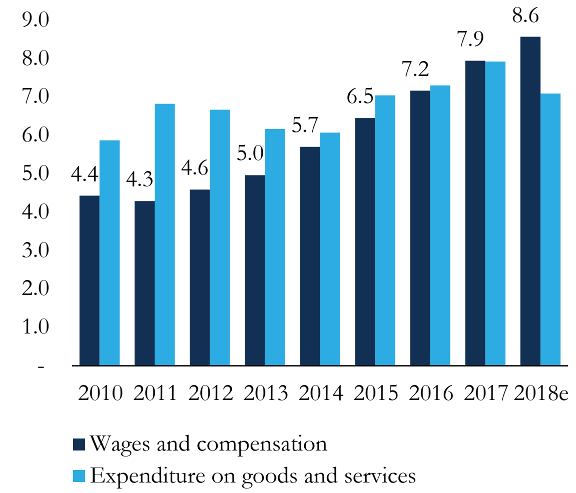
According to official data, by mid-2018, Cambodia had a total public debt outstanding of US$6.79 billion (or 28.6 percent of GDP) of which 0.04 percent is public domestic debt.[24] Overall, the borrowing terms remained highly concessional, with a (weighted average) interest rate of 1.37 percent, a maturity of 25.5 years, and a grace period 8 years. By major currencies, outstanding debt in US dollar, Special Drawing Rights (SDR) and Chinese Yuan are 43.2 percent, 28.1 percent and 16.1 percent, respectively.

FIGURE 19: General government expenditure: Main components (percent of GDP)



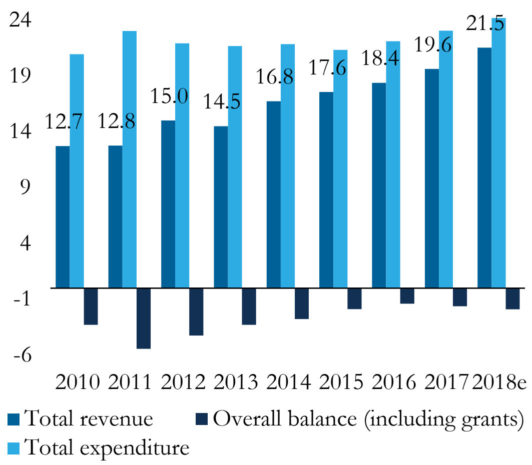
Source: Cambodian authorities.
Note: e = estimates.

FIGURE 20: Public sector wage bill (percent of GDP)



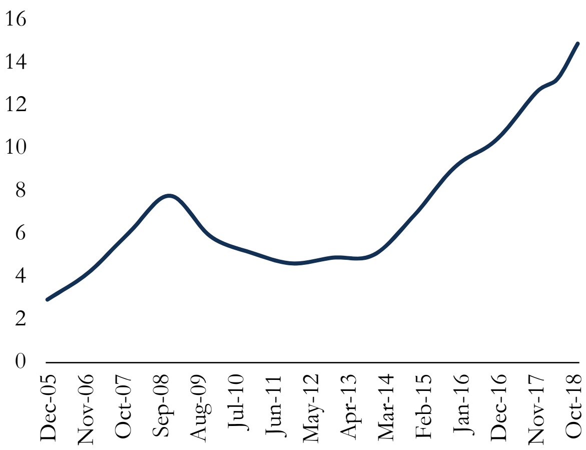
Source: Cambodian authorities.
Note: e = estimates.

FIGURE 21: The general government fiscal deficit remained almost unchanged in 2018 thanks to good revenue collection (percent of GDP)



Source: Cambodian authorities.
Note: e = estimates.

FIGURE 22: Government deposits at the banking system (percent of GDP)



Source: Cambodian authorities.

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[23] As of June 2018, 31 percent of government deposits at the National Bank of Cambodia were in U.S. dollars.

[24] "Cambodia Public Debt Statistical Bulletin," Volume 6, September 2018, Ministry of Economy and Finance.

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

Cambodia's external debt owed to China accounts for 48.4 percent of the total outstanding debt as of the first half of 2018. The second- and third-largest creditors are multilateral, namely the Asian Development Bank and the World Bank, covering for 19.3 percent and 8.0 percent of total outstanding debt, respectively. The fourth-and fifth-largest creditors are the Republic of Korea and Japan, accounting for 5.1 percent and 4.4 percent of total outstanding debt, respectively. Old debts (under negotiations) account for 9.1 percent. Cambodia's debt distress level remained low as per the 2018 World Bank/IMF Debt Sustainability Analysis, thanks mainly to the authorities' principle of borrowing only on concessional terms.

The 2019 budget reflects the authorities' fiscal consolidation stand

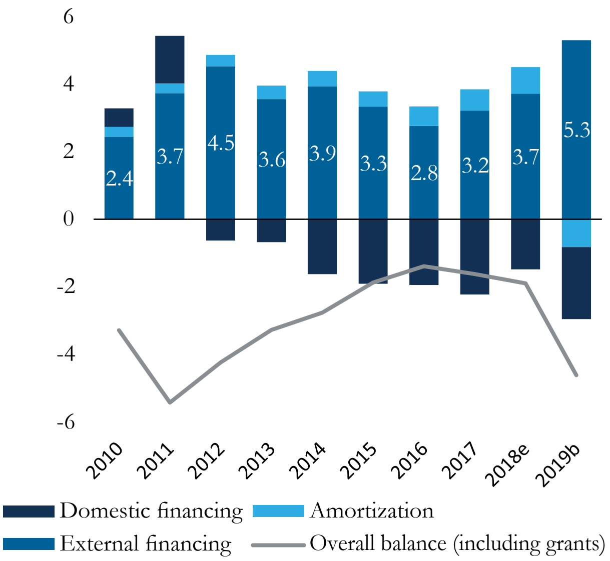
Indicating the authorities' fiscal consolidation policy, the deficit of the 2019 budget is targeted to narrow to 4.6 percent of GDP, compared to 4.8 percent in the 2018 budget. The deficit, however, is substantially higher than 2018's estimated deficit of 1.9 percent of GDP (figure 23). To reduce the 2019 budget deficit, this year the authorities target improved revenue collection, while containing public outlay.

The budgeted revenue (including grants) for the 2019 budget is conservative. Although domestic revenue is budgeted to increase to 19.3 percent of GDP in 2019, up from 18.6 percent of GDP in 2018 budget, it remains below the estimated revenue collection of 21.5 percent of GDP achieved for 2018 (figure 24). Public outlay is budgeted to be contained at 23.9 percent of GDP in 2019, only slightly lower than 24.0 percent of GDP in 2018 budget (and the estimated public outlay).

The budgeted wage bill for 2019 is 7.6 percent of GDP

For the 2019 budget, the wage bill (under chapter 64 of the budget classification) has been corrected (split). In 2019, the corrected wage bill accounts for 7.6 percent of GDP (figure 25) under chapter 64 (personnel), while 0.8 percent of GDP, representing general government expenditures for social security benefits (which had been part of the wage bill until 2018) is now reclassified under social security benefits (chapter 62) under the non-wage category. Chapter 62 finances social security benefits for both civil servants and veterans.

FIGURE 23: Fiscal balances and financing for the 2019 budget (percent of GDP)



Source: Cambodian authorities.
Note: e = estimates and b = budget.

FIGURE 24: Budgeted revenue for the 2019 budget (percent of GDP)

Source: Cambodian authorities.
Note: e = estimates and b = budget.

The 2019 budget boosts the subnational administration budget by 30 percent

The allocated budget for the subnational administration increases by 30 percent in the 2019 budget, up from a mere 5 percent increase in the 2018 budget, of which the municipal and provincial administration budget experiences the largest increase, at 39.3 percent. The city and district administration budget increases by 24 percent, while the Commune and Sangkat budget expands by 20 percent (table 1).

The 2019 budget sets the (external) borrowing ceiling at SDR1.4 billion, which is SDR114 million lower than the borrowing ceiling allowed under the 2018 budget. The 2018 budget's (external) borrowing ceiling was initially set at SDR1 billion but it was amended in the 2019 budget to increase by SDR514 million, effectively bringing the total borrowing ceiling for the 2018 budget to SDR 1.514 billion.

Outlook

With better-than-expected export performance, the growth outlook has been revised up, compared to earlier projections

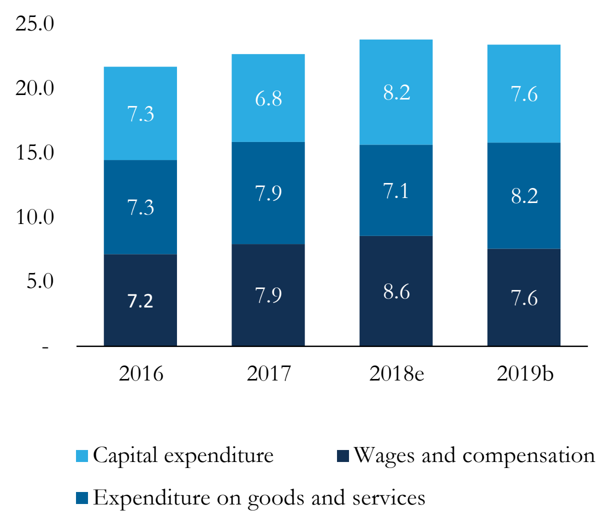
The growth outlook has been revised up for the short term, compared to the previous projections made in October 2018 (table 2). This is due to better-than-expected export performance, expansion of consumption and construction. Yet, as exports moderate in line with deceleration in global demand (see box 1 for the global and regional economic outlook and risks), real growth is projected to ease to 7 percent in 2019, while remaining near 7 percent in the short term. After experiencing accelerated growth of 7.5 percent in 2018, the economy is expected to return to its long-term potential of about 7 percent. The robust economic growth is expected to result in continued poverty reduction. The longer-term outlook, however, depends on the country's ability to productively absorb FDI inflows, while promoting domestic investment. There is potential to maintain growth at a healthy pace in the years ahead, but addressing structural bottlenecks is a must.

TABLE 1: Rising subnational budget in 2019

Sub-national budget (in millions of riels)	2018 budget	2019 budget	Change (%)
Total	1,684,674	2,199,636	30.6%
Municipal and provincial administration	1,060,233	1,476,946	39.3%
o/w transfer from the central administration	*148,814*	*83,808*	*-43.7%*
City and district administration	160,400	198,890	24.0%
o/w transfer from the central administration	*155,015*	*192,060*	*23.9%*
Commune and Sangkat administration	434,041	523,800	20.7%
o/w transfer from the central administration	*434,041*	*523,800*	*20.7%*

Source: 2018 and 2019 Budget Laws, Cambodian Authorities.

FIGURE 25: Budgeted expenditures for the 2019 budget (percent of GDP)



Source: Cambodian authorities.
Note: e = estimates and b = budget.

Risks

Main risks include the concentrated FDI inflows, originating mainly from China and financing a few sectors, and the potential temporary withdrawal of EBA. In addition, weather shocks are a risk to agricultural production. The authorities' efforts to promote the use of local currency is undermined by rising foreign currency deposits.

Cambodia is increasingly dependent on China to sustain FDI and tourism flows

Chinese FDI inflows account for a large proportion of the recent surge in the inflows (figure 26). A slowdown or reversal of FDI inflows, especially Chinese FDI, will significantly impact private investment and growth. As FDI inflows are coming largely from China, risks are associated with an abrupt slowdown in Chinese FDI. In addition, spillovers from a large economy, such as China, can occur both through trade and financial channels. The channels, namely FDI and tourism through which growth spillovers from large economies, such as China, can affect Cambodia growth rate.

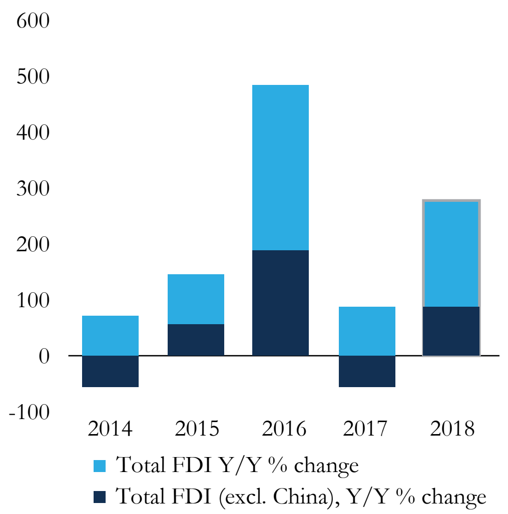
Cambodia has been able to sustain tourist arrival growth, thanks to rising Chinese visitors. Without the contribution of Chinese tourists,

TABLE 2: Improved macro outlook in the short and medium term, compared to earlier projections

Percent of GDP unless specified otherwise	2019	2020	2021
October 2018 projections	*6.8*	*6.8*	-
GDP growth (%)	7.0	6.9	6.8
Domestic demand (% change y/y)	9.8	8.9	10.5
Inflation (% change, average)	3.3	3.0	3.1
Overall fiscal balance	-3.8	-3.2	-2.7
Government debt	30.0	30.1	31.1
Export growth (% change)	9.0	8.6	8.1
Import growth (% change)	7.6	7.1	6.8
Current account	-9.5	-9.1	-9.2
FDI	10.4	9.3	9.2
Gross international reserves (months of imports)	6.6	6.2	6.0

Source: World Bank/IMF DSA and World Bank staff estimates and projections.
Note: Government debt is projected to edge up slightly due to rising borrowing ceiling.

FIGURE 26: Chinese FDI have recently increased
Approved FDI
(y/y, percent change)



Source: Cambodian authorities.

FIGURE 27: Tourists arrival from China has continued to increase
Tourist arrivals (y/y, percent change)

Source: Cambodian authorities.

Box 1

Global and Regional Economic Outlook and Risks[1]

Global growth is expected to stabilize in 2020-21 recovering from a temporary dip in 2016. The global economic growth rate is projected to slow to 2.6 percent in 2019, reflecting a broad-based weakness in advanced economies and major Emerging Market and Developing Economies (EMDEs) at the start of the year, before stabilizing at 2.8 percent on average during 2020-21. Growth in advanced economies is projected to moderate from 2.1 percent in 2018 to 1.7 percent on average during 2019–21 toward its potential rate, as capacity constraints become more apparent and labor markets tighten. Growth in EMDEs is projected to slow to 4.0 percent in 2019 before recovering to 4.5 percent on average during 2020-21 assuming the recovery in a few large economies (for example, Argentina, the Islamic Republic of Iran, Turkey) (figure B1.1).[2]

Global economic conditions are expected to remain challenging over the forecasted period. Barring a renewed escalation of trade tensions, global trade growth is projected to moderate towards 3.3 percent on average during 2019-21, reflecting weaker global growth and remaining high global policy uncertainty. Global financing conditions are expected to remain volatile, even if generally more supportive. This reflects a more accommodative monetary policy stance adopted by the major central banks in the near term due to the deteriorating global growth prospects. Despite the recent recovery of EMDE markets from the 2018 correction episode, there is still a considerable risk of "monetary shocks" associated with the global policy uncertainty. Financial market volatility will continue to have the strongest impact on countries with high vulnerabilities, weak growth prospects, and elevated policy uncertainty. Oil prices are expected to average US$64/barrel (bbl) in 2019 and US$65/bbl in 2020, with high uncertainty around the outlook. Despite weaker demand prospects, metals prices are anticipated to stabilize in 2019 and 2020 due to modest supply growth and low inventory levels. Agricultural prices are expected to remain broadly flat over the next two years (figure B1.2).

FIGURE B2.1: Real GDP growth (percent)

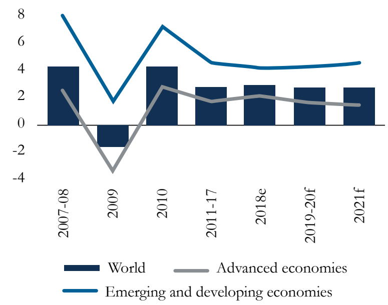


FIGURE B2.2: World commodity price forecast (Index=nominal U.S. dollars, 2010=100)

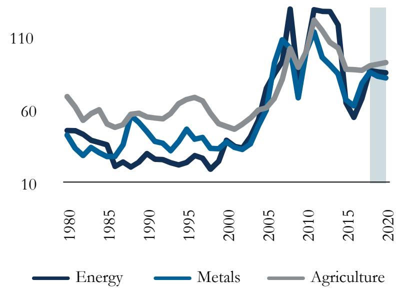
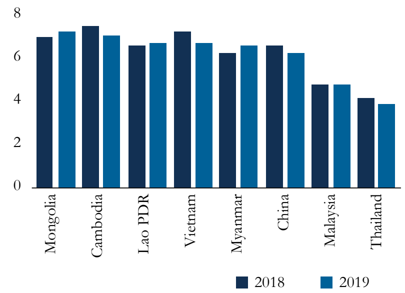


FIGURE B2.3: Regional growth



Source: Global Development Finance, January 2019 (forthcoming).

After moderating from 6.3 percent in 2018 to 6.0 percent in 2019, EAP growth is projected to remain around this rate during 2020-21. The outlook is predicated on a gradual moderation in global growth and more rapid deceleration in global trade, alongside broadly stable commodity prices and supportive global financing conditions, especially in the near term. The baseline also assumes that there will be a constructive resolution of trade disputes between China and the United States, and that Chinese authorities successfully calibrate their policy response to any headwinds to activity. Growth in China is projected to slow to 6.2 percent in both 2019 and 2020 and to moderate further to 6.0 percent in 2021 amid continued domestic and external rebalancing. Growth in the rest of the region is projected to remain broadly unchanged at around 5.2 percent a year during 2019-21. Resilient domestic demand is expected to offset the negative impact of slowing exports. While growth in the region is projected to remain robust in the near term, underlying potential growth—which has fallen considerably over the past decade, in large part reflecting slowing potential growth in China—is likely to decline further over the long term, largely owing to deteriorating demographic trends, especially in China, Thailand, and Vietnam; demographic developments are projected to be broadly neutral for growth in the rest of the region (figure B1.3).

Risks continue to be on the downside. There is considerable uncertainty around the outlook for the global economy and the balance of risks remains firmly on the downside. Although unlikely in the near term, the simultaneous occurrence of a sharper-than-expected slowdown in China, Euro Area, and the United States could trigger a significant downturn in global activity. The re-escalation of trade tensions could be highly disruptive to global activity amid the presence of complex value chains. The risk of severe and broad-based financial stress adversely affecting the outlook for EMDEs remains high amid elevated debt levels in many countries. Policy uncertainty and geopolitical risks remain high and could negatively impact confidence and investment in both affected countries and globally. Policy uncertainty is particularly elevated in a number of European countries—including in the United Kingdom as it transitions out of the European Union, and in Italy where fiscal slippages have led to a market reassessment of country risk.

[1] Prepared by Ekaterine T. Vashakmadze, Senior Country Economist, World Bank.

[2] These are working assumptions, published in the World Bank's January 2019 Global Economic Prospects.

total arrivals would have declined in 2018 (figure 27). As discussed above, arrivals from China are number one, accounting for 32.6 percent, or 2.03 million visitor arrivals. Any interruption of Chinese tourist inflows, for example by a sharp slowdown of the Chinese economy, will significantly impact Cambodia's tourism sector and growth.

Heightened trade uncertainty has intensified the risks

As discussed above, effective January 18, 2019, the EU reinstated the normal customs duties of € 175 per ton in year one, progressively reducing it to €150 per ton in year two and € 125 per ton in year three.[25] In addition, in February, the EU started the process that could lead to the temporary suspension of Cambodia's preferential access under the EBA scheme.[26] According to the EU, EBA preferences can be removed, if beneficiary countries fail to respect core human rights and labor rights. The process (starting February 2019) includes a six-month period of intensive monitoring and engagement with the Cambodian authorities, followed by another three-month period for the EU to produce a report based on the findings. After a total of twelve months (February 2020), the European Commission will conclude the procedure with a final decision on whether or not to withdraw tariff preferences. The Commission will decide the scope and duration of the withdrawal. Any withdrawal would come into effect after a further six-month period (August 2020).

A summary of the EU's tariffs, if EBA were suspended, on Cambodia's key products exported to the EU market is presented under the tariff/safeguard column in table 3. Cambodia's main products exported to the EU market include garments, footwear, bicycles and milled rice. Overall, the EU's tariffs on garments, footwear, and bicycle products are 12 percent, 16 percent and 10 percent, respectively. The EU has already imposed safeguards on Cambodia's milled rice —€175 (or about US$200) per ton in the first year starting from January 18, 2019, €150 per ton in the second year, and €125 per ton in the third year.[27]

Garment exports account for roughly 80 percent of Cambodia's total exports to the EU market. It is therefore crucial to estimate the impact of EBA suspension on Cambodia's garment exports. As presented in table 4, main categories of Cambodian-made garments are subject to 12 percent tariff, except harmonized system (HS) code 6104 products which are subject to a tariff of 6.5-8 percent.

Analyzing price elasticity of garment (footwear, milled rice, and bicycle) exports helps quantify the impact of EBA suspension

The EU's tariffs, if EBA is suspended, will increase the prices of Cambodia's products exported to the EU market. Therefore, the size of the price elasticity is important from a policy perspective. If, for example, the export demand for this product is price elastic (that is if the price

TABLE 3: Cambodia's main exports and EU tariff rates

Harmonized system code (HS)	Main exported products	Share (%)	Value* (US$ million)	Tariff/ safeguard
61+62	Garment	77.6	4,206.3	12%
64	Footwear	13.1	729.2	16%
87	Bicycle	6.1	331.7	10%
10	Milled rice	3.2	169.6	Beginning with €175/ton

Note: * estimated figures for 2018 as only first 11 months of 2018 data available..
Source: UN Comtrade website https://comtrade.un.org/ and Schedule of customs duties, Official Journal of the European Union (see https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2017:282:FULL&from=EN)

25 Press release, European Commission, January 19, 2019.

26 The EBA scheme was adopted by resolution of the EU Council No. 416/2001 dated 28 February 2001. It is an EU initiative to allow the importation of all kinds of goods from least developed countries except arms into EU countries both duty free and quota free. EBA is part of EU generalized system of preferences which entered into force on 5 March 2001 with no time limit. Cambodia is among 48 least developed countries that enjoy this preferential treatment. https://trade.ec.europa.eu/doclib/press/index.cfm?id=1981&title=Cambodia-EU-launches-procedure-to-temporarily-suspend-trade-preferences

27 According to the EC's decision, as of 18 January the European Union reinstated the normal customs duty on this product of €175 per ton in year one, progressively reducing it to €150 per ton in year two, and €125 per ton in year three. See http://trade.ec.europa.eu/doclib/press/index.cfm?id=1970

elasticity is greater than 1), then any increase in the price of the product resulting from EBA suspension, all other things remaining unchanged (for example, there is no corresponding increase in the price of the commodity by other exporting countries), will lead to a substantial reduction in the quantity exported and have negative implication for the garment industry in Cambodia. Alternatively, if the export demand for Cambodian products is price inelastic (i.e. if it is less than one), then there may be less concern about EBA suspension with regard to its impact on Cambodia's garment exports.

If EBA is suspended, estimated maximum decline of garment exports to the EU market is 10.4 percent

Applying elasticities found in the existing studies (reported in Annex 1), **the estimated decline of Cambodia's garment product exported to the EU market ranges from 8.7 percent** (columns 5 of table 5) to 10.4 percent (column 6), if EBA is suspended and importers pass all tariffs on the garment products to EU consumers. In volume terms, using Cambodia's garment export volume in 2018, the estimated decline ranges from 0.02 million (column 8) to 0.03 million metric tons (column 9). In value terms, the estimated garment exports decline is between US$320.0 million (column 11) and US$381.4 million (column 12).

Estimated decline of footwear exports to the EU market is 25.2 percent

Similarly, the estimated decline of footwear export is 25.2 percent (column 6). Cambodia's

TABLE 4: Cambodia's main garment product export categories and the EU's tariff rates

HS code	Main garment products	% Share (2017)	Value (in US$ million, 2018*)	EU customs duties rate
6110	Jerseys, pullovers, cardigans, etc. knitted or crocheted	20.7	837.4	12%
6104	Women's suits, dresses, skirts etc. & short, knit/crocheted	15.6	642.5	6.5-8%
6109	T-shirts, singlets and other vests, knitted or crocheted	9.9	414.9	12%
6204	Women's suits, jackets, dresses skirts etc. & shorts	12.1	536.5	12%
6203	Men's suits, jackets, trousers etc. & shorts	7.7	315.3	12%
6205	Men's shirts	2.2	84.8	12%
6108	Women's slips, panties, pyjamas, bathrobes etc., knitted/crocheted	3.2	134.5	12%
6102	Women's overcoat, cape, etc., knitted/crocheted, o/t of hd 61.04	2.7	102.8	12%
6112	Track suits, ski suits and swimwear, knitted or crocheted	2.8	120.6	12%
6103	Men's suits, jackets, trousers etc. & shorts, knitted/crocheted	3.2	146.2	12%
	Total (top 10 garments products)	80.2	3335.4	

Source: UN Camtrade website, https://comtrade.un.org/ and schedule of customs duties, Official Journal of the European Union (see https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2017:282:FULL&from=EN).
Note: * estimated figures for 2018 as only first 11 months of 2018 data available.

footwear export volume and value are the estimated to decline by 0.01 million metric tons (column 9) and US$128.5 million (column 12), respectively. Therefore, estimated decline of Cambodia's garment and footwear export combined, if EBA is suspended is US$510 million, or 5.4 percent of Cambodia's total garment and footwear exports. Last year, Cambodia exported US$9.5 billion of garment and footwear products. The EU market share accounts for 33 percent.

With the imposition of EU safeguards, the estimated decline of Cambodia's milled rice exported to the EU market ranges from 36.6 percent (column 5) **to 81.2 percent** (column 6). As discussed earlier, the actual milled rice export decline was 57.8 percent month-on-month in February 2019.[28] The actual decline, therefore, falls within the estimated range of decline. In volume terms, using Cambodia's milled rice export volume in 2018, the estimated decline ranges from 0.10 million (column 8) to 0.21 million metric tons (column 9). In value terms, the estimated milled rice export decline is between US$65.1 million (column 11) and US$144.1 million (column 12). For bicycle products, the elasticity is not found in any studies. Therefore, estimated decline is not discussed there.

Cutting production and export costs could help mitigate the impact of EBA suspension

Measures to improve competitiveness will mitigate the potential negative impacts of EBA

TABLE 5: Estimated decline in exports to the EU market, if EBA is suspended

		Elasticities of demand (from existing studies)[3]		Estimated declines in quantity demanded (%)		Volume (in millions of metric tons)[1]			Value (in US$ million)		
1	2	3	4	5=2x3	6=2x4	7	8=5x7	9=6x7	10	11=5x10	12=6x10
Impact of EBA suspension on	EU tariff rate (%)[2]	Min	Max	Min	Max	Exports (2018)	Estimated min decline	Estimated max decline	Exports (2018)	Estimated min decline	Estimated max decline
Garment	12.0	-0.73	-0.87	-8.76	-10.44	0.27	-0.02	-0.03	3,653.4	-320.0	-381.4
Footwear	16.0	-1.58		-25.28		0.04	-0.01		508.1	-128.5	
Milled rice	26.2	-1.40	-3.10	-36.68	-81.22	0.26	-0.10	-0.21	177.5	-65.1	-144.1
Subtotal									4,339.0	-513.6	-654.0
Bicycle[4]	10.0					1.52			331.07		
Total									4,670.1		

Source: Authors' estimates using the data from the authorities, EU's schedule of custom duties, and the elasticities reported in Annex 1.
Note:
[1] Garment, footwear, and milled rice exports are in millions of metric tons, while bicycles are in million units.
[2] For Cambodia's milled rice exports, it represents EU safeguard.
[3] See annex 1 for elasticities reported by different studies.
[4] For bicycle, elasticity is not found in any studies.

[28] Cambodian premium rice is sold from $950 to $960 per ton while normal rice – or Indica rice – is sold at about $420 per ton see https://en.vietstock.vn/2019/02/kingdom-sees-minimal-change-in-rice-exports-between-2016-2018-41-348482.htm.

Box 2

Measures to facilitate trade and lower the cost of doing business introduced in March 2019

During the Public-Private Sector Forum on March 29, 2019, a range of measures to facilitate trade and reduce the cost of doing business were announced by the authorities. The measures are:

- Withdrew the inspection role of the Cambodia Import-Export and Fraud Repression Directorate General (Camcontrol) at the international gateways, which include border crossings such as checkpoints, seaports, special economic zones, and other export and import inspection zones in Cambodia.
- Abolished the (state-owned) Kampuchea Shipping Agency and Brokers (Kamsab).
- Ceased issuing Certificates of Origin (CO) for the export of goods unless importing countries need one (Inter-ministerial Prakas No. 1627 between the Ministry of Economy and Finance and the Ministry of Commerce).
- Reduced logistics costs including loading costs and services fees at both the Phnom Penh and Sihanouk Ville Autonomous ports. Those fees include the Terminal Handling Charge (THC) which was reduced by US$5/twenty-foot equivalent unit (TEU); and the Container Imbalance Charge (CIC) which was reduced by US$20 (to US$100 from US$120) for 20-foot containers, and US$40 (to US$200 from US$240) for 40 foot containers. The Ocean Freight Charge (OFC) was reduced by 50 percent (SITC Logistics Cambodia agreed). The Emergency Bunker Charge (EBC) was eliminated. It was US$15, US$30, and US$30 for 20-, 30-, and 40- foot containers, respectively. Lift-on/lift-off (LoLo) fees at Sihanoukville port were reduced by 10 percent, while bonus was reduced to US$5/box down from US$7.5/box with shifting is now free of charge. Phnom Penh port is considering reducing the Stevedoring Charge, the Gate Fee, the Export Container fee, and the LO-LO scan fee.
- Electricity cost reduction will be discussed to respond to the growing short- and medium-term needs in the country.
- The government announced policies to support small and medium-sized enterprises (SMEs), which include establishment of an SME bank with initial capital of US$100million, entrepreneurship funds with a budget of US$5 million a year, and SME tax incentives for six priority sectors, related to agro-industry and food production and processing.
- Trade facilitation measures under customs include a Prakas on customs automated and transparent receipted fees and charges. Effective April 1, 2019, container scan fees are reduced by 50 percent, declining to US$10 from US$20 for 20-foot containers, and to US$16 from US$32 for 40 foot containers, and implementation of risk-based container scanning.
- Measures under tax administration include online VAT refunds and VAT credits, a tax audit review period going back three years (instead of 10 years), while the late tax payment penalty has been reduced to 1.5 percent a month from 2 percent a month.
- Reduced the number of observed holidays by seven days, starting 2020. Now, there are from 28 to 30 official holidays a year. This is estimated to result in a 0.5 percent gain in economic growth.
- Consolidated factory inspections (by various agencies) into one team and once a year.
- Accelerated the amendment to the Law on Investment and the finalization of the draft Law on Special Economic Zones, expected to be ready in the first half of 2019. In principle, incentives are to be moved from the Law on Investment to the Budget Law.
- Projected the E-commerce law will be finalized by mid-2019.

Source: 18th Public- Private Sector Forum, March 29, 2019.

suspension. It is a priority to embark on structural reforms, especially those that can help improve investment climate, and reduce costs of doing business, including by introducing competitive energy prices and lower logistic costs. See box 2 for recent measures to facilitate trade and lower the cost of doing business recently introduced by the authorities. Foreign investors confirm that low labor costs, high tax incentives and preferential access to key export markets are the reasons for their investment in Cambodia. With wages rising rapidly and Cambodia facing the potential suspension of the EBA, the country's attractiveness is likely to erode. The current cost of doing business in Cambodia does not encourage enough domestic investment and entrepreneurship. Cambodia ranks 185th out of 190 economies globally on ease of starting a business. Trade costs weigh heavily on Cambodia's export structure and exporting firms' performance. The contribution of transport and logistics to the total exported value added from Cambodia reached 14 percent, double the contribution of these sectors in Thailand and 3.5 times that in Malaysia or Vietnam.[29] The current quality and intensity of supply chain linkages between FDI and Cambodian firms is low. In the short- to medium-term, given its large FDI stock, the long-standing policy goal to facilitate backward linkages for local firms—to improve productivity and capture knowledge spillovers—needs to be implemented earnestly.

Also in the short term, filling the skills gaps is essential, while addressing the human capital deficiency must start now to underpin Cambodia's long-term aspirations. Focusing on the role of early childhood health and nutrition is a priority. See the detailed discussion on Cambodia's skills gaps and human capital deficiency in the selected issue section entitled "Investing in Cambodia's Future: Early Childhood Health and Nutrition" in the selected issue section below.

Lowering macroeconomic vulnerabilities is critical

Considering further macroprudential measures such as bank limits in terms of exposure to construction and real estate to lower the banking sector's vulnerabilities to construction boom. Given prolonged expansion of domestic credit growth, which has been largely behind the construction and real estate boom, and strengthening oversight capacity and crisis preparedness in the financial sector, is the way forward. The recent surge in FDI inflows may have helped sustain the construction boom further, while masking the financial sector's vulnerability after years of rapid lending growth. However, it is unlikely that such large FDI inflows currently biased toward the construction sector will be sustained, given that underpinning FDI inflows requires improvements in external competitiveness which may only be achieved in the longer term. A significant slowdown in FDI inflows may then unmask the banking sector's exposure and vulnerabilities.

[29] See box 1 — Cambodia Investment Climate Review — lessons for future competitiveness, October 2018 Cambodia Economic Update for more details.

SECTION 2

SELECTED ISSUE: Early Childhood Health and Nutrition: A Smart Start for Cambodia's Economic Growth and Prosperity

SELECTED ISSUE: Investing in Cambodia's Future: Early Childhood Health and Nutrition[30]

1. Introduction

A child born today in Cambodia will enter the labor market around 2040, perfectly aligned to accompany Cambodia on the ambitious goal of reaching high-income country status. The time is right to ask the questions: will she be prepared for the economy of the future? Will improvements in education be enough to stimulate this readiness? And, if not, what other changes are essential to enhance the quality of the labor force and favorably bend Cambodia's economic development curve? Grounded in the wide body of evidence on the early foundations of education and skills formation, this report aims to answer these questions by: (i) summarizing what is known about Cambodia's human capital acquisition and economic progress, focusing on the role of early childhood health and nutrition; and (ii) drawing upon key findings from recent studies to identify key challenges and opportunities to improve early childhood nutrition and maximize the readiness of Cambodia's future labor force to advance the country's development aspirations.

2. Human Capital and Its Contributions to Cambodia's Economic Development

Growing evidence highlights the investments in people are needed to drive economic progress and sustainable development. While building human capital has many intrinsic and private benefits, these extend to others and to the whole of economies. Recent estimates indicate that human capital accounts for over two thirds of total global wealth (estimated at $1,143 trillion in 2014). Produced capital (buildings, machinery, and infrastructure) and natural capital (agricultural land, forests, protected areas, minerals, oil, coal, gas reserves) have long been identified as the foundations of national wealth; it is only recently that global wealth accounting has included human capital, or the sum total of a population's skills, health, knowledge, and resilience, as an explicit contributor to the overall assets and economic health of a country.[31]

Improving the quality of Cambodia's human capital is at the core of the country's aspirations to reach upper middle-income country status by 2030 and high-income country status by 2050.[32] Human capital wealth increases in importance as countries climb the income ladder: whereas human capital wealth accounted for 51 percent of total wealth in lower-middle-income countries, this share rose to 70 percent among high-income OECD countries.[31] The ability of the labor force to interact with and transform natural and produced capital is necessary to increase economic output, and therefore Cambodia's ability to achieve upper-middle income status.

However, Cambodia trails regional and economic comparators in human capital wealth acquisition (table S1). Cambodia has made significant progress in wealth acquisition since the mid-1990s. However, at 43.3 percent of total per capita wealth, Cambodia's human capital wealth is well below the average for low middle-income countries (50.6 percent) and the East Asia and Pacific region (60.2 percent).

[30] Thi note was prepared by Anne Marie Provo and Somil Nagpal

[31] Lange GM, Wodon Q, Carey K, eds. 2018. The Changing Wealth of Nations 2018: Building a Sustainable Future. Washington, DC: World Bank. Note: Human capital wealth estimated as the present value of future earnings for the labor force.

[32] See Fourth Rectangular Strategy, Royal Government of Cambodia, September 2018, p. 44.

The World Bank introduced the Human Capital Index (HCI) in October 2018 as a metric designed to forecast a country's human capital (Box S1). The HCI captures the impact of investments in children today on future productivity and long-term economic growth. The HCI provides countries with a mechanism for understanding the quantity and quality of their human capital, helping them to determine priorities for developing these assets.

Cambodia's HCI score demonstrates gaps in health, early childhood nutrition, education, and skills which constrain the productivity of the future labor force. Cambodia has an overall HCI value of 0.49, meaning that—based upon the status of health and education outcomes—a child born today will be 49 percent as productive when she grows up as she could be if she enjoyed complete education, good health, and a well-nourished childhood.[33]

Cambodia performs slightly better than expected for a lower middle-income country on the overall HCI but requires significant progress to attain human capital levels of regional and economic comparators. Overall, Cambodia ranks 100th out of 157 countries on the HCI, far behind countries such as Vietnam and Thailand but ahead of neighboring Lao PDR (table S2).

Cambodia performs well on child and adult survival (panels B and C, figure S3) **and test scores** (panel D, figure S3) **but underperforms relative to other countries in the region and lower middle-income group with respect to school attainment** (panel E, figure S3) **and childhood stunting** (panel F, figure 3). One-third of Cambodia's future labor force experiences childhood stunting, a sign of poor nutrition, care, and health in early life; high stunting is a sign of children growing up in an inadequate environment.[34] Quality in education is a concern, and when years of schooling are adjusted for quality of learning, learning gap is 2.7 years.

TABLE S1: Human capital wealth per capita as a share of total wealth per capita, Cambodia and comparator countries

Country	Total Wealth	Human Capital	Human Capital as Share of Total (%)
Bangladesh	12714	7170	56.4
Cambodia	16933	7337	43.3
Guatemala	43140	25450	59.0
Lower middle-income	25,948	13117	50.6
East Asia Pacific	140,042	84334	60.2
Nicaragua	37084	16698	45.0
Philippines	30823	17790	57.7
Vietnam	27368	13740	50.2

Source: Lange et al. 2018. *Note*: Estimates are in 2014 U.S. dollars per capita at market exchange rates.

TABLE S2: Human Capital Index score and rank, Cambodia and regional and economic comparators

Country	HCI Score	HCI Rank
Vietnam	0.67	47th
Thailand	0.60	65th
Philippines	0.55	84th
Nicaragua	0.53	92nd
Cambodia	0.49	100th
Bangladesh	0.48	106th
Guatemala	0.46	109th
Lao PDR	0.45	111th

Source: World Bank, 2018.

33 World Bank. 2018. Human Capital Index: Cambodia Country Brief. Available online: https://databank.worldbank.org/data/download/hci/HCI_ 2pager_KHM.pdf.

34 Stunting is defined as having a height-for-age z score (HAZ) <–2SD. HAZ is calculated by subtracting an age- and sex-appropriate median value from a standard population and dividing by the SD of the standard population (4). In a healthy population, ~2.5% of all children have a HAZ <–2SD. A higher percentage <–2SD is indicative of a deficient growth environment. Children who are stunted are a subset of those with linear growth retardation. See: Leroy J and Frongillo E. 2019. Perspective: what does stunting really mean? A critical review of the evidence. Adv Nutr. 2019;10:196–204; doi: https://doi.org/10.1093/advances/nmy101.

Box S1

The Human Capital Index

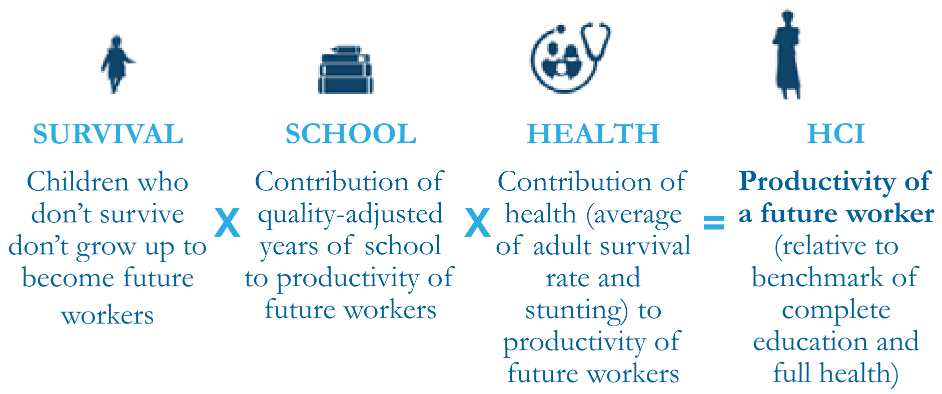
The Human Capital Index (HCI) is a component of the World Bank's Human Capital Project and a metric of countries' investments in the human capital of the next generation. The HCI aims to forecast the joint effects of health and education on future productivity, defined as the human capital a child born today can expect to attain by the end of secondary school given the risks of poor health and education that exist at the time of the child's birth. The HCI is built upon three main ingredients:

1. Survival. This component reflects the fact that children born today need to survive until the process of human capital accumulation through formal education can begin. Survival is measured using the under-5 mortality rate.

2. Expected years of learning-adjusted school. Information on the quantity of education a child can expect to obtain by age 18 is combined with a measure of quality: how much children learn in school based on countries' relative performance on international student achievement tests. This combination produces the expected years of learning-adjusted school. By adjusting for quality, this component reflects the reality that children in some countries learn far less than those in other countries, despite being in school for a similar amount of time.

3. Health. This component uses two indicators for a country's overall health environment: (1) the rate of stunting of children under age 5; and (2) the adult survival rate, defined as the proportion of 15-year-olds who will survive until age 60. The first indicator reflects the health environment experienced during prenatal, infant, and early childhood development. The second reflects the range of health outcomes that a child born today may experience as an adult.

The resulting index ranges between 0 and 1. A country in which a child born today can expect to achieve both full health (no stunting and 100 percent adult survival) and full education potential (14 years of high-quality school by age 18) will score a value of 1 on the index. Therefore, a score of 0.70 signals that the productivity as a future worker for a child born today is 30 percent below what could have been achieved with complete education and full health.



Source: "World Bank. 2018. The Human Capital Project. World Bank, Washington, DC.. *https:*//openknowledge.worldbank.org/handle/10986/30498

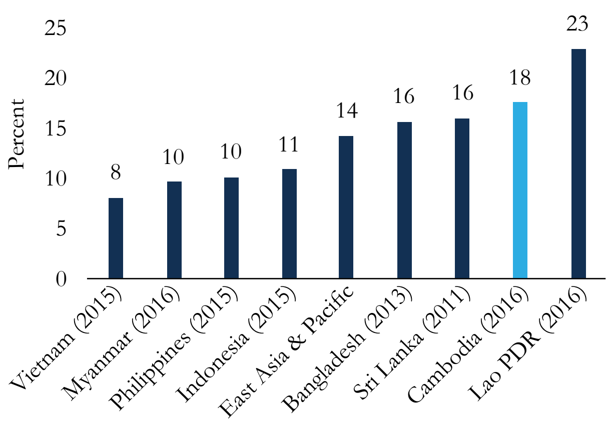
Promoting educational attainment and improving the quality of education are key priorities for promoting human capital growth and ensuring the future employability of the Cambodian labor force. Cambodia's employers are affected more by inadequately skilled labor than neighboring countries and returns to primary and secondary education are low (figures S1 and S2). Access to primary education has improved, with a net enrollment rate of 93 percent and completion of 79 percent (2017-2018). However, the quality is inadequate, as demonstrated by poor learning outcomes. According to the 2018 International Student Assessment for Development, PISA-D, Cambodia has a high proportion of students who performed below the baseline in all the three domains—92 percent in reading, 90 percent in mathematics and 95 percent in science. Access to secondary school remains a challenge; in 2017-2018 gross enrollment for lower secondary was only 56.8 percent and drop-out rates were still high at 15.4 percent. A well-educated and highly skilled population is needed to drive innovation and income generation, and subsequently economic growth and poverty reduction in the 'knowledge economy'.

However, the foundations human capital, education, and skills development are set long before a child enters primary school: first 1000 days between conception and a child's second birthday are critical period of physical and cognitive development. Poor nutrition, inadequate care, and repeated infections are associated with poor child growth, or linear growth faltering. The evidence is well-established that stunting—a marker of undernutrition and measure of the severity of linear growth faltering—are associated with lower cognition and motor development in early childhood and later life learning, health, and ultimately, adult earnings potential.[35]

From an early age, the dimensions of human capital complement each other. Adversities, when experienced, accumulate from pre-conception and continue throughout prenatal and early life. These adversities can disrupt brain development, health, and early learning; developmental delays are present in the first year can worsen during early childhood, and continue throughout life.[36] On the other hand proper nutrition in utero and in early childhood improves children's physical and mental well-being. Evidence from a multi-country study in Southeast Asia found that both underweight and obese children had lower IQ scores than healthy-weight children.[37] Early abilities make it easier to learn new skills, as well as build confidence and the motivation to learn more.

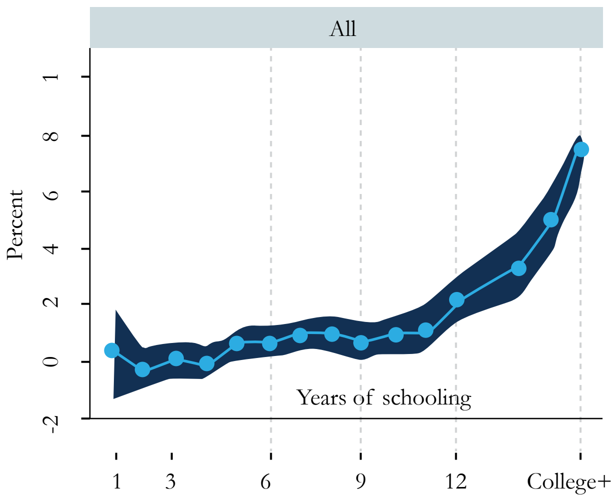
Smart investments in the nutrition, physical, cognitive, social, and emotional development of children -- starting before birth until they transition to primary school – are critical to set in motion human capital formation. Early intervention is effective and increases the efficiency and likelihood of success of later investments

FIGURE S1: Cambodia's employers are affected more by inadequately skilled labor force than other countries



Source: Enterprise Survey, 2016. *Note:* Percent of employers reporting inadequately educated workforce as a barrier to firm operation.

FIGURE S2: Low rate of return to education



Source: World Bank. 2019. Future jobs in Cambodia. *Note:* Percent returns to wages by year of schooling..

35 Sudfeld CR, Charles-McCoy D, Danaei G, et al.. 2015. Linear growth and child development in low- and middle-income countries: a meta-analysis. Pediatrics;135:e1266.

36 Black MM, Walker SP, Fernald LC, et al. 2017. Early childhood development coming of age: science through the life course. Lancet; 389: 77–90.

37 Sandjaja BK, Poh N, Rojroonwasinkul B, et al. . 2013. Relationship between Anthropometric Indicators and Cognitive Performance in Southeast Asian School-Aged Children.British Journal of Nutrition;110 (supplement 3): S57–S64.

in education and skills building. On the other hand, nutritional, physical, and socioemotional deprivations that emerge early in life are difficult—if not sometimes impossible—to remedy later in life.

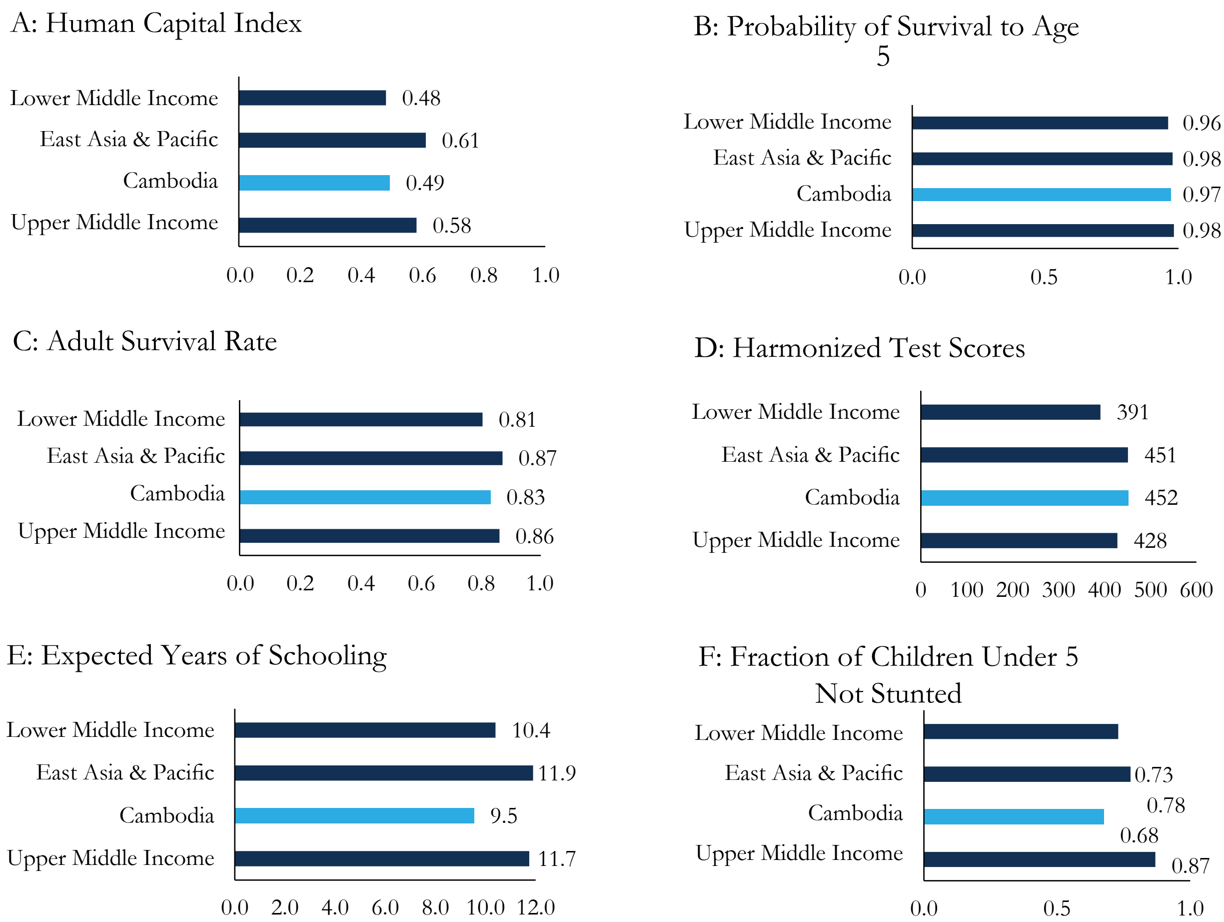
3. The State of Child Health and Nutrition in Cambodia

Cambodia has made remarkable progress in health outcomes over the past three decades. Emerging from widespread poverty in the 1990s, Cambodia's health outcomes improved rapidly and the country has surpassed several better-off countries in reductions in mortality and improvement in life expectancy (table S3). Cambodia was one of only four Countdown to 2015 countries to achieve the Millennium Development Goals for both maternal and child mortality.[38]

Despite progress in many health areas, child undernutrition remains an impediment to Cambodia's human capital formation. Child undernutrition—including stunting, wasting, underweight, and micronutrient deficiencies—are of concern in Cambodia. Child stunting declined from 59 percent in 1996 to 32 percent in 2014 (figure S4), but is still considered 'high' according to global standards.[39] At nearly 10 percent, child wasting (a form of acute malnutrition) is also considered 'high'.[40]

Maternal undernutrition poses risks to a woman's own health and productivity and also impacts the nutrition of her child: undernutrition

FIGURE S3: Cambodia's overall performance on the human capital index is about as expected as compared to other low middle-income economies, though years of schooling, adult survival, and child stunting remain key issues



Source: The World Bank.

[38] Countdown to 2015 countries include 75 countries that accounted for more than 95% of maternal, newborn, and child deaths globally in 2005. For more information see: UNICEF and WHO. 2015. A decade of tracking progress for maternal, newborn, and child survival. The 2015 report. Geneva: World Health Organization.

[39] According to the World Health Organization (WHO) public health thresholds.

[40] Notably, little progress was made in reducing wasting between 2005 and 2014. The high prevalence of wasting is of particular concern given Cambodia's relatively low levels of absolute poverty and food insecurity.

during pregnancy and lactation can result in micronutrient deficiencies and poor growth and development of the fetus. Among Cambodian women of reproductive age (15–49 years), 14 percent are underweight and nearly half (45 percent) suffer from anemia. These high levels of undernutrition contribute to low birth weight births (11 percent), which can signal both linear growth faltering during gestation and pre-term births. Importantly, up to 20 percent of stunting in children ages 1 to 5 years can be attributed to small for gestational age births.[41]

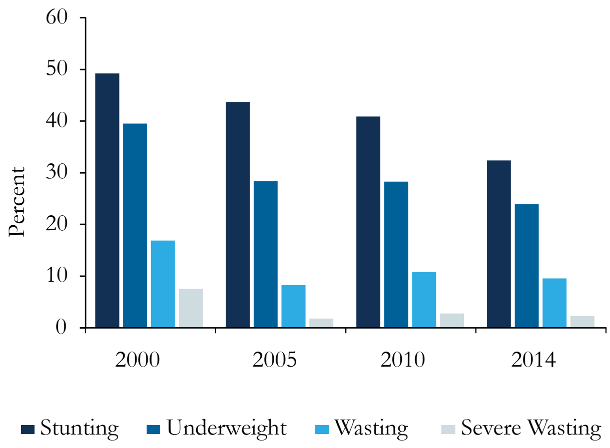
Overall, Cambodian children in poor households (located in the rural areas) **are more vulnerable to undernutrition than their wealthier peers** (figure S5). Stunting prevalence in the poorest wealth quintile (42 percent) is more than double that of the richest (18 percent) (figure S6). However, the relatively high prevalence of maternal and child undernutrition among the richest households is a sign that undernutrition in Cambodia is not solely a function of poverty. Interestingly, Cambodia's stunting prevalence among children in the wealthiest households remains three times higher than that of Vietnam,[42] highlighting the importance of non-income causes of undernutrition in the country.

TABLE S3: Human Development Indicators, Cambodia (2000–2014)

Indicator	2000	2014
Total population	12,152,354	15,270,790
Total fertility rate	3.8	2.7
Life expectancy	65.6	68.3
Under-five mortality rate (deaths per 1,000 live births)	83	35
Infant mortality rate (deaths per 1,000 live births)	80	29
Neonatal mortality rate (deaths per 1,000 live births)	37	18
Maternal mortality ratio (deaths per 100,000 live births)	437	170

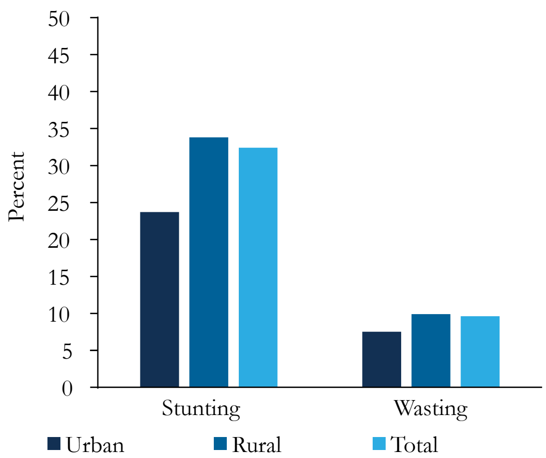
Source: CDHS 2000 and 2014.

FIGURE S4: Child (<5) undernutrition prevalence, Cambodia, 2000-2014



Source: Cambodia DHS 2014

FIGURE S5: Geographic Distribution of Stunting and Wasting among Children (<5)



Source: Cambodia DHS 2014

[41] Christian P, Lee SE, Donahue AM, et al. 2013. Risk of childhood undernutrition related to small-for-gestational age and preterm birth in low- and middle-income countries. International Journal of Epidemiology;42: 1340–55.

[42] According to the 2011 Multiple Indicator Cluster Survey in Vietnam, stunting prevalence was 6.1 percent among children in the highest wealth quintile.

The prevalence of stunting in Cambodia is similar to regional comparators, yet the country needs to accelerate progress to catch up with aspirational peers such as Malaysia, Thailand, and Vietnam (Figure S7). Notably, child stunting remains a widespread challenge in ASEAN countries: in Indonesia, Philippines, Lao PDR, and Myanmar roughly one third of children are stunted according to the most recent estimates.

Cambodia's burden of undernutrition carries short and long-term effects for individuals and society. Undernutrition was estimated as an underlying cause over 60 percent of Cambodia's child mortality in 2010. For surviving children, the consequences of early childhood undernutrition range from delayed cognitive development to lower school achievement, lower adult earnings, increased health expenditures, and higher probability of adult noncommunicable chronic diseases. Nationally, the overall costs of undernutrition[43] were estimated at US$ 250-400 million annually in 2010, or 1.5 - 2.5 percent of gross domestic product.[44]

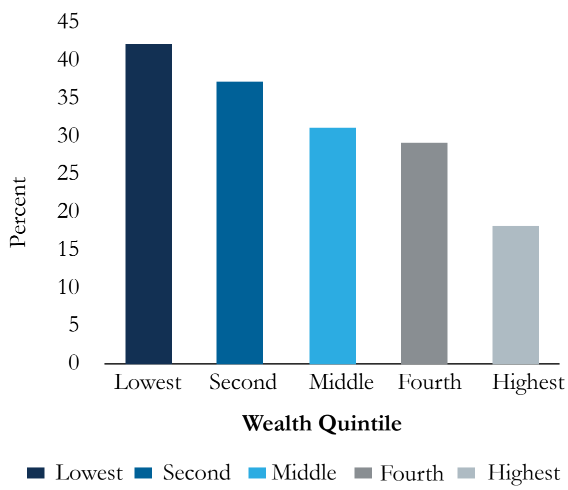
4. Drivers of Poor Child Nutrition

The causes of undernutrition in Cambodia are multiple, interacting, and multisectoral. The UNICEF framework is a well-established conceptual model for assessing the drivers of undernutrition in a given context (Figure S8). Reducing the burden of child undernutrition in Cambodia will require interventions to: (a) improve the immediate drivers of undernutrition by improving nutrition intake, care, and disease; (b) prevent and reduce undernutrition through improvements in maternal health, care, and nutritional status; and (c) simultaneously addressing underlying drivers (food insecurity; poor care for women and children; low access to health services; and poor access to water, sanitation, and hygiene [WASH]).

A. Poor Nutrition Behaviors

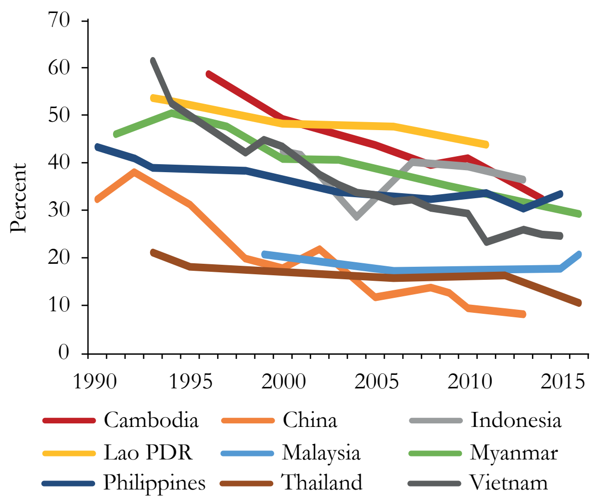
Improving the diet of women and children is at the core of achieving better nutrition outcomes in Cambodia. The Cambodian diet is heavily rice-based, and there is little evidence that women enhance dietary quality or quantity to accommodate the needs of pregnancy.[45] On the contrary, qualitative analysis demonstrates that pregnant women often display one or more of the following poor behaviors: skipping meals to avoid gaining weight and maintain physical appearance as well as have an easy delivery; skipping meals to avoid chanh (morning sickness); and eating excess sugar and sugary snacks.[46]

FIGURE S6: Undernutrition in Children Under-Five by Wealth Quintile, 2014, Cambodia



Source: Cambodia DHS 2014

FIGURE S7: Stunting prevalence over time in EAP Countries



Source: World Development Indicators.

[43] Including maternal undernutrition, micronutrient deficiencies in women and children, child stunting, wasting, and underweight, and poor breastfeeding.

[44] Bagriansky J, Champa N, Pak K, et al. 2014. The Economic Consequences of Malnutrition in Cambodia, More than 400 million US dollar lost annually. Asia Pacific Journal of Clinical Nutrition. 23(4); 524-31.

[45] In fact, recent analysis indicates that based upon current levels of rice consumption, achieving requirements for fats and select B vitamins is not possible without exceeding acceptable levels of caloric intake. For more information, see: World Food Program. 2017. Fill the Nutrient Gap: Summary Report. Rome: World Food Program.

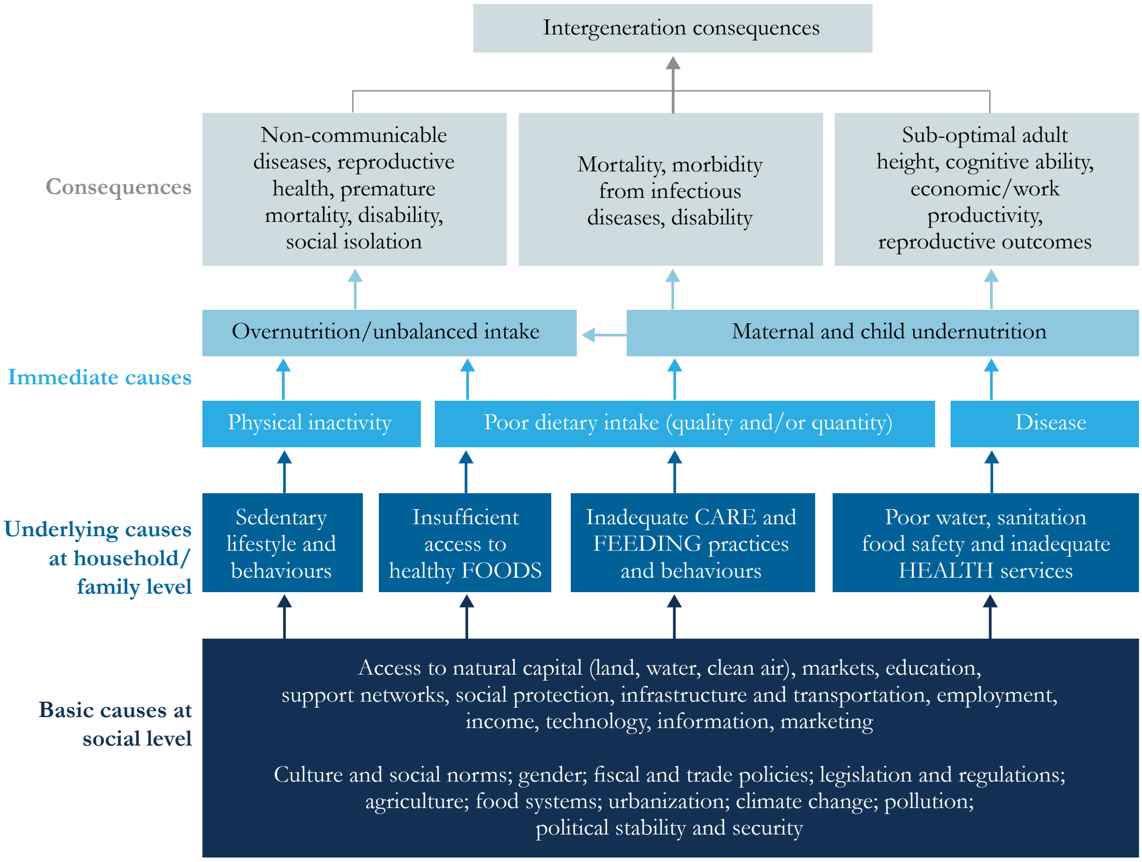
[46] MOH, UNICEF, HKI, iDE, and Melon Rouge. 2017. The 1000 Day Feeding Journey of Infants and Young Children in Cambodia. Phnom Penh: iDE.

Breastfeeding practices[47] in Cambodia are high relative to comparators (panels A and B, figure S9) but show signs of deterioration over time (panels C and D, figure S9). Breastfeeding is a critical source of early life nutrients and has significant impacts on children's health and development independent of the relationship with linear growth. Children who are breastfed longer have lower rates of disease and death and higher intelligence than do those who are breastfed for shorter periods, or not breastfed, with the impacts persisting until later in life.[48] Growing evidence also suggests that breastfeeding might protect against overweight and diabetes later in life.

The decline in breastfeeding is most pronounced among urban and wealthy Cambodian mothers. The use of formula milk—which puts children at risk of inadequate nutrient intake and disease—is rapidly expanding across ASEAN countries. Factors associated with its increased use are include: decreased time for breastfeeding, particularly as women return to work, convenience, lack of social support, and the status imparted by its use.[49] Recent studies have found widespread promotion of formula milk within public and private health facilities despite regulation against this practice; the pervasive marketing has shifted the perceptions and recommendations of health professionals, who often promote formula milk rather than providing quality lactation support.[50]

The complementary feeding period (6-24 months of age) is particularly critical for

FIGURE S8: Conceptual framework for identifying the causes of malnutrition



Source: ASEAN, UNICEF, and WHO. 2016. Regional Report on Nutrition Security in ASEAN: Volume 2. Bangkok: UNICEF.

47 The initiation, duration, and exclusivity of infant and young child breastfeeding plays an important role in establishing the child's early life nutritional status and preventing infant mortality (Black et al. 2008). The WHO recommends the early initiation of breastfeeding within one hour of birth, exclusive consumption of breastmilk through six months of age, and continued breastfeeding through 24 months.

48 Victora CG, Bahl R, Barros AJ, et al. 2016. Breastfeeding in the 21st century: epidemiology, mechanisms and lifelong effect. Lancet; 387: 475–90.

49 Pries AM, Huffman SL, Mengkheang K, et al. 2016. Pervasive promotion of breastmilk substitutes in Phnom Penh, Cambodia, and high usage by mothers for infant and young child feeding. Maternal & Child Nutrition; 12(Suppl. 2): 38–51.

50 MOH, UNICEF, HKI, iDE, and Melon Rouge. 2017. The 1000 Day Feeding Journey of Infants and Young Children in Cambodia. Phnom Penh: iDE.

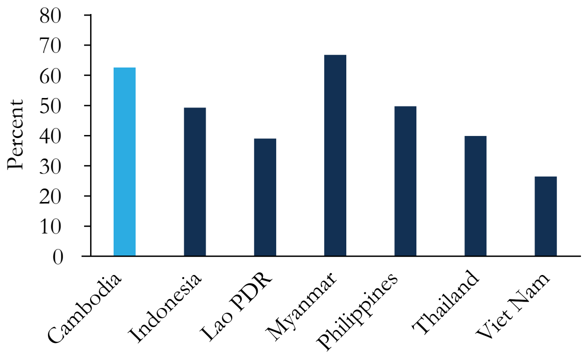
children's nutrition and growth. Similar to global trends, there is a near doubling in the prevalence of stunting among Cambodian children around the introduction of complementary foods: 16 percent of infants under 9–11 months are stunted compared with 34 percent of children age 18–23 months.[51] This trend is largely attributed to: poor quality, quantity, and hygiene of complementary foods; consumption of unsafe water; and increasing exposure to infection and illness as children become mobile (particularly in unhygienic environments).

Improvements in complementary feeding practices are necessary to ensure Cambodian children have adequate nutrient intake. Children need timely, safe, appropriate, and age-adequate complementary feeding at 6-24 months in addition to breastmilk. The quantity and quality of complementary foods[52] in Cambodia is poor. Few infants and young children consume a diet of appropriate minimum diversity (48 percent) and this is low relative to peers such as Indonesia (52.6 percent) and Vietnam (59 percent) (figure S10). Cambodia also experiences significant disparities are between the dietary diversity of children in the wealthiest households (69 percent) compared to the poorest (33 percent).[53] Importantly, a third of Cambodia's richest young children are not fed a minimally diverse diet.

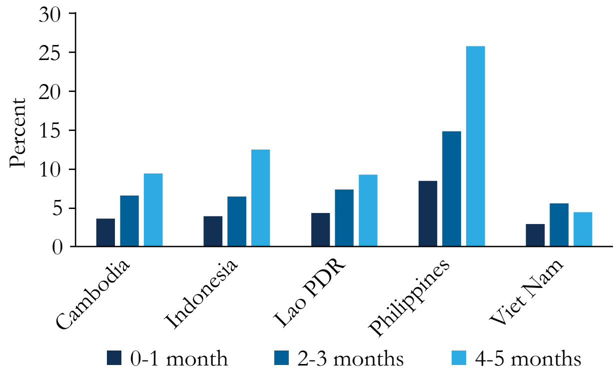
B. Low availability and affordability of nutritious foods

FIGURE S9: Breastfeeding practices in Cambodia and Comparator Countries

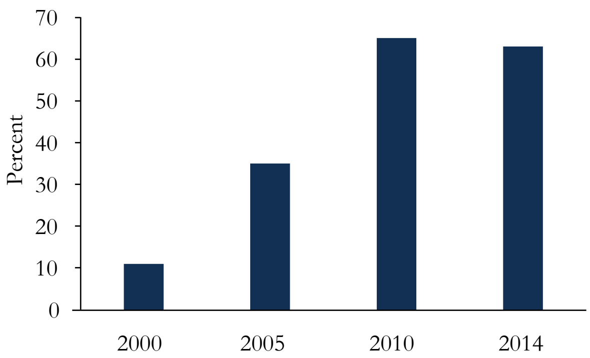
A: Early Initiation of Breastfeeding (within one hour of birth)



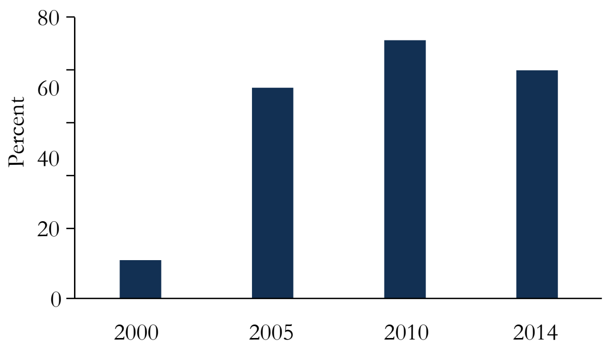
B: Infants not receiving any breastmilk, by age group



C: Early initiation of breastfeeding (within one hour of birth), Cambodia, 2000-2014



D: Exclusive breastfeeding (infants 0-5 months), Cambodia, 2000-2014



[51] National Institute of Statistics, 2015. Cambodia Demographic and Health Survey 2014.

[52] Beyond the first 6 months of age, the frequency of feeding, the diversity of diet, and nutrient composition of complementary foods has an impact on infants' and young children's nutritional status and has been strongly associated with stunting. See: Bhutta et al. 2013.

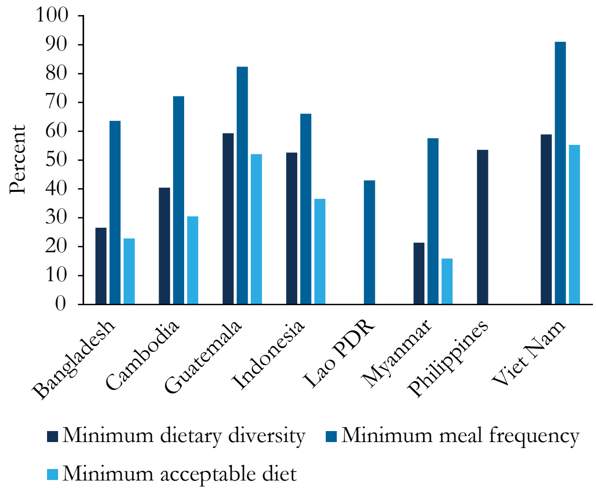
[53] Minimum dietary diversity represents the percentage of children age 6–23 months who receive foods from at least four food groups in the previous day. For breastfed children, the minimum meal frequency is solid or semisolid food at least twice a day for infants 6–8 months per day least three times per day for children 9–23 months. For non-breastfed children, the minimum meal frequency is solid or semisolid food or milk at least four times a day for children 6–23 months.

Cambodia's large increases in food availability (e.g. national rice self-sufficiency) have been accompanied by only small improvements in food access (namely geographic and economic access to a diverse, nutrient rich diet). Severe food insecurity remains a challenge only in select areas (largely poor and remote). Most agricultural households can meet their staple food (rice) needs but rely on income and foraging to obtain nutrient-dense foods. Geographic access to markets is not a widespread concern: most households can access a market within 30 minutes and these markets have, on average, 270 foods available.

On the other hand, the affordability of nutrient dense foods poses a common challenge. Recent estimates suggest 21 percent of households can't afford a nutritious diet[54] and poor agricultural households are the most food insecure. The national average daily cost of the staple-adjusted nutritious diet[55] in Ratanakiri/Mondulkiri ($6.06) is nearly twice as high as the national average ($3.62). Thus, an estimated 66 percent of households in Northeast provinces could not afford a nutritious diet.[56]

Moreover, growing anecdotal and scientific evidence points to a rising exposure of the Cambodian and population to food safety hazards. Cambodia's food system is 'transitioning', where growing food safety challenges will increasingly strain, if not overwhelm, existing country capacity.[57] Foodborne disease is associated with poor population health and illness, though the specific impacts for children are less well understood. Cambodia's food safety challenges range from institutional (weak policy, prioritization, and data availability) to individual (inappropriate and unhygienic food vendor locations; lack of knowledge on temperature control, which is especially problematic when delays between food preparation; poor personal hygiene practices, either due to low knowledge or lack of nearby facilities).[58]

FIGURE S10: Complementary feeding practices among children age 6-23 months, Cambodia and comparator countries



Source: UNICEF Infant and Young Child Feeding Indicators Database. Most recent available year by country.

C. Gaps in nutrition services delivered by the health sector

Despite significant improvements in the coverage of essential maternal and child health and nutrition services, gaps in coverage and significant inequities remain (figure S11). There are a number of high-impact, evidence-based nutrition interventions that—when delivered at 90 percent coverage—can contribute to a 20 percent reduction in stunting.[59] According to the 2014 DHS, only two-thirds (65 percent) of children receive all basic vaccinations by age 12 months. Over one quarter of children age 12-23 months are not fully vaccinated, and many of these reside in 'high-risk communities', such as indigenous populations, the unofficially/ remotely-settled urban and rural populations, and children of migrant families. Only about half (59 percent) of children receive bi-annual deworming medication and 70 percent receive bi-annual vitamin A supplementation.[60]

54 World Food Programme. 2017. Fill the Nutrient Gap Summary Analysis, Phnom Penh, WFP.

55 The staple-adjusted nutritious diet is modeled using linear programming to identify the least expensive nutritious diet for a household including nutritionally vulnerable individuals that is adjusted to include the main staples (rice and fish). It is not true reflection of what people are eating, nor designed to provide recommendations of what people should eat, but is instead based upon identifying how the macro-/micro-nutrient needs of individuals within a household can be met at the lowest cost based upon the foods available in local markets and small adjustments for local preferences.

56 World Food Programme. 2017.

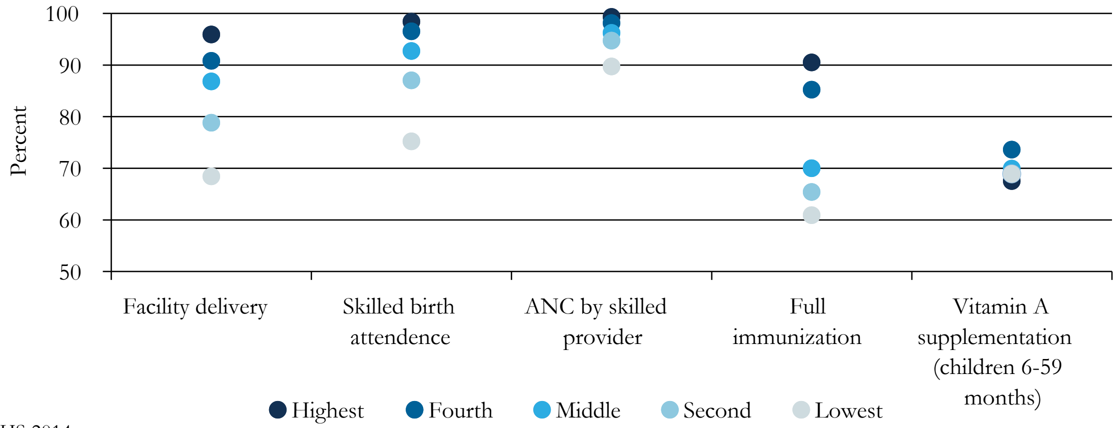
57 World Bank. 2019. The Safe Food Imperative: Accelerating Progress in Low- and Middle-Income Countries. Washington, DC: World Bank.

58 See: "Tackling the Food Safety Challenges of Middle-Income East Asia and Pacific" in World Bank. 2019. East Asia Pacific Economic Update: April 2019. Washington, DC: World Bank.

59 Bhutta ZA, Das JK, Rizvi A, et al. 2013. Evidence-Based Interventions for Improvement of Maternal and Child Nutrition: What Can Be Done and at What Cost? The Lancet 382: 452–77.

60 National Institute of Statistics, 2015. Cambodia Demographic and Health Survey 2014.

FIGURE S11: Coverage of essential maternal and child health and nutrition services by wealth quintile, Cambodia, 2014



Source: CDHS 2014.

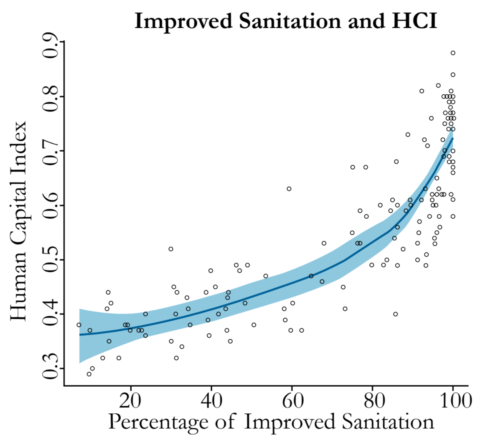
There are several bottlenecks to improving the delivery of nutrition services through the health sector, including: (i) limited quality of services in facilities, with a need to improve professional standards and skills related to nutrition counselling, growth promotion, and behavior change interventions for maternal, infant, and young child nutrition; (ii) low availability of nutrition services in communities and through outreach; (iii) limited demand for and awareness of the importance of preventive and promotive nutrition services.[61]

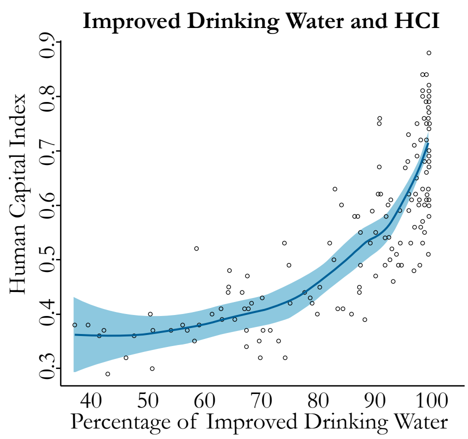
D. Limited access to improved water supply and sanitation and poor hygiene

Access to water supply and sanitation appears to have an association with the HCI (figure S12), and open defecation is associated with stunting among children in Cambodia (figure S13). Open defecation within a community is associated with harms to the physical and cognitive development of children, even children living in households that use toilets themselves. Children living in unhygienic environments (with repeated exposure to and ingestion of human and animal feces) can experience impaired gut health, diarrhea, malnutrition, stunted growth.

Access to improved water supply and sanitation in Cambodia significantly improved over the last decade, though clear disparities persist alongside a growing need to focus on quality of services. Cambodia achieved 75 percent access to improved water supply and 49 percent access to improved sanitation

FIGURE S12: Access to improved water supply and sanitation and HCI



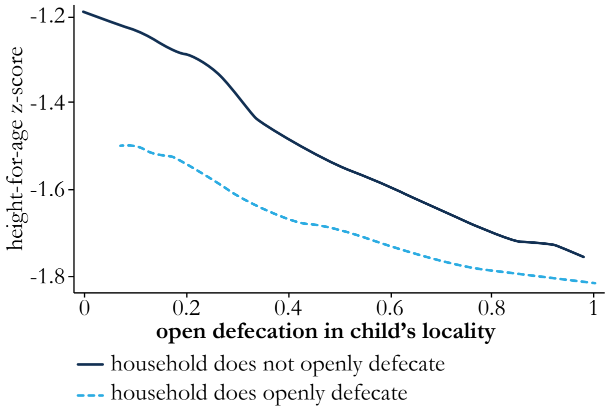


Source: World Bank staff estimates using 2018 Human Capital Index and World Development Indicator data.

61 World Bank. 2019. Preliminary Findings: Cambodia Health Financing System Assessment.

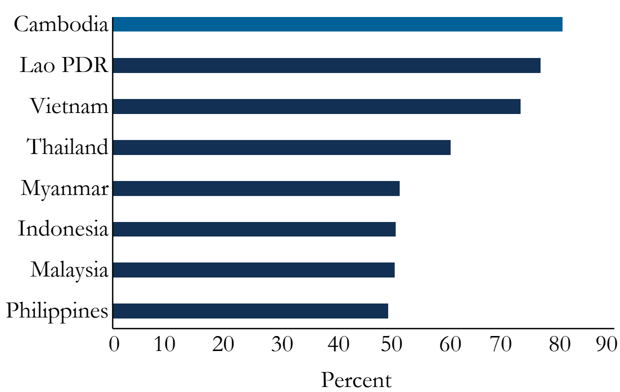
in 2015.[62] However, this remains significantly below the average for lower middle-income economies (90 and 52 percent, respectively). In urban areas, access rates for improved water supply were 78 percent for the poorest and 99 percent for the richest, while figures for improved sanitation were 36 percent and 100 percent, respectively.[63] Despite good progress, proportion of people practicing open defecation remains among the highest in East Asia and Pacific region. Only 24 percent of the population has access to safely managed water supply in 2015.[64, 65] Overcoming water supply and sanitation challenges could be an important factor contributing to human capital development in the country.

FIGURE S13: Growth faltering (height-for-age z-score) for households with and without a toilet for different levels of open defecation (2010)



Source: Vyas S, Kov P, Smets S, Spears D. 2016. Disease externalities and net nutrition: evidence from changes in sanitation and child height in Cambodia, 2005-2010. Economics and Human Biology; 23:235-45.

FIGURE S14: Cambodia's female labor force participation relative to peers.



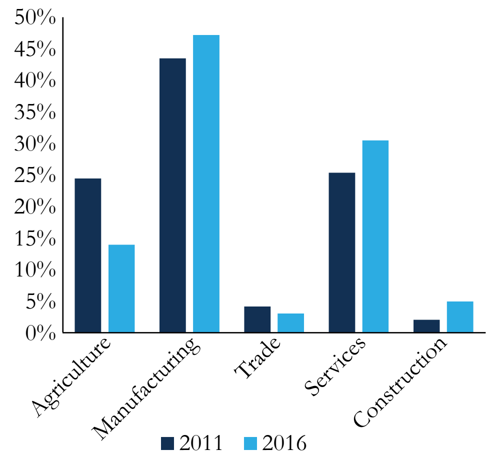
Source: ILO Modeled Estimates 2016.

E. Constraints on women's resources for optimal care

Cambodia's high female labor force participation outpaces other countries in the region (figure S14) **and facilitated the growth of manufacturing.** An estimated 80 percent of Cambodian women age 15-64 worked for at least an hour in the previous week, compared to an average of 66 percent for EAP women. Nearly 23 percent of Cambodian women worked in the manufacturing sector in 2015, as compared to 21 percent in Thailand and 19 percent in Vietnam.[66] Manufacturing has driven the rise in wage labor: 42 percent of working women in 2016 held paid occupations, almost half of which were in the garment sector. There have also been significant increases in women's wage work in services and construction sectors between 2011 and 2016 (figure S15).

Cambodian women working in the garment and footwear industries face difficulties managing the balance between work and caregiving roles, despite Labor Law provisions. Most garment and footwear workers cannot afford to have children living with them due to the high cost of accommodation and childcare expenses. Garment workers with children typically spend about 50 percent more than single workers do on

FIGURE S15: Female wage employment by sector in Cambodia



Source: CSES 2011 and 2016. In: Gavalyugova, Dimitria and Wendy Cunningham. 2019. "Gender Analysis of the Cambodian Labor Market." World Bank. In progress.

62 WHO/UNICEF Joint Monitoring Program (JMP) 2017 (Updated July 2017). Note: Improved sanitation refers to improved sanitation which is not shared. If shared latrine is included, the figure would be 57 percent.

63 WHO/UNICEF JMP 2015.

64 Safely managed water service is defined as an improved drinking water source which is located on premises, available when needed, and free from fecal and chemical contamination. Safely managed sanitation service is defined as improved sanitation facility which is not shared with other households and where excreta are safely disposed in situ or transported and treated off-site.

65 WHO/UNICEF JMP 2017. Note that the estimate for safely managed sanitation is not available.

66 Gavalyugova, Dimitria and Wendy Cunningham. 2019. "Gender Analysis of the Cambodian Labor Market." World Bank. In progress.

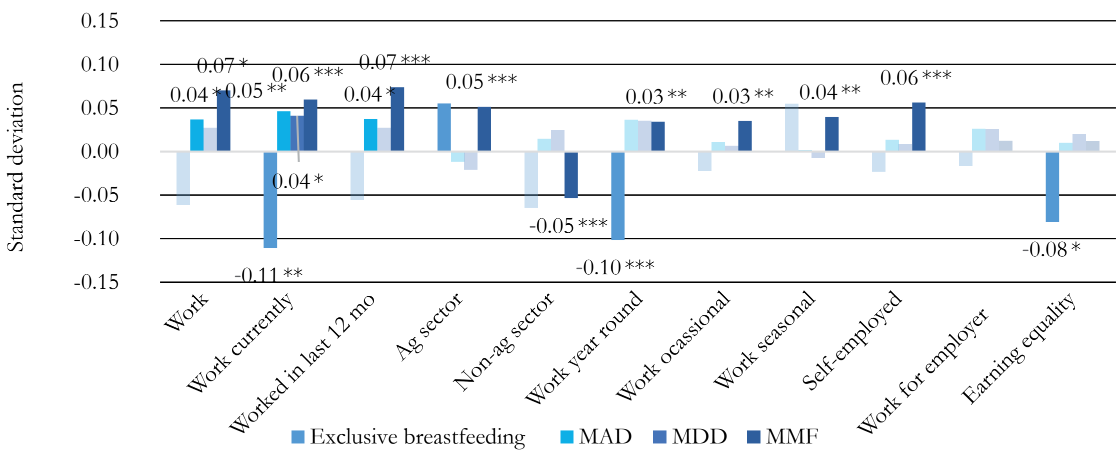
their children's living and educational expenses.[67] Moreover, factory non-compliance with childcare and breastfeeding provisions is pervasive: 72 percent of surveyed factories were in noncompliance with the provisions to have both an accessible nursing room and functioning day care center.[68]

Even so, many of Cambodia's working women are not covered under provisions of the labor law. Though women have been most visible as the engine of the formal garment industry, their participation is growing in private wage employment in services (such as hospitality and education), agriculture, and construction that in the large part remains informal. For instance, more than 500,000 women workers are in the informal wage employment sector in the services and construction sectors.[69] Women in these informal sectors lack the formal protections afforded to workers in large garment factories, such as maternity protection, workload burden, wage, breastfeeding, childcare, and others.

Thus, Cambodian women experience growing constraints on the time available for care of young children. Due to the high cost, inconvenience, and lack of safety inherent in relocating or commuting with their mothers, young children are often left in the custody of secondary caregivers (e.g. grandmothers, neighbors, siblings) for extended periods. There are concerns regarding the quality of these caregivers in providing for optimal care and child development, particularly grandmothers, who have expressed low skills and bandwidth to take care of young children.[70] According to the 2014 DHS one in ten children under five in Cambodia are left in inadequate care.[71]

There is growing evidence to scrutinize the role of care for women and children as a driver of undernutrition. The persistence of traditional gender roles and weak social systems to provide care and feeding for children (both formal and informal), may contribute to unforeseen impacts on infant and young child feeding and nutritional outcomes. Recent analyses suggest there are tradeoffs between women's productive and reproductive roles: that benefits accrued from additional income may result in reduced breastfeeding but improved complementary feeding. Among all children age 0-5, mother's work and year-round work are both associated with better anthropometric and infant and young child feeding (IYCF) outcomes; however, these two variables are associated with poorer outcomes (wasting, underweight, and height-for-age) among children under 2 as compared to all children under 5 (figures S16 and S17). Moreover, significant improvements in IYCF practices disappear when limited to women working in non-agriculture sector (figure S16).

FIGURE S16: Infant and young child (0-23 months) feeding outcomes associations with mother's work force participation, 2014



Source: Authors' calculations from CDHS 2014. MAD: Minimum Acceptable Diet; MDD: Minimum Dietary Diversity; MMF: Minimum Meal Frequency. * p< 0.10, ** p < 0.05, *** p < 0.01.

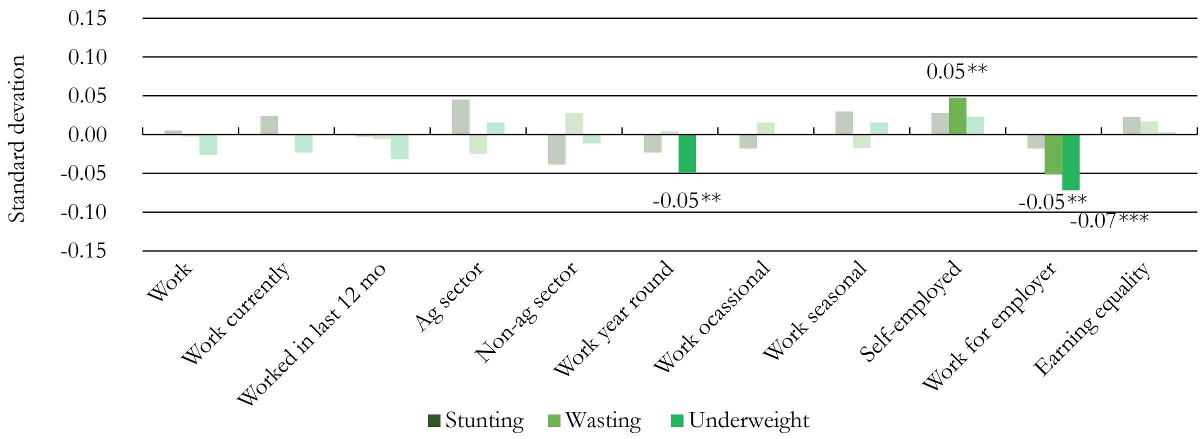
[67] See the selected issue on the Garment Sector in Perspective, October 2016 Cambodia Economic Update, the World Bank.
[68] International Labour Office (ILO). 2018. Better Factories Cambodia: Towards Gender Equality - Lessons from factory compliance assessments. Geneva: ILO.
[69] See the selected issue on Future Jobs in Cambodia, April 2018 Cambodia Economic Update, the World Bank.
[70] See for instance: World Bank and Planète Enfants & Développement. Results of consultations on the concept of community-based childcare for garment factory workers. In progress.
[71] Defined as being left alone or in the care of a child under the age of 10 years.

F. Limited Availability and Efficiency of Public Expenditures for Child Health and Nutrition[72]

Cambodia spends more on health (about 6-7% of GDP) relative to regional comparators, (figure S18), but the public expenditure on health is relatively low (1.3% of GDP in 2015). Public expenditure accounts for 22 percent of total health expenditure, and government share of per capita health expenditure remains low relative to other countries in the region at $16 (figure S19). Increases in public expenditure on health have been historically driven by macroeconomic growth rather than a prioritization of the sector (figures S20 and S21).

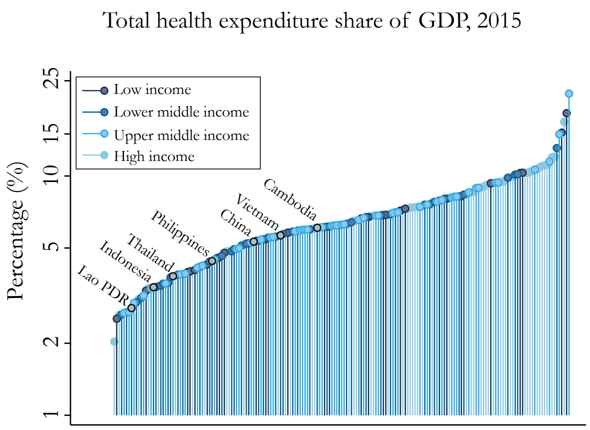
High out-of-pocket spending and reliance on external financing are challenges in the sustainable financing for universal health coverage. Health expenditures are largely financed through out-of-pocket spending. Among sectors, Cambodia's health sector receives the largest share of grant financing from overseas development assistance, but external financing has been declining since 2011; by 2017 it was nearly halved from 2002 (figure S22).

FIGURE S17: Infant and young child (0-23 months) anthropometric outcomes associations with mother's work force participation, 2014



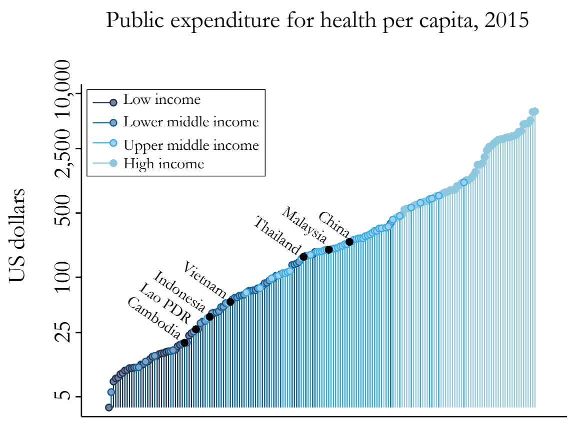
Source: Authors' calculations from CDHS 2014. *p < 0.10, ** p < 0.05, *** p < 0.01

FIGURE S18: Cambodia's total health expenditure is high relative to regional peers



Source: WHO Global Health Expenditures Database.

FIGURE S19: Though Cambodia's public health expenditure per capita is lowest among regional peers



Source: WHO Global Health Expenditures Database.

72 Due to the importance of nutrition-specific interventions for improving child nutrition and growth, this section draws heavily upon preliminary findings from the following report led by Emiko Masaki: World Bank. Cambodia Health Financing System Assessment. In Progress. It focuses on trends in public expenditure in the health sector as sectoral home of nutrition service delivery.

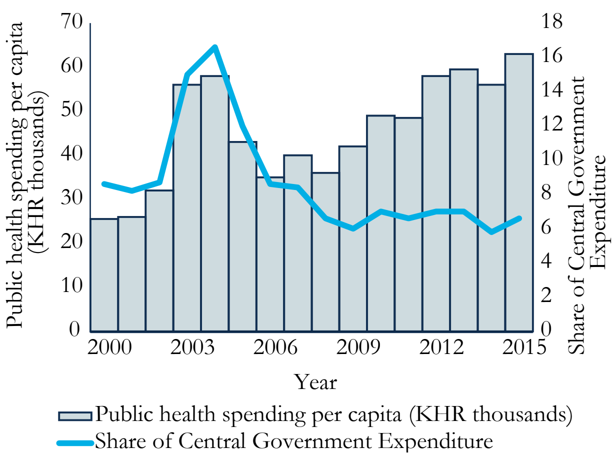
Despite the slow increase in public health expenditure, innovations in health financing and service delivery have improved productivity and efficiency of underlying investments in health to enable improvement in several population health and nutrition outcomes. Specifically, the expansion of the Health Equity Fund and service delivery grant systems have: (i) mobilized resources to frontline provides; (ii) improved health worker motivation and accountability; (iii) enabled systematic and structured supervision; (iv) created data systems of growing transparency; and (v) improved the citizen-centeredness and responsivity of public services.

Unfortunately, these mainstream systems of health financing and service delivery have addressed nutrition only to a limited extent. Health sector investments in nutrition have historically been low, fragmented, and dominated by external financing (Figure S23). Cambodia's National Nutrition Program has long operated as a vertical program with ad hoc interaction with mainstream public health service delivery and frontline providers.

As with the wider health sector, the nutrition program has been experiencing an external financing transition. There has been slow progress in integrating this financing into the domestic budget: While the national maternal and child health program[73] received 6-7 percent of the overall Ministry of Health budget in 2016-2018, the National Nutrition Program received less than one percent (annual average US$ 127,000) of the MCH program budget (Figure S24). The bottlenecks in service delivery identified above are to be expected.

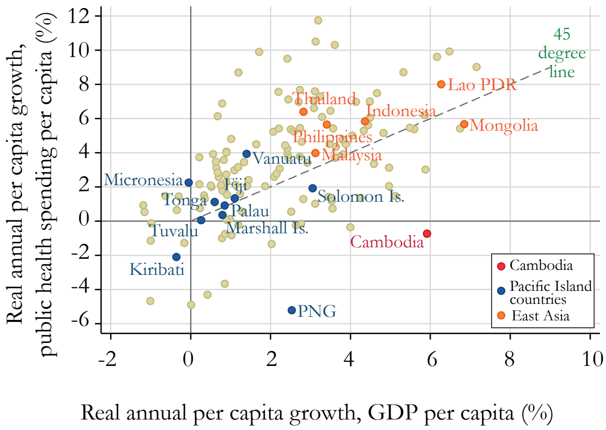
Domestic financing potential for early childhood health nutrition exists within the commune/Sangkat fund, yet this potential remains unrealized. Under the commune/sangkats general mandate, local authorities have the flexibility to support investments in social services and social protection, including maternal and child health and nutrition. The annual C/S fund allocation rose incrementally by 2 percent since 2003 and reached a total of US$93 million in 2017. However, only about one-third of the total allocation (averaging US$63,000 per C/S) is available for development activities.[74] Thus, despite remarkable increases in the total funding, the development investment per capita is relatively low (US$2.37 in 2017) and has plateaued since 2013.[75] However, the commune investment planning process and the complex procurement procedures often limit C/S investment in local social services/development projects.

FIGURE S20: Per capita public health expenditure has increased over the past decade



Source: Authors' estimates.

FIGURE S21: Cambodia's strong economic growth is not being translated into commensurate public investments in health



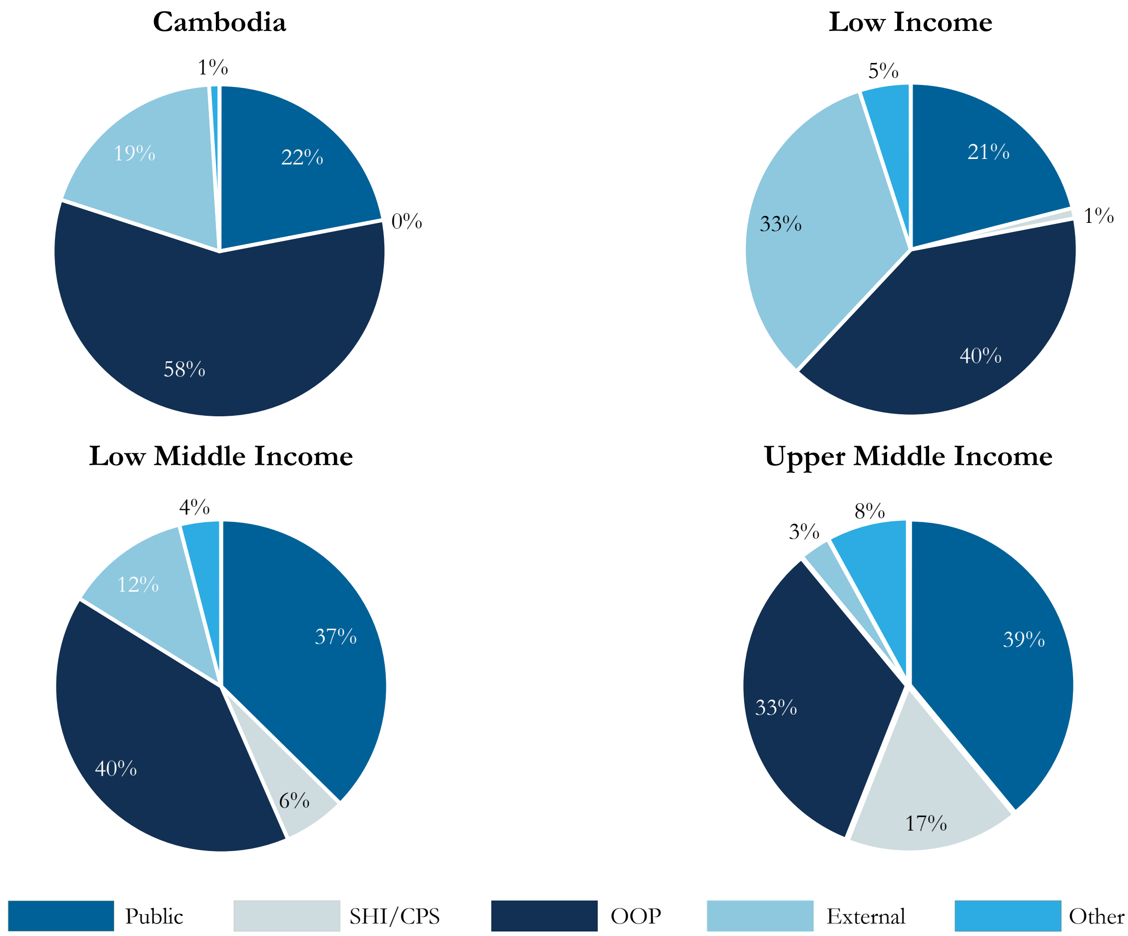
Source: IMF World Economic Outlook, WHO Global Health Expenditures Database.

73 Including sub-programs for reproductive health, maternal and newborn care, child health (including immunization), and nutrition.

74 Until 2013, it was a legal requirement that the cost of administration not exceed one-third of all total funding. By 2017, the cost of administration reached 61 percent of total costs. This raises potential allocative efficiency issues, as the opportunity costs of high salaries is reduced development spending on capital projects and, by extension, reduced effectiveness of SNAs.

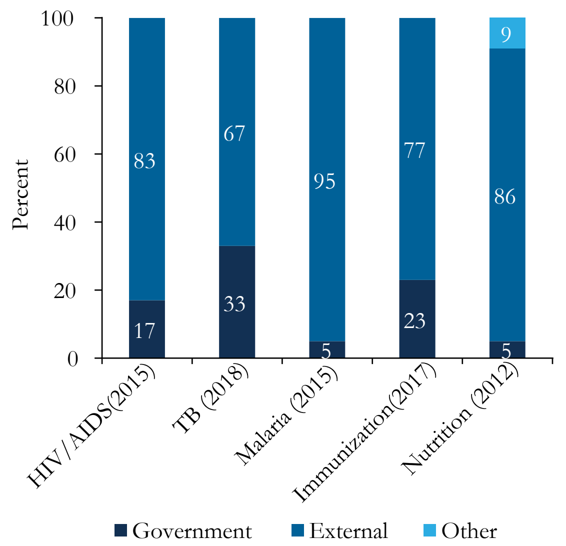
75 World Bank. 2018. Cambodia's Cross-Cutting Public Financial Management, Decentralization, and Public Administration Reforms: Achievements, Coordination, Challenges, and Next Steps. Phnom Penh: World Bank.

FIGURE S22: **Composition of health financing in Cambodia and comparator country groups**



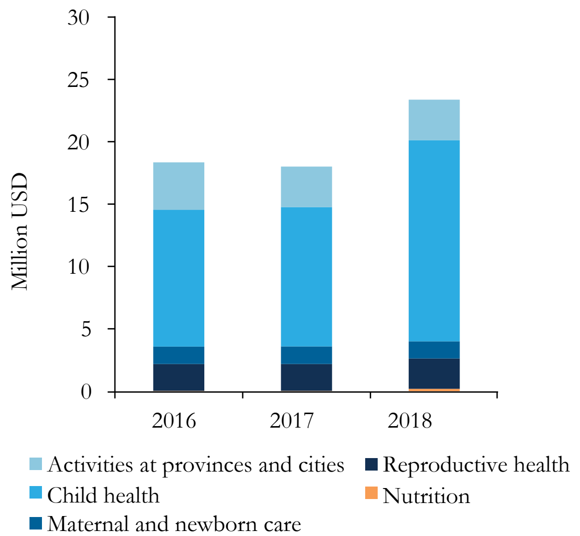
Source: Source: WHO Global Health Expenditures Database 2017. SHI: Social Health Insurance. CPS: Contributory Pension Scheme. OOP: Out-of-Pocket.

FIGURE S23: **Health Spending by Program and Sources (latest available year)**



Sources: UNAIDS, Global AIDS Monitoring Database 2018; WHO, World Malaria Report 2017; WHO, World Tuberculosis Report 2018; WHO/UNICEF, JRF, 2018.
Note: other includes OOP and Health Insurance.

FIGURE S24: **Maternal and Child Health* Program Budget by Sub-Program, Ministry of Health, FY 2016-2018**



Source: General Department of Budget, MEF, Budget In Brief for Fiscal Year 2016, 2017, 2018.

5. Policy Options

Without dedicated effort and attention to address the foundations of early childhood health and nutrition, Cambodia will struggle to have its human capital formation keep pace national development aspirations. In addition to rapid poverty reduction combined with robust economic growth, at least three achievements have likely contributed to Vietnam's rapid reduction in child stunting: prioritization of nutrition by the national government, policies designed to improve infant and child feeding practices, and efforts to reduce micronutrient deficiencies.[76]

Increasing the magnitude and efficiency of the investments from individuals, public sector, and the private sector can help ensure that children get off to a smart start, preparing them with the foundations to maximize their education and skills development. These investments will further help the country to take advantage of the country's demographic dividend and maximize its produced and natural resources. Policy makers can take several actions to contribute to accelerated progress in this area:

1. **Develop a comprehensive human capital master plan that begins in the early years to guide domestic investments.** Immediate steps can be taken to initiate the development of a strategic vision for human capital improvement that will simultaneously: (i) meet the needs for short-term skills-building alongside medium-term improvements in the quality of education; and (ii) support long-term investments in the health, nutrition, and development of young children. These two strategies should be undertaken in parallel in order to avoid the loss of early childhood potential that would result if these investments are only undertaken one after the other. As will be outlined below, the agenda is not for the public sector alone: progress can be augmented by linking sectoral programs and interventions and engaging the private sector and families.

Sector Specific Strategies

To close gaps in early life nutrition outcomes, more will need to be done specifically to: (i) prioritize nutrition within existing sector resources; and (ii) focus on improved quality to enhance the efficiency of underlying public expenditures.

2. **Leverage mainstream health financing and service delivery reforms to improve the coverage and quality of maternal and child health and nutrition services delivered through public facilities.** A first priority will be to ensure the availability and quality of nutrition-specific services such as maternal nutrition counselling (especially through antenatal care), well-child visits including immunization and infant and young child feeding promotion, and management and treatment of acute malnutrition are critical first steps to improving nutrition outcomes. Small investments in building the capacity and resources of the National Nutrition Program can enable the use of mainstream health system platforms to dramatically increase the quantity, quality, performance and efficiency of health sector spending on nutrition.

3. **Engaging the subnational administration (commune/sangkats) to increase the efficiency of domestic resources at local level and create community awareness of the importance of early childhood nutrition.** Subnational finances and platforms can be redirected to contribute to nutrition, even within the existing resource envelope. Proposed increases to the C/S Fund allocation present opportunities to improve the magnitude and quality of expenditure on nutrition. This can best be achieved through: (i) dedicated staff support at C/S level to manage and administer social funds; (ii) clear guidelines and capacity building (technical and fiduciary) to manage such funds at the local level; and (iii) close interaction with the health sector to provide guidance and quality assurance and support for community-level health and nutrition promotion.

4. **Support social and behavior change through a multi-component communication strategy**

[76] Keefe M. On the Fast Track: Driving Down Stunting in Vietnam. In: Nourishing Millions - stories of change in nutrition. Eds: S Gillespie, J Hodge, S Yosef, and R Pandya-Lorch. Washington, DC: IFPRI.

and engagement with private sector. The Cambodian government's role in improving child health and nutrition extends beyond service provision. The public sector can also invest in interventions to shape social norms and provide information that can shape individual decisions for long term behavior change and sustainability. Experience in Vietnam and Bangladesh demonstrated that a national mass media campaign combined with counselling at health facilities and/or community mobilization could successfully improve complementary feeding practices.[77][78] A similar approach is warranted in Cambodia to influence individual behaviors and longer-term social change related to maternal, infant, and young child nutrition and household and food hygiene behaviors. Facilitating the entry of private sector actors (food processors, sanitation providers, and water operators) can leverage their expertise in developing marketing solutions, thus reducing consumer barriers to product uptake and increase perceived product benefits.

5. **Improve the availability and affordability of nutrient-rich foods and complementary food products.** A nutrition-sensitive value chains approach can contribute to increasing the supply of nutrient-rich foods and food processing that enhances the nutritional value of food products. Efforts are underway to improve agricultural productivity and diversification: intensifying the focus of agricultural investments on research, inputs, extension, and domestic market creation for nutrient-rich foods (e.g. fruits, vegetables, animal-source protein, and whole grains) can help enhance the quality of the Cambodian diet. Targeted public-private partnerships can support manufacturers of commercially produced, fortified complementary food products to enhance their availability and affordability. These efforts need to be complemented by stronger regulation and enforcement of private sector companies marketing unhealthy foods/ beverages and breastmilk substitutes, along with stronger private sector engagement in self-regulation.

6. **Expand the breadth and depth of social protection and labor policies to enable Cambodia's families invest in the next generation.** Women's participation in Cambodia's labor force has intrinsic and instrumental value and should be maintained. A medium-term policy agenda can include strengthening formal and informal social support systems can minimize women's tradeoffs between work and care for children and improve child nutrition and development outcomes. Options include:

   a. Leverage the maternal and child cash transfer to stimulate demand and remove access barriers to health and nutrition service utilization and improved dietary behaviors. As the program moves toward roll-out, care must be taken to maintain the integrity and confidence in public health system to deliver quality services. Investing in a system to easily, consistently, and transparently transfer promised benefits can help ensure there are no failed promises.

   b. Further expand and refine maternity protections to enable women's full participation in the labor force. Developing viable options for expanding the breadth (duration of protection) and depth (possible beneficiaries) of maternity protection is needed to cover more women regardless of sector of work. Contributory schemes may be explored to support such expansion.

   c. Improve the availability and affordability of child care options. While the labor law mandates the provision of on-site childcare, this may not be feasible or desirable in the Cambodian context, particularly for garment workers. Expanding models of community-based and private child care, accompanied by strong quality standards and capacity building, can improve the quality of care provided to children of working mothers.

   d. Create social support and pressure to fully involve fathers in child care. Given the finite

[77] Rawat R, Nguyen PH, Tran LM, Hajeebhoy N, Nguyen H Van, Baker J, Frongillo EA, Ruel MT, Menon P. Social franchising and a nationwide mass media campaign increased the prevalence of adequate complementary feeding in Vietnam: a cluster-randomized program evaluation. J Nutr 2017;147:670–9.

[78] Menon P,Nguyen PH, Saha KK,Khaled A, Sanghvi T, Baker J,Kaosar A, Haque R, Frongillo EA, RuelMT, et al. 2016. Combining intensive counseling by frontline workers with a nationwide mass media campaign has large differential impacts on complementary feeding practices but not on child growth: results of a cluster-randomized program evaluation in Bangladesh. J Nutr;146(10):2075–84.

nature of women's time, efforts to improve care and feeding for young children can be maximized through greater involvement of fathers in childcare.

7. **Mobilize investment in water supply and sanitation to expand services to unserved population.** Achieving universal coverage for water supply and sanitation by 2025 would require US$211 million per year.[79] The requirement is much greater than what the public sector alone can afford, and thus options of leveraging private sector financing and household investment should be explored. A focus should be on creating the regulatory environment to ensure the quality and safety of drinking water, and also strengthening support for improved household hygiene environment, particularly in rural areas.

Photo credited : Igor Dashevskiy

[79] World Bank. 2015. Service Delivery Assessments for Water Supply and Sanitation in Cambodia: Turning Finance into Services for the Future.

ANNEX 1: PRICE ELASTICITIES OF GARMENT, FOOTWEAR AND MILLED RICE IN THE WORLD

Author	Article	Methodology	Price Elasticity
Rice			
Wen S. Chern, Kimiko Ishibashi, Kiyoshi Taniguchi, Yuki Tokoyama (2002)	Analysis of food consumption behaviour by Japanese households	Heckman	-1.8 (Japan)
Erkan Erdil (2006)	Demand systems for agricultural products in OECD countries	Rotterdam and AIDS models	-2.9 (Italy) -3.1 (Netherland) -1.5 (Norway) -1.4 (Portugal) -2.0 (Sweden)
Noel D. Uri, Jonathan D. Jones (1989)	The price elasticity of export demand for US agricultural commodities reconsidered	Export Function	-0.6 (USA)
Garment			
Donatella Baiardi, Carlucci Bianchi, Eleonora Lorenzini (2015)	The price and income elasticities of the top clothing exporters: evidence from a panel data analysis	Export Function	-0.92 (China) -0.73 (France) -0.75 (Germany) -0.96 (Hongkong) -0.74 (Hongkong) -0.72 (Netherland) -0.87 (UK) -1.25 (USA)
Nadezhda Ivanova (2005)	Estimation of own-and cross-price elasticities of disaggregated imported and domestic goods in Russia	Demand Function	-1.13 (Russia)
Footwear			
Nadezhda Ivanova (2005)	Estimation of own-and cross-price elasticities of disaggregated imported and domestic goods in Russia	Demand Function	-1.01 (Russia)
Jan Kemper (2018)	Cross-cultural differences in online price elasticity	Demand Function	-1.58 (EU)
Garment and Footwear			
Jan Kemper (2018)	Cross-cultural differences in online price elasticity	Demand Function	-1.07 (Austria) -0.97 (Belgium) -1.76 (France) -2.74 (Germany) -1.22 (Netherland) -0.48 (Sweden

ANNEX 2: CAMBODIA'S KEY INDICATORS

	2016	2017e	2018e	2019f	2020f	2021f
Output and Economic Growth						
Real GDP (% change, yoy)	7.0	7.0	7.5	7.0	6.9	6.8
Exports, GNFS [1/]	61.3	60.7	63.3	63.6	64.9	65.8
Imports, GNFS	65.7	64.1	66.6	65.3	65.1	65.7
Domestic demand (% change, yoy)	9.9	8.5	10.0	9.9	8.9	10.5
GDP per capita (US$, nominal)	1,264.9	1,375.8	1,476.8	1,640.3	1,789.9	1,951.9
Money and Prices						
Inflation, consumer prices (annual %, period average)	3.5	3.1	3.2	3.3	3.0	3.1
M2 (% of GDP)	70.9	79.4	88.8	96.0	103.2	110.4
Domestic Credit to the Private Sector (% of GDP)	69.5	74.5	82.8	91.1	100.2	110.2
Nominal Exchange Rate (local currency per USD)	4,058.0	4,062.0	4,067.0	4,075.0	4,050.0	4,030.0
Real Exchange Rate Index (2010=100)	104.9	105.2	108.6	110.3	111.2	113.7
Short-term interest rate (% p.a.)	11.9	11.7	11.3	11.0	11.0	11.0
Fiscal						
Revenue (% of GDP)	20.7	21.4	22.3	21.2	21.6	22.0
Expenditure (% of GDP)	22.1	23.1	24.2	23.9	23.6	23.6
Overall Fiscal Balance (% of GDP)	-1.4	-1.6	-1.9	-2.6	-2.0	-1.6
Primary Fiscal Balance (% of GDP)	-1.0	-1.2	-1.5	-2.1	-1.5	-1.1
General Government Debt (% of GDP)	29.1	30.3	30.6	30.0	30.1	31.1
External Accounts						
Export growth, f.o.b (nominal US$, annual %)	8.6	5.3	5.3	9.0	8.6	8.1
Import growth, c.i.f (nominal US$, annual %)	8.6	4.0	4.1	7.6	7.1	6.8
Merchandise exports (% of GDP)	45.5	45.2	46.8	46.8	47.5	47.7
Merchandise imports (% of GDP)	56.9	55.6	57.6	56.6	56.6	57.4
Services, net (% of GDP)	7.0	7.0	7.4	8.1	9.0	9.9
Current account balance (current US$ millions) [2/]	-2,040.2	-2,155.5	-2,502.9	-2,540.7	-2,702.1	-3,012.4
Current account balance (% of GDP)	-10.2	-9.7	-10.5	-9.5	-9.1	-9.2
Foreign Direct Investment, net inflows (current US$ millions)	2,164.4	2,381.0	3,238.6	2,835.8	2,802.4	3,044.6
Foreign Direct Investment, net inflows (% of GDP)	10.8	10.8	13.4	10.4	9.3	9.2
Gross international reserves (millions US$)	6,730.8	8,757.9	10,143.7	10,650.9	11,183.5	11,742.7
(prospective months of imports of g&s)	5.7	6.6	6.3	6.6	6.2	6.0
	1.187	1.301	1.158	1.050	1.050	1.050
Memo: Nominal GDP (millions US$)	20,019.0	22,109.6	23,720.4	26,749.3	29,619.2	32,753.4

Sources: Cambodian authorities, IMF and World Bank staff estimates and projections
e = estimates
f = forecast
p = projection
[1/] Goods and Non-Factor Services (GNFS)
[2/] Excluding transfers.

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Cambodia Country Office
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Floor 10th IBRD and 11th IFC
Streets 51-61 and Streets 102 -106
Sangkat Wat Phnom, Khan Daun Penh
Phnom Penh, Cambodia
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