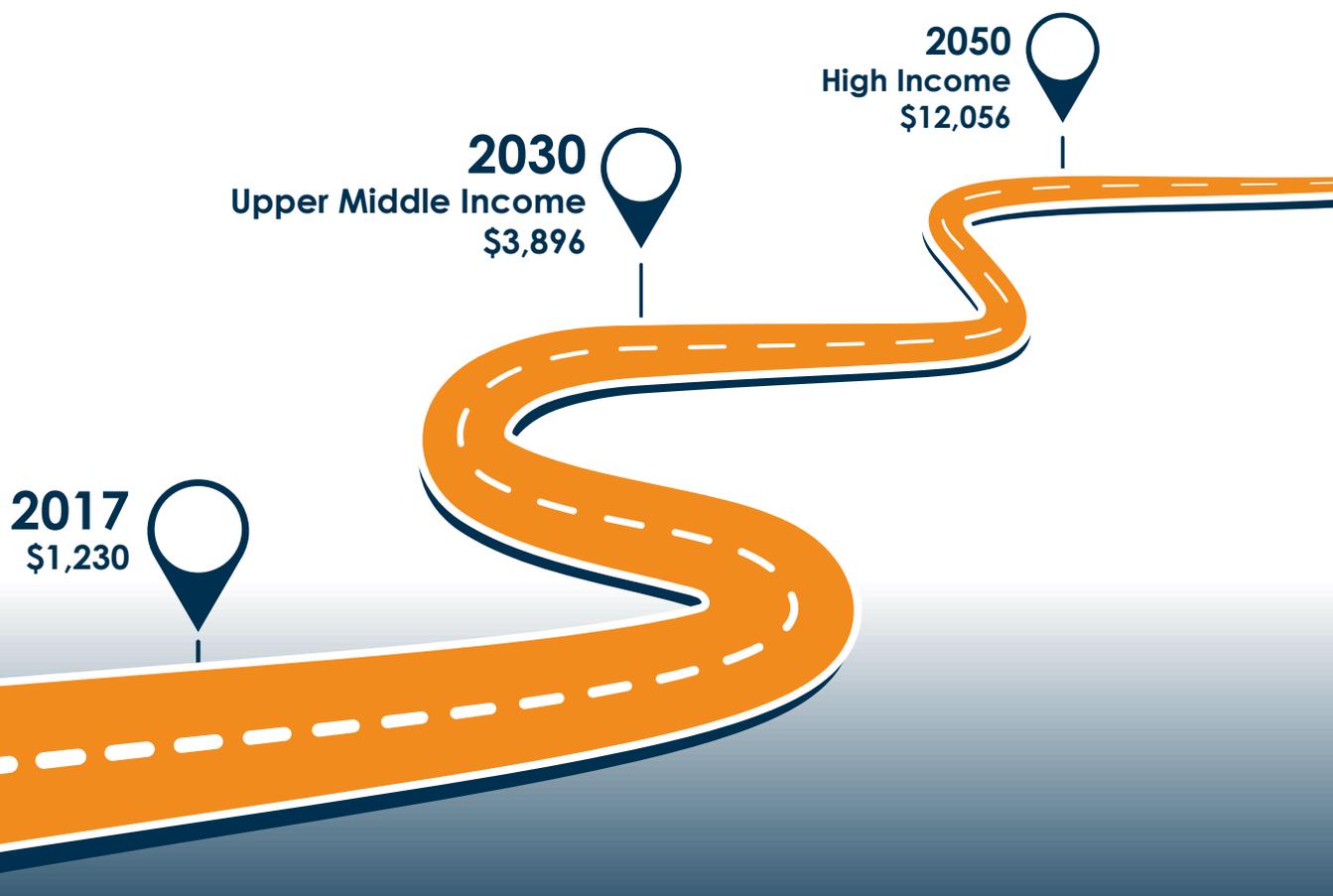


# CAMBODIA ECONOMIC UPDATE



## RECENT ECONOMIC DEVELOPMENTS AND OUTLOOK

### SELECTED ISSUE:

Can Cambodia become an upper middle-income economy by 2030 and a high-income country by 2050?

OCTOBER 2018



WORLD BANK GROUP



# CAMBODIA ECONOMIC UPDATE

OCTOBER 2018

Recent economic  
developments and  
outlook





# TABLE OF CONTENTS

<b>ACKNOWLEDGEMENTS</b> .....	<b>1</b>
<b>ABBREVIATIONS</b> .....	<b>2</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>3</b>
<b>SECTION 1 – Recent Economic Developments and Outlook</b> .....	<b>9</b>
Recent economic developments.....	9
Growth has remained strong in Cambodia.....	9
There has been a surge in FDI inflows .....	12
The recent FDI inflows also favored investment in the manufacturing industries, especially garments .....	12
A thriving tourism industry, as visitor arrivals grew to 3.0 million or 13.6 percent (y/y) by mid-2018.....	13
Nevertheless, Cambodia remains far behind Thailand and Vietnam in attracting foreign tourists ..	14
Only 5 percent tourists visiting Vietnam and 13.5 percent of tourists coming to Thailand extended their visits to Cambodia .....	14
Agricultural diversification, including quality differentiation, will help the sector respond to changing domestic and external demand .....	15
Access to safe water for rural households, however, remains a challenge .....	16
Rising domestic demand has been met by a surge in imports.....	17
Cambodia has been quite successful in attracting FDI inflows, thanks to its liberal trade and investment policy .....	21
Confidence in the banking system continued to underpin foreign currency deposits.....	22
As a share of GDP, Cambodia’s bank credit has already overtaken that of Indonesia and the Philippines .....	25
Fiscal expansion fueled domestic demand, consumption, and imports.....	27
This year’s revenue performance continues to be strong and is projected to meet or exceed the 2018 budget target.....	27
China is by far the largest creditor, accounting for almost half of Cambodia’s outstanding debt ...	29
Against a backdrop of better-than-expected export performance, rising consumption, and upbeat investor sentiment, the growth outlook has been revised up.....	29
Risks are growing as domestic credit continues to substantially go to the construction and real estate sector .....	30
Potential spill-over effects of U.S.-China trade disputes on the economy.....	31
Safeguarding the health of the financial sector is a top priority .....	31
Cambodia requires a substantial boost in its investment to achieve its higher-income economy targets .....	32
<b>SECTION 2 – SELECTED ISSUE: Can Cambodia become an upper middle-income economy by 2030 and a high-income country by 2050?</b> .....	<b>35</b>
I. Introduction.....	35
II. Structural transformation .....	36
III. Assessing Cambodia’s long-term growth potential .....	38
IV. Policy options .....	49
<b>Annex: A description of the Long-Term Growth Model</b> .....	<b>52</b>
<b>CAMBODIA: KEY INDICATORS</b> .....	<b>54</b>
<b>References</b> .....	<b>55</b>

# ACKNOWLEDGEMENTS

The preparation of the 2018 October Cambodia Economic Update (CEU) was led by Sodeth Ly, with contributions from Miguel Eduardo Sánchez Martín. The selected issue “Can Cambodia become an upper middle-income economy by 2030 and a high-income country by 2050?” was prepared by Steven Michael Pennings, with contributions from Jorge Luis Guzman Correa and Norman V. Loayza, and comments from Sodeth Ly and Runsinarith Phim. Linna Ky served as research assistant. Inputs for the poverty section were provided by Kimsun Tong. Saroeun Bou helped with the press release, web display, and dissemination events.

The team worked under the overall guidance of Deepak Mishra, Practice Manager, Macroeconomics, Trade, and Investment Global Practice. The team is grateful for the advice and comments provided by Ellen Goldstein, Country Director for Myanmar, Cambodia and Lao PDR and Inguna Dobraja, Country Manager for Cambodia. Several World Bank colleagues provided comments on the draft version including Bronwyn Grieve, Ekaterine Vashakmadze, Ergys Islamaj, Francesca de Nicola, Lan Van Nguyen, Phyrum Kov, Ratchada Anantavasilpa, Sinem Celik, Sudhir Shetty and Ulla Heher.

The team is grateful to the Cambodian authorities, particularly the Ministry of Economy and Finance and the National Bank of Cambodia for their cooperation and support. The report also benefited from the advice, comments and views of various stakeholders in Cambodia, including its enthusiastic readers and critics.

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](http://www.worldbank.org/cambodia).

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

# ABBREVIATIONS

<b>ABSD</b>	Additional Buyer's Stamp Duty	<b>LTGM</b>	Long-Term Growth Model
<b>AFTA</b>	ASEAN Free Trade Agreement	<b>LTV</b>	loan-to-valuation
<b>ASEAN</b>	Association of Southeast Asian Nations	<b>MA</b>	moving average
<b>bbf</b>	barrel	<b>MAFF</b>	Ministry of Agriculture, Forestry and Fisheries
<b>BOT</b>	Bank of Thailand	<b>MDI</b>	microfinance deposit-taking institution
<b>CDC</b>	Council for the Development of Cambodia	<b>MEF</b>	Ministry of Economy and Finance
<b>CEU</b>	Cambodia Economic Update	<b>MFI</b>	microfinance institution
<b>CR</b>	Cambodian riel	<b>MOEYS</b>	Ministry of Education, Youth and Sport
<b>DECMG</b>	Development Economics and Chief Economist: Macroeconomics & Growth	<b>MOP</b>	Ministry of Planning
<b>DP</b>	Development Partner	<b>MPK</b>	marginal product of capital
<b>EAP</b>	East Asia and Pacific	<b>NCD</b>	negotiable certificate of deposit
<b>EBA</b>	Everything But Arms	<b>NIS</b>	National Institute of Statistics
<b>EMDEs</b>	emerging markets and developing economies	<b>NPL</b>	nonperforming loan
<b>EOP</b>	end of period	<b>NSDP</b>	National Strategic Development Plan
<b>EU</b>	European Union	<b>PC</b>	per capita
<b>FCD</b>	foreign currency deposit	<b>PDR</b>	People's Democratic Republic
<b>FDI</b>	foreign direct investment	<b>PFM</b>	public financial management
<b>GDCE</b>	General Department of Customs and Excises	<b>ppts</b>	percentage points
<b>GDP</b>	gross domestic product	<b>RGC</b>	Royal Government of Cambodia
<b>GDPPC</b>	gross domestic product per capita	<b>RMS</b>	Revenue Mobilization Strategy
<b>GMAC</b>	Garment Manufacturers' Association in Cambodia	<b>RS</b>	Rectangular Strategy
<b>GNI</b>	gross national income	<b>SDR</b>	Special Drawing Rights
<b>GNIPC</b>	gross national income per capita	<b>SEA</b>	Southeast Asia
<b>GTAP</b>	Global Trade Analysis Project	<b>SME</b>	small and medium-sized enterprise
<b>GVC</b>	global value chain	<b>TVET</b>	Technical and Vocational Education and Training
<b>ICOR</b>	incremental capital-to-output ratio	<b>UMI</b>	upper middle-income
<b>IDP</b>	Industrial Development Policy	<b>US\$</b>	United States dollar
<b>IMF</b>	International Monetary Fund	<b>VAT</b>	value-added tax
<b>LPCO</b>	Liquidity-Providing Collateralized Operation	<b>WBG</b>	World Bank Group
		<b>YTD</b>	year-to-date
		<b>y/y or yoy</b>	year-on-year



## EXECUTIVE SUMMARY

### Recent developments

**Economic growth remains strong, driven primarily by robust expansion in consumption and exports.** Domestic demand has been boosted by higher wage growth and larger public investments, with fiscal expansion serving as stimulus. Public outlays were budgeted to increase to 24.6 percent of GDP in 2018 from 23.1 percent in 2017. At the same time, strong external demand has boosted exports of garment and footwear products, which increased 16.1 percent (y/y) during the first half of 2018—a two year high—from 8.3 percent at the end of 2017. Tourist arrivals reached 3 million during the first six months of 2018, a 13.6 percent increase (y/y), compared with 11.8 percent in 2017, driven by a surge in tourist arrivals by air from China.

**Capital inflows, mainly comprising foreign direct investment (FDI) continue to increase, underpinning Cambodia’s stable external position.** Official data showed rising FDI to the manufacturing sector, especially the textile, apparel,

and footwear industries, and to agroprocessing. Vibrant construction activity continues to be financed by rising FDI inflows and domestic credit. FDI is estimated to have increased by 14.3 percent (y/y) during the first six months of 2018. About 90 percent of the inflows (excluding those to the financial sector) have originated from China and are directed toward the construction and real estate, agriculture and agroprocessing, and garment sectors. A growing proportion of FDI is now invested in the productive sectors, namely the manufacturing and agriculture sectors, albeit its share remains relatively small at about 20 percent of total inflows.

**Rising disposable income remains the main driver of domestic demand, fueling economic activity.** Rapidly rising wages in the private and public sector have underpinned strong domestic demand, which is being largely met by a surge in imports. Motor vehicles and steel imports, which gauge domestic consumption and construction demand, skyrocketed, rising by 81.4 percent and 50.0 percent respectively, in June 2018. Therefore,

the current account deficit slightly widened in the first half of 2018 but continued to be entirely financed by FDI inflows.

**While easing, credit growth remains elevated.**

Though credit growth continues to moderate, bank (and microfinance) credit-to-GDP rose to an all-time high of 73 percent (and 20 percent) at the end of June 2018, up from 31.4 percent (and 3.8 percent) in 2010. Confidence in the banking system has so far remained strong and private sector deposits, largely in U.S. dollars, grew at 22.4 percent (y/y) in June 2018. Gross international reserves rose to US\$9.0 billion or about six months of prospective imports. The Cambodian riel (CR) which is pegged to the U.S. dollar due to Cambodia's highly dollarized economy, has slightly depreciated, reaching CR 4,082 per U.S. dollar at the end of September 2018, compared to CR 4,037 at the end of December 2017. Rising prices of food items (and utilities) have pushed up inflation, which rose to 2.9 percent (y/y) in June 2018, from 2.2 percent in December 2017. Consequently, the real exchange rate continued its appreciating trend.

**Rapid fiscal expansion has underpinned consumption and growth.** The overall fiscal deficit (including grants) is expected to widen significantly to 4.2 percent in 2018, up from 1.6 percent in 2017. Cambodia's debt distress level, however, remained low as per the 2018 World Bank/IMF Debt Sustainability Analysis, given the fact that the authorities only contract external debt on concessional terms. In addition, after years of fiscal consolidation and strong revenue performance, the authorities have built up the fiscal buffer in the form of government deposits, accounting for about 13 percent of GDP by mid-2018.

## Outlooks and risks

**With the impact of the fiscal stimulus wearing off after 2018, Cambodia's growth is expected to return to its long-term potential.** Cambodia's growth, which was trending downward since 2013, is expected to continue to marginally expand, reaching 7.1 percent in 2018, driven by strong domestic and external demands. Given that the recent cyclical acceleration in growth has been driven in part by substantial fiscal expansion, the growth outlook is projected to ease slightly to 6.8 percent over

the next two years. The favorable longer-term outlook is boosted largely by rising FDI inflows to manufacturing and agriculture, and improved supply chain linkages between FDI and Cambodian firms. Authorities have introduced several new initiatives to promote small- and medium-sized enterprises, including strengthening their linkages with the FDI sector (see box 2). Strong economic growth is expected to result in continued poverty reduction.

**Risks in the financial sector continue to grow, with large exposure to the construction and real estate sector.** The growth of domestic credit in Cambodia has been faster than any other country in East Asia— increasing nine-fold in 12 years. As construction and real estate typically are more prone to boom and bust cycles, rising domestic credit financing the construction sector increases the financial sector's vulnerability. In addition, the construction sector has experienced a lengthy boom since the end of the 2008–09 global financial crisis.

**External risks are rising as well, with the potential temporary withdrawal of Everything But Arms (EBA) preferences for Cambodia, ongoing trade frictions between the two largest trading nations, and continued appreciation of the U.S. dollar against most global currencies.** The European Union market accounts for more than a third of Cambodia's key exports, which are garment and footwear products. Therefore, losing EBA preferences, which currently provide Cambodia full duty-free and quota-free access to the EU for all their exports with the exception of arms and armaments, will likely slow Cambodia's export growth, and negatively impact its labor market in the short term. Trade disputes among major economies, especially the United States and China, will negatively impact global trade and disrupt regional and global value chains, with uncertain impact on Cambodia. Given Cambodia's increased dependency on China for its FDI, tourism, and official development assistance, a sharp downturn in the Chinese economy will diminish Cambodia's growth outlook in the short and medium term. The hardening of global monetary conditions and appreciation of the U.S. dollar could erode the competitiveness of exports, given Cambodia's high level of dollarization.

## Key messages and policy options

**Given the lengthy construction boom, a high priority for the authorities would be to safeguard the health of the financial sector in the near term.** Lately, the real estate sector has shifted toward more speculative activity in which there is a growing trend of land sales and purchases with less obvious or justifiable investment returns in the foreseeable future. The recent surge in FDI inflows has masked the financial sector's vulnerability caused by prolonged rapid credit growth. It is therefore necessary to develop macroprudential policies, including both financial and fiscal measures to reduce the scope for speculative activities financed by the banking and microfinance sectors. It is crucial to adopt lending guidelines including value-to-loan ratio limits, while considering imposing additional taxes on sales and purchases of property, especially land, for investment (speculative) purposes. It is equally important to revisit the nonperforming loan to classifications. In addition, other prudential measures such as loan-to-income ratio, increased down payment and other factors could be considered.

**To absorb rising FDI inflows in manufacturing and agroprocessing, further bridging of the infrastructure deficit is warranted.** While improving, further investment to upgrade and expand physical infrastructure needs to be a priority to enable Cambodia to better integrate into regional (and global) value chains. To facilitate

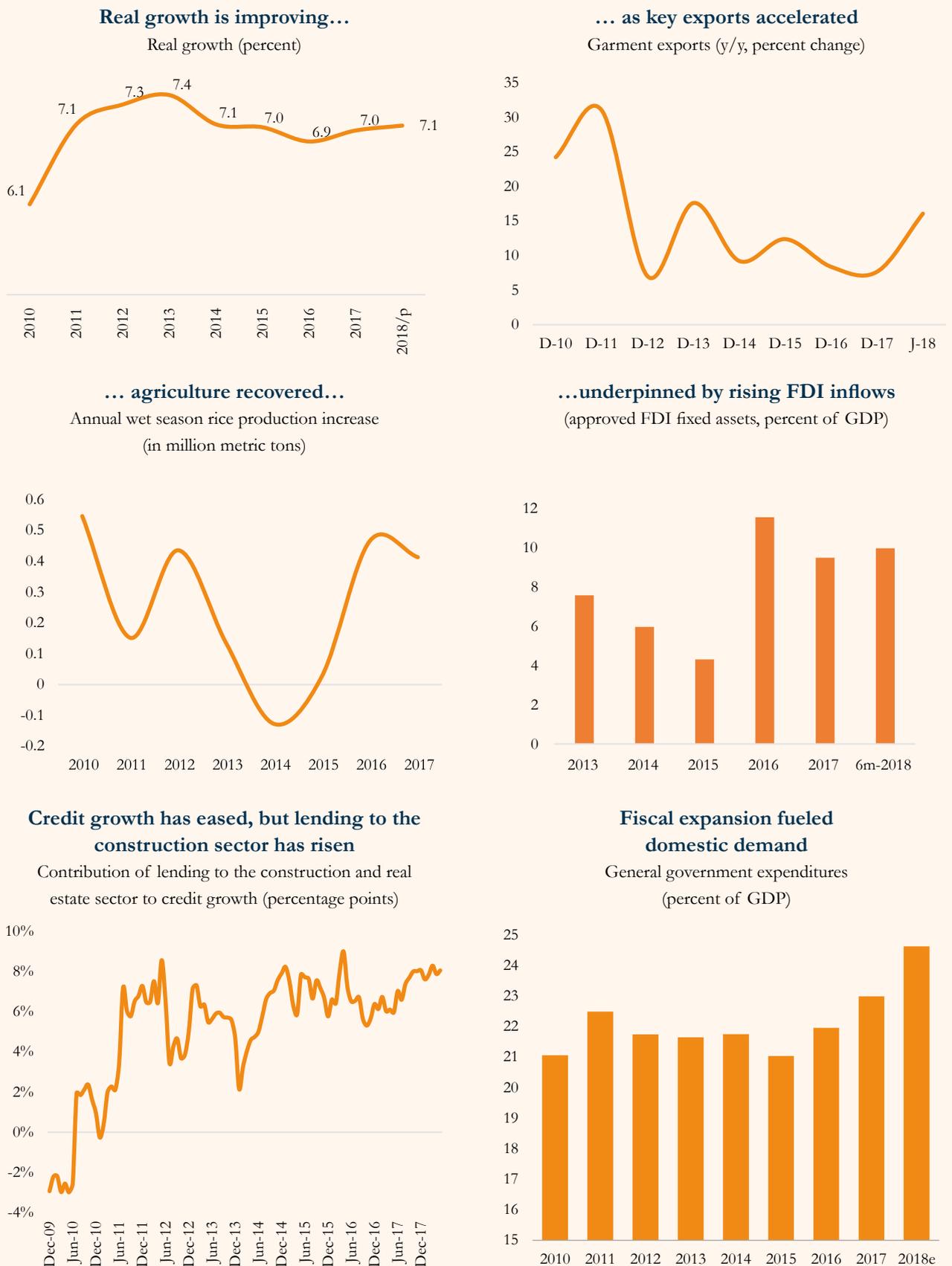
trade expansion, connectivity such as transportation and logistics upgrade is being identified with the preparation of the National Logistics Masterplan and the introduction of the National Logistics Council. In terms of logistics capabilities, Cambodia ranked 98th out of 160 countries on the 2018 Logistic Performance Index (LPI), declining from 73rd place in 2016. On average, successful exporters of electronics, such as Thailand and Malaysia, rank in the top 40.

**Mobilizing domestic savings to boost investment in the medium term is paramount.**

As discussed in the selected issue section, “Can Cambodia become an upper middle-income economy by 2030 and a high-income country by 2050?” Cambodia's gross domestic savings, at under 20 percent of GDP, is among the lowest in the region. The country is therefore heavily dependent on foreign savings in the form of FDI, which is not only volatile but also unsustainable in the long term. It is therefore necessary to start generating additional domestic resources to finance productive investment as Cambodia endeavors to become a high-income country within the next four decades. Pro-saving policies similar to those provided by regional countries (see box S2), are therefore needed to encourage households to save and to reward businesses to reinvest. Enhancing the regulatory and supervisory framework, improving the financial reporting system, developing good corporate governance practices, and establishing a financial protection system will help further promote savings.



## FIGURE ES. 1: CAMBODIA'S ECONOMY AT A GLANCE



Sources: Cambodian authorities and World Bank staff estimates and projections.  
Note: pre = preliminary; p = projection; RHS = right-hand side.





SECTION 1

**Recent Economic  
Developments  
and Outlook**

# SECTION 1 – Recent Economic Developments and Outlook

## Recent economic developments

### Growth has remained strong in Cambodia

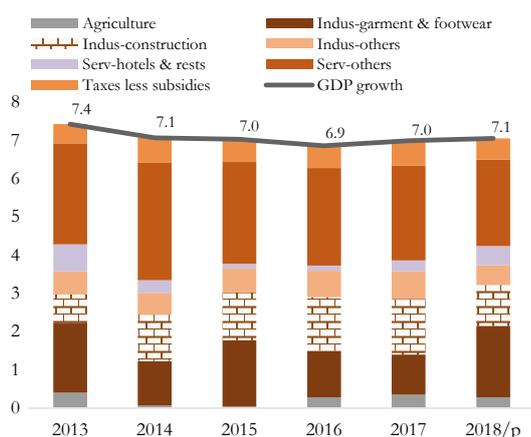
**Overall, economic activity has continued to remain strong, driven by domestic consumption and exports.** Against a backdrop of rising consumption, better-than-expected export performance, and upbeat investor sentiment, growth outlook has been revised up modestly in the short and medium term. Cambodia’s growth is expected to reach 7.1 percent in 2018 (compared to a newly revised official number of 7 percent growth in 2017) (figure 1).

**Cambodia is among the few countries in the East Asia and Pacific (EAP) region that are expected to experience marginal improvements in growth.** Growth in advanced economies remained above potential despite signs of softening.<sup>1</sup> In the United States, significant fiscal stimulus will boost near-term activity. Growth in the United States reached 2.3 percent in 2017, supported by broad-based

strength in domestic demand, especially investment. The Euro Area economy grew 2.4 percent in 2017, its fastest increase since the financial crisis, reflecting strong consumption, investment, and exports. Advanced economy growth is projected at 2.2 percent for 2018—a slight deceleration from last year (as additional fiscal stimulus in the United States is offset by moderating growth in other major economies), while consumer confidence is still high and new jobs are being created at a solid pace (see box 1 for the global and regional economic outlook).

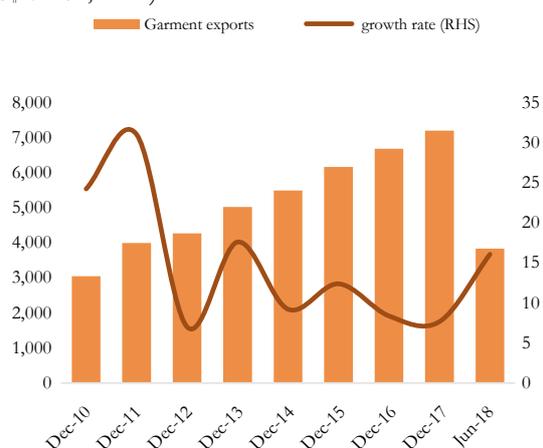
**Following a gradual recovery in the second half of 2017, Cambodia’s exports surged, supported largely by strong demand in the United States and the European Union (EU).** The overall textile, apparel, and footwear product exports, accounting for 74 percent of Cambodia’s total merchandise exports, recorded double-digit growth of 16.1 percent during the first six months of 2018, up from 8.3 percent at the end of 2017 (figure 2).

**FIGURE 1: Contribution to real growth**  
(percentage point)



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

**FIGURE 2: Garment and footwear export performance improved**  
(US\$ billion, YTD)



Sources: Cambodian authorities.  
Note: RHS = Right-hand side.

<sup>1</sup> Global Economic Prospects, June 2018, the World Bank Group, Washington, DC.

## Box 1

Global and Regional Economic Outlook<sup>1</sup>

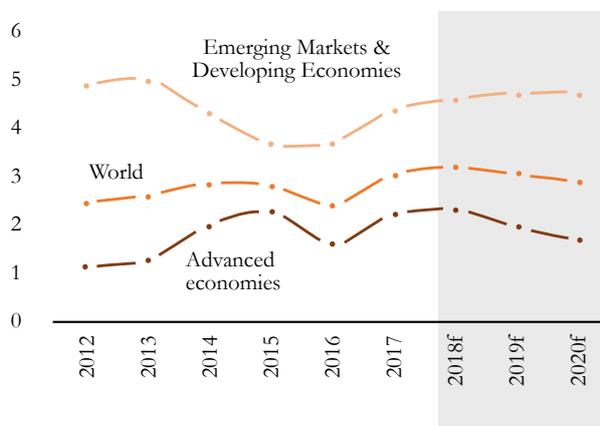
**Global growth is moderating, as the recovery in trade and manufacturing activity loses steam.** It is projected to slow from 3 percent in 2018 to 2.9 percent in 2019, as economic slack dissipates, major central banks continue to remove policy accommodations, and global trade and investment growth weaken further (figure B1.1).<sup>2</sup> Growth in advanced economies is projected to ease slightly from 2.2 percent in 2018 to 2 percent in 2019, and gradually decelerate toward potential, reaching 1.6 percent in 2020, as capacity constraints become binding.

**External conditions, which have deteriorated in 2018, are expected to become even less supportive of emerging markets and developing economies (EMDEs) during the forecast horizon.** This reflects moderating advanced-economy growth, softening global trade and investment, tightening financing conditions, and rising trade tensions. EMDE growth, which stalled at an estimated 4.2 percent in 2018, as a number of countries suffered financial pressures, is expected to increase only slightly in 2019, to 4.3 percent. Global trade, which accelerated sharply in 2017, benefiting from a cyclical upturn in global manufacturing, is expected to slow faster than expected in 2018 and will moderate further in 2019–20. Trade policy uncertainty has increased, weighing on the outlook for global investment and trade. Borrowing costs have generally tightened in EMDEs following a broad-based appreciation of the U.S. dollar, bouts of investor risk aversion, and increased focus on country-specific vulnerabilities. Since the U.S. dollar started strengthening again in April 2018, EMDE currencies have

fallen by an average of around 11 percent. Cumulative portfolio outflows from EMDEs have surpassed those seen after the Taper Tantrum in 2013, reflecting a broad-based selloff in both equity and bond funds. While financial market stress was most pronounced in Turkey and Argentina, many other EMDEs have also suffered from increased risk aversion. Countries with sizable external financing needs and policy uncertainties were most severely impacted, pointing to heightened investor focus on external vulnerabilities and growth prospects. External financing conditions are expected to continue to deteriorate in 2019, as monetary policy accommodation in advanced economies ends, and even reverses.

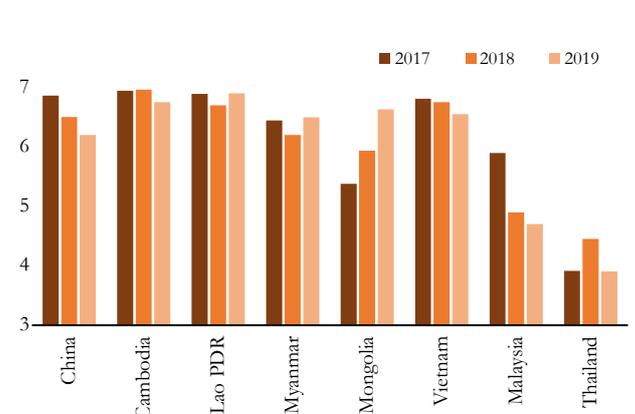
**Growth in the East Asia and Pacific region is expected to gradually moderate from 6.3 percent in 2018 to 6 percent in 2019 and 2020** (figure B1.2). The slowdown in regional growth reflects the structural slowdown and weaker exports amid rising trade tensions between China and the United States. Activity in the rest of the region is expected to remain steady, around its potential rate in 2019, but downside risks to the outlook have increased. The potential growth for the region appears to have declined. This reflects increasingly adverse demographic patterns and the projected slowing pace of capital accumulation, needed to rein in credit growth. Tightening global financing conditions, higher borrowing costs, moderating capital flows, and lingering policy uncertainty may hamper investment growth in the coming years, further constraining potential growth.

**FIGURE B1.1: Real GDP growth**  
(percent)



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

**FIGURE B1.2: Real GDP growth**  
(percent)



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

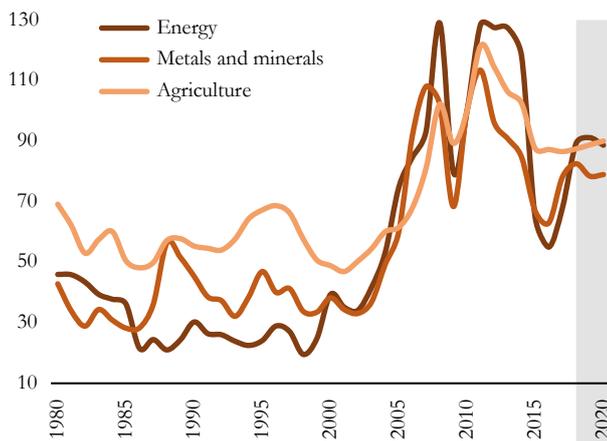
<sup>1</sup> Prepared by Ekaterine T. Vashakmadze, Senior Country Economist, World Bank.

<sup>2</sup> These are working assumptions, which will be finalized and published in the World Bank's January 2019 Global Economic Prospects.

**Commodity prices have diverged over the last six months.** While oil prices have risen since mid-2018, most other commodity prices have weakened amid growing trade tensions (figure B1.3). After a notable increase in the first half of last year, metal prices fell sharply in the second half following the imposition of broad-based tariffs by the United States on Chinese imports and market concerns about a global trade slowdown. Oil prices are expected to average US\$73/barrel (bbl) in 2019, before softening to US\$71/bbl in 2020—a rise of US\$4/bbl and US\$2/bbl, respectively, relative to June forecasts. (Metals prices are expected to weaken in 2019 and 2020 amid muted demand.) Agricultural prices are projected to remain stable in 2019 and 2020 on ample supply.

**The balance of risk to the global outlook is firmly on the downside.** Disorderly financial market developments could spread through EMDEs, amplified by elevated

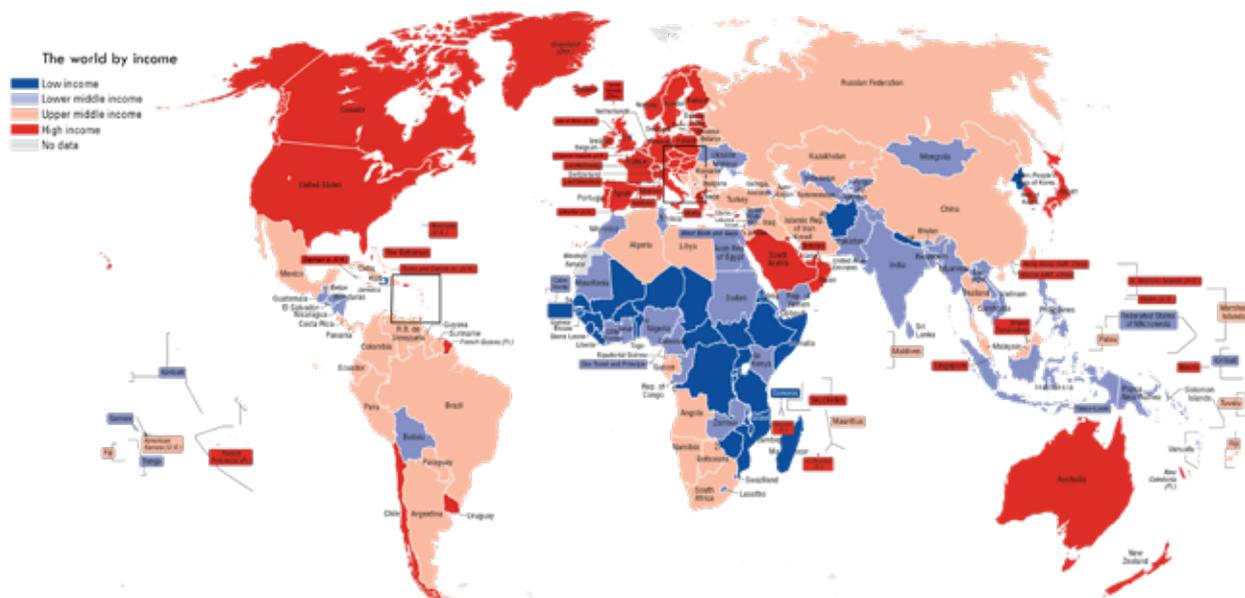
**FIGURE B1.3: World commodity prices forecast**  
(nominal U.S. dollars, 2010 = 100)



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

vulnerabilities in many countries. The probability of escalating trade restrictions continues to increase, which could have broad-based consequences in the presence of global value chains. In addition, policy uncertainty and geopolitical risks remain elevated and could negatively impact confidence and investment both in the affected countries and globally.

**Risks to the regional outlook are also tilted to the downside and have intensified.** Increased protectionist tendencies continue to create uncertainty about the future of established trading relationships. The imposition of trade restrictions by advanced economies would disproportionately affect the more open economies in the region. The EAP region is characterized by deep regional and global integration, which makes it vulnerable to trade shocks. It relies significantly on foreign income from exports and other foreign sources (World Bank October 2018 *East Asia and Pacific Economic Update*). In addition, a faster-than-expected tightening of global financing conditions and associated financing stress—triggered, for instance, by changes in market expectations of advanced-economy monetary policy or a rise in risk aversion—could further reduce capital inflows, heighten financial market volatility, and place pressure on regional exchange rates and asset prices. Rising borrowing costs could substantially increase the burden of debt servicing, which has been contained in recent years by low global interest rates and risk premiums. If a combination of downside risks were to materialize, it could trigger an even sharper-than-expected slowdown in regional growth. Domestic vulnerabilities—elevated domestic debt and large external financing needs in some countries—would amplify the impact of external shocks and dampen growth, especially where policy buffers are limited.

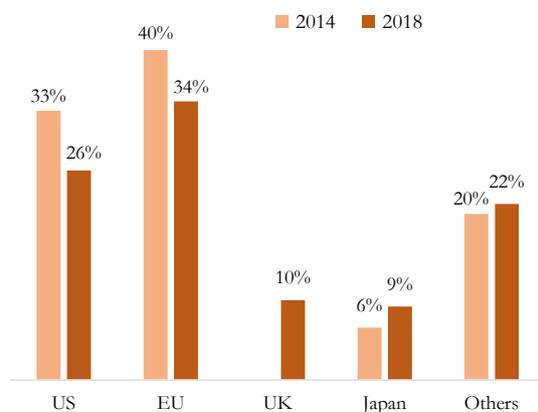


This represents a two-and half-year high. Notably, the exports to the EU (excluding the United Kingdom), with a 34.0 percent market share (figure 3), and to the United States, with a 26.0 percent market share, rapidly expanded, climbing at 15.5 percent and 26.3 percent, respectively. While these two markets did well, the rest of Cambodia’s export markets, namely the UK, Japan, and other markets, were flat. Consistent with the surge in textile and apparel exports, fabric imports, largely used as inputs for garment production, climbed sharply, growing at 37.1 percent during the first six months of 2018, reaching a three-year high.

**Official data show that investment in the textile, apparel, bag, and footwear industries rose, with a rising number of factories opening during the first half of 2018.**<sup>2</sup> In contrast to a net decline of 48 factories due to factory closures in 2017, 44 new factories started operating (31 of which are in the textile and apparel industries) during the first half of 2018, totaling 1,075 factories. Other manufacturing industries such as chemical, rubber, plastic, electrical appliances, and auto parts also received additional investment, with a net increase of 17 factories. In addition, several factories witnessed expanded operation in the first half of 2018. A total of 33,000 new jobs have reportedly been created, resulting in a total of 1.015 million jobs or a 3.4 percent increase.

**There has been a surge in FDI inflows**

**FIGURE 3: Textile, apparel, and footwear exports by main destination (percent share)**



Source: Cambodian authorities.

Note: The EU market in 2014 included the UK.

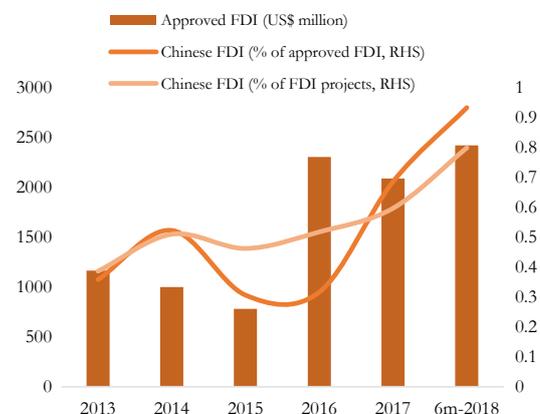
<sup>2</sup> Data from the Ministry of Industry and Handicraft.

**FDI inflows and foreign investors arriving in Cambodia are on the rise.** International visitors who have reported coming to Cambodia to conduct business rose to almost 9 percent in 2018, compared to 4.4 percent in 2013. Approved FDI (fixed assets) amounts increased quickly, rising at 38.4 percent, reaching US\$2.4 billion during the first six months of 2018 (figure 4).<sup>3</sup> Recently, FDI inflows have largely originated from China. As a share of approved FDI project value, Chinese FDI accounted for 60 percent of total FDI-funded projects (excluding FDI invested in the financial sector) in 2017. In 2018, the share rose further, reaching 90 percent during the first six months.

**The recent FDI inflows also favored investment in the manufacturing industries, especially garments**

**Unlike previous years when the share of FDI going to the garment sector shrank, the recent inflows favored investment in the manufacturing industries, especially garments and agroprocessing.** During the first half of 2018, the manufacturing industry received US\$120 million or a 90 percent (y/y) increase. Similarly, FDI inflows to the agriculture sector, including agroprocessing also increased, reaching US\$167 million during the first six months of 2018 or a 26.5 percent increase. However, FDI continues to predominantly go to physical infrastructure projects,

**FIGURE 4: Rising foreign direct investment**



Source: Cambodian authorities.

Note: RHS = Right hand side

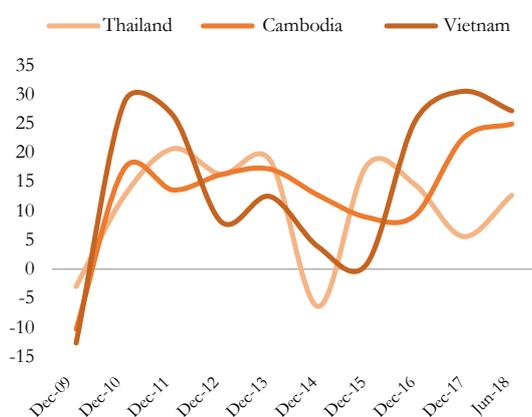
<sup>3</sup> Data from the Council for the Development of Cambodia.

including commercial and residential real estate development projects which have helped sustain vibrant construction activity.

**Newly emerging hot spots of the current construction boom have spread to seaside cities and border towns.** Sihanoukville received US\$126 million in approved FDI in June 2018 alone. Total approved development projects for residential and commercial purposes accounted for about 1,600 projects, amounting to US\$2.1 billion during the first six months of 2018, indicating a continued strong investment appetite. However, the per-square-meter value of approved investment in construction has declined, pointing to a shift toward lower-end development projects, targeting less affluent market segments. This is consistent with the expansion of more affordable housing projects on the outskirts of the capital city of Phnom Penh and in other urban areas.

**Those newly developed projects seem to partly respond to a thriving tourism industry as visitor arrivals grew to 3.0 million, or a 13.6 percent (y/y) increase in mid-2018,** compared with an 11.8 percent increase at the end of 2017 (figure 5). Expansion of construction activity in coastal cities, especially Sihanoukville, may have responded to the rising demand of tourism activity there. With the rising popularity of coastal zones, their share of tourists rose to 13.6 percent of total destination arrivals in 2018, compared to only 5.5 percent in 2010.

**FIGURE 5: Tourist arrivals to Cambodia, Thailand, and Vietnam (y/y, percent change)**



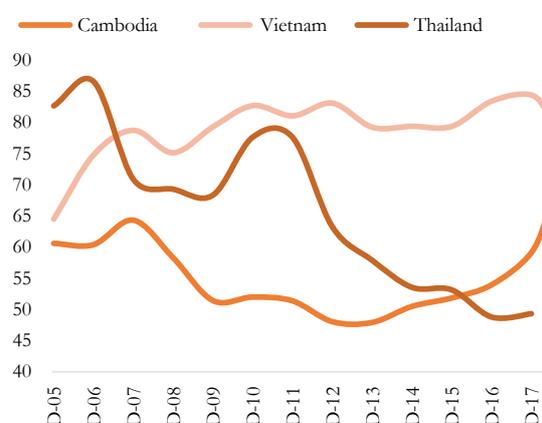
Source: Cambodian authorities; Thailand's Ministry of Tourism and Sport; and Vietnam's Ministry of Culture, Sport and Tourism.

**An abrupt slowdown in FDI from China due to a change in Chinese investor confidence therefore poses a risk.** This can negatively affect investment and growth. Challenges in doing business continue as Cambodia is currently ranked 138th out of 190 countries in Doing Business ranking in 2019, declining from 135th in 2018 and 131st in 2017. While the country is ahead of Lao PDR (154th), it is far behind many regional countries such as Indonesia (73rd), Vietnam (69th) and Thailand (27th).<sup>4</sup> In the latest Investment Climate Assessment (see box 2), while acknowledging the significant progress made, the assessment concludes that the current investment climate hampers improvements in productivity, diversification, and the development of a dynamic local private sector.

**A thriving tourism industry, as visitor arrivals grew to 3.0 million or 13.6 percent (y/y) by mid-2018**

**Efforts by the authorities to attract Chinese tourists have paid off.** Chinese tourists are ranked first (followed by Vietnamese, Lao, and Republic of Korea visitors) and their number skyrocketed, growing by 80 percent y/y, accounting for 30 percent of total arrivals (higher than in Thailand, where 27 percent of foreign visitors are Chinese). Travel by air now accounts for almost 70 percent of total arrival numbers, increasing from just 50

**FIGURE 6: Tourist arrivals by air to Cambodia, Thailand, and Vietnam (percent of total arrivals)**



Source: Cambodian authorities; Thailand's Ministry of Tourism and Sport; and Vietnam's Ministry of Culture, Sport and Tourism.

<sup>4</sup> <http://www.doingbusiness.org/content/dam/doingBusiness/country/c/cambodia/KHM.pdf>.

percent a few years ago (figure 6). While Siem Reap International Airport continues to attract the largest share, capturing 51 percent of all travel by air, arrivals via Phnom Penh International Airport have surged, expanding at 40 percent y/y by mid-2018 and accounting for 45 percent of total arrivals by air.

**Nevertheless, Cambodia remains far behind Thailand and Vietnam in attracting foreign tourists**

**In 2017, Cambodia attracted only 5.6 million foreign visitors, whereas Thailand and Vietnam received 35.4 million and 12.9 million visitors, respectively.** Looking at the combined tourism markets in its two large neighbors, Cambodia obtains only a small (and declining) fraction. As a share, Cambodia captures only 10 percent of the combined tourist arrivals to Thailand and Vietnam in 2017, down from 12 percent in 2014. This reflects substantial untapped potential as the country has not been very successful in luring tourists who visit its neighbors to come to the country.

**More than 80 percent of foreign tourists to Cambodia are first-time visitors.** Due to limited tourist destinations and product diversification, only 16.5 percent of foreign tourists coming to Cambodia are returning tourists, compared with more than 50 percent in Thailand. One study indicated that repeat visits can be due to several factors. These include satisfaction with accommodations, shopping, restaurant and food, and attitude of local people that generate relaxation and recreation.<sup>5</sup> Lessons learned from Vietnam may be applicable to Cambodia. Vietnam has done exceptionally well as, since 2016, foreign tourist arrivals there have grown by almost 30 percent y/y. Key issues such as far-reaching reform including implementation of a tourism law, preferential policies encouraging investment in tourism, prioritizing capital for tourism human resources, and enhancing tourism promotion work are among key policy measures that have helped propel Vietnam's tourism sector.

**Only 5 percent tourists visiting Vietnam and 13.5 percent of tourists coming to Thailand extended their visits to Cambodia<sup>6</sup>**

**In this regard, it is important to have a policy to make inroads into this growing market located at Cambodia's doorstep.** The policy may involve looking at the demand segments beyond what are being offered in Thailand and Vietnam. Potential market segments may include ecotourism, especially wildlife adventure parks and trekking, given Cambodia's relatively large share of the land area that is covered by national parks and reserves with high biodiversity. Cambodia could then develop a strategy to meet those segments, while establishing linkages with major attraction sites in Thailand and Vietnam.<sup>7</sup>

**Favorable weather conditions have contributed to improved production of the agriculture sector this year.** In 2017, rice production rose to 10.4 million metric tons, a 4.4 percent y/y increase (figure 7). The contribution by land (as the rice harvested area increased) and by yield to production increase is 230,000 and 180,000 metric tons, respectively. With rising rice surplus and exports, Cambodia jasmine, which is the country's famous fragrant rice, is gaining in popularity. The 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.<sup>8</sup> 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 gradual recovery of agriculture commodity prices has helped underpin increased agricultural production.** However, agricultural growth during 2016–17 remains much lower than during the period before 2013 (figure 8), because land expansion, which had been the main driver of strong agricultural performance, may have reached its limit. Raising the yield of agricultural production requires improvements in land and labor productivity, while diversification, intensification, and better seeds will

<sup>5</sup> "Factors Influencing International Visitors to Revisit Bangkok, Thailand," by Tun Thiomsak and Athapol Ruangkanjanase; <http://www.joebm.com/vol14/394-E000008.pdf>.

<sup>6</sup> 34.7 percent and 31.2 percent of foreign tourists come to Cambodia via Thailand and Vietnam, respectively, according to the 2017 Annual Report of the Ministry of Tourism.

<sup>7</sup> See the selected issue section entitled "Cambodia Calling: Maximizing Tourism Potential," October 2017 "Cambodia Economic Update" for an in-depth analysis of the tourism sector.

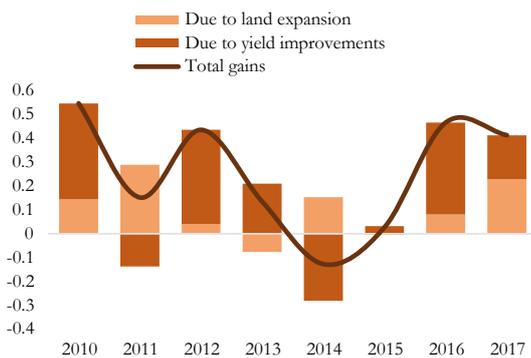
<sup>8</sup> <https://thericetrader.com/conferences/2018-WRC-Hanoi/worlds-best-rice/>.

promote land productivity. As Cambodia is located within the neighborhood of commodity giants, namely Thailand and Vietnam, it is strategically important to work toward quality differentiation (rice, pepper), sustainability premiums (“green”), and improved food safety (“clean”), while advancing agroprocessing (cashews, starch).

**Agricultural diversification, including quality differentiation, will help the sector respond to changing domestic and external demand**

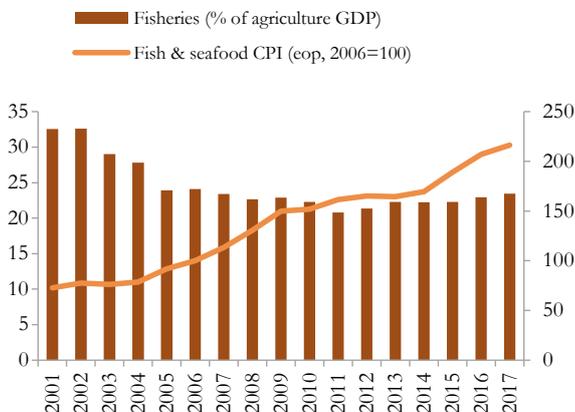
**Domestically, rising income and urbanization with a rapid expansion of the tourism sector is changing household food consumption,**

**FIGURE 7: Contribution to annual wet season rice production increase (in million metric tons)**



Source: Cambodian authorities.

**FIGURE 9: There have been rising fish and seafood prices, but diversification toward production of fisheries remains unrealized**



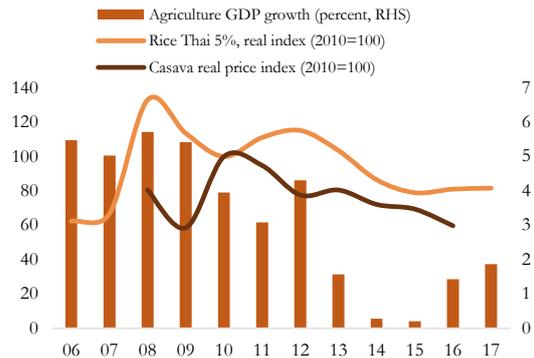
Source: Cambodian authorities.

Note: RHS = Right hand side

particularly regarding its consumption of animal products. This is also true for exports as the Asian middle class, especially in China, expands. However, during the last decade or so, diversification toward production of animal products and fisheries remains less successful despite rising demand and prices (figure 9).

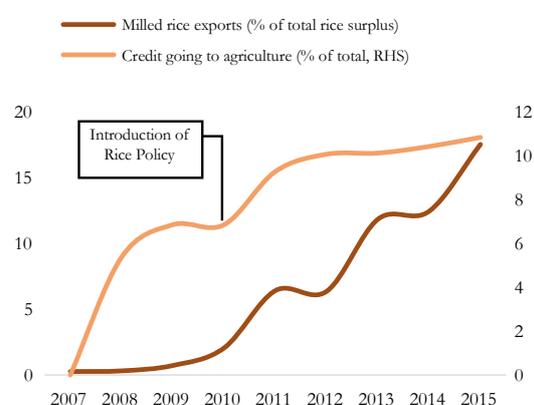
Therefore, a national strategy to promote agricultural diversification could play a crucial role. As in the case of the rice sector, the Policy on Paddy Rice Production and Promotion of Milled Rice Export introduced in 2010 has a lot to do with boosting private and public investment and underpinning the trade and export regulatory environment favorable to the expansion of milled rice production and exports (figure 10).

**FIGURE 8: Growth of agriculture GDP recovers but remains well below pre-2003 levels**



Source: Cambodian authorities and the World Bank Group.

**FIGURE 10: Rice policy in 2010 helped boost the share of milled rice exports and domestic credit to the agriculture sector (percent)**



Source: Cambodian authorities.

**The recovery in agricultural production has promoted agriculture-related jobs and businesses, although jobs in primary agriculture continue to decline.** The recovery in agricultural production in 2016 and 2017, coupled with improving economic prospects in the rural areas, is believed to have contributed to the return of some migrants, especially from Thailand, as proxied by a recent fall in remittances (figure 11). In this regard, poverty reduction is likely to continue in the rural areas.

**Consistent with the decline in poverty, access to housing and shelter has also improved.** Nearly 95 percent of all households in Cambodia owned dwellings in 2016, compared with 93 percent in 2010.<sup>9</sup> In the rural areas, as much as 96 percent of households own dwellings (averaging 50 square meters each), although the quality of their homes is inferior to those of their urban counterparts (82.7 percent with soft and temporary material flooring and 65 percent with one room only).

Access to safe water for rural households,  
however, remains a challenge

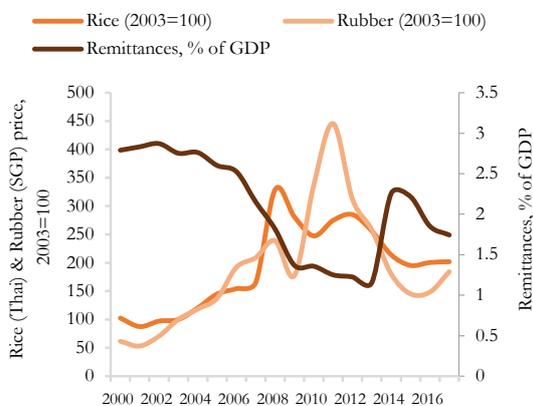
**As many as 47 percent of rural households (declining from 64 percent in 2010) continue to consume from unimproved water sources** (such as unprotected dug wells, ponds, rivers, streams,

and unimproved rainwater collection). Access to improved sanitation facilities has expanded significantly but remained relatively low, accounting for 67 percent of rural households, up from 29 percent in 2010.<sup>10</sup>

**Structural transformation continues, while the labor market is tightening.** The agriculture sector shed 344,000 jobs in 2016 (figure 12), although its performance improved. However, almost half a million jobs were created by the services sector, more than offsetting the decline in agriculture jobs, resulting in net job creation of a quarter of a million (higher than 116,000 jobs created in 2015). This net job creation may have helped fully absorb Cambodia's growing working-age population (age 15–64) with 164,000 new entrants into the labor force each year.

**Rising FDI inflows will continue to demand more labor, especially skilled labor.** In this regard, it appears that local skilled workers are not sufficient, and therefore for some industries including construction, employing foreign skilled workers is necessary. The constraints caused by Cambodia's inadequately educated workforce have been found to be the second-most-severe obstacle for the operation of manufacturing enterprises, according to the 2016 World Bank Group Enterprise Survey.

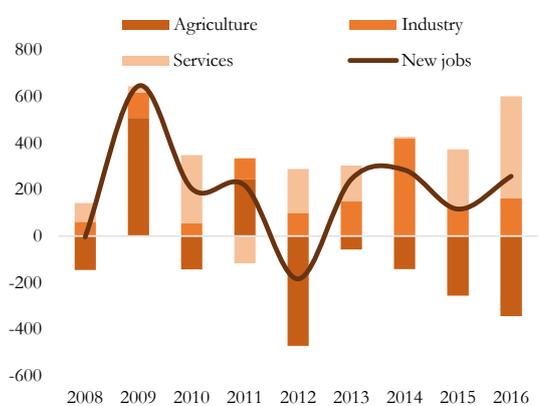
**FIGURE 11: Trends in rubber and rice prices, and remittances**



Source: Cambodian authorities.  
Note: RHS = Right hand side

<sup>9</sup> According to the 2010 and 2016 Cambodia socioeconomic surveys, the National Institute of Statistics.

**FIGURE 12: Contribution to job creation**  
('000 jobs)



Source: Cambodian authorities.

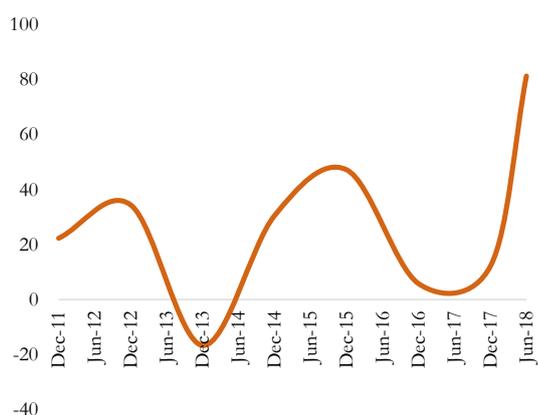
<sup>10</sup> 2010 and 2016 Cambodia Socio-Economic Surveys, National Institute of Statistics.

**Driven largely by external demand, merchandise exports have quickly accelerated this year.** In addition to the expansion of textile, apparel, and footwear product exports discussed above, initial diversification success has resulted in emerging manufactured product exports. Underpinned by the EU’s Everything But Arms (EBA) arrangement, Cambodia is now the biggest bicycle supplier to the EU market. It overtook Taiwan, China, which had been the largest bicycle exporter to the EU for over 20 years.<sup>11</sup> In 2017, Cambodia exported more than 1.4 million conventional bicycles, or about a 9 percent y/y increase, to the EU market, followed by Taiwan, China (1.3 million bicycles) and the Philippines (0.8 million bicycles). Cambodia’s total bicycle export value was US\$335 million in 2017. And during the first six months of 2018, Cambodia’s bicycle export grew by 16.7 percent. Other emerging exported products include vehicle and electrical parts, with a combined export value of about US\$400 million.

**Rising domestic demand has been met by a surge in imports**

**Cambodia recently experienced a surge in imports, reflecting rising consumer confidence.** Motor vehicles and steel imports, which gauge domestic consumption and construction demands, accelerated quickly. The imports of motor vehicles,

**FIGURE 13: Motor vehicle imports accelerated** (YTD y/y, percent change)



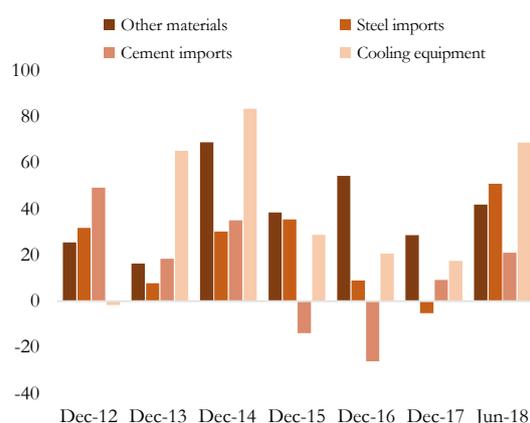
Source: Cambodian authorities.

<sup>11</sup> <https://www.bike-eu.com/sales-trends/nieuws/2018/06/cambodia-now-eus-leading-bicycle-supplier-10134013?vakmedianet-approve-cookies=1&ga=2.250830918.1923186902.1532411510-374096326.1532411510>.

which include largely passenger vehicles and motorcycles, skyrocketed, accelerating at 81.4 percent during the first six months of 2018 (figure 13). Bustling construction activity has required rising construction material imports as strong investor confidence continues. The imports of key construction materials, which include steel, cement, and cooling equipment, grew at 50.9 percent, 21.1 percent, and 86.7 percent, respectively (figure 14). Imports of foodstuff, beverages (soft drinks), and medicines, combined accounting for about US\$700 million, also rose by 31.1 percent y/y during the first six months of 2018.

**Cambodia’s external position, however, remains stable as healthy exports partly offset the surge in import demand and the current account deficit is fully financed by FDI inflows.** While slightly widening, the current account deficit is expected to remain fairly stable in 2018 at around 10.3 percent of GDP and entirely financed by FDI inflows. However, the fact that a disproportionate share of FDI is increasingly originating from one country can be a matter of concern. In addition, the surge in import demand has slowed the pace of gross international reserves accumulation, which grew at 15 percent year-on-year in June 2018, down from 30 percent in December 2017 — the fastest accumulation rate during the post-global financial

**FIGURE 14: Construction materials and steel imports** (y/y, percent change)



Source: Cambodian authorities.

## Box 2

## Cambodia Investment Climate Review – lessons for future competitiveness<sup>1</sup>

Cambodia experienced more than two decades of strong economic growth and graduated to lower middle-income status in 2017. These results are commendable and have pushed many Cambodians over the poverty line.<sup>2</sup> To identify lessons for the future, we take a closer look at how this exceptional growth was achieved.

This growth was mainly driven by export-oriented FDI and tourism. In the last decade, Cambodia ranked among the countries that attracted the most FDI in relation to its size worldwide.<sup>3</sup> Its garment sector produces 84 percent of all value added in manufactured exports, and the boom in tourism brought foreigners' cash to the country. In addition, official development assistance has supported progress in many public services such as infrastructure, health, and education. Overall, the growth was largely driven by attracting foreign financial resources in various ways, which should not diminish its impact.

What senior policy makers should consider, however, is that these foreign resources were attracted based on a low-cost, low-value model, while real achievements in productivity and competitiveness remain limited.<sup>4</sup> Foreign investors continuously confirm that low labor cost, high tax incentives and tariff preferences, and preferential access to export markets are the key reasons for their investment in Cambodia. With prosperity, wages are rising since the workforce has more opportunities. As a lower middle-income economy, Cambodia is likely to experience a progressive erosion in trade preferences and a decline in concessional financing over the next decade. The rise of Myanmar and other low-cost production destinations will test Cambodia's ability to retain and continue to attract high levels of FDI inflows to sustain robust economic growth and job creation. These are the consequences of progress—not bad developments—but they will impact the pathway to future growth.

A recent World Bank Group assessment<sup>5</sup> looked at the most important aspects of the investment climate affecting the benefits FDI, trade, and SME development can have for future growth. An enabling investment climate creates opportunities and incentives for private enterprises, both foreign and domestic, to invest, create jobs, and expand which strengthens the Cambodian industrial base and the competitiveness of firms in international markets. While acknowledging the significant progress made, the assessment concludes that the current investment climate

hampers improvements in productivity, diversification, and the development of a dynamic local private sector, for the following reasons.

First, the current cost of doing business in Cambodia does not encourage sufficient domestic investment and entrepreneurship. The “missing middle”<sup>6</sup> phenomenon in the size distribution of firms is much more pronounced in Cambodia than in low-income-country averages. In fact, there is also a scarcity of small-sized formally registered enterprises in Cambodia. The annual business entry density rate is less than a third of the average for lower middle-income countries (figure B2.1).

**FIGURE B2.1: Enterprise Entry Density across income groups in Cambodia**



Cambodia is one of the most difficult places in the world to register a business. Doing Business 2018 reported that starting a business in Phnom Penh requires nine procedures that take 99 days on average, costing 51.3 percent of Cambodia's income per capita. Paid-in minimum capital of 82.5 percent of income per capita is also required. Thus, Cambodia ranks 183rd out of 190 economies globally on ease of starting a business and last out of 25 economies in the East Asia and Pacific region. Consequently, many entrepreneurs do not register their business and avoid paying taxes. Informality, by default, makes participating in trade or linking to FDI firms more difficult, which has severe consequences for business' prospects—and for the competitiveness of the economy.

<sup>1</sup> Prepared by Ulla Heher, Private Sector Specialist, Macroeconomics, Trade and Investment GP.

<sup>2</sup> According to official estimates, the poverty rate in 2014 was 13.5 percent compared to 47.8 percent in 2007.

<sup>3</sup> Average FDI inflow of 7.8 percent of GDP between 2000 and 2016.

<sup>4</sup> The World Economic Forum Global Competitiveness Index ranked Cambodia 110<sup>th</sup> out of 125 countries in 2006 and 94<sup>th</sup> out of 137 nations in 2017. This is below all its neighbors and significantly below the East Asia and Pacific average.

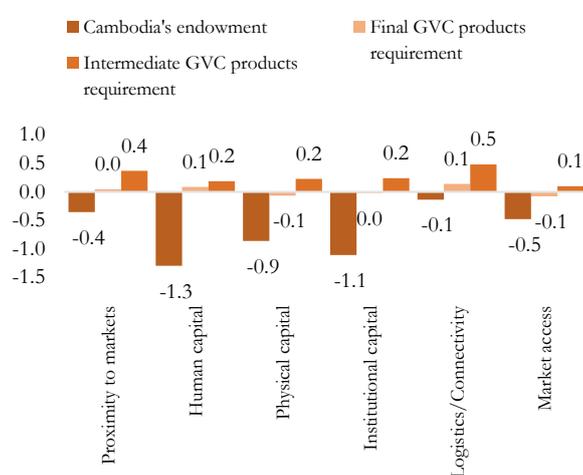
<sup>5</sup> The full report will be published in the first half of 2019.

<sup>6</sup> Cambodia has a significantly lower density of firms in the small-to-medium-sized segment than comparable economies.

Second, trade costs weigh heavily on Cambodia's export structure and exporting firms' performance. For a small country like Cambodia, the global marketplace is an important source for growth and development. Trade costs make up a significant portion of the total operating costs for Cambodia's importers and exporters, particularly for FDI, as most is export oriented. The contribution of transport and logistics to the total exported value added from Cambodia reached 14 percent.<sup>7</sup> This is double the contribution of these sectors in Thailand and 3.5 times that of Malaysia or Vietnam.<sup>8</sup> Reducing trade costs will not only enhance the cost competitiveness of existing exporters but will also help attract more sophisticated FDI into the country. This is particularly important, since exporters and foreign companies in Cambodia are 25 to 40 percent more productive than non-exporters and domestic companies.<sup>9</sup>

Third, the sophistication of Cambodia's economy and trade costs determine its ability to participate in regional and global value chains (GVCs). Currently, Cambodia is inserted in the least demanding GVC in the least demanding form—garments as a buyer—and is specialized in low-quality, low-sophistication, and highly substitutable segments. Cambodia falls short of required capabilities

**FIGURE B2.3a: Revealed capability intensities of GVC products and Cambodia's endowments**  
(Standard deviations in world averages)



Sources: Authors' calculations based on the Centre d'Études Prospectives et d'Informations Internationales (CEPII), The Changing Wealth of Nations database, Barro and Lee Education database, Penn World Tables 9.0, World Bank Governance Indicators, World Bank Logistics Performance Index, and Farole and Pathikonda (2016).

<sup>7</sup> This includes direct contributions and those through other sectors (forward linkages).

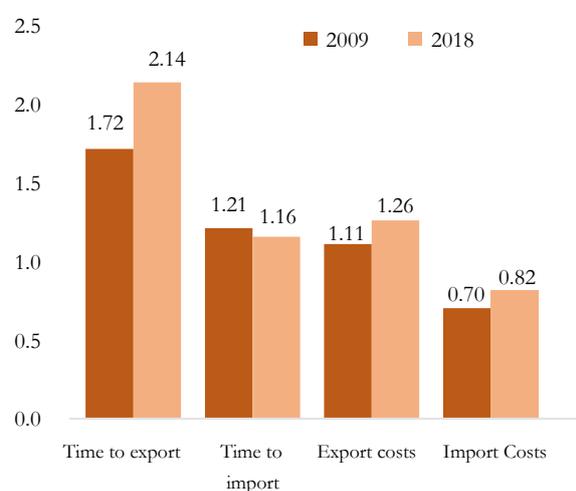
<sup>8</sup> These differences result from a combination of the sectoral composition of exports of each country, as transport and logistics matter more given Cambodia's export basket, plus the cost differences that countries face in the provision of these sectors.

<sup>9</sup> Measured through comparison of TFP, size and wage premia for firms in all countries, in lower middle-income countries, for EAP and Cambodian only.

for improved GVC integration in every dimension, for final and intermediate GVC product manufacturing. While trade-related capabilities are relatively stronger (figure B2.3a), they remain below the requirements for integration into more sophisticated activities. Indeed, indicators on trade facilitation costs reveal that Cambodia lags regional comparators in monetary and time terms, which also have increased in relative terms (figure B2.3b).

Fourth, the current quality and intensity of supply chain linkages between FDI and Cambodian firms is low. Given its large FDI stock, enhancing the local embeddedness of international firms to capture knowledge spillovers has been a long-standing policy goal of the Royal Government of Cambodia (RGC). Such linkages are an important channel through which foreign firms transfer technology, know-how, and management practices, and improve supplier productivity. Especially when linked to exporters, linkages are often an important conduit for suppliers to access international markets and value chains. However, FDI mostly uses Cambodia as an export platform for low-cost, low-productivity activities that have limited potential for transferring capital and knowledge. FDI manufacturing firms import about 95 percent of production inputs, by far

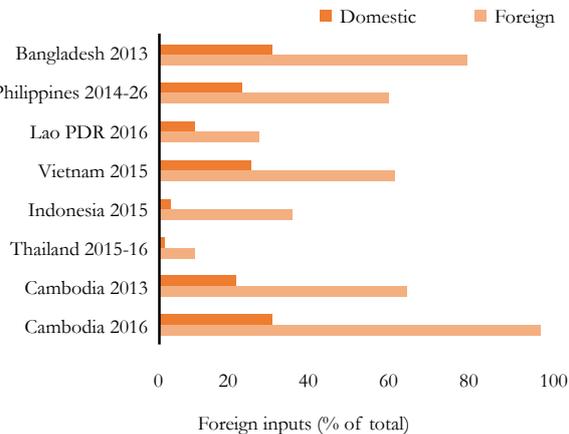
**FIGURE B2.3b: Cambodia's Trading Across Borders indicators relative to the regional average**  
(Above 1 indicates Cambodia has higher trade costs than the regional average)



Sources: Trading Across Borders, Doing Business, World Bank.

the largest among peer countries. The import share increased further compared to 2013, indicating that very little of the new demand created through recent FDI arrivals was met by local firms, and most of the value was captured abroad (figure B2.4a). Linkages in services are more prevalent.

**FIGURE B2.4a: Share of foreign inputs in manufacturing operations**



Sources: WBG Enterprise Survey 2016.

**The current investment climate in Cambodia has not** addressed the market failures and constraints that prevent its private sector from profiting from linkages gains. FDI firms report<sup>10</sup> that the lack of competitive local firms active in FDI-dominant sectors is by far the biggest constraint. Next on the list of barriers are the high search costs to identify suitable suppliers, the inability of suppliers to meet quality and cost requirements and the lack of basic certification,<sup>11</sup> the cumbersome process to claim VAT refunds, and informality. Likewise, Cambodian suppliers cite the gap in productivity and workforce skills as their main constraint in linking to FDI. Due to the lengthy time lags in supply chain financing and high investment needs for upgrading production capacity, access-to-finance issues are also more pronounced for Cambodian suppliers when linking to FDI.

Until now, there was hardly any business support infrastructure available for the domestic private sector to tap into. Recent RGC initiatives to establish a fund to enhance entrepreneurship, an SME bank, and a tax incentive to support SMEs in priority sectors are first steps. The route

to success will depend on the details determining focus, conditions, and implementation of these initiatives. Two points are important to learn from international experience. First, finance by itself is usually not effective. Support needs to include enabling legal and policy frameworks as well as promotion services in the form of enterprise capacity building, human resource development, and market information. Second, local content rules—especially in highly tradable and substitutable sectors—usually do not work, because they fail to address the underlying issues and might exacerbate the problem at the cost of long-term competitiveness. When applied to only one group of investors, such rules distort competition.

The review of the investment climate highlights that the whole economy is currently geared to support the low-cost, low-value growth model, some of the characteristics of which have enabled Cambodia to reach its current income level. Given past successes, Cambodia needs to adapt this model toward one that fosters productivity growth as the main driver of future growth and prosperity. This is also essential to better accommodate social and environmental considerations and to avoid the middle-income trap that Cambodia runs the risk of entering at a low level. First, global connections via trade, FDI, participation in GVCs, and the international mobility of skilled labor need to be fostered. Second, investment in education and skills is crucial to ensure that workers have the capacity to learn new skills to make the most of new opportunities and to adapt to changing technologies and working conditions. Third, investment in entrepreneurship and innovation is essential to enable the economy to absorb, adapt, and reap the full benefits of international exposure and new technologies. Committing to reforms in the investment climate will be inevitable in this transformation.

As Nobel Laureate in economics Paul Krugman once said, “Productivity isn’t everything, but, in the long run, it is almost everything.” Certainly, if Cambodia wants to achieve the ambitious goals set forth in the recently published fourth Rectangular Strategy<sup>12</sup> of becoming an upper middle-income country in 2030 with a vision to achieve high-income status by 2050, the country needs to rethink its growth model. A crucial determinant for success will be whether policy makers in Cambodia succeed in adopting a longer-term perspective.

<sup>10</sup> The World Bank Group conducted a survey of FDI and supply firms in 2017. The findings are based on survey results.

<sup>11</sup> Only 5 percent of Cambodian firms have internationally recognized quality certification compared to the 12 percent average for the East Asia and Pacific region.

<sup>12</sup> <http://cnv.org.kh/wp-content/uploads/2012/10/Rectangular-Strategy-Phase-IV-of-the-Royal-Government-of-Cambodia-of-the-Sixth-Legislature-of-the-National-Assembly-2018-2023.pdf>.

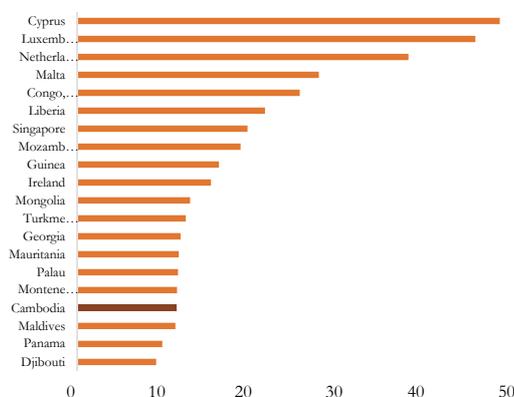
crisis period (see more discussion on the impact of the surge in import demand on the exchange rate in the monetary sector section below). Gross international reserves reached US\$9.08 billion by June 2018, or six months of prospective imports.

**Cambodia has been quite successful in attracting FDI inflows, thanks to its liberal trade and investment policy**

**Over the last 10 years, Cambodia has received a relatively large amount of net FDI inflows, averaging about 10 percent of GDP.** The country is among the top 20 in the world in terms of net FDI inflows as percent of GDP (figure 15). According to the annual study by fDi Intelligence, which looked at inbound greenfield investment in 2017 relative to the size of each country's economy, Cambodia is the leading Asian country, and ranks third overall. Singapore and Vietnam rank second and third, respectively.<sup>12</sup>

**To promote export diversification, supply chain linkages are an important channel through which FDI firms transfer technology, know-how, and management practices.** Improving the investment climate to promote small and medium-sized enterprises and businesses to grow and to capture FDI spillovers, that is, the productivity gains that result from the diffusion of knowledge and technology from foreign investors to the local economy, is especially crucial for a small and concentrated economy such as Cambodia (see box 2).

**FIGURE 15: Cambodia is among top 20 countries receiving largest net inflows of FDI as percent of GDP (2017)**



Source: World Development Indicators.

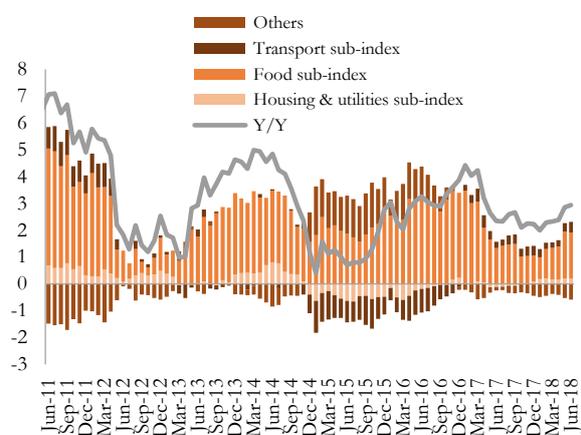
Note: 2017 or latest available years.

<sup>12</sup> [https://www.fdiintelligence.com/Locations/Asia-Pacific/Mozambique-tops-2017-Greenfield-FDI-Performance-Index?utm\\_campaign=August+2018+e-news+2&utm\\_source=emailCampaign&utm\\_medium=email&utm\\_content.](https://www.fdiintelligence.com/Locations/Asia-Pacific/Mozambique-tops-2017-Greenfield-FDI-Performance-Index?utm_campaign=August+2018+e-news+2&utm_source=emailCampaign&utm_medium=email&utm_content.)

**Strong consumer confidence with rising wages has pushed up inflation, which edged up to 2.9 percent (y/y) in June 2018, up from 2.2 percent in December 2017** (figure 16). Driven largely by rising prices of animal products, especially beef, fish, and seafood, the food component (subindex), which captures a 43 percent weight of the inflation basket, contributed 1.7 percentage points to the increase in the Consumer Price Index. To a lesser extent, the transport component contributed 0.4 percentage points to the increase. Note that improved weather conditions have supported the expansion of agricultural production, which in turn helped contain retail prices of some food items, especially rice, vegetables, and fruits. This has helped subdue overall inflationary pressures.

**In addition, to stabilize the retail prices of petroleum products against the gradual rise in international oil prices, the authorities earlier introduced a reduction in a special tax levied on imported petroleum products.** In July 2018, a special tax (one of four taxes) levied on imported petroleum products was reduced. The special tax on gasoline was cut to 15 percent (from 35 percent), on diesel to 5.5 percent (from 15 percent), and on kerosene to 5 percent (from 15 percent).<sup>13</sup> The reported revenue forgone is US\$30 million a year. As Cambodia imports all petroleum products for domestic consumption, there is a full “pass-through” from international oil prices to domestic retail prices.

**FIGURE 16: Contributions to 12-month inflation (percent)**



Source: Cambodian authorities.

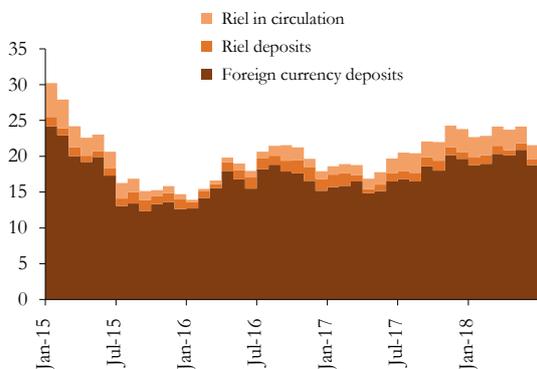
<sup>13</sup> [http://cnv.org.kh/petroleum-price-decrease-0-03-first-july/.](http://cnv.org.kh/petroleum-price-decrease-0-03-first-july/)

**Inflation across the East Asia and Pacific region is also edging up, especially in Myanmar, the Philippines, and Vietnam, where elevated consumer prices have already prompted policy responses.**<sup>14</sup> Both consumer and producer prices are expected to rise due to four key factors: (a) continued firm economic growth, which is closing output gaps; (b) nominal depreciation, which is pushing up import prices; (c) pass-through from higher global oil and food prices; and (d) rising wages. Rising production costs indicate that price pressures may start to emerge, although consumer prices generally remain within regional central banks' target bands.

### Confidence in the banking system continued to underpin foreign currency deposits

**Broad money growth, however, slightly decelerated to 21.6 percent in June 2018, down from 23.8 percent in December 2017.** This slight deceleration was due largely to slower growth of foreign currency deposits (FCDs) of 18.8 percentage points (as imports rose) and local currency in circulation of 2.0 percentage points, down from 19.6 percentage points and 3.2 percentage points, respectively (figure 17).

**FIGURE 17: Contribution to broad money growth (percentage points)**



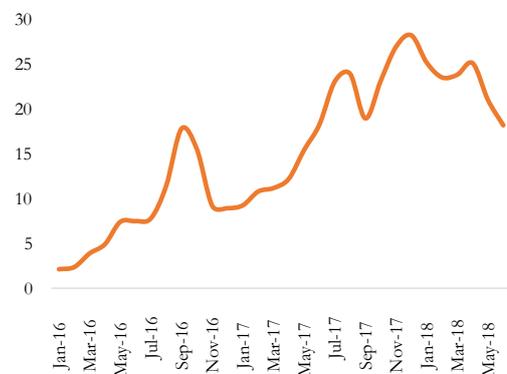
Source: Cambodian authorities.

**Accumulation of gross foreign reserves continued but at a slower pace as FCD growth decelerated.** The central bank's gross foreign reserves reached US\$9.08 billion or six months of prospective imports coverage in June 2018. Similarly, riel in circulation continued to increase but at a slower pace, decelerating to 18.2 percent (y/y) in June 2018, down from 28.2 percent in December 2017 (figure 18) as the local currency was under increased pressures because of rising demand for imports.

**As a result, the riel versus the U.S. dollar exchange rate depreciated,** reaching CR 4,082 per U.S. dollar at the end of September 2018, compared to CR 4,037 at the end of December 2017. The riel also slightly depreciated against the Thai baht but appreciated against the Vietnamese dong. Against the currencies of its main export markets (besides the United States), the riel recently appreciated against the euro, the Canadian dollar, and the British pound.

**However, given that the economy continues to be highly dollarized, the exchange rate does not fully perform its roles.** For example, the exchange rate may not affect prices in international trade. The share of U.S. dollar deposits in total deposits is as much as 95 percent, or 68 percent of GDP. Large transactions and private sector wages, especially for those working for the garment and footwear industry, the largest export sector in Cambodia, are denominated in U.S. dollars. As the development-partner-funded component has shrunk, the majority

**FIGURE 18: Riel in circulation (y/y, percent change)**



Source: Cambodian authorities.

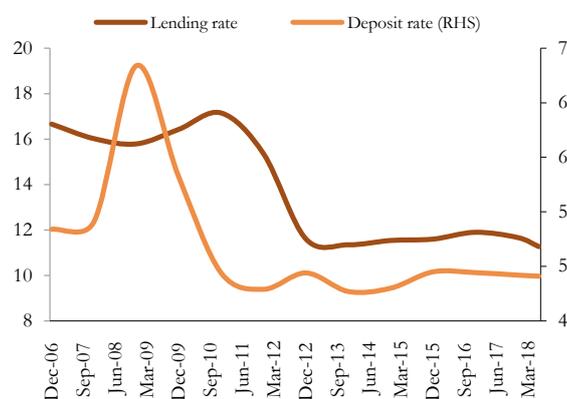
<sup>14</sup> World Bank October 2018 East Asia and Pacific Economic Update.

of public expenditures (including civil servants' wages) is denominated in local currency. With rising public spending as a percent of GDP, the use of local currency expands. Efforts by the central bank to promote the use of the local currency continue.

**Lending rates continue to gradually decline** (figure 19). The weighted average of the U.S. dollar lending rate dropped to 11.4 percent per year in June 2018, down from 11.7 percent per year in December 2017. However, the average lending rate of microfinance institutions is substantially higher than that of banks. Cambodia's high cost of borrowing may have prompted the central bank to impose an interest cap at 18 percent in April 2017, targeting all microfinance institutions (MFIs), microfinance deposit-taking institutions (MDIs), and rural credit operators under its supervision. The average interest rate charged by banks in Cambodia remain high compared to that of other countries in the region and the world (figure 20). In Thailand, the average minimum loan rate, the interest rate charged by commercial banks, is only 8 percent.<sup>15</sup> In Vietnam, lending interest rates for production and business were commonly 6.8 percent to 9 percent per year for short-term loans.<sup>16</sup>

**The success of the Liquidity-Providing Collateralized Operation (LPCO) introduced last year to establish a benchmark rate of local currency borrowing has led to a reduction**

**FIGURE 19: Bank's short-term U.S. dollar interest rates have declined**  
(percent per year)



Source: Cambodian authorities.

<sup>15</sup> Bank of Thailand; <https://www.bot.or.th>.

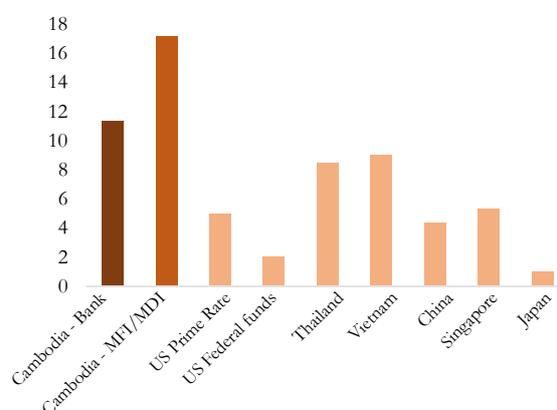
<sup>16</sup> Social and economic situation in the first quarter of 2018, General Statistics Office of Vietnam; [https://www.gso.gov.vn/default\\_en.aspx?tabid=622&ItemID=18799](https://www.gso.gov.vn/default_en.aspx?tabid=622&ItemID=18799).

**of riel lending rate.** 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.<sup>17</sup> As a result, the riel lending rate has now converged with that of the U.S. dollar.

**Deposit interest rates, however, remain largely unchanged** as banks and MDIs compete to mobilize funds. The weighted average of the U.S. dollar deposit interest rate (12-month maturity) stayed at 4.42 percent per year in June 2018. Rapid expansion of the banking and microfinance sector is likely to continue, given that the spread between lending and deposit rates remains large, especially at MFIs and MDIs (with the average lending rate of 17.15 percent and the deposit rate of 4.85 percent for June 2018). This also indicates that there is still considerable room to improve the efficiency of the financial sector. Note that while lending rates at MFIs and MDIs are declining, they were as high as 25.7 percent before the interest rate cap was imposed in April 2017.

**By mid-2018, total outstanding loans financed by the banking and microfinance sector reached 93 percent of GDP, or 92 trillion riels**

**FIGURE 20: Cambodia's lending rate, while declining, remains high**  
(percent per year)



Source: Cambodian authorities and regional countries' central banks/statistical offices.

<sup>17</sup> See "Cambodia Economic Update", April 2018, for a detailed discussion on the introduction of the LPCO under the monetary sector.

**(US\$22.6 billion). While easing, credit growth remains elevated.** Though credit growth continues to moderate, bank (and microfinance) credit-to-GDP rose to an all-time high of 73 percent (and 20 percent) at the end of June 2018, up from 31.4 percent (and 3.8 percent) in 2010 (figure 21). The banking sector provided 80 percent of total domestic credit, while the remaining 20 percent was supplied by the microfinance sector. This, however, excludes credit provided by the informal sector (and shadow banking activity). Domestic credit supplied by the banking and microfinance sector grew at 20.8 percent y/y by mid-2018, slightly lower than 21.8 percent at the end of 2017.

**Reported nonperforming loan (NPL) ratios for both the banking and microfinance sectors deteriorated.** Reported NPL ratios for the banking sector rose to 3.1 percent in June 2018, compared with 2.4 percent at the end of 2017.<sup>18</sup> Similarly, reported NPLs for the microfinance sector rose, reaching 5.0 percent in June 2018, compared with 2.1 percent at the end of 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 that may disguise deeper problems.

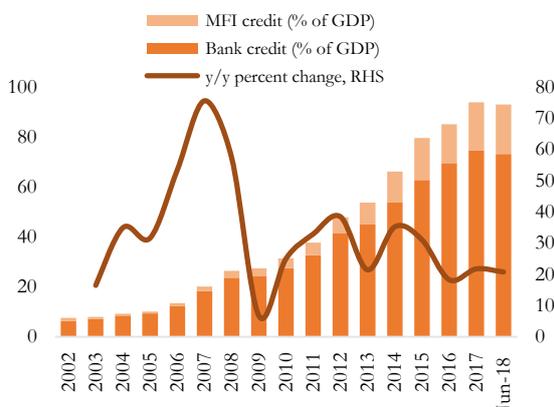
**The banking sector served 755,000 borrowers, while there were 3.48 million bank depositors in 2017.** The microfinance sector captured about 1.8

million borrowers and 1.8 million depositors. Given its small market share and larger borrowers, average loan size of the microfinance sector was only 9.4 million riels (or US\$2,372), or about 10 percent of that of the banking sector.

**Access to finance provided by the microfinance sector was curtailed because the sector's average loan size rapidly increased, growing at 43 percent in 2017, up from 11.8 percent in 2016.** While credit growth of the MFI/MDI sector was 36.1 percent in 2017, up from 34.0 percent in 2016, borrowers (of which 70 percent are female) from the microfinance sector declined to 1.8 million in 2017, down from 1.88 million in 2016. Access to finance provided by the banking sector barely expanded in 2017. The number of borrowers from the banking sector marginally increased, growing at only 1.1 percent in 2017, rising to 775,107 borrowers, up slightly from 746,930 borrowers in 2016 (when the sector experienced 45.7 percent growth in number of borrowers, partly due to reclassification of an MDI to a commercial bank). As a result, the banking sector also experienced an increase in the average loan size, growing at 17.2 percent, in contrast to its good performance in terms of access to finance in 2016 (when its average loan size declined by 15.6 percent).

**While it is clear that the interest cap has reduced interest rates charged by the microfinance**

**FIGURE 21: Domestic credit growth decelerated but remains elevated**  
(percent of GDP)



Source: Cambodian authorities.

**TABLE 1: Rising average loan sizes of the banking sector and microfinance sector while access to finance curtailed**

	The banking sector		The microfinance sector	
	Average loan sizes (US\$)	Number of borrowers	Average loan sizes (US\$)	Number of borrowers
2015	22,196.66	512,582	1,483.84	2,037,424
2016	18,723.75	746,930	1,659.46	1,889,914
2017	21,953.59	755,107	2,372.01	1,800,00

Source: Cambodian Authorities.

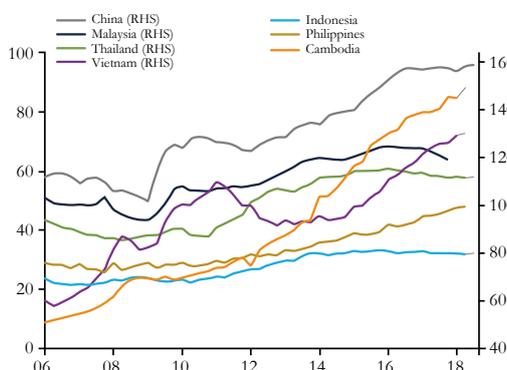
<sup>18</sup> 2018 Mid-year report and 2017 Banking supervision report, the National Bank of Cambodia.

**sector, its implication for access to finance needs further analysis.** For the microfinance sector, a reduction in the number of borrowers began a year before the introduction of the cap (table 1), although a structural issue involving reclassification of an MDI to a commercial bank in 2016 may partly explain this. Adjusting for the reclassification reveals that the number of borrowers of the microfinance sector declined by 1.8 percent and 4.8 percent in 2016 and 2017, respectively. During the same period, the number of borrowers of the banking sector increased by 22 percent and 0.7 percent.<sup>19</sup> So, the interest rate cap may have largely impacted access to finance for the microfinance sector. Nonetheless, given its much smaller loan size and deep penetration in rural and remote areas, access to finance by the microfinance sector is crucial for supporting productive activity, leading to poverty reduction. The microfinance sector has been credited in large part for its contribution to promoting access to finance by the poor and those previously negatively affected by informal lending practices often associated with loansharking.

**As a share of GDP, Cambodia's bank credit has already overtaken that of Indonesia and the Philippines**

**Regional comparisons show that Cambodia's bank credit growth is rapid, given the country's**

**FIGURE 22: Cambodia's bank credit growth is among the highest** (domestic credit, percent of GDP)



Source: October 2018 East Asia and Pacific Economic Update, World Bank.

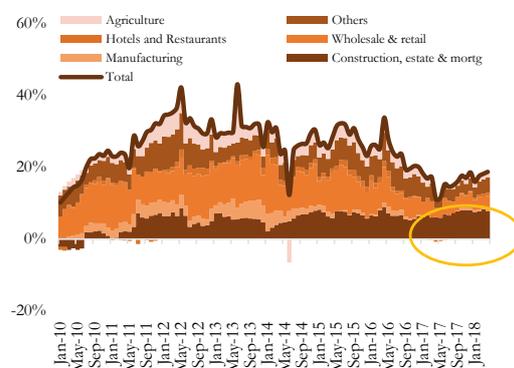
<sup>19</sup> Based on Sathapana Bank's 2017 annual report, there were 113,000, 121,500, and 125,200 borrowers in 2015, 2016 and 2017, respectively.

**nascent banking sector** (figure 22). The rapid acceleration of bank credit growth that occurred during the post-global financial crisis period is largely associated with the construction and real estate boom. As depicted in figure 23, while overall bank credit growth eased, starting in mid-2016, rapid credit growth financing the construction and real estate sector has continued. Figure 23 also indicates that bank credit going to tradeable sectors such as the wholesale, retail, and manufacturing sectors has been substantially curtailed since.

**Lately, the real estate sector has shifted toward more speculative activity with a new wave of land plot sales and purchases with increasingly less obvious or justifiable investment returns.**

Recently, the government issued a prakas (regulation) on land development aimed at ensuring sustainable land management and urbanization.<sup>20</sup> The prakas may be an attempt to better manage, and in particular to contain, the unregulated proliferation of land developments into land plots for sales and purchases. (For measures taken by neighboring countries to cool the property market, see box 3 on Singapore's efforts.) Importantly, the recent surge in FDI inflows may have helped sustain the construction boom further, while masking the financial sector's vulnerability after several years of rapid credit growth.

**FIGURE 23: Contribution to domestic credit growth** (percentage points)



Source: Cambodian authorities.

<sup>20</sup> Prakas on Land Development, May 11, 2018, Ministry of Land Management, Urbanization and Construction.

## Box 3

## Singapore has imposed new cooling measures on properties<sup>1</sup>

Effective July 6, 2018, the Government of Singapore imposed new property cooling measures to moderate the investment demand for residential and industries properties. This is the latest in a series of cooling measures, which include increasing the Buyer's Stamp Duty and tightening the loan-to-valuation limits.

**Increase Buyer's Stamp Duty:** The Buyer's Stamp Duty (BSD) is levied on all purchases of properties. The Additional Buyer's Stamp Duty (ABSD), first introduced in 2012, aims to ensure that the residential property remains affordable for Singaporeans and to stabilize the property market. The ABSD rate was recently raised by 5 percent for all groups of individuals and by 10 percent for entities except Singapore citizens and Singapore permanent residents who are purchasing their first home (see figure B3.1).

**Tightening of loan-to-valuation (LTV):** Singapore's banks are only allowed to give a housing loan based on LTV limits. The LTV is the maximum percentage of the property's purchase price or valuation price that can be borrowed from the Bank. After July 6, 2018, these rates were reduced by 5 percent of a property's value for those who do not have an existing loan (see figure B3.2).

As a result, home sales dropped by 49 percent while home prices increased by 0.1 percent, following the latest cooling measures. These prudent measures make Singaporeans less enthusiastic about buying new homes and help prevent property prices from rapidly increasing.

**FIGURE B3.1: Revised ABSD rates**

	Before 5 July 2018	After 6 July 2018
SCs buying first residential property	0%	0% (no change)
SCs buying second residential property	7%	12%
SCs buying third and subsequent resident property	10%	15 %
SPRs buying first residential property	5%	5% (no change)
SPRs buying second and subsequent residential property	10%	15%
Foreigners buying any residential property	15%	20%
Entities buying any residential property	15%	25% + 5% (new, non-remittable)

Source: Inland Revenue Authority of Singapore.

Note: SCs = Singapore citizens; SPRs = Singapore permanent residents.

**FIGURE B3.2: Revised LTV limits**

	Before 5 July 2018	After 6 July 2018
LTV limit for first home	80%	75%
LTV limit for second home	50%	45%
LTV limit for third home onward	40%	35%
Minimum cash down payment	5%	5% (No change)
Remaining down payment (cash/Central Provident Fund)	15%	20%

Source: Inland Revenue Authority of Singapore.

<sup>1</sup> Prepared by Linna Ky, Consultant, World Bank.

## Fiscal expansion fueled domestic demand, consumption, and imports

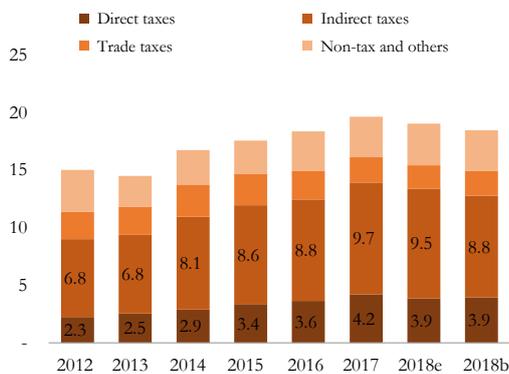
**Fiscal expansion introduced this year has helped serve as a stimulus, fueling domestic demand, consumption, and imports.** Driven by both wages and public investment, public outlay is budgeted to increase significantly, reaching 24.6 percent of GDP in 2018, up from 23.1 percent in 2017.

**This year's revenue performance continues to be strong and is projected to meet or exceed the 2018 budget target**

**However, given the exceptional revenue collection recorded last year, this year's collection is anticipated to be more moderate** (figure 24). Based on the performance during the first six months of 2018, this year's general government domestic revenue is expected to grow at about 10 percent, projected to reach about 19 percent of GDP.

**Domestic revenue continues to be mainly provided by indirect taxes, contributing about half of the total collection this year,** of which the VAT and excise taxes (on imports) account for 90 percent. Contribution by direct taxes is second, accounting for about 20 percent of total collection. The rest is covered by non-tax revenue, the trade tax, and other taxes. Direct tax collection is also improving, with better administration. Given the fact that Cambodia has not introduced a personal income tax, while corporate income tax remains

**FIGURE 24: General government revenue: Main components**  
(percent of GDP)



Source: Cambodian authorities.

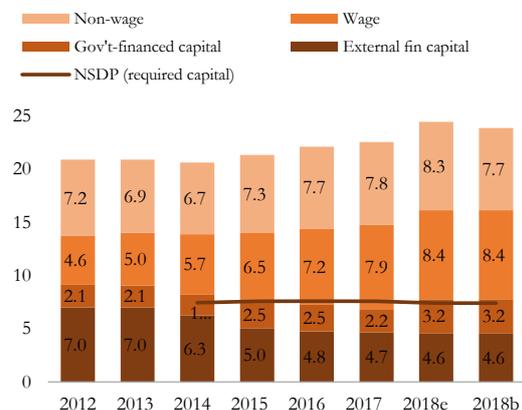
Note: e = estimates and b = budget.

constrained by the tax holiday, the country will continue to rely on indirect taxes for some time. Non-tax revenue is gradually improving due largely to an improved collection system and administration with the implementation of interministerial prakases and a standardized receipting system. Trade tax is on the decline due to Cambodia's commitment under the ASEAN Free Trade Agreement (AFTA).

**During the last several years, solid revenue performance has been remarkable and may not be repeated in the next five years or so unless a new strategy is introduced.** A new revenue mobilization strategy for the next five years, scheduled to be introduced soon, is expected to further improve revenue administration and address current structural weaknesses of the current revenue system, including broadening of the revenue base.

**This year's fiscal expansion also boosts general government expenditures to finance rising civil servant wages and initial scale-up of public investment.** The public sector wage bill increases to 8.4 percent of GDP in 2018 (figure 25) to meet the minimum civil servants' wage target of at least 1 million riels a month by 2018. This represents a tripling of civil servants' minimum wage, compared to the level in 2013. In addition, for the first time in several years, a significant boost is provided to domestically financed capital investment. The relatively large fiscal expansion lifts domestically financed capital spending to 3.2 percent of GDP, up from 2.3 percent in 2017.

**FIGURE 25: General government expenditures: Main components**  
(percent of GDP)



Source: Cambodian authorities.

Note: e = estimates and b = budget.

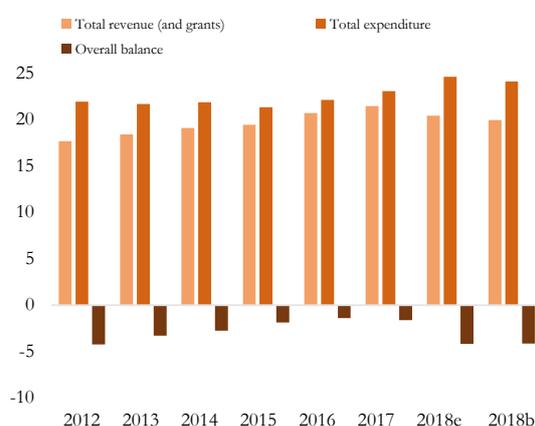
**TABLE 2: Cambodia's wage bill as a share of expenses rose and is among the highest in Southeast Asia**

Wage (% of expense)	2008	2013	2017*
Cambodia	38.9	37.8	40.4
Philippines	34.3	36.6	35.6
Malaysia	27.2	29.1	34.9
Lao PDR	47.4	56.3	34.8
Thailand	35.3	28.9	28.5
Singapore	27.2	29.6	26.6
Indonesia	12.4	15.1	16.4

Sources: World Development Indicators, Cambodian authorities, and 2018 IMF Article IV staff report.

Note: \*Data are for 2016 except for Cambodia and Lao PDR.

**Scaling up domestically financed public investment may reflect an effort by the authorities to compensate for the gradual decline (in percent of GDP) in the development-partner-funded capital budget,** as Cambodia has now become a lower middle-income economy. Total (domestically and externally financed) capital spending already reaches the level recommended in the 2014–18 National Strategic Development Plan. The Ministry of Education, Youth and Sports (MoEYS) receives the largest boost to its 2018 capital investment budget to meet the demand for building additional provincial schools, with its capital investment budget of CR 420 trillion (or 0.5 percent of GDP), up from a mere CR 90 trillion in 2017.

**FIGURE 26: The general government fiscal deficit widened in 2018, thanks to fiscal expansion (percent of GDP)**

Source: Cambodian authorities.

Note: e = estimates and b = budget.

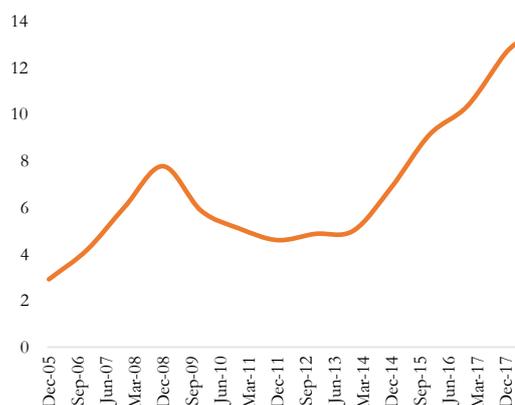
**TABLE 3: Cambodia's wage bill as a share of revenue rose and is among the highest in Southeast Asia**

Wage (% of revenue)	2008	2013	2017*
Lao PDR	37.8	60.5	50.0
Cambodia	26.6	32.6	34.6
Malaysia	25.7	28.6	34.4
Philippines	31.9	34	32.9
Thailand	32.0	26.9	27.1
Singapore	19.3	21.3	20.8
Indonesia	11.5	15.5	19.5

Sources: World Development Indicators, Cambodian authorities, and 2018 IMF Article IV staff report.

Note: \*Data are for 2016 except for Cambodia and Lao PDR.

**The public sector wage bill has grown quickly during the last five years.** Regional comparison shows that Cambodia's public sector wage spending as a share of public expenditures and domestic revenue is on the high side (tables 2 and 3). So, there is limited room for further expansion of the wage bill in a sustainable way. More importantly, there is a need to accelerate the critical tasks on public administration reforms, focusing human resources management to bring about an improvement in public service delivery. Given that the public sector is a major service provider and facilitator, it is crucial to link the public sector's significant wage increases to improvements in service delivery. Raising public sector productivity underpins private sector development in driving growth and reducing poverty.

**FIGURE 27: Government deposits in the banking system (percent of GDP)**

Source: Cambodian authorities.

**The overall fiscal deficit is targeted to increase to 4.2 percent of GDP in the 2018 budget**, up from 1.6 percent in 2017 (figure 26). External finance is budgeted to cover 3.7 percent of GDP of the 4.2 percent of GDP fiscal deficit, while the remaining 0.5 percent of GDP is budgeted to be financed by domestic funds—mostly from the drawdown of government deposits at the central bank. However, the authorities’ fiscal buffer remains substantial, accounting for about 13 percent of GDP by mid-2018 (figure 27). During the past six months of 2018, government deposits at the banking system continued to increase, thanks partly to strong revenue performance.<sup>21</sup>

**In 2017, Cambodia contracted US\$977.63 million of public debt in the form of concessional loans with development partners (DPs)** (equivalent to Special Drawing Rights [SDR] 684.71 million), accounting for 97.82 percent of the debt ceiling of SDR 700 million,<sup>22</sup> of which 82.3 percent was signed with bilateral DPs and the rest with multilateral DPs. The purpose of the borrowing was to finance public investment projects which, for 2017, covered 100 percent of total borrowing. Overall, the borrowing remained highly concessional, with an average grant element of 54.9 percent. From 1993 to the end of 2017, the authorities signed US\$9.6 billion in concessional loan agreements with DPs (87.8 percent for infrastructure projects and 12.2 percent for other priority sectors).

**At the end of 2017, the public debt outstanding was US\$6.67 billion (30.2 percent of GDP)**, of which 0.04 percent (or US\$2.77 million) was public domestic debt.

**China is by far the largest creditor, accounting for almost 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, while 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.

**Against a backdrop of better-than-expected export performance, rising consumption, and upbeat investor sentiment, the growth outlook has been revised up**

**Underpinned by exports and government spending, Cambodia’s growth is expected to accelerate to 7.1 percent in 2018**, (compared to a newly revised official number of 7.0 percent growth in 2017). Given that this year’s growth is boosted in part by substantial fiscal expansion, growth outlook is projected to ease slightly in the next two years but remains at a healthy rate of 6.8 percent until 2020. The longer-term growth outlook is favorable, thanks largely to rising FDI inflows going to the productive sectors, namely manufacturing and agriculture, including agroprocessing. Several new initiatives have been introduced by the authorities to promote small and medium-sized enterprises and businesses, while promoting their linkages with the FDI sector (see box 2). Poverty reduction is expected to continue with expansion of the services and manufacturing sectors.

**The recent surge in FDI inflows going to the manufacturing sector including agroprocessing has been encouraging.** In this regard, Cambodia’s growth trajectory is expected to improve, especially in the short- and medium-term outlook, compared to previous projections (table 4). The authorities’ efforts to improve access to and quality of basic education including the introduction of a new generation of school initiatives may result in improved learning outcomes and better labor force quality in the medium to long term. Initiatives under the public financial management and public administration reforms are designed primarily to improve value for money and public service delivery, facilitating private sector growth.

<sup>21</sup> As of June 2018, 31 percent of government deposits at the National Bank of Cambodia is in U.S. dollars.

<sup>22</sup> “Cambodia Public Debt Statistical Bulletin,” Volume 5, March 2018; and Volume 6, September 2018, Ministry of Economy and Finance.

**TABLE 4: Improved macro outlook in the short and medium term**

Percent of GDP unless specified otherwise	2018	2019	2020
<b>GDP growth (%)</b>	7.1	6.8	6.8
<b>Domestic demand</b> (% change y/y)	9.4	9.7	10.1
<b>Inflation</b> (% change, average)	3.2	3.3	3.0
<b>Overall fiscal balance</b>	-4.2	-4.2	-4.3
<b>Government debt</b>	36	37	38
<b>Export growth</b> (% change)	14.9	13.6	12.7
<b>Import growth</b> (% change)	14.6	12.0	10.3
<b>Current account</b>	-10.3	-10.2	-9.9
<b>FDI</b>	10.9	10.6	10.4
<b>Gross international reserves</b> (months of imports)	5.9	6.0	6.0

Source: World Bank staff estimates and projections.

While rising FDI inflows have so far helped boost investment, sustaining high investment rates in the long term are only practicably possible with high domestic savings rates. Feldstein and Horioka found that international differences in domestic savings rates among major industrial countries have resulted in almost equal corresponding differences in domestic investment rates.<sup>23</sup> As Cambodia endeavors to become high income within the next four decades or so, the country will need to sustain a higher investment rate than it currently achieves. Given Cambodia's very low savings rate—and existing heavy reliance of foreign savings through FDI—a larger increase in investment rates might not be possible. A simulation presented in the selected issue section shows that Cambodia will need to increase the investment rate to 28.5 percent of GDP (from the current rate of 20 percent of GDP) by 2030—similar to the path of

Malaysia—to reach both the upper middle-income 2035 and high-income 2050 goals.

**It is important to be prepared for eventual graduation from least developing country status and the loss of preferential trade treatment and more restricted access to concessional loans in the next decade or so.** Currently, Cambodia is benefiting from EBA with full duty-free and quota-free access to the EU for all their exports, with the exception of arms and armaments, and from the U.S. Generalized System of Preferences (GSP), which removed U.S. customs tariffs on Cambodian-made travel products such as luggage, backpacks, handbags, and wallets. Once Cambodia loses preferential trade access to the EU and U.S. markets in the next decade or so, the country will likely become less attractive for FDI inflows, and its access to concessional borrowing will also be curtailed. In that regard, authorities need to start taking action now to comply with the requirements and conventions needed to keep accessing the EU market under the GSP+ scheme (with better terms than under no agreement).

**Risks are growing as domestic credit continues to substantially go to the construction and real estate sector**

**This, together with Cambodia's low domestic savings rate, increases exposure of the financial sector.** Lately, the expansion of real estate sector activity has encompassed increased speculative activity, with growing purchases and sales of land located on the city outskirts or in nearby provinces, with increasingly less obvious or justifiable investment returns. The recent surge in FDI inflows has, however, masked the financial sector's vulnerability caused by lengthy rapid credit growth.

**Externally, risks are associated with the potential temporary withdrawal of EBA preferences for Cambodia.** The EU market accounts for more than a third of Cambodia's key exports, which are garment and footwear products. Therefore, losing EBA preferences will likely shrink Cambodia's export market share there and negatively impact real growth, if the temporary EBA withdrawal becomes effective within the next 12 months.<sup>24</sup> There is

<sup>23</sup> Domestic Saving and International Capital Flows by Feldstein and Horioka, NBER Working Paper 310 January 1979.

<sup>24</sup> Media Release, October 7, 2018, European Union, Delegation to the Kingdom of Cambodia.

no recent study on the impact of the temporary withdrawal. Without EBA, most of Cambodia's exports to the EU market will face 12 percent customs.

### Potential spill-over effects of U.S.-China trade disputes on the economy

**A spill-over of U.S.-China trade disputes could be positive and negative for other countries including Cambodia.** On the plus side, higher tariffs on bilateral U.S.-China trade could create an opportunity for other countries to increase exports to U.S. markets. Countries most able to increase their export shares to the United States are those that already compete with Chinese exports in the United States and can leverage their knowledge of trade processes and existing U.S.-based business relationships.

**There are signs that the trade disputes may have resulted in relocations of companies out of China, and Cambodia has witnessed rising inward Chinese FDI to the garment, footwear, and travel goods sectors.** The negative impacts of the U.S.-China trade disputes would pass through to other economies via regional supply chains. Further U.S. tariffs would push up the final prices of Chinese goods in the United States, reducing the quantity demanded. This effect would reverberate through regional value chains, weakening demand for developing country exports that are inputs for Chinese exports to the United States. However, Cambodia seems little affected by this tension since the country's exports to China, which consist of both final and intermediate goods, account for a mere 9 percent of its total export to the world.<sup>25</sup>

**Large possible negative spill-over effects may instead occur through trade in services, especially in the tourism sector, and financial flows mainly in the form of FDI.** Tourism, especially tourist revenue from Chinese tourists, has been one of the main sources of Cambodia's foreign exchanges. Excluding the rising share of Chinese tourists, tourist arrivals to Cambodia have recently declined. Similarly, excluding the rising share of inward Chinese FDI, FDI inflows have shrunk.

### Safeguarding the health of the financial sector is a top priority

**Given the lengthy construction boom, a high priority for the authorities would be to safeguard the health of the financial sector in the near term.** Lately, the real estate sector has shifted toward more speculative activity in which there is a growing trend of land sales and purchases with less obvious or justifiable investment returns in the foreseeable future. The recent surge in FDI inflows has masked the financial sector's vulnerability caused by prolonged rapid credit growth. It is therefore necessary to develop macroprudential policies, including both financial and fiscal measures to reduce the scope for speculative activities financed by the banking and microfinance sectors (see box 3). It is crucial to adopt lending guidelines including value-to-loan ratio limits, while considering imposing additional taxes on sales and purchases of property, especially land, for investment (speculative) purposes. It is equally important to revisit the nonperforming loan to classifications. In addition, other prudential measures such as loan-to-income ratio, increased down payment and other factors could be considered.

**Further addressing the infrastructure deficit is necessary to absorb rising FDI inflows in manufacturing and agroprocessing.** While improving, further investment to upgrade and expand physical infrastructure continues to be a priority to enable Cambodia to better integrate into regional (and global) value chains. This is to take advantage of Cambodia's strategic location at the heart of ASEAN, facilitating and further fostering investment for export diversification (see box 2). To facilitate trade expansion, connectivity such as transportation and logistics upgrade is being identified with the preparation of the National Logistics Masterplan and the introduction of the National Logistics Council. In terms of logistics capabilities, Cambodia ranked 98th out of 160 countries on the 2018 Logistic Performance Index (LPI), declining from 73rd place in 2016. On average, successful exporters of electronics, such as Thailand and Malaysia, rank in the top 40. In addition, upskilling the labor force in the short and medium term will be important.<sup>26</sup>

<sup>25</sup> <https://www.adb.org/publications/key-indicators-asia-and-pacific-2018>.

<sup>26</sup> For a detailed analysis, see selected issue, "Summary Findings of Future Jobs in Cambodia," April 2018 "Cambodia Economic Update."

**Cambodia requires a substantial boost in its investment to achieve its higher-income economy targets**

**Mobilizing domestic savings is necessary to boost investment in the medium to long term.**

As discussed in the selected issue section, “Can Cambodia become an upper middle-income economy by 2030 and a high-income country by 2050?” below, Cambodia’s gross domestic savings of below 20 percent of GDP is among the lowest in the region. The country is heavily dependent on foreign savings in the form of FDI, which is not only volatile but also unsustainable in the long term. It is therefore necessary to start generating additional domestic resources

to finance productive investment as Cambodia endeavors to become high income within the next four decades or so. Boosting investment is necessary to propel the economy toward higher-income status, as envisaged. In this regard, mobilization of savings is a prerequisite, and developing capital markets, including pension fund systems, will be fundamental. Pro-saving policy measures are therefore needed to encourage households to save and to reward businesses for reinvesting (see box S2). Developing the financial ecosystem in order to build trust in the financial sector, including an enhanced regulatory and supervisory framework, an improved financial reporting system, good corporate governance practices, and establishing a financial protection system, will help further promote savings.





SECTION 2

**Can Cambodia become an upper middle-income economy by 2030 and a high-income country by 2050?**

## SECTION 2 – SELECTED ISSUE:

# Can Cambodia become an upper middle-income economy by 2030 and a high-income country by 2050?<sup>27</sup>

### I. Introduction

**After more than two decades of sustained rapid economic growth, Cambodia attained lower middle-income status in 2015.** With its current population of 16.1 million, Cambodia’s gross national income (GNI) per capita is estimated to have reached US\$1,230 in 2017. Official estimates show that the percentage of Cambodians living under the national poverty line fell from 47.8 percent in 2007 to 13.5 percent in 2014. Real GDP growth is projected to grow at 7.1 percent in 2018 and is expected to expand robustly in the medium term.

**Unlike many aging regional countries in the EAP region, Cambodia is benefiting from a demographic dividend.** Cambodia’s working-age population (age 15–64) is growing faster than its population—2.3 percent compared to 1.56 percent during 2007–15—freeing up resources for investment and family income growth.<sup>28</sup> Given the existing population dynamics, the country has a window of opportunity for rapid economic growth during the next 30 years, until its working-age population starts to decline.

**Cambodia’s strategic location at the heart of ASEAN, together with its liberal trade and investment policy, has attracted rising inflows of foreign investment.** Net FDI inflows into the country account for over 10 percent of GDP on average during the last decade, ranked among the top 20 countries in the world. Cambodia is the leading Asian country (ahead of Singapore and Vietnam, which ranked second and third, respectively), and ranked third overall on the 2017 Greenfield FDI Performance Index.<sup>29</sup> Cambodia has been positioned by Euromonitor International’s data as part of the 20 Markets of the Future, providing

promising opportunities for international companies to invest in.<sup>30</sup>

**Together with Myanmar and Lao PDR, Cambodia is classified among the “Southeast Asian frontier markets” in a report by the Swedish Trade and Investment Council.**<sup>31</sup> “Frontier markets,” also known as pre-emerging markets, are developing countries with high potential for investment, presenting significant opportunities—high growth, low labor costs, and growing consumer markets—but requiring long-term work and enormous infrastructure and construction development, and posing challenges in doing business.

**Cambodia has set itself a target to become an upper middle-income country by 2030 and a high-income economy by 2050.**<sup>32</sup> This selected issue is prepared using the World Bank’s Long-Term Growth Model (LTGM) to shed light on Cambodia’s potential growth during the next 33 years (Loayza and Pennings 2018).<sup>33</sup> It discusses opportunities and challenges, if Cambodia is to become an upper middle-income country in 2030 and a high-income economy in 2050, including what needs to be improved and what needs to happen. Regional comparisons will be provided to assess the pace of gross national income (GNI) per capita growth that Cambodia can reasonably accomplish.

**This selected issue section is organized as follows.** Section II provides background information on the economy, focusing on structural transformation. Section III uses the LTGM to simulate Cambodia’s attainment in GNI per capita (Atlas method). Section IV provides key policy options.

<sup>27</sup> This Note was prepared by Steven Pennings and Jorge Guzman with inputs from Sodeth Ly and Runsinarith Phim.

<sup>28</sup> World Bank staff’s calculation based on WDI data.

<sup>29</sup> <https://www.fdiintelligence.com>.

<sup>30</sup> <http://www.euromonitor.com/markets-of-the-future-in-cambodia/report>; [https://www.fundhive.com/Invest\\_in\\_Cambodia\\_ebook.pdf](https://www.fundhive.com/Invest_in_Cambodia_ebook.pdf).

<sup>31</sup> <https://www.business-sweden.se/contentassets/4ecbc372953f4cd4be227d97c758cd73/frontier-sea-markets-pov---final-report.pdf>.

<sup>32</sup> See Fourth Rectangular Strategy, Royal Government of Cambodia, September 2018, p. 44.

<sup>33</sup> Developed by Steven Pennings, Leonardo Garrido, and Jorge Luis Guzman. See <http://www.worldbank.org/LTGM>. The LTGM builds on earlier work by Hevia and Loayza (2012).

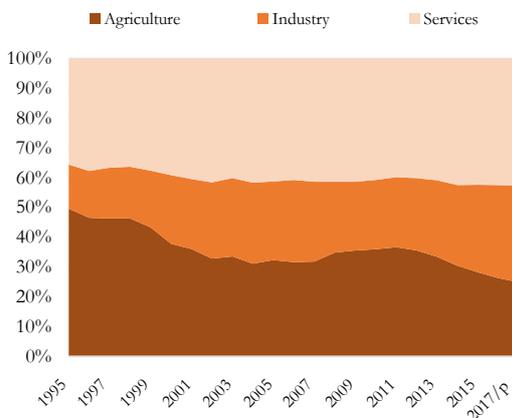
## II. Structural transformation

### 1. Strong growth, driven by the agriculture, garment, tourism, and more recently, construction sectors is driving rapid economic structural transformation

**Cambodia ranked sixth in the world in economic growth during 1994–2015, with an average growth rate of 7.6 percent, and is experiencing rapid structural transformation.** GNI per capita grew at an average rate of 5.4 percent between 1996 and 2015, the year in which Cambodia became a lower middle-income economy. This period was marked by significant structural transformation in the economy. The share of agricultural GDP dropped from 45.3 percent in 1993 to 23.4 percent in 2017 (figure S1). Agriculture employment in total employment declined to 36.4 percent in 2016, down from 58.3 percent in 2004. The decline in agriculture jobs continued to be offset by the increase of employment in the industry and services sectors, resulting in net employment creation and absorption of new entrants into the labor force as population grew (figure S2).

### 2. Gross capital formulation remains low, with limited ability to mobilize domestic savings

**FIGURE S1: Structural transformation, 1995–2017**  
Rapidly declining agriculture GDP (percent share)

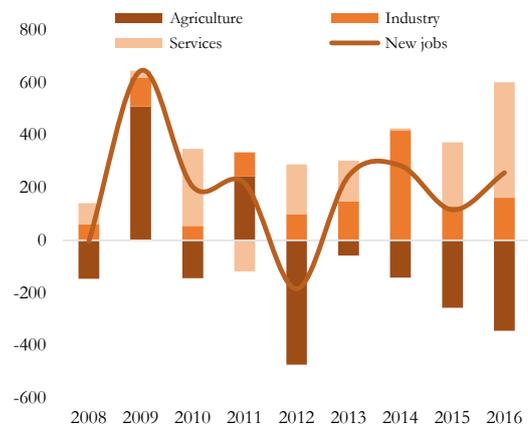


Sources: Official sources and World Bank staff estimates.

**Cambodia's gross fixed capital formation as a percentage of GDP averaged less than 20 percent of GDP over the last two decades.** This is lower than comparator countries and much lower than Vietnam and Thailand during their boom years (figure S3). While total investment in Cambodia has been rising in recent years, it has mostly gone into construction, and not machinery and equipment. Cambodia's low gross fixed capital formation may be explained by its low national savings rate. As depicted in figure S4, because the national savings ratio has been low, most of the investment has been financed by foreign savings—private investment by foreign investors and public investment by official development partners. It is estimated that about 10 to 11 percent of GDP in terms of capital formation is financed by FDI and about half is financed by domestic investment. The rest is public investment, largely financed by development partners. While capital formation has increased in recent years, the allocation of this investment appears to have become less efficient, as manifested in the falling rate of return on investment.<sup>34</sup> Equipment investment is found to generate more growth than building investment, and countries with high equipment investment had higher growth (Summers and DeLong 1991, 1992).

**The country's low national savings rate can be traced to Cambodia's tragic history, including the spillovers of the Vietnam War and a mass**

**FIGURE S2: Agriculture jobs declined**  
Contribution to job creation ('000 jobs)



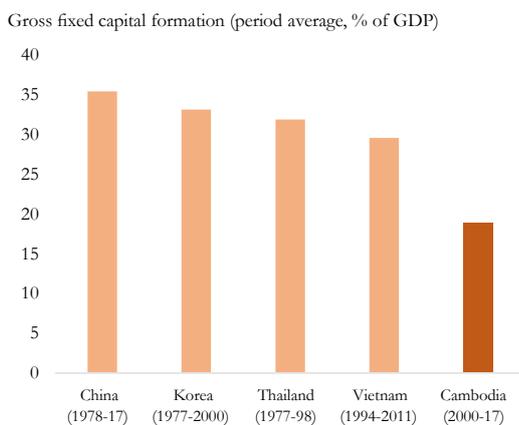
Source: Cambodia socioeconomic surveys.

<sup>34</sup> "2017 Cambodia – Sustaining Strong Growth for the Benefit of All: A Systematic Country Diagnostic," World Bank, Washington, DC, 2017.

**genocide.** During these periods, Cambodia experienced persistent hyperinflation. The worst happened during the Khmer Rouge regime when the country’s currency was completely abolished and virtually replaced by a barter system for more than three years. During the 1980s, after the Khmer Rouge regime was toppled, the banking sector did not fully function due to instability and the continuation of civil war in many parts of the country. Even after peace was largely restored in the 1990s, confidence in the banking system only slowly improved, and confidence in the local currency lagged behind. Cambodia’s persistent high dollarization is a reflection of its unstable past.

**Cambodia’s financial sector remains nascent, limiting the country’s ability to raise capital to finance investment.** There is as yet no well-functioning capital market or a domestic debt market in Cambodia, so there is no facility to raise long-term funds, while providing opportunity for the public to invest their long-term savings. Opportunities for different institutions such as commercial banks, mutual funds, or investment trusts in which to invest savings remain limited. Rising FDI inflows that Cambodia has experienced during the past decade are associated with the country’s widening savings-investment gap that makes it increasingly difficult to sustain strong growth in the long run. More importantly, with its persistently large current account deficit, the economy is increasingly exposed to external shocks.

**FIGURE S3: Capital formation remains low**



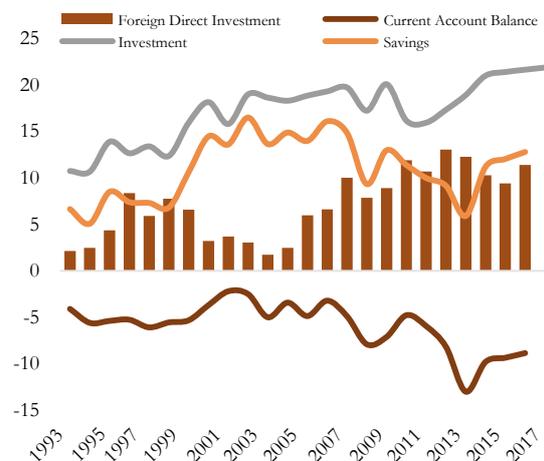
Source: World Development Indicators.

### 3. Human capital is accumulating rapidly but from a low base, while the growing labor force remains inadequately trained

**The most recent enterprise survey revealed that a significant percent of firms found an inadequately educated workforce to be among the top three obstacles** (figure S5). The constraint of an unskilled workforce is reflected in the World Economic Forum’s Executive Opinion Survey in which a similar share of firms signaled it as a significant impediment to conducting business. The potential for economic diversification may be constrained by limited human capital and the relatively high costs in terms of informal fees and electricity.<sup>35</sup> A rapidly rising minimum wage is another challenge.

**The accumulation of human capital is crucial for facilitating economic diversification and job creation.** Human capital is expected to be increasingly critical as Cambodia endeavors to move up the value chain and diversify beyond low-end garment product exports. While a high degree of openness in terms of regulation helps increase Cambodia’s ability, relative to its neighbors, to diversify services, the country’s low education attainment is a constraint for moving toward higher-value-added and more sophisticated sectors and industries (figure S6).

**FIGURE S4: Cambodia’s savings-investment gap**

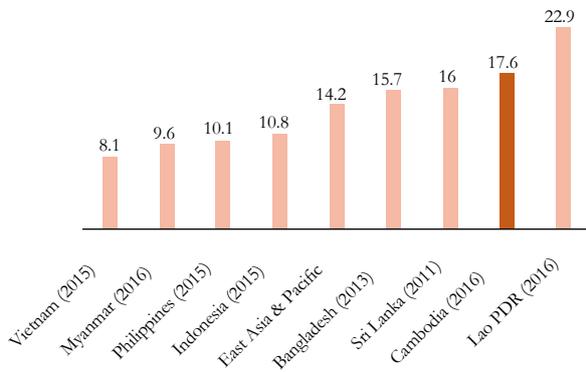


Source: World Development Indicators.

Note: Savings is defined as a residual equal to the investment rate plus the current account balance.

<sup>35</sup> “2017 Cambodia – Sustaining Strong Growth for the Benefit of All: A Systematic Country Diagnostic,” World Bank, Washington, DC, 2017.

**FIGURE S5: Inadequately skilled labor force SMEs include “inadequately skilled LF” among their top 3 constraints, ranks lower for large firms (percent of firms)**



Source: Enterprise Survey 2016.

The section below discusses opportunities and challenges for Cambodia in pursuing an upper middle-income target in 2030 and a high-income target in 2050 as set forth in the fourth Rectangular Strategy.<sup>36</sup> To that end, the section specifically simulates Cambodia’s GNI per capita attainments during the next 33 years by employing the World Bank’s Long-Term Growth Model (Loayza and Pennings 2018).

### III. Assessing Cambodia’s long-term growth potential

#### Growth targets

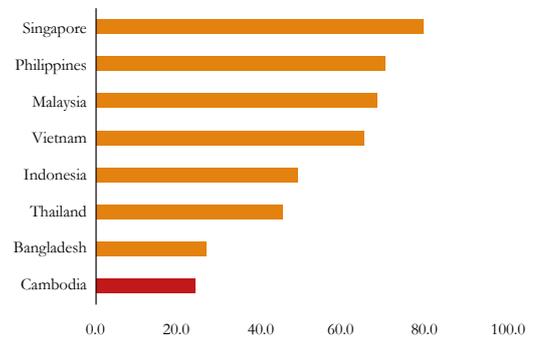
Cambodia is endeavoring to become an upper middle-income country by 2030 and a high-income economy by 2050; however, achieving these targets requires rapid and sustained economic growth. As classified by the World Bank Group, upper middle-income economies are those with a gross national income per capita (GNIPC) (Atlas method)<sup>37</sup> of at least US\$3,896, and high-income economies are those with a GNI per capita of at least US\$12,056. In 2017, Cambodia had a GNI per capita of US\$1,230, which means the gross national income per capita must more than triple in 13 years to reach the 2030 upper middle-income target, and be almost 10 times larger in 33 years. In other words, these targets require sustaining GNI

<sup>36</sup> Fourth Rectangular Strategy, Royal Government of Cambodia, September 2018.

<sup>37</sup> <https://datahelpdesk.worldbank.org/knowledgebase/articles/378832-the-world-bank-atlas-method-detailed-methodology>.

<sup>38</sup> The upper middle-income and high-income targets are defined in nominal U.S. dollar terms at market exchange rates averaged over several years (the Atlas method). The World Bank revises the cutoffs annually, usually upward to reflect inflation, so what the actual cutoffs will be in 2030 and 2050 are impossible to know. Instead, we make two simplifying assumptions: (a) the cutoffs stay constant in real terms (they increase with U.S. dollar inflation), and (b) GNI and GDP grow at the same rate. Historically, during 1996–2017, (c) is approximately true: the average growth rate of GNI was only 0.25 ppts slower than GDP growth. Over the period to 2030, a 0.25 ppt annual gap accumulates to 3 ppts, and over the period to 2050, 7 ppts. However, these are almost rounding errors relative to a three-fold or 10-fold increase in GDP per capita over the same period.

**FIGURE S6: Low education attainment**  
Education attainment, at least completed lower secondary (pop. 25+, total (%), cumulative)

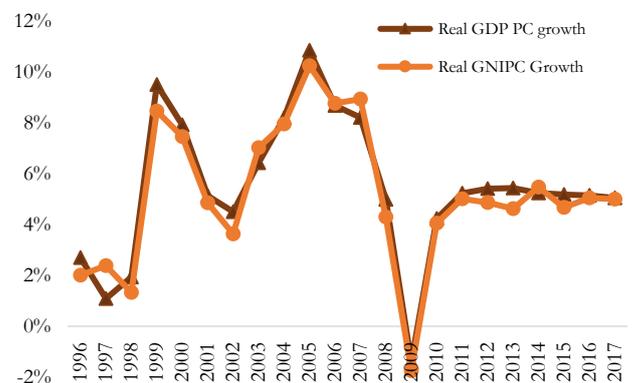


Source: WDI and CSES 2016.

Note: The data are 2016 or most recent available years.

per capita growth at 9.3 percent over 2018-30 to reach the 2030 upper middle-income goal, and 7.2 percent over 2018-50 to reach the 2050 high-income target. In contrast, over the last five years, GNI per capita has grown at around 5.2 percent (figure S7), so the 2050 goal requires increasing growth by 2 percentage points (ppts), whereas the upper middle-income goal requires almost doubling GDP per capita growth. Note that GDP per capita and GNI per capita grow at roughly similar rates, and we will use the terms interchangeably.<sup>38</sup>

**FIGURE S7: GDP per capita and GNI per capita growth at roughly similar rates (percent)**



Source: World Development Indicators.

**Looking at development paths of rapidly growing Asian countries from when they were at Cambodia’s level of income (figure S8), all except China missed the upper middle-income (2030) target, and all except the Republic of Korea missed the high-income (2050) target.** Malaysia was at Cambodia’s GNI per capita around 1958 and Thailand in 1975. Despite high growth rates in both countries, they substantially missed the goal of tripling gross national income per capita in 13 years, or increasing it 10-fold in 33 years. Vietnam was in Cambodia’s position much more recently (2006), but seems to follow similar growth paths as Thailand and Malaysia. Korea was at Cambodia’s level of development around 1963, but despite spectacular growth as an “Asian tiger” economy, it also missed the upper middle-income target, though it managed to reach the high-income target.<sup>39</sup>

**China’s recent experience is not a good guide for Cambodia because of its very high initial rates of investment and savings.** When China was at Cambodia’s level of development (around 1994), it was already investing around 35 percent of GDP, which hit 45 percent of GDP 15 years later (figure S9). In contrast, Cambodia currently invests 22 percent of GDP and until recently invested less than 20 percent. In practice, high investment rates are only practically possible with high savings rates, even for countries with open capital accounts (the Feldstein-Horioka Puzzle). Whereas China was

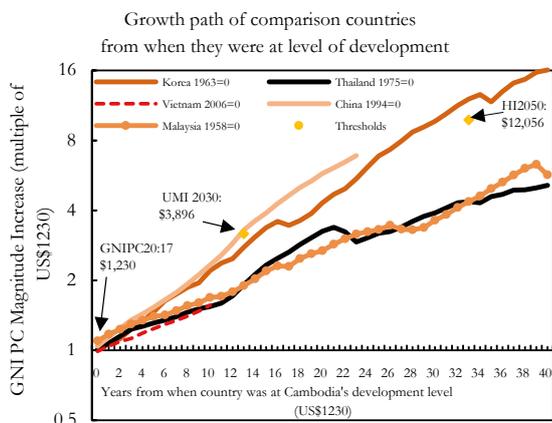
saving around 35 percent of GDP in 1994, Cambodia has never saved much more than 15 percent of GDP, as depicted in figure S4, above. Increasing savings and investment rates may be possible over the long term (discussed further below), but they are generally difficult to increase quickly.

**Malaysia’s and Korea’s experience of slowly increasing investment rates are a better guide: a similar initial investment rate as Cambodia, increasing to around 30 percent of GDP after 15 years (figure S10).** Investment rates in Malaysia and Korea were originally quite low as a share of GDP, and in fact sometimes lower than Cambodian investment rates today. But both countries managed to increase them by around 10 ppts of GDP during the 1960s and early 1970s, to achieve investment rates of 28 to 33 ppts. We consider this a more achievable path for Cambodia, and a guide for “investing like Korea or Malaysia” simulations below.

*Simulating Cambodia’s growth prospects under business-as-usual scenario reveals that the country will miss both the upper middle-income and high-income growth targets*

**The World Bank Long-Term Growth Model (LTGM) is an Excel-based tool building on the celebrated Solow-Swan growth model, and is used for simulating Cambodia’s growth path under several scenarios.** The LTGM includes

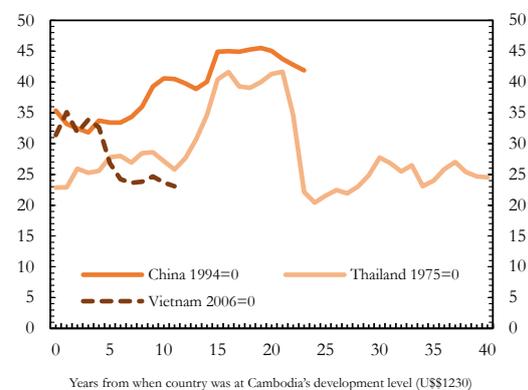
**FIGURE S8: Most fast-growing comparison countries missed the upper middle-income target**



Source: World Development Indicators.

Note: \$1,230 GNI PC (current Atlas dollars) in Cambodia is \$1,062 in 2010 U.S. dollars. Calculations are based on when countries’ GNI PC was at that level (in 2010 U.S. dollars). Real GDPPC growth rates from PWT9 or WDI used to backfill series when real GNI is missing.

**FIGURE S9: China’s investment rate was extremely high, even when at Cambodia’s level of development**



Source: World Development Indicators.

<sup>39</sup> We also considered Singapore and Japan, but GNI per capita was above that of Cambodia when annual data started in 1950.

investment, total factor productivity, human capital,

demographics, and other growth drivers that are important for developing and emerging economies. (See Annex and [www.worldbank.org/LTGM](http://www.worldbank.org/LTGM) for a description of the LTGM, or to download the model spreadsheet.)

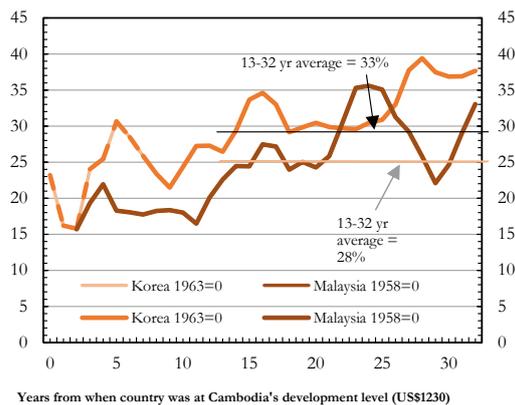
**There are two business-as-usual baselines: a default baseline, which delivers 7 percent headline GDP growth initially (similar to 2013–17), or a more conservative baseline, which delivers 6.1 percent growth (similar to 2008–17).** Growth in each baseline is fairly stable (figure S12), increasing by around 0.5 ppts over the period to 2045, before slowing (mostly due to demographics, as discussed below). As can be seen from figure S11, headline growth (not per capita) has been stable at around 7 percent since 2011, which is targeted by the default baseline, though if one includes the financial crisis, growth is almost a percentage point slower (targeted by the conservative baseline).

**The different growth rates of the default and conservative baseline stem from two**

**differences.** First, the default baseline assumes a higher investment rate of 22 percent of GDP, as in 2017 and IMF forecasts, whereas the conservative baseline assumes an investment-to-GDP (I/Y) ratio of 20 percent, like the most recent 5- or 10-year average. Second, the default baseline assumes a lower labor share (40 percent) based on Global Trade Analysis Project (GTAP) data, which boosts the effectiveness of investment for economic growth. Often, the GTAP labor share is too low, as the informal sector income is counted as capital income. So, the conservative baseline assumes 50 percent instead, which is closer to the cross-country lower middle-income median of 53 percent (Barrot 2016). Other features of the baselines are common (see table S1): (a) a capital-to-output ratio of 2—a low-to-medium value, which results from high growth and modest investment; (b) a fairly rapid human capital growth rate of 1.5 percent, based on Penn World Tables v9 data averaged over the last decade,<sup>40</sup> and (c) a high total factor productivity growth rate of 2 percent—a residual stemming from high growth rates but relatively low investment.<sup>41</sup>

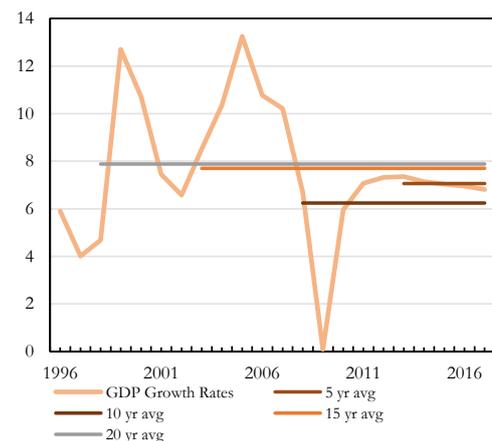
**FIGURE S10: Korea and Malaysia were able to increase investment rates, starting from Cambodia's level**

Comparative Investment-to-GDP ratio (percent)



Source: World Development Indicators (solid lines), Penn World Tables v9 (dashed lines)

**FIGURE S11: Cambodia's historical growth has been rapid but stable at around 7 percent since 2011** (percent)



Source: World Development Indicators.

<sup>40</sup> Human capital is defined as the productivity of a worker with average years of schooling, relative to the productivity of a worker with no schooling. Productivity estimates are based on how wages increase with schooling, as in a Mincer regression. The years of schooling are not quality adjusted. In 2014, the average years of schooling were 4.6, yielding a human capital measure of 1.8.

<sup>41</sup> This human capital growth rate is the same as in Korea during 1960–2014, and so is already quite high. The TFP growth rate is higher than Korea's in every decade except the 1980s (Jeong 2017). As a result, there is little room for material increases in the rate of total factor productivity or human capital growth, which is why they are not considered as ways to boost growth further in this section.

**TABLE S1: Summary of Key Parameters and Assumptions**

Variable	Conservative	Default	Source/Comments
<b>Panel A: Universal Parameters/Assumptions</b>			
<b>Capital-to-Output Ratio</b>	2.0		PWT 8.1 for 2010: 2.07, PWT 9 for 2014: 2.03.
<b>Human Capital Growth</b>	1.5%		Similar to PWT 9 5- to 10-year average
<b>TFP Growth</b>	2%		PWT TFP growth is missing. 2% is between the 2.2% for the 20-year average, and 1.3% for 10-year average (by own calculations) and around 95th percentile for the 20-year average, across countries
<b>Depreciation Rate</b>	4.7%		2011 for the PWT 8.1
<b>Population Growth 2017...2050</b>	1.54%...0.54%		UN Population projections (via World Bank and Human Development Network)
<b>GNI PC Level (2017)</b>	US\$1,230		
<b>Panel B: Business-as-usual baselines (other parameters as in Panel A)</b>			
<b>Investment-to-GDP ratio</b>	20%	22%	Conservative: Close to the 5–10-year average. Default: Equal to the 2017 value Similar to the IMF Article IV estimates for the near future 2018-2023
<b>Labor Share of Income</b>	50%	40%	Default: GTAP (38%) (PWT data is missing) Conservative: Cross-country median (50%)*
<b>Implied headline GDP Growth in 2018</b>	6.1%	7.0%	The 7% GDP headline growth rate is consistent with the IMF Article IV estimates
<b>Panel C: Scenarios with higher investment to reach the growth target (other parameters as in Panel A or B)</b>			
<b>Investment-to-GDP ratio by 2030–50</b>	28%	33%	Default: Korea investment rate (1978–95 ave, WDI) Cons: Malaysia's investment rate (1971–90 ave, WDI)

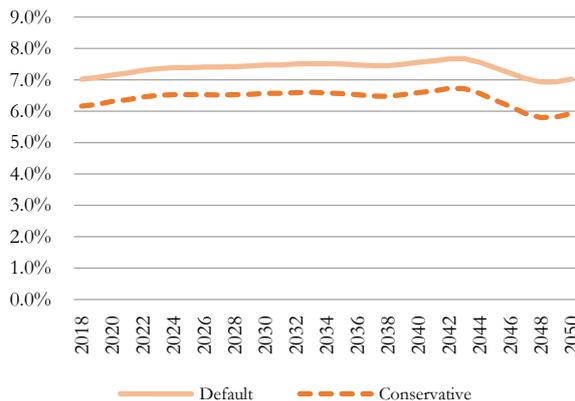
*Note:* \*GTAP labor share may be biased downward as informal sector business income is counted as profits rather than labor. GTAP = Global Trade Analysis Project; PWT = Penn World Table; TFP = total factor productivity.

The per capita growth rate (figure S13)—which is what is relevant for the upper middle-income and high-income targets—is initially around 1.5 ppts slower than the headline GDP growth rate (figure S12), though the gap narrows in the outyears as population growth slows. Current population growth in Cambodia is around 1.5 percent but is expected to fall to 0.5 percent by 2050 (figure S14) according to UN projections. The declining population growth increases GDP per capita growth by around 0.3 ppts by 2050 in the default baseline but reduces headline growth by around 0.7 ppts.<sup>42</sup> There is a small demographic dividend from an increasing share of the population of working age, which boosts growth by around 0.1 to 0.2 percent for 2023–43. After 2043, the demographic dividend becomes a cost as the population ages, which is what causes the decline in per capita growth of around

0.5 ppts over 2043–48, as depicted in figure S14.<sup>43</sup>

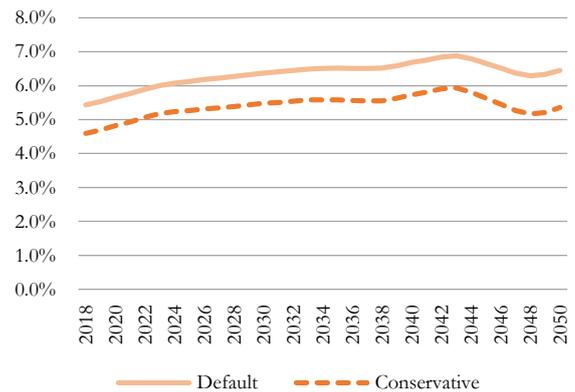
If Cambodia continues to grow at current rates—at the business-as-usual baselines—the country will miss both the upper middle-income and high-income growth targets (figure S15). Cambodia needs to grow at 9.3 percent in per capita terms to reach the upper middle-income target by 2030, yet only averages 6 percent per capita growth in the default baseline, and 5 percent in the more conservative baseline over that period, as depicted in figure S13—resulting in a sizable miss where gross national income per capita is less than two-thirds of the target. The high-income target by 2050 requires 7.2 percent per capita growth, which is still above the 5.4 to 6.4 percent average per capita growth of the baselines over this period, resulting in gross national income per capita that is only three-fourths of the target.

**FIGURE S12: Cambodia Real GDP Growth Rate**



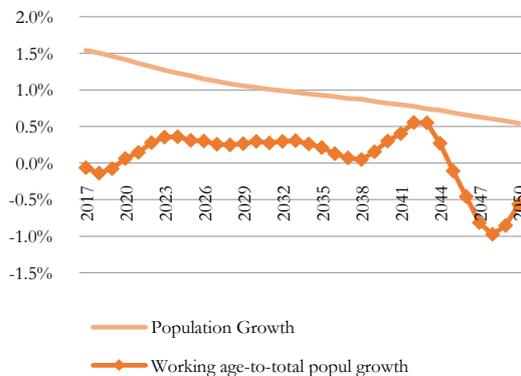
Source: World Bank Group’s LTGM.

**FIGURE S13: Cambodia GDP Per Capita Growth Rate**



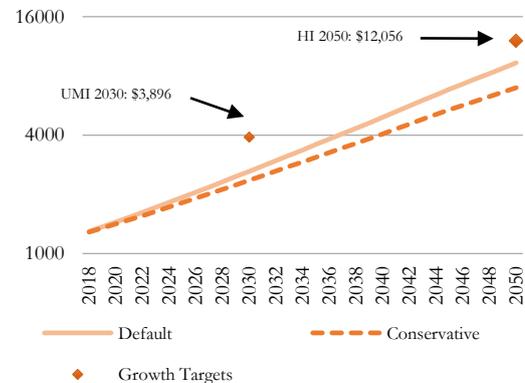
Source: World Bank Group’s LTGM.

**FIGURE S14: Cambodia Demographics**



Source: World Bank Group’s LTGM.

**FIGURE S15: Cambodia GNI PC Level (US\$)**



Source: World Bank Group’s LTGM.

<sup>42</sup> In the conservative baseline, declining population growth increases GDP per capita growth by 0.2 ppts and decreases headline GDP per capita growth by 0.8 ppts.

<sup>43</sup> In Korea, changes in the working-age population ratio and labor force participation added around 0.5 ppts each to growth during 1960–2014 (Jeong 2017).

## Cambodia may achieve [some] growth targets through higher investment

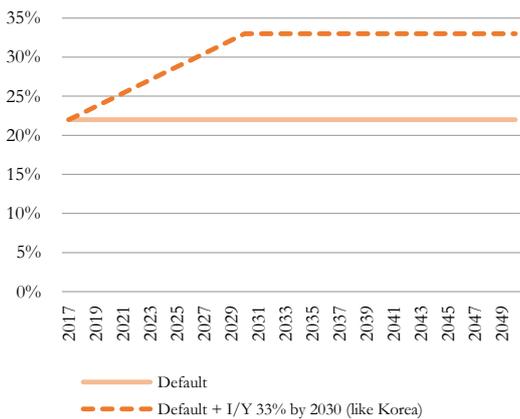
a) With an “investing like Korea” simulation, Cambodia reaches the high-income 2050 target, but misses the 2030 upper middle-income target

To accelerate growth, Cambodia might like to follow the path of Malaysia or Korea by increasing investment rates to 28 to 33 percent by 2030. As indicated in figure S10, both Korea and Malaysia started with investment rates similar to that of Cambodia currently, but then increased them to around 28 to 33 percent of GDP (respectively) over around 15 years. Korea’s experience is particularly

relevant, given they did manage to achieve high-income status around 33 years after they were at Cambodia’s development level. Specifically, our first simulation starts at the default baseline, and increases investment rates to Korea’s 33 percent of GDP by 2030. Our second simulation starts with the conservative baseline and increases investment rates to Malaysia’s rate of 28 percent of GDP by 2030.

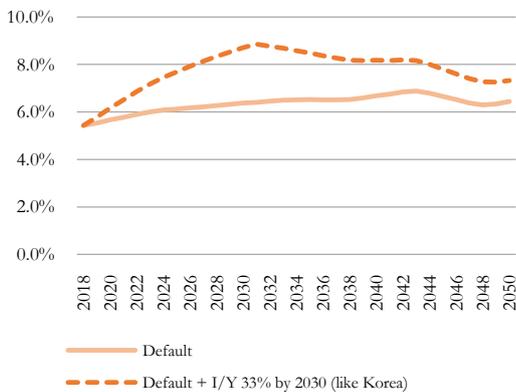
**With a rapid increase in investment and default parameters, Cambodia reaches the high-income 2050 target, but misses the 2030 upper middle-income target** (figure S17). Figure 16 displays the simulated increase in investment rates in our first “investing like Korea” simulation, where investment increases 11 pts of GDP (from 22 percent to 33 percent) over 2018–30. The extra investment boosts growth by almost 2.5 pts by 2031, which results in per capita growth of 8.8 percent (figure S18) and boosts

**FIGURE S16: Cambodia Investment to GDP Ratio**



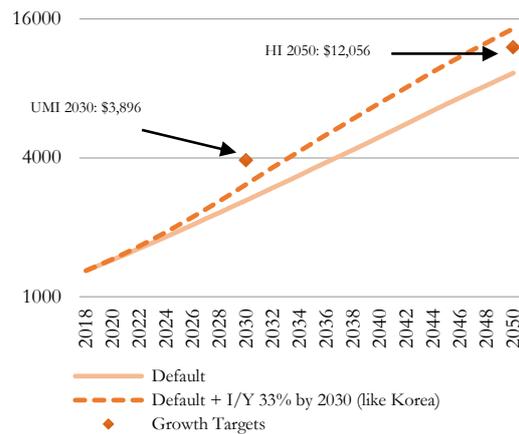
Source: World Bank Group’s LTGM.

**FIGURE S18: Cambodia GDP Per Capita Growth Rate**



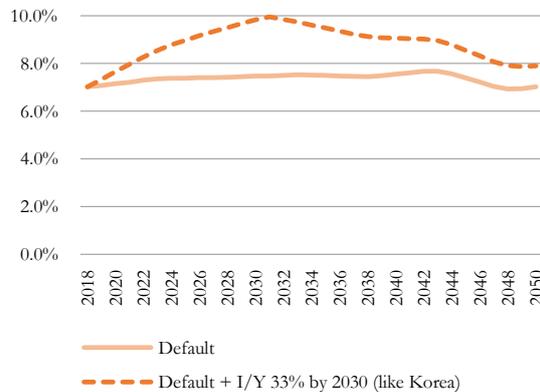
Source: World Bank Group’s LTGM.

**FIGURE S17: Cambodia GNI PC Level**  
(with Korean investment rates from 2030)



Source: World Bank Group’s LTGM.

**FIGURE S19: Cambodia Real GDP Growth Rate**



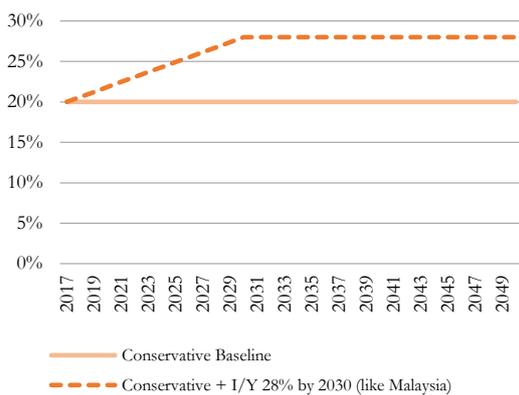
Source: World Bank Group’s LTGM.

headline growth to almost 10 percent (figure S19). However, the level of GNI per capita still falls about 20 percent short of the 2030 upper middle-income target as depicted in figure S17, in part because of the ambition of that goal, and in part because the increase in investment rates are phased in over a period of more than a decade (like in Korea). On the plus side, Cambodia does reach the high-income target. In fact, the 2050 target is exceeded; Cambodia only needs an investment-to-GDP ratio of 28.3 percent from 2030 to reach that target.

b) If investment follows the path of Malaysia and more conservative (and perhaps realistic) assumptions for the capital share, Cambodia will likely miss both growth targets

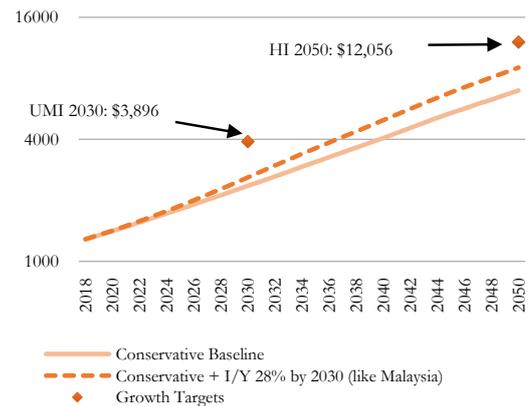
**Therefore, with more conservative (and perhaps realistic) assumptions regarding investment and the capital share, both growth targets are missed.** Figure S20 displays the increase in investment rates in our “investing like Malaysia” simulation, where investment increases 8 ppts of GDP (from 20 percent to 28 percent) during 2018–30, with a capital share of 50 percent. Given Cambodia’s very low savings rate—and existing heavy reliance of foreign savings through FDI—a larger increase in investment rates might not be possible. The extra investment boosts growth by almost 1.5 ppts by 2031, which results in per capita growth of 7 percent (not reported) and headline growth of almost 8 percent (figure S22). Unfortunately, all targets are missed: the upper middle-income target is still missed (though with a wider margin), and Cambodia now misses the 2050 high-income target by 25 percent, as depicted in figure S21.

**FIGURE S20: Cambodia Investment to GDP Ratio**



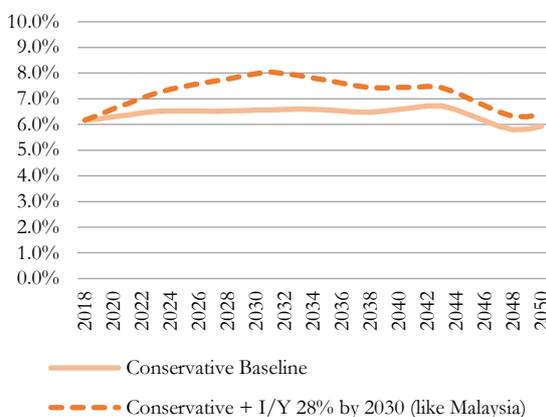
Source: World Bank Group’s LTGM.

**FIGURE S21: Cambodia GNI PC level [conservative] (with Malaysian Inv/Y from 2030)**



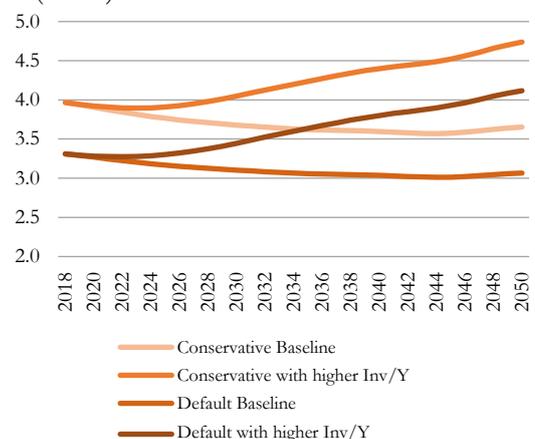
Source: World Bank Group’s LTGM.

**FIGURE S22: Cambodia Real GDP Growth Rate**



Source: World Bank Group’s LTGM.

**FIGURE S23: [Marginal] Incremental Capital Output Ratio (ICOR)**



Source: World Bank Group’s LTGM.

**Cambodia fails to hit its growth targets with the second conservative simulation in part because of the lower rate of investment, but also because the effect of investment on growth is lower.** The effectiveness of investment in boosting growth can be measured in the LTGM by the marginal incremental capital-to-output ratio (ICOR), which is the size of the increase in investment required to generate an extra 1 ppt of growth (the inverse of the marginal product of capital).<sup>44</sup> The marginal ICOR is calculated as the capital-to-output ratio (initially 2 in all simulations) divided by the capital share of income (1- the labor share). The capital share is 0.6 in the default baseline, but 0.5 in the conservative baseline. This yields marginal ICORs of 3.3 (default) compared to 4 (conservative), which means an extra unit of growth requires 20 percent more investment with the conservative parametrization (figure S23).

**High rates of investment also become less effective over time in boosting growth.** Dynamically, investment-driven growth leads to a faster increase in the capital stock than GDP, results in an increase in the capital-to-output ratio and the marginal ICOR, and hence a fall in investment effectiveness. This is the reason the boost to growth falls after 2031 in all the simulations with higher investment (figures S18, S19, and S22). For example, in 2050 with the conservative parametrization, an extra unit of growth requires 30 percent more investment with the higher investment (marginal ICOR = 4.7), than in the baseline (marginal ICOR = 3.65).

**FIGURE S24: Malaysia and Korea: Savings and Current Account Balance** (percent of GDP) 20+years pre-Asian Financial Crisis\*



Source: World Development Indicators.

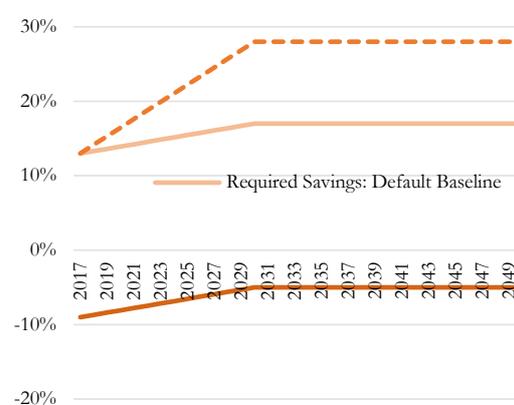
Note: \*In 1998, the current account balance moved into a surplus of more than 10 percent of GDP

### c) Implications for required savings

**The current account deficit is likely to shrink in the long term from its current elevated level.** Around 9 pts of the 22 percent investment rate are funded by foreign savings in the terms of a current account deficit. The current account balance of comparator countries, Malaysia and Korea, averaged around -2 percent of GDP in the 20+ years from when data begin to the Asian financial crisis (figure S24), though the current account balance was very volatile during that time. In the 20 years to 2012, the Cambodian current account balance was relatively stable at -5 percent of GDP, which is often considered a rule-of-thumb threshold for a possibly unsustainable deficit. Although Cambodia's current account deficit is driven by FDI, it is likely to close somewhat during the simulation period. Based on Cambodia's own history, we assume that the current account balance converges to -5 percent of GDP by 2030 (figure S25).

**To maintain current investment rates—or increase investment to reach the growth target—Cambodia will have to increase savings rates dramatically** (figure S25). Given the assumed paths for investment and the current account balance, required savings rates as a share of GDP can be calculated simply as the sum of the investment rate and the current account balance (both as shares of GDP).

**FIGURE S25: Cambodia Savings and CAB** (percent of GDP)



Source: World Development Indicators.

<sup>44</sup> The traditional ICOR is measured as the ratio investment to growth and is commonly used as a rule of thumb for investment effectiveness. The marginal ICOR is its analogue in the LTGM, which allows for the fact that growth is also affected by other non-investment factors.

Cambodia currently saves around 13 percent of GDP, so to maintain current rates of investment it will have to increase savings to 17 percent of GDP by 2030—a 4-ppt GDP increase. If Cambodia increases investment rates to those of Korea (33 percent of GDP by 2030), savings rates will have to increase to 28 percent of GDP—a 15-ppt GDP increase. Savings rates in Malaysia and Korea averaged around 30 percent of GDP around 15+ years after they were at Cambodia’s current level of development, with a strong upward trend as depicted in figure S24. Box S1 provides additional information on comparison countries, and box S2 suggests ways that policy can help support higher savings rates in Cambodia.

### The challenge of sustaining growth: cross-country evidence

“[V]irtually all [developing] countries experience both growth miracles and failures over substantial periods [10–15– year time scales]...but sustaining growth is difficult and may pose a very different set of challenges than starting it” (Jones and Olken 2008).

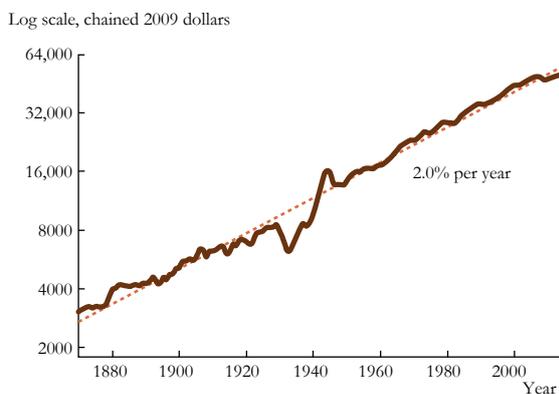
**The key to long-term development is often more about maintaining growth than accelerating growth.** The world’s richest large country, the United States, never grew extremely fast. Rather, it maintained a steady rate of 2 percent per capita growth for more than a century (figure S26, taken from Jones [2016]). Although other Asian countries, such as Singapore, Malaysia, and Korea, achieved fast growth rates,

they also maintained those growth rates over long horizons. This is particularly relevant for the goal of becoming a high-income country by 2050, which requires maintaining growth for more than 30 years.

As the quote from Jones and Olken (2008) above suggests, periods of fast growth are common among developing countries. But the difficulty is that they are not maintained, and instead per capita incomes stagnate or decline. Cambodia’s own experience bears this out: although growth has been fairly stable since the mid-1980s, political instability before that resulted in rapidly falling per capita incomes (figure S27).

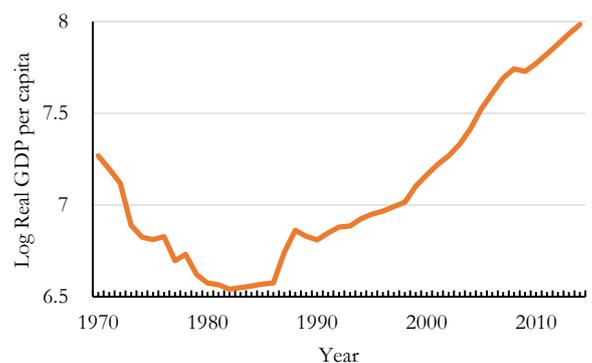
**Cambodian policy makers might like to consider policies to extend their growth spells in addition to policies to accelerate growth.** Berg, Ostry, and Zettelmeyer (2012) list policies that are associated with longer periods of expansion. First, they find that countries that are growing faster tend to have less durable expansions, which is consistent with the fact that overheating economies are more likely to fall into recession.<sup>45</sup> Second, they find countries that are more equal, have more democratic institutions, greater export orientation, and greater macroeconomic stability are likely to have more durable growth. Cambodia already scores well on many of these, such as economic equality (with a low Gini coefficient of around 0.31), strong export orientation (high FDI and strong export growth), and a stable macroeconomic environment. Political variables are also important. Specifically, Berg, Ostry, and Zettelmeyer (2012) find that constraints on executive power and political competition seem to be associated with more durable growth, and autocracy is associated with less durable growth.

**FIGURE S26: United States: Real GDP per capita**



Source: Jones (2016).

**FIGURE S27: Cambodia level of GDPPC**



Source: PWT9.

<sup>45</sup> Higher current account balances and savings rates are also sometimes related to a more durable expansion.

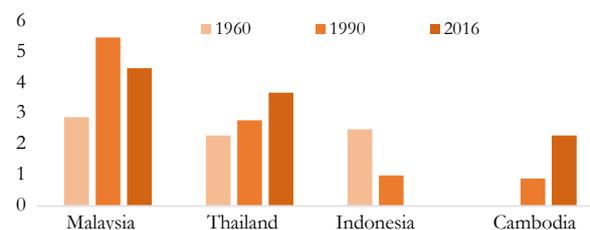
## Box S1

Regional experience<sup>1</sup>

Malaysia, Indonesia, and Thailand are three among the eight countries in East Asia the economies of which grew so rapidly during 1960–1990 that their growth has been referred as the “East Asian miracle.” High rates of investment, in particular unusually high rates of private investment, combined with high and rising endowments of human capital due to universal primary and secondary education, tell a large part of their growth successes. Governments of these countries have focused education spending on the lower grades first by providing universal primary education, and later by increasing the availability of secondary education. More than three-quarters of the education budget was allocated to primary and secondary education. Rapid demographic transitions facilitated these efforts. Declining fertility and rapid economic growth meant that, even when education investment as a share of GDP remained constant, more resources were available per child. They limited public funding of postsecondary education, which primarily focused on technical skills.

Malaysia and Thailand adopted import substitution and a wide variety of export incentives, while shifting from resource-based to manufactured export. Exchange rate policies were liberalized and currencies frequently devalued to support export growth. Overall, these policies exposed much of the industrial sector to international competition and resulted in domestic relative prices that were closer to international prices than in most other developing economies. Under Malaysia’s New Economic Policy launched in 1971, major export incentives included taxable income deductions linked to export performance and domestic input content, tax allowances for export-related promotional expenses, and accelerated depreciation for firms exporting more than 20 percent of their output. Credit policies promoted exports through guarantees and automatic rediscounting of export financing at low interest rates. Export processing zones, free trade zones, and licensed manufacturing warehouses that permitted duty-free import of materials to be assembled or processed for export were crucial to the successful combination of import substitution and export promotion. By 1980, about 70 percent of manufactured exports originated in

**FIGURE SB1: Government spending on education**  
(percent of GDP)



Source: WDI and ADB.

the export processing zones, primarily from foreign-owned firms.

In the 1970s, Thailand followed import substitution strategies favored by many other developing economies by raising tariffs on consumer goods to a range of 30 to 55 percent. Capital and intermediate goods entered with low duty rates. Textiles, pharmaceuticals, and automobile assembly were particularly favored. At times, vehicles imports were banned. Domestic content requirements and parts raised production costs in the assembly sector while subsidizing the producers of inputs. The second oil shock exposed weaknesses in the Thai economy tainted with import substitution policies of the 1970s. In 1981, Thailand’s trade policy shifted explicitly in the direction of export promotion. Automatic and concessionary credit was another major element in the export promotion strategy. The Bank of Thailand had traditionally extended refinancing facilities, through the commercial banks, to key economic sectors. As part of the export incentives package, Bank of Thailand revised its rediscount rules to focus more explicitly on small, nontraditional exporters and on other productive activities.

The outcome of these policy changes was dramatic. By 1986, light manufactures represented 30.6 percent of a growing volume of Thai exports. Leading sectors include clothing, footwear, artificial flowers, jewellery, and integrated circuits. Foreign direct investment played a major role in the export boom, as firms from the more developed economies in Asia moved more labor-intensive manufacturing processes offshore.

<sup>1</sup> Prepared by Runsinarith Phim, Consultant, World Bank.

## Box S2

Promoting Savings<sup>1</sup>

Malaysia, Indonesia, and Thailand increased savings and investment with a combination of fundamental and interventionist policies. Two fundamental policy areas provided a foundation for high and rising saving rates. First, by avoiding inflation, they avoided volatility of real interest rates on deposits and ensured that rates were largely positive. As a result, they have generally offered higher real interest rates on deposits in the financial system than other developing economies. Second, they ensure the security of banks and made them more convenient to small and rural savers.

Malaysia promoted national saving by creating postal saving systems. These systems attracted multitudes of small savers by giving them security and convenient access. The Malaysian government also used compulsory pension plans to boost domestic savings.<sup>2</sup> Two rationales are given for such plans. First, most developing countries lack private annuity markets, and the few that exist are barely functional. Indexed annuities, for example, are rarely available, and nonindexed annuities are often priced unattractively because of large transaction costs and problems of adverse selection. Second, even when annuities are available, people may not save enough for their old age, and governments end up assisting elderly people who are unable to support themselves. To avoid this free-rider problem, government may require citizens to have at least a minimum level of savings for retirement.

Thailand established the Government Saving Bank (GSB) in 1913 with the mandate of promoting saving among the Thai population, with a special focus on kids and students. To enhance people's trust in the GSB, the Royal Thai Government explicitly guarantees GSB's saving accounts. With this targeted mandate, the GSB has initiated several saving options with a lot of saving campaigns. The GSB is partly contributing to the strong domestic saving habits. The Royal Thai Government imposed several regulations to enhance the solvency of financial institutions, which improved both the savings rate and the efficiency of resource allocation. Thailand introduced prudential regulations in the 1980s in the forms of capital adequacy requirements, collateral requirements and lending restrictions, and central bank's direct supervision. Lending restrictions

could be one of the important policy objectives to discourage speculative lending, which has become the main source of financial disruption in Thailand, as it was in other East Asian economies during the 1980s.

Thailand also followed other East Asian peers by imposing a mandatory savings scheme after the 1997 Asian financial crisis. The scheme has three pillars. Pillar 1, for private sector employees, and pillar 2, for government officials, are complemented by the provident funds (pillar III). Provident funds are offered by corporations and state enterprises to their employees. Under pillar III, employee's contributions must be at least 3 percent of wages but must not exceed 15 percent. Employer contributions must not be less than employee contributions. The employees receive lump sum proceeds when they resign or retire. Funds are generally placed in the custody of major financial institutions licensed by the Ministry of Finance. In addition to the provident funds, Thailand has retirement mutual funds that are similar to U.S. individual retirement accounts (IRAs). An individual can set up a personal account with any authorized financial institution. Contributions are tax deductible up to the stipulated limit. Retirement mutual funds were introduced in Thailand in March 2001 to provide a means of voluntary retirement savings for employees not in the provident fund or wanting to make additional contributions. Investors are given broad freedom in fund asset allocation. However, withdrawal is not permitted until age 55.

**TABLE S2.1. Public and private savings (% of GDP)**

Economy	Public Savings	Private Savings
<b>Malaysia</b>		
1961–80	3.2	18.7
1981–90	10.3	19.1
<b>Thailand</b>		
1980–85	14.3	4.7
1986–87	8.6	14.6
<b>Indonesia</b>		
1981–88	7.7	14.0

Source: "East Asia's Miracle," World Bank.

<sup>1</sup> Prepared by Runsinarith Phim, Consultant, World Bank.

<sup>2</sup> "Financial Markets, Public Policy, and the East Asian Miracle," Joseph Stiglitz and Marilou Uy, World Bank, Washington, DC, 1996.

## IV. Policy options

The results of the Long-Term Growth Model indicate that Cambodia will likely miss the upper middle-income target by 2030, even with higher investment. However, there is an opportunity that Cambodia may be able to reach the high-income target by 2050 with a large boost to investment. What can Cambodian policy makers do?

**First, Cambodia should consider delaying the 2030 upper middle-income (UMI) target to 2035 (figure S28) as the 2030 target is unlikely to be met, given other Asian tiger economies would have missed such a goal when they were at Cambodia’s development level.<sup>46</sup>** The simulations above have shown that even with rapid total factor productivity and human capital growth, as well as a massive increase in investment similar to the level of Republic of Korea rates, Cambodia will still miss the 2030 UMI target. This is neither surprising nor a cause for concern: even fast-growing Korea and Malaysia would have missed that target. Per capita growth would have to average 9.3 percent over 13 years, a feat almost no other country has achieved. In contrast, a UMI target by 2035 is achievable: it would require average per capita growth of 6.6 percent. Given that per capita growth over the last five years was 5.2 percent, this is still an ambitious goal and one that will be missed under “business-as-usual.” However, it is achievable if Cambodia were able to increase investment rates (figure S28), as discussed further below.

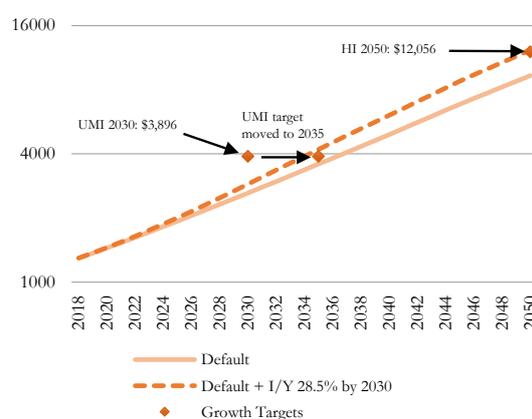
**Trying to grow too rapidly can lead to imbalances that can threaten the sustainability of growth.<sup>47</sup>** Another reason to postpone the UMI 2030 target to 2035 is to make sure that the economy does not overheat in the pursuit of that goal. Trying to achieve an overly ambitious growth target might lead to policies that boost short-term growth but threaten long-term growth. On the macroeconomic side is the possibility of excessive current account deficits and a sudden stop in capital flows, driven by excessive investment. Alternatively, policies designed to increase firm investment via

greater borrowing might lead to excessive credit growth and a banking crisis. Combinations of these have affected Cambodia’s peers in the past, with disastrous consequences. On the microeconomic side, the quality of investment can suffer as investment projects are approved with the goal of increasing growth rather than generating a market-based return.

**Second, Cambodia should seek to maintain strong rates of human capital and total factor productivity growth.** In the background of all the simulations above is rapid growth in human capital per worker and total factor productivity (TFP), which have supported rapid growth at around 7 percent in recent years. Growth in human capital and TFP is important to retain competitiveness as (a) wage growth reduces Cambodia’s comparative advantage as a low-wage economy, and (b) rising income means Cambodia will no longer be eligible for trade preferential treatment, which is accorded to least developed countries.

**Maintaining the same rate of growth requires further reforms, as the easy gains have already been made.** In addition, as discussed, global conditions are expected to become less supportive for EMDE growth (see Box 1: Global and Regional Economic Outlook) and Cambodia is no exception. Cambodia’s fast rates of human capital and TFP growth over the last decade are impressive, but they

**FIGURE S28: Cambodia GNI PC Level**  
(with 28.5 percent investment rates from 2030)



Source: World Bank Group’s LTGM.

<sup>46</sup> This recommendation is based on the current level of GNI per capita. Many developing countries have improved the methodology to calculate GDP and GNI, which has resulted in those values being revised upward. In that case, the UMI 2030 target might be more achievable.

<sup>47</sup> Imbalances that Cambodia may face, if it tries to grow too fast, include unsustainable fiscal deficit and external debt, financial sector instability, and runaway inflation.

are off a low base from where gains are easily made. For example, moving workers from rice farming to garment manufacturing leads to a large increase in productivity. But these are a one-off: increasing the productivity of current garment manufacturers is more difficult. The same applies to human capital: providing a basic education can provide large gains off a low base, but future advances are more difficult.

**In the short to medium term, enhancing human capital by improving access and quality education, especially at the primary and secondary levels, is necessary.** The recent gains from achieving universal primary education are undermined by poor learning outcomes in primary education.<sup>48</sup> It is necessary to address poor learning outcomes attributed to a combination of fewer and poor-quality teachers compared to peers, fewer learning hours, and delayed engagement of children in schools due to low early childhood education enrollment. In addition, lower secondary completion rates, at 47.4 percent in 2016, are the lowest in the region. Stronger human capital is crucial not only for enabling people to take up better job opportunities in the non-farm sector, but also for facilitating economic diversification and job creation (see box S1 for regional experience).

**Maintaining TFP growth will involve continued structural transformation, as well as further reforms to increase the quality of the business environment.**<sup>49</sup> In addition to structural transformation across sectors (moving labor from agriculture to manufacturing and services), TFP growth in developing countries is driven by a reallocation of capital and labor toward more efficient firms *within* sectors. Politically driven access to credit, inefficient regulations, and costly enforcement of contracts can result in misallocation. For example, Hsieh and Klenow (2009) found that reducing misallocation in China and India to U.S. levels would increase manufacturing TFP 30 to 50 percent in China and 40 to 60 percent in India. There is a substantial

upside potential to improve Cambodia’s business environment. Cambodia is currently ranked 138th out of 190 countries in Doing Business ranking in 2019, declining from 135th in 2018 and 131st in 2017. While the country is ahead of Lao PDR (154th), it is far behind many regional countries such as Indonesia (73rd), Vietnam (69th) and Thailand (27).<sup>50</sup> In the latest Investment Climate Assessment (see box 2), while acknowledging the significant progress made, the assessment concludes that the current investment climate hampers improvements in productivity, diversification, and the development of a dynamic local private sector.

**Third, Cambodia will need to increase investment rates.** Figure S28 suggests that an increase in investment to 28.5 percent of GDP by 2030—similar to the path of Malaysia—is needed to reach both the upper middle-income 2035 and high-income 2050 goals. The simulations in figure S28 are similar to those above using the default baseline (not the conservative baseline, in which investment less effective for growth). However, this time (a) we calculate the increase in investment by 2030 required to just achieve the growth targets (rather than following the experience of other countries), and (b) the upper middle-income 2035 target is easier to reach. Starting at 22 percent of GDP investment today, it involves an increase in the investment rate by 6.5 ppts. To put this in context, investment rates also increased by around 6.5 ppts from the mid-to-late 1990s to the early-mid 2000s, suggesting this an achievable increase (figure S4). It is also a path taken by comparator countries like Malaysia (figure S10). Reforms to the investment and business climate can encourage firms to invest more. In addition to boosting efficiency, a better business climate will also attract more investment. Firms will invest more if they feel secure that their contracts will be honored, there is a predictable policy environment, and the macroeconomy is stable. Greater competition can also boost investment by new firms (see box 2).

<sup>48</sup> “2017 Cambodia – Sustaining Strong Growth for the Benefit of All: A Systematic Country Diagnostic,” World Bank, Washington, DC, 2017.

<sup>49</sup> An increase in the quality and quantity of public infrastructure investment can also increase TFP growth. Public investment currently is about 7.5 percent of GDP, which is relatively high for a lower middle-income country, though typical for a low-income country (Devadas and Pennings 2018). Given that, Cambodia might instead like to focus on improving the quality of public infrastructure, by improving road quality, reducing power transmission losses, and reducing water leaks. The Infrastructure Efficiency Index in Devadas and Pennings (2018) of 0.67 suggests substantial room for improvement.

<sup>50</sup> <http://www.doingbusiness.org/content/dam/doingBusiness/country/c/cambodia/KHM.pdf>.

**Finally, Cambodia will need to increase savings rates by around 10 ppts of GDP to fund the increased investment required to achieve the growth goals and reduce dependence on foreign savings.**<sup>51</sup> The increase in required savings is smaller than that above in figure S25, where we assumed that Cambodia followed Korea’s investment path, but is still substantial. Around 6 ppts of this is due to the expansion of investment required to meet the growth goals. Around 4 ppts of GDP extra savings is needed to reduce reliance on foreign savings and shrink the current account balance of its long-term average of around -5 percent of GDP (as discussed above). Cambodia might have no choice in this. As incomes increase, it likely will lose preferential access to markets that are the motivation for much of the inbound FDI in the garment sector (it will also become less competitive as wages rise with development). Finally, modest amounts of inbound FDI in dollar terms appear large as a share of GDP because GDP is currently low. As GDP increases 10-fold over the next 32 years (according to simulations), the real dollar value of capital inflows would also have to increase 10-fold simply

to maintain the share of GDP, which international investors might not want to provide.

**Cambodia can rely on the experience of peer countries in finding ways to increase savings.** Several countries in the region have successfully mobilized their savings through different means (see box S2 and figure S24). Digitalization for financial inclusion, and developing capital markets and a domestic debt market while introducing incentives to deposit and save in local currency would also support both higher investment and progressive de-dollarization. Currently, the willingness of households and firms to deposit in the domestic banking sector is also sensitive to its perceived riskiness. Therefore, introducing enhanced regulation and deposit insurance can increase confidence.<sup>52</sup> For instance, Malaysia promoted national savings by, as mentioned above, creating a postal saving system, while Thailand introduced the Government Saving Bank and imposed several regulations to enhance the solvency of financial institutions, which improved both the savings rate and the efficiency of resource allocation.



<sup>51</sup> “2017 Cambodia – Sustaining Strong Growth for the Benefit of All: A Systematic Country Diagnostic,” World Bank, Washington, DC, 2017.

<sup>52</sup> This would ultimately help attain greater exchange rate flexibility and regain monetary policy independence. In the medium term, market measures aimed at fostering the use of the Cambodian riel, coupled with the progressive development of capital and bond markets, could help provide sources of long-term funding for the corporate sector and establish alternatives to investment in construction and real estate.

## ANNEX: A DESCRIPTION OF THE LONG-TERM GROWTH MODEL

The Long-Term Growth Model (LTGM) is an Excel-based tool building based on the celebrated Solow-Swan growth model but adapted for growth analysis in developing countries.<sup>53</sup> (The Excel-based tool and documentation are freely downloadable from [www.worldbank.org/LTGM](http://www.worldbank.org/LTGM).) Investment, savings, and productivity are key growth drivers, but the model includes other factors important for developing and emerging countries, like human capital, demographics, and labor market participation (especially for women). Recently, the baseline LTGM has been extended to allow for an analysis of the effects of growth (and inequality) on poverty, based on a log-normal approximation of the income distribution.

There are two important common results in the LTGM. First, investment-led growth is unsustainable in the long run, as the capital stock grows faster than output, which increases the capital-to-output ratio and reduces the effectiveness of investment for growth. Enhancing other growth drivers, like total factor productivity, human capital, and labor force participation, helps contain the capital-to-output ratio by boosting output, and hence makes growth more sustainable. Second, high rates of investment need to be financed by either domestic or foreign savings. As foreign savings can be fickle, high rates of investment in the long run usually require high rates of domestic savings.

The LTGM economy consists of a single sector that produces GDP using physical capital ( $K_t$ ) and effective labor ( $h_t L_t$ ).  $A_t$  denotes total factor productivity, which determines the aggregate efficiency of the economy.

$$(1) \quad Y_t = A_t K_t^{1-\beta} (h_t L_t)^\beta$$

where  $\beta$  is the aggregate labor share of income and effective labor is decomposed into human capital per worker ( $h_t$ ) and the number of workers ( $L_t$ ). The total number of workers can be written as:

$$(2) \quad L_t = \rho_t \omega_t N_t$$

where  $\rho_t$  is the participation rate,  $\omega_t$  is the ratio of working-age population to total population, and  $N_t$  is the total population.

Physical capital next period ( $K_{t+1}$ ) is formed by undepreciated capital  $(1 - \delta)K_t$  and new investment  $I_t$ :

$$(3) \quad K_{t+1} = (1 - \delta)K_t + I_t$$

Investment is funded by either domestic savings  $S_t$  or foreign savings via a current account deficit ( $CAD_t$ ):

$$(4) \quad I_t/Y_t = S_t/Y_t + CAD_t/Y_t$$

<sup>53</sup> The LTGM builds on earlier work by Hevia and Loayza (2012).

Changes in foreign savings can be further decomposed into inbound foreign direct investment, and changes in total external debt ( $D_t$ ):

$$(5) \quad \frac{I_t}{Y_t} = \frac{S_t}{Y_t} + \frac{FDI_t}{Y_t} + \frac{D_t}{Y_t} - \frac{D_{t-1}/Y_{t-1}}{(1+g_{y,t}^{pc})(1+g_{N,t})}$$

By combining these, the model can calculate growth resulting from an investment constraint (Model 1), or a savings constraint (Model 3), or it can calculate required investment to meet a growth target (Model 2). It also calculates changes in the poverty rate, as growth in GDP per capita shifts the income distribution to the right.

$$(6) \quad \cdot g_{y,t+1} \approx g_{A,t+1} + \beta(g_{h,t+1} + g_{\omega,t+1} + g_{N,t+1} + g_{\rho,t+1}) + \left[ \frac{1-\beta}{K_t/Y_t} \right] \frac{I_t}{Y_t} - (1-\beta)\delta.$$

Headline GDP growth ( $g_{y,t+1}$ ) can be decomposed using a log-linear approximation into different growth fundamentals (Equation 6). Here  $g_{x,t+1}$  is the growth rate of factor  $x$  from  $t$  to  $t+1$ . Equation (7) is the equivalent formulation for per capita GDP growth,  $g_{y,t+1}^{pc} = g_{y,t+1} - g_{N,t+1}$ , with the key difference being that population growth adds to headline GDP growth, but subtracts from GDP per capita growth.

$$(7) \quad g_{y,t+1}^{pc} \approx g_{A,t+1} + \beta(g_{h,t+1} + g_{\omega,t+1} + g_{\rho,t+1}) + \left[ \frac{1-\beta}{K_t/Y_t} \right] \frac{I_t}{Y_t} - (1-\beta)(\delta + g_{N,t+1})$$

$(1-\beta)/(K_t/Y_t)$  is the marginal product of capital (MPK), or the inverse of the marginal ICOR (mICOR), which determines the effectiveness of investment in boosting growth. An increase in  $(K_t/Y_t)$ , for example, from excessive investment, will decrease the marginal product of capital (MPK) and increase the mICOR.

## CAMBODIA: KEY INDICATORS

	2015	2016	2017	2018e	2019f	2020f
<b>Output and Economic Growth</b>						
Real GDP (% change, yoy)	7.0	6.9	7.0	7.1	6.8	6.8
Domestic demand (% change, yoy)	8.0	9.9	7.8	11.2	9.7	8.5
GDP per capita (US\$, nominal)	1,171.0	1,264.9	1,372.6	1,451.6	1,563.9	1,701.0
<b>Money and Prices</b>						
Inflation, consumer prices (annual %, period average)	1.7	3.5	3.1	3.2	3.3	3.0
M2 (% of GDP)	66.6	70.9	79.6	87.0	94.0	101.0
Domestic Credit to the Private Sector (% of GDP)	62.7	69.5	74.7	82.7	86.8	89.9
Nominal Exchange Rate (local currency per US\$)	4,025	4,058	4,062	4,067	4,087	4,063
Real Exchange Rate Index (2010 = 100)	103.6	105.1	103.7	103.7	103.9	103.9
Short-term interest rate (% p.a.)	11.6	11.8	11.4	11.4	11.7	11.8
<b>Fiscal</b>						
Revenue (% of GDP)	19.5	20.7	21.5	20.4	19.8	19.4
Expenditure (% of GDP)	21.3	22.1	23.1	24.6	23.9	23.7
Overall Fiscal Balance (% of GDP)	-1.9	-1.4	-1.6	-4.2	-4.1	-4.3
Primary Fiscal Balance (% of GDP)	-1.6	-1.0	-1.2	-3.8	-3.7	-3.9
General Government Debt (% of GDP)	31.3	32.4	33.9	36.2	37.0	37.5
<b>External Accounts</b>						
Export growth, f.o.b. (nominal US\$, annual %)	7.5	9.0	9.4	14.7	13.0	13.3
Import growth, c.i.f. (nominal US\$, annual %)	7.6	9.0	7.8	14.5	11.4	10.9
Merchandise exports (% of GDP)	45.4	45.5	45.3	48.4	50.0	50.9
Merchandise imports (% of GDP)	57.3	56.9	55.7	59.8	61.2	61.3
Services, net (% of GDP)	7.5	7.0	7.0	7.9	8.6	9.3
Current account balance (current US\$ millions) <sup>1/</sup>	-2,007.0	-2,041.4	-2,160.6	-2,432.2	-2,637.6	-2,813.6
Current account balance (% of GDP)	-11.0	-10.2	-9.8	-10.3	-10.2	-9.9
Foreign direct investment (Net, current US\$ millions)	1,668.8	2,164.4	2,381.0	2,582.0	2,739.3	2,964.9
Foreign direct investment, net inflows (% of GDP)	9.1	10.8	10.8	10.9	10.6	10.4
Gross international reserves (current US\$ millions)	5,672.1	6,730.8	8,757.9	9,081.9	9,536.0	10,012.8
(prospective months of imports of g&s)	5.2	5.7	6.8	6.6	6.3	5.9
Memo: Nominal GDP (current US\$ millions)	18,241.7	20,020.2	22,059.2	23,680.3	25,883.3	28,550.3

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

Note: e = estimates; f = forecast; g&s = goods and service; p = projection.

<sup>1/</sup> Excluding transfers.

## References

- Barrot, D. 2016. “Long-Term Growth Model (LTGM): Reference Note on Data Issues.” Internal Note. World Bank, Washington, DC.
- Berg, A., J. Ostry, and J. Zettelmeyer. 2012. “What makes growth sustained?” *Journal of Development Economics* (29) 149–166.
- Devadas, S., and S. Pennings. 2018. “Assessing the Effect of Public Capital on Growth: An Extension of the World Bank Long-Term Growth Model.” Policy Research Working Paper 8604, World Bank, Washington, DC.
- Hevia, C., and N. Loayza. 2012. “Savings and Growth in Egypt.” *Middle East Development Journal* 4 (1).
- Hsieh, Chang-Tai, and P. Klenow. “Misallocation and Manufacturing TFP in China and India.” *The Quarterly Journal of Economics* 124 (4): 1403–1448.
- Jeong, H. 2017. “Korea’s Growth Experience and the Long-Term Growth Model.” Policy Research Working Paper 8240, World Bank, Washington, DC.
- Jones, B., and B. Olken. 2008. “The Anatomy of Start-stop Growth.” *Review of Economic and Statistics* 90 (3): 582–587.
- Jones, C. 2016. “The Facts of Economic Growth.” *Handbook of Macroeconomics* Vol. 2A, Chapter 1: 3–69.
- Stiglitz, Joseph, and Marilou Uy. 1996. “Financial Markets, Public Policy, and the East Asian Miracle.” World Bank, Washington, DC.
- Thiumsak, Tun, and Athapol Ruangkanjanases. 2016. “Factors Influencing International Visitors to Revisit Bangkok, Thailand.” *Journal of Economics, Business and Management* 4 (3): March. <http://www.joebm.com/vol4/394-E00008.pdf>.
- World Bank. 2017. “2017 Cambodia – Sustaining Strong Growth for the Benefit of All: A Systematic Country Diagnostic.” World Bank, Washington, DC.
- World Bank. 2018. *East Asia Pacific Economic Update, October 2018: Navigating Uncertainty*. Washington, DC: World Bank.

## Additional References

- Annual Reports (2013–17), Ministry of Agriculture, Forestry and Fisheries
- Annual Reports (2016–17), National Bank of Cambodia
- Balance of Payment Statistics (2018), National Bank of Cambodia
- Banking Supervision Reports (2016–17), National Bank of Cambodia
- Budget Law (2018), Royal Government of Cambodia
- Cambodia Doing Business Ranking (2018), World Bank
- Cambodia Enterprise Survey (2016), World Bank
- Cambodia Future Jobs (2018), the World Bank
- Cambodia Industrial Development Policy (2015–25), Royal Government of Cambodia
- Cambodia Investment Climate Assessment (2018), World Bank
- Cambodia Public Debt Statistical Bulletin*, Volume 5, March 2018, Ministry of Economy and Finance
- Cambodia Public Expenditure Review (2018), World Bank
- Cambodia Socioeconomic Surveys (2004–16), National Institute of Statistics, Ministry of Planning
- Cambodia Systematic Country Diagnostic (2017), World Bank
- Cambodia Tourism Statistics (2017–18), Ministry of Tourism
- Cambodian National Accounts Statistics (2017), National Institute of Statistics, Ministry of Planning
- East Asia and Pacific Economic Update* (October 2018), World Bank
- Global Economic Prospects* (2018), World Bank
- IMF Article IV Staff Report (2017), International Monetary Fund
- Logistic Performance Index (2016), World Bank
- Mid-year report, June 2018, National Bank of Cambodia
- Monetary Statistic Bulletin* (2018), National Bank of Cambodia
- National Strategic Development Plan (2014–18), Ministry of Planning
- Rectangular Strategy, Royal Government of Cambodia, September 2018
- World Development Report 2019: The Changing Nature of Work*, World Bank



The World Bank  
Cambodia Country Office  
Exchange Square Building  
Floor 10<sup>th</sup> IBRD and 11<sup>th</sup> IFC  
Streets 51-61 and Streets 102 -106  
Sangkat Wat Phnom, Khan Daun Penh  
Phnom Penh, Cambodia  
Website: [www.worldbank.org/cambodia](http://www.worldbank.org/cambodia)