

# RESILIENT DEVELOPMENT

## A STRATEGY TO DIVERSIFY CAMBODIA'S GROWTH MODEL

### Cambodia Country Economic Memorandum





# **RESILIENT DEVELOPMENT**

## **A STRATEGY TO DIVERSIFY CAMBODIA'S GROWTH MODEL**

Cambodia Country Economic Memorandum

December 2021



# Contents

<b>Currency Equivalentents</b>	<b>iv</b>
<b>Acronyms</b>	<b>iv</b>
<b>Acknowledgments</b>	<b>v</b>
<b>List of Boxes, Figures, and Tables</b>	<b>vi</b>
<b>Executive Summary</b>	<b>ix</b>
<b>Overview</b>	<b>xi</b>
Enable productive firms and workers	xv
Diversify exports	xviii
Harness domestic investments	xxi
Cambodia's Resilient Development Policy Matrix	xxv
<b>Chapter 1: Improving Cambodia's Productivity Performance</b>	<b>1</b>
Labor productivity is constrained by weak human capital and low total factor productivity	2
Structural transformation has contributed to productivity growth but is incomplete	4
Within-sector productivity growth has been flat	5
Policy recommendations for productivity improvements	12
<b>Chapter 2: Economic Transformation Through Exports</b>	<b>20</b>
Economic upgrading through GVC participation in manufacturing	22
Value addition in Cambodian agriculture	32
Increasing competitiveness to export modern services	40
<b>Chapter 3: Financing the Next Phase of Growth</b>	<b>66</b>
Two options for obtaining finance	67
Analysis of Cambodia's savings situation	74
Policy recommendations for raising finance	88
<b>References</b>	<b>96</b>
<b>Annex</b>	<b>101</b>
Empirical approach and data for firm-level productivity analysis	101

# Currency Equivalents

Exchange rate effective December 1, 2021

Currency Unit=Cambodian Riels (KHR)

US\$1=KHR4,069

## Acronyms

ASEAN	Association of Southeast Asian Nations
ASYCUDA	Automated System for Customs Data
CSES	Cambodia Socio-Economic Survey
DFS	Digital financial services
EAP	East Asia and Pacific
EU	European Union
FDI	Foreign direct investment
FTA	Free trade agreement
GATS	General Agreement on Trade in Services
GDP	Gross domestic product
GNI	Gross national income
GVC	Global value chain
HCI	Human Capital Index
ICT	Information and communication technologies
IMF	International Monetary Fund
IPR	Intellectual property rights
KHR	Cambodian riel
Lao PDR	Lao People's Democratic Republic
LDC	Least developed country
MDI	Microfinance deposit taking institution
MFI	Microfinance institution
NTM	Non-tariff measure
OECD	Organisation for Economic Co-operation and Development
PIM	Public investment management
PTA	Preferential trade agreement
RGC	Royal Government of Cambodia
SME	Small and medium enterprise
SPS	Sanitary and phytosanitary standards
TFP	Total factor productivity
UN	United Nations
US	United States
US\$	US dollar
VAT	Value-added tax
WTO	World Trade Organization

Regional Vice Presidents	Victoria Kwakwa, Manuela Ferro
Regional Director	Hassan Zaman
Country Director	Mariam Sherman
Practice Managers	Deepak Mishra, Sebastian Eckardt
Team Task Leader	Claire H. Hollweg

# Acknowledgements

The report was written by a World Bank team led by Claire H. Hollweg. The team included Bradley Larson, Mikel Tenllado, Laura Gomez-Mera (Chapter 1); Roberto Echandi, Luis Rubalcaba, Martha Soprana (Chapter 2); Rishabh Sinha, Kimsun Tong, Wendy Karamba, Clarence Tsimpo Nkengne, Nikola Kojucharov, Ratchada Anantavrasilpa, and Sodeth Ly (Chapter 3). The team worked under the close supervision of Deepak Mishra and Sebastian Eckardt.

The World Bank's Cambodia Economic Diversification Study (World Bank 2019a) led by Miguel Eduardo Sánchez Martín was written as Part I of the Cambodia Country Economic Memorandum. This earlier study was subsequently extended in the areas of (i) firm-level productivity, (ii) services export diversification, and (iii) financing the next phase of growth as Part II of the Cambodia Country Economic Memorandum. This report summarizes the findings and recommendations of Part I and Part II of the Cambodia Country Economic Memorandum. The report was prepared in 2020 and reflects the most up to date data available at the time.

The report was prepared under the guidance of Victoria Kwakwa and Manuela Ferro, Vice Presidents for East Asia and Pacific; Hassan Zaman, Regional Director for East Asia and Pacific; Mariam Sherman, Country Director for Cambodia, Myanmar, and Lao People's Democratic Republic; and Inguna Dobraja and Maryam Salim, Country Managers for Cambodia. The report benefitted from peer review guidance provided by Nora Dihel, Miguel E. Sánchez Martín, Chan Sophal, and many colleagues in the World Bank who provided insights and suggestions to the report, including Hans Beck, Rinku Murgai, Zafer Mustafaoglu, and Antonio Nucifora. The team is grateful for editorial support from Jessica Wholey and financial support from the Umbrella Facility for Trade Trust Fund.

The team thanks H.E. Vongsey Vissoth (Minister Attached to the Cambodian Prime Minister and Permanent Secretary of State, Ministry of Economy and Finance, H.E. Dr. Phan Phalla (Secretary of State, General Secretariat of the Committee on Economic and Financial Policy, Ministry of Economy and Finance), H.E. Tep Phyorin (Under Secretary of State, General Department of Economic Policy, Ministry of Economy and Finance), and H.E. Vanarith Chheang (Director General, General Department of Economic Policy, Ministry of Economy and Finance) for their guidance. The team is also grateful to participants in consultation meetings with the Ministries of Economy and Finance, Commerce, Culture and Fine Arts, and Agriculture, Forestry, and Fisheries, as well as representatives from the private sector, non-governmental organization community, and the development partners.

# List of Boxes, Figures, and Tables

## BOXES

Box 0.1:	Main findings and recommendations of the Cambodia Economic Diversification Study	xiii
Box 2.1:	Ecotourism can promote upgrading in tourism	41
Box 2.2:	Diversifying through creative services in Cambodia	51
Box 3.1:	Required savings for meeting upper middle income 2030 and high income 2050 targets	73
Box 3.2:	Econometric analysis of saving behavior in Cambodia	75
Box 3.3:	Why do households save and what factors explain the variation in saving behavior across households?	80
Box 3.4:	Exploring the inclusion-savings link	84

## FIGURES

Figure 0.1:	The pandemic-induced economic slowdown has been more severe in Cambodia than in other EAP countries	xi
Figure 0.2:	Cambodia's growth generating process suffers from high concentration of products, markets, and factor inputs	xii
Figure 0.3:	Physical capital accumulation accounts for two thirds of growth	xiv
Figure 0.4:	Cambodia's exports have a narrow base	xiv
Figure 0.5:	Cambodia's labor productivity is low for its level of economic development	xv
Figure 0.6:	Low labor productivity reflects low TFP	xvi
Figure 0.7:	Labor productivity of Cambodian firms is lower than firms in comparator countries	xvii
Figure 0.8:	Cambodia's exports are concentrated in garments with little diversification	xix
Figure 0.9 :	Business environment constraints inhibit backward linkages from FDI to domestic firms	xx
Figure 0.10:	Cambodia's savings rates are low	xxii
Figure 0.11:	Cambodia's private savings have been declining in recent years	xxii
Figure 0.12:	Cambodia's savings rate is slightly below other countries at a similar income level	xxiii
Figure 0.13:	Most households save through informal mechanisms	xxiii
Figure 0.14:	A low share of households in Cambodia have a financial account	xxiii
Figure 1.1:	Cambodia's labor productivity is low for its level of economic development	1
Figure 1.2:	Cambodia's aggregate TFP is low and has grown slowly in recent years	3
Figure 1.3:	Workers have moved from agriculture to industry and services, alongside large productivity increases in agriculture	4
Figure 1.4:	Workers are moving to more productive industries, boosting overall productivity growth	5
Figure 1.5:	Labor productivity has been stagnant in Cambodia's key sectors	6
Figure 1.6:	Average firm-level labor productivity is low in Cambodia	7
Figure 1.7:	Firm-level labor productivity declined in 2013-15	8

Figure 1.8: Informality was identified as the biggest obstacle by a plurality of non-agricultural firms	9
Figure 2.1: Cambodia's exports outperform globally	20
Figure 2.2: Cambodia's exports have a narrow base	21
Figure 2.3: Cambodia specializes in limited manufacturing GVC tasks	23
Figure 2.4: In Cambodia there has been little diversification into other GVC sectors, unlike in Vietnam	23
Figure 2.5: Cambodia's top GVC exports have fallen on the global quality ladder	24
Figure 2.6: There has been little discovery of new garment products...	24
Figure 2.7: ...with some signs of diversification outside of garments	24
Figure 2.8: Non-garment manufacturing export growth has slowed	25
Figure 2.9: FDI inflows to manufacturing have tapered	25
Figure 2.10: Most manufacturing inputs are imported	26
Figure 2.11: Cambodia has relatively low shares of foreign firms with quality certificates...	26
Figure 2.12: ...or technologies licensed from foreign companies	26
Figure 2.13: Business environment constraints inhibit backward linkages from FDI to domestic firms	27
Figure 2.14: Rice and cassava have driven Cambodia's agricultural export growth	32
Figure 2.15: Foodstuffs exports underperform against comparator countries	33
Figure 2.16: Survival rates of vegetables in export markets are lower than in Vietnam and Thailand	33
Figure 2.17: Cambodia's key agricultural exports are positioned low on the quality ladder	34
Figure 2.18: Cambodian rice yields have improved but net returns and labor productivity are low	36
Figure 2.19: Mechanization has been increasing in Cambodia	36
Figure 2.20: NTMs increase the cost of agricultural inputs	36
Figure 2.21: The business environment constrains agro-processing firms and input importers	37
Figure 2.22: Cambodia relies heavily on tourism and has not diversified into modern services	42
Figure 2.23: Cambodia outperforms in tourism-related services	42
Figure 2.24: Compared to the Philippines and Thailand, services are used less as inputs	43
Figure 2.25: Sectors rely most heavily on traditional domestic services inputs, rather than domestic modern services	43
Figure 2.26: Cambodia has significantly liberalized its services trade regime	44
Figure 2.27: Cambodia scores low on rule of law...	45
Figure 2.28: ...and property rights protection	45
Figure 2.29: Broadband access is limited	45
Figure 2.30: Improvements are needed in trade infrastructure	45
Figure 2.31: Cambodia has a low-educated workforce	46
Figure 2.32: Restrictions remain in professional services	46
Figure 2.33: Trade agreements are increasingly covering services	47
Figure 2.34: Cambodia participants in relatively few regional trade agreements with services provisions	47
Figure 3.1: Capital formation remains low relative to high-growth countries at Cambodia's stage of development	67
Figure 3.2: Investment has largely been financed by FDI	67

Figure 3.3:	Cambodia's reliance on FDI for capital formation is much higher than comparator countries	68
Figure 3.4:	FDI has increased faster in non-tradable sectors	69
Figure 3.5:	Cambodia's large current account deficit...	70
Figure 3.6:	...has been largely financed by FDI	70
Figure 3.7:	Covid-19 threatens foreign investment in developing economies	70
Figure 3.8:	Cambodia's savings rate is lowest among comparator countries...	70
Figure 3.9:	...and is low given income level	71
Figure 3.10:	Cambodia's savings trajectory falls below that of high-growth countries	71
Figure 3.11:	Growth declines without an increase in the savings rate	72
Figure 3.12:	Cambodia's private savings is lowest among comparator countries	77
Figure 3.13:	Government savings have been growing while private savings have been declining	77
Figure 3.14:	Dollarization in Cambodia is among the highest globally	78
Figure 3.15:	The share of adults saving is high given Cambodia's income level...	79
Figure 3.16:	...but below most comparators	79
Figure 3.17:	Formal savings is far less prevalent in Cambodia than in comparator countries	82
Figure 3.18:	Financial inclusion has grown...	83
Figure 3.19:	...but lags behind most countries	83
Figure 3.20:	Financial sector issues are among the top reasons cited for not banking...	85
Figure 3.21:	...posing a larger constraint in Cambodia than in other countries	85
Figure 3.22:	A large share of Cambodia's population does not have a national ID	86
Figure 3.23:	DFS remain nascent	87
Figure 3.24:	FDI outflows have been growing	88
Figure B2.1:	Creative services are a subset of creative industries	52
Figure B3.1:	Cambodia falls short of its growth targets without significant increases in savings	76
Figure B3.2:	Household needs, health care, asset purchase, and agricultural expense are the most important reasons for households to save in Cambodia	80
Figure B3.3:	The dependency ratio is negatively correlated with savings	81
Figure B3.4:	Saving patterns follow the life cycle	81
Figure B3.5:	Savings rate increases with household income decile	81

## TABLES

Table 1.1:	Cambodia scores poorly on the World Bank HCI	2
Table 1.2:	Firm employment and firm productivity are weakly correlated within sectors	6
Table B2.1:	Smaller services subsectors have experienced fast export growth in Cambodia	51
Table B3.1:	Demographics and other household characteristics correlate with higher savings	76
Table A.1:	Objective constraints faced by firms	103

# Executive Summary

Cambodia's growth slowdown in 2020 due to the Covid-19 pandemic was among the most pronounced in the East Asia region. The devastating impact on Cambodia's economy lies in the country's growth generating process. Cambodia's growth has been remarkable, but insufficiently diversified in products, markets, and factor inputs. Five products—garments, footwear, rice, cassava, and tourism—accounted for 80 percent of total exports; two markets—the European Union (EU) and the United States—accounted for 69 percent of merchandise exports; and foreign capital—through foreign direct investment (FDI) and official development assistance—accounted for 72 percent of gross fixed capital formation in 2018. Not surprisingly, when the pandemic disrupted cross-border flow of goods, services, and capital, Cambodia was ill-positioned to absorb the shock.

Cambodia's inability to diversify its development through alternate products, markets, and financing sources predates the pandemic, and has its roots in low and declining productivity, low quality and weak export linkages, and high FDI but low domestic investment. The Covid-19 crisis exacerbates these challenges.

- **Low and declining productivity.** Cambodia's inability to grow the product basket is explained by low labor productivity, or output per worker, which lags behind most countries globally when at Cambodia's development level. Low labor productivity, at least in part, reflects low human capital. But the largest contributor, and largest cause for concern, is low and declining total factor productivity (TFP). This report's analysis suggests two primary causes. First, resource misallocation within sectors, likely caused by shortcomings of market institutions where market signals governing resource allocation need to be generated in more competitive and well-regulated markets, and an incipient public investment management (PIM) system where value for money in domestic public investment remains limited. Second, and more important, low within-firm productivity growth, explained by a disabling business environment that imposes significant obstacles to firms' operations. Poor access to finance, inefficient business regulations, prevalent informality, and inadequate electricity are found to be the main constraints to firm productivity performance in Cambodia.
- **Low quality and weak export linkages.** Low competitiveness and limited integration within global value chains (GVCs) have led to concentrated markets and trade. A primary cause of low diversification and inability to upgrade is the quality of FDI, where FDI firms do not create backward linkages or share knowledge, limiting opportunities for technology transfer and productivity spillovers. Barriers in the business environment and the current investment and tax incentives regime influence the quality of FDI. Other constraints to diversifying and upgrading Cambodia's trade are low firm and worker capability, costly trade-related regulatory barriers (particularly affecting agricultural products), insufficient trade-related infrastructure, and nascent use of regional trade agreements to support greater market access for exporters.
- **High FDI but low domestic investment.** The country's low private savings rate, and as a result low domestic investment, has led to reliance on external financing sources. Rather than how many households save, how much households save and more important how households save appear to be key factors impeding greater domestic investment. While 51 percent of adults reportedly saved some money in the past year, only 22 percent had any savings at a point in time, and only 5 percent participated in formal savings, significantly below other countries. There is a relatively lower share of adults with a savings account in Cambodia. Low formal savings by households stems from inefficiencies in the formal financial sector that pose high barriers including financial sector regulatory gaps, low financial literacy, low technology adoption and therefore limited access to financial services, and underdeveloped financial instruments beyond banks and microfinance institutions (MFIs) that would otherwise support savings.

Urgent action is needed to support Cambodia's economic recovery from Covid-19 in a way that addresses the diversification problem to build back even stronger. Cambodia's policymakers have the opportunity to forge a new growth path—by **enabling** productivity of firms and workers, **diversifying** exports, and **harnessing** domestic investment. An ambitious reform agenda is needed—one that focuses on improving **capabilities**, strengthening **regulations**, and investing in **infrastructure**.

- Enable productivity of firms and workers.** Investing in human capital, supporting more efficient resource allocation through improved market institutions and PIM, reducing the cost of operating a business for firms, and improving the performance of key services inputs to strengthen domestic linkages are key reform areas to promote more productive firms and workers. The Covid-19 crisis threatens to further erode labor productivity, requiring an immediate focus on improving the business environment. Short-term policy priorities are: making the recently promulgated competition law and regulator effective and implementable through sub-regulations; improving PIM capacity at all ministries and agencies and preparing PIM appraisal and implementation manuals; implementing the insolvency legal framework; and simplifying tax-audit compliance.
- Diversify exports.** A cross-cutting and medium-term policy agenda to diversify Cambodia's trade is structured on upgrading in manufacturing GVCs, creating value addition in agriculture, and increasing competitiveness to export modern services. Key short-term reforms to support post-Covid-19 recovery of Cambodia's exports include: building capacity of trade negotiators to negotiate deeper trade agreements; moving away from a blanket tax holiday scheme to an investment incentives system that introduces reinvested dividends, investment tax credits, and investment depreciation on the value of acquired machinery and equipment, quality certificates, or new technologies; reviewing the effectiveness of all licenses, quotas, and fees on imported agricultural inputs; supporting backward linkages by developing an online portal and digital app to offer basic matchmaking services and overcome information asymmetry between foreign investors and domestic producers; intensifying market surveillance and traceability for food quality and safety; and introducing a risk-management system at the border to lower costs and increase timeliness of agricultural inputs.
- Harness domestic investment.** Promoting higher savings to support domestically financed private, productive investment will be critical to sustain the rapid expansion of fixed capital formation required to meet Cambodia's growth targets. To harness domestic investment, key reform areas include promoting FDI into productive and export sectors, promoting higher domestic savings rates, improving access to savings institutions, supporting access through digital financial services (DFS), addressing financial and administrative costs of savings accounts and products, and supporting financial sector stability and development more broadly. This is even more critical today, where the massive disruption in the international credit market brought on by Covid-19 will likely further threaten investment activity for years to come. Ensuring financial sector stability is a priority to promote long-term savings and resilience to shocks like Covid-19. Reforms that target stability include: establishing a national deposit protection fund and strengthening the crisis preparedness regime; promoting greater financial literacy; implementing the legal framework for government bonds and finalizing the legal framework for micro-insurance and sub-regulations of the new Social Security Law; and developing the infrastructure backbone for digital banking.

# Overview

The devastating impact of the Covid-19 pandemic on the Cambodian economy—where the growth slowdown was among the most pronounced in the East Asia and Pacific (EAP) region—lies in the country’s growth generating process. Recent growth has been remarkable, but insufficiently diversified in products, markets, and factor inputs. The diversification problem is rooted in low and declining productivity; low quality and weak export linkages; and high foreign direct investment (FDI) but low domestic investment. Just when past success was fueling high ambitions for future growth—to become upper middle income by 2030 and high income by 2050—the pandemic threatens to put those targets out of reach. Cambodia’s policymakers have the opportunity to build a new and stronger growth path—by **enabling** productivity of firms and workers, **diversifying** exports, and **harnessing** domestic investment. But an ambitious reform agenda is needed—one that focuses on improving **capabilities**, strengthening **regulations**, and investing in **infrastructure**.

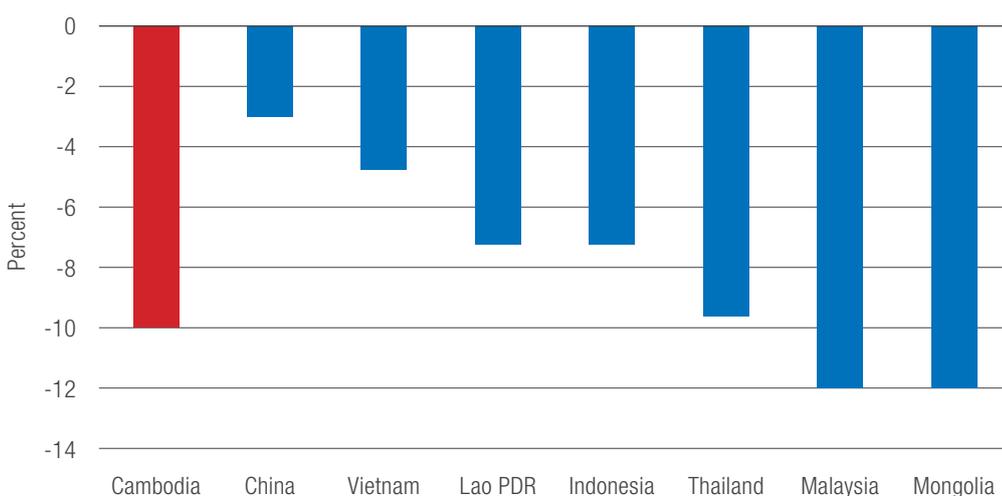
**Cambodia’s economy has been devastated by Covid-19—experiencing one of the starkest growth slowdowns in the region.** Prior to the pandemic, Cambodia was a world leader in economic growth and poverty reduction. It sustained an average growth rate of 7.7 percent between 1995 and 2019, raising its per capita income from US\$323 in 1995 to US\$1,621 in 2019, and graduated to a lower-middle-income economy in 2015. The poverty rate fell from 47.8 percent in 2007 to 13.5 percent in 2014. Given its resilient

growth record, Cambodia was expected to withstand the Covid-19 shock better than most of its comparators.<sup>1</sup> Instead, the economic impact has been more severe in Cambodia than in other EAP countries; growth fell by an estimated 10.1 percentage points from its pre-pandemic average growth rate,<sup>2</sup> compared to 3.5 and 6.3 percentage points in Vietnam and Myanmar, respectively (figure 0.1). In fact, the pandemic poses the biggest risk to Cambodia’s development in the 25 years of its modern history.

**FIGURE 0.1**

The pandemic-induced economic slowdown has been more severe in Cambodia than in other EAP countries

Difference in the average real growth between 2010-19 and 2020



**Source:** World Bank staff calculations using data from World Bank World Development Indicators.

**Why did the pandemic lead to such a dramatic growth slowdown in Cambodia? The answer, as this report demonstrates, lies in the country’s growth generating process that suffers from high concentration of products, markets, and factor inputs (mostly capital).** In short, Cambodia’s growth generating process has been insufficiently diversified. In 2018, five products—garments, footwear, rice, cassava, and tourism—accounted for 80 percent of its total exports (figure 0.2, panel a). Together the European Union (EU) and the United States accounted for 69 percent of merchandise exports (figure 0.2, panel b). And foreign capital, through FDI and official development assistance, accounted for 72 percent of gross fixed capital formation (figure 0.2, panel c). Not surprisingly, when the pandemic disrupted cross-border flow of goods, services, and capital, Cambodia was ill-positioned to absorb the shock without alternate products, markets, and financing sources. Compared to Cambodia, countries like Indonesia, Malaysia, and Vietnam faced equally or more severe external shocks, however they have shown greater economic resilience due to their diversified export baskets, varied trade destinations, or deeper domestic financial markets.

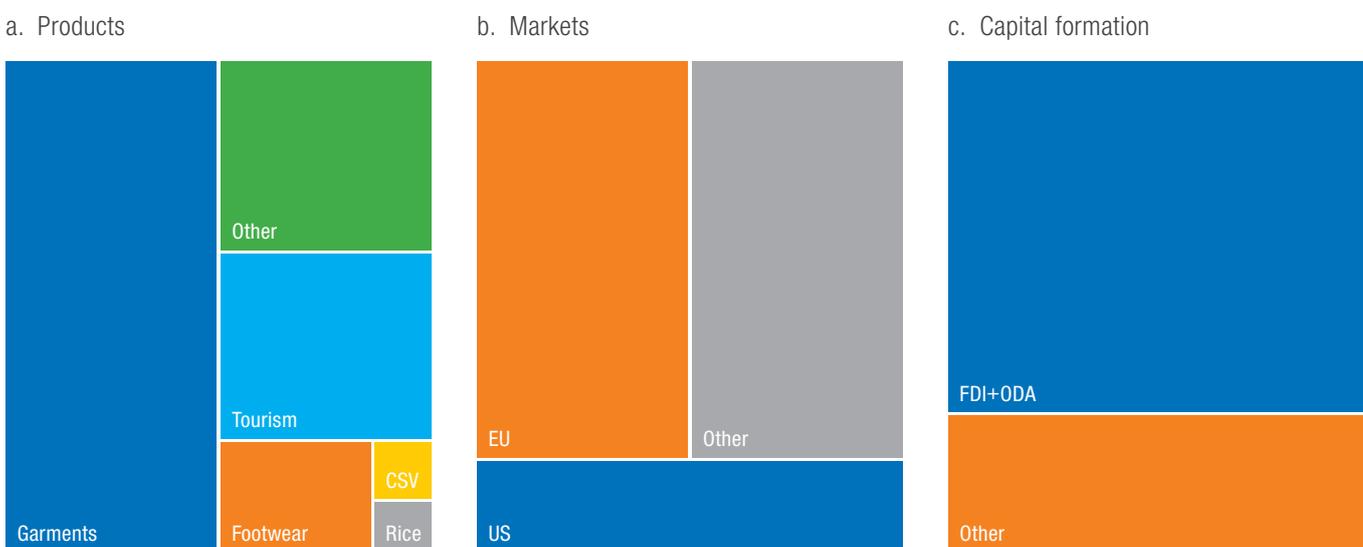
**Just when past success was fueling high ambitions for future growth, the pandemic has pushed those growth targets further out of reach.** Cambodia set a target to become an upper-middle-income economy by 2030 and a high-income economy by 2050—lofty goals that require substantial strategic effort. Under the World Bank’s Long-Term Growth Model, meeting these targets would entail growth rates achieved only by China and the Republic of Korea, and require significant growth in total factor productivity (TFP), improved labor quality, and higher

investment levels.<sup>3</sup> Covid-19 has poured cold water on these aspirations. It effectively curbed the construction and real estate boom that relies heavily on foreign investment, indicated by sharp contractions in steel and cement imports in the first nine months of 2020. Due to travel restrictions and lockdowns, Cambodia’s tourism and hospitality sector has collapsed. Global supply and demand shocks have led to contractions in Cambodia’s key merchandise export sectors. Additionally, the Covid-19 pandemic will likely accelerate global megatrends that were already reshaping Cambodia’s future growth opportunities like automation, protectionism, and the reconfiguration of global value chains (GVCs).

**Cambodia’s inability to diversify its development predates the pandemic.** The Cambodia Economic Diversification Study<sup>4</sup> shows the country’s insufficiently diversified growth model is a crucial impediment to achieve rapid and sustained growth. It identifies critical bottlenecks to economic transformation but also opportunities for growth acceleration through further diversification, upgrading, and domestic linkages (see box 0.1 for a summary of the study’s main findings and recommendations). Focusing on exports, the report applied both trade outcomes analysis and GVC participation assessment methodologies to draw a series of empirical findings about Cambodia’s performance relative to comparator countries. This report integrates the findings of the previous study (undertaken as Part I of the Cambodia Country Economic Memorandum) with new analytical work (undertaken as Part II of the Cambodia Country Economic Memorandum) to show that, in addition to low quality and weak export linkages, the diversification problem is also rooted in low and declining productivity (using firm-level data) and high FDI but low domestic investment.<sup>5</sup>

**FIGURE 0.2**  
Cambodia’s growth generating process suffers from high concentration of products, markets, and factor inputs

Share of export products, import and export markets, and capital formation, 2018



**Note:** CSV=Cassava; FDI=Foreign direct investment; ODA=Official development assistance.

**Source:** World Bank staff calculations using data from World Bank World Development Indicators, UN Comtrade, and UN Conference on Trade and Development.

## BOX 0.1: Main findings and recommendations of the Cambodia Economic Diversification Study

The Cambodia Economic Diversification Study (World Bank 2019a) highlights how Cambodia's growth has remained highly concentrated in exports of garments and footwear, rice, and tourism to Angkor Wat, with limited success in diversifying its export basket, upgrading its activities, or linking its export-oriented sector to domestic firms. The limited success of diversifying, upgrading, and linking is a reality across all manufacturing, agriculture, and services sectors, and hinders economic complexity and, ultimately, Cambodia's potential growth.

The study identified a series of root causes that limit value addition and further GVC integration in Cambodia. Weaknesses in investor protection (including property rights) and lack of cost-effective incentives for acquiring machinery likely discourage investors in higher-value-added industries. Cumbersome and non-transparent regulation affects both service provision (for example, information and communication technologies (ICT) services) and uptake of agriculture inputs (for example, irrigation). In addition, deficient provision of public goods and infrastructure (for example, information portals and electricity access) affect the scope for product upgrading and the introduction of agro-processing or more complex forms of manufacturing. Finally, lack of local capacity results in missed opportunities to foster domestic value addition across sectors.

The study recommends that to sustain or even accelerate economic growth and to achieve its long-term goals, Cambodia would need to move up the value chain through diversification, upgrading, and domestic value addition. First, attract a new wave of FDI into electronics, auto assembly, and other emerging light-manufacturing clusters; reduce restrictions for manufacturing firms to use more modern services; and introduce a more varied set of crops for diversification. Second, pursue production process upgrading by upskilling the workforce; adopting international standards; and ensuring sanitary and phytosanitary standards (SPS) compliance (to go organic in agriculture). Third, facilitate domestic value addition by building capacity in domestic firms; promoting digitalization and connectivity; and facilitating the uptake of agricultural inputs.

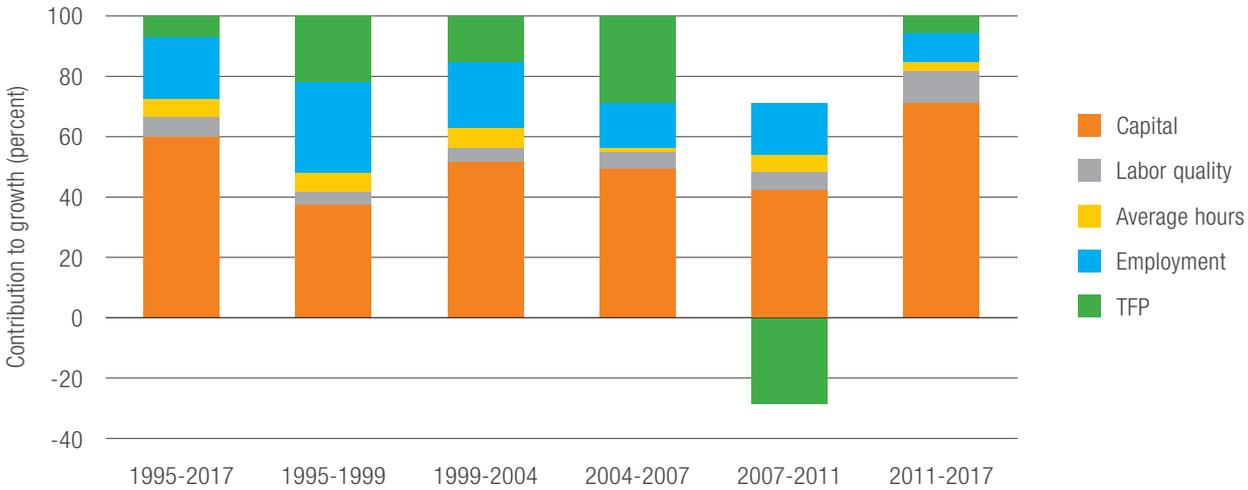
**Source:** World Bank (2019a).

**Cambodia's growth model has been built largely on physical capital accumulation with low contributions of human capital accumulation and declining contributions of productivity.** Physical capital accumulation—aided largely by FDI—has been responsible for nearly two thirds of Cambodia's real gross domestic product (GDP) growth since 1995 and nearly three quarters of real GDP growth since 2011 (figure 0.3). Another 20 percent can be attributed to increases in the average number of employed workers since 1995. The quality of the labor force—a measure of human capital—has made only modest contributions to GDP growth, with just 8 percent of growth during the past three decades attributed to improvements in labor quality. Labor quality has also contributed less to GDP growth in Cambodia than in other comparator countries, like Vietnam.<sup>6</sup> More worrying, despite Cambodia's high inflows of foreign capital that traditionally supports technology transfer, the contribution of TFP has declined. TFP explained 28 percent of Cambodia's real GDP growth between 2004 and 2011—aided largely by increased productivity and structural transformation out of agriculture—but just 5 percent since 2011.

**Cambodia's stellar export performance has been driven by few products shipped to a handful of countries**—namely, garments in manufacturing, rice and cassava in agriculture, and tourism in services.<sup>7</sup> In 2018, textiles, wearing apparel, and leather products represented 81 percent of manufacturing exports, rice and cassava represented 79 percent of agricultural exports, and tourism represented 89 percent of services exports (figure 0.4). Moreover, about 70 percent of goods and services exports go to North America and Europe.<sup>8</sup> But Cambodia's export model is increasingly under pressure. In recent years, garment sector competitiveness has weakened due to rapid escalation in legislated minimum wages, which tripled between 2012 and 2019. This, coupled with stagnant productivity, threatens the sustainability of Cambodia's key garment export sector. Moreover, the partial suspension of the country's preferential access to the EU market under the "Everything But Arms" agreement took effect in August 2020, affecting approximately 20 percent of Cambodia's exports to the EU. In addition, global megatrends like automation, protectionism, and the reconfiguration of GVCs have added uncertainty to Cambodia's prospects for continued export success in its current activities.

**FIGURE 0.3**  
Physical capital accumulation accounts for two thirds of growth

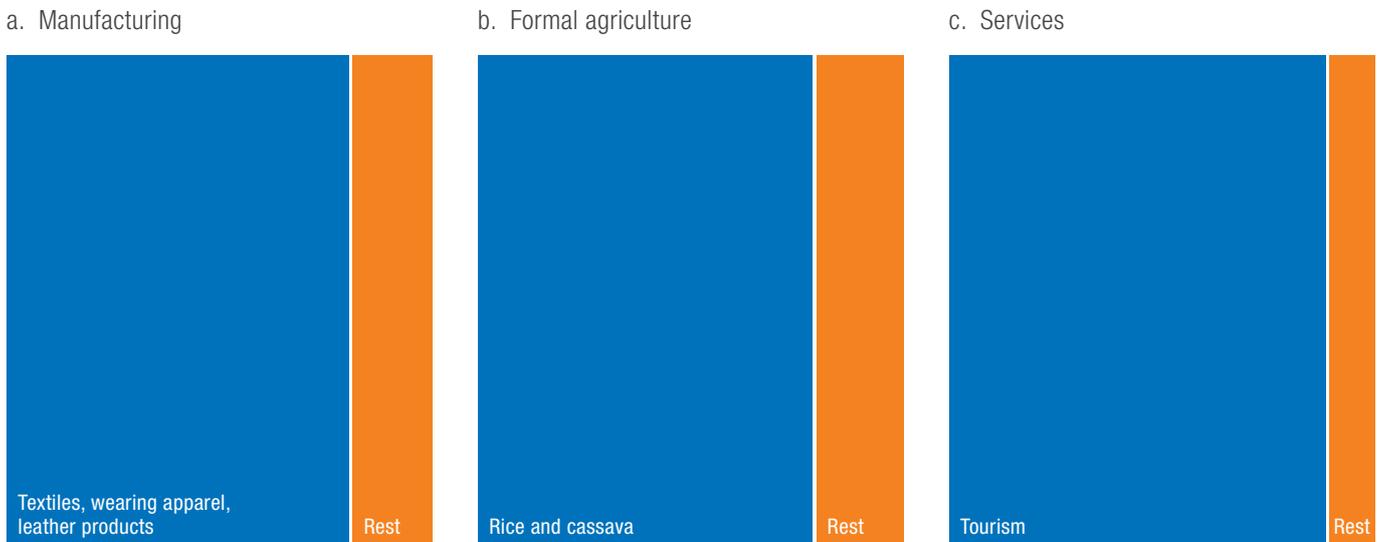
GDP growth decomposition, share in total, 1995-2017



Source: World Bank staff calculations using data from Penn World Tables 9.1, World Bank Cambodia Socio-Economic Survey (CSES), World Bank World Development Indicators, and Asian Productivity Organization and Cambodia Future Jobs (World Bank 2019b).

**FIGURE 0.4**  
Cambodia's exports have a narrow base

Products' share of sector exports, 2018



Source: World Bank staff calculations using data from UN Comtrade and UN Conference on Trade and Development and Cambodia Economic Diversification Study (World Bank 2019a).

**Cambodia's physical capital accumulation is owed largely to external capital—private as well as official development assistance—with modest and declining reliance on domestic investment.** As a share of GDP—averaging 18 percent from 1995-2019—gross fixed capital formation remains low relative to what was achieved by other high-growth countries when at Cambodia's stage of development. Growth simulations using the World Bank's Long-Term Growth Model show that Cambodia falls short of its high income growth target without higher investment

rates in the range of those seen in the Republic of Korea. Moreover, sustaining the current rate of FDI will be harder in the future.<sup>9</sup> First, as incomes rise, Cambodia will continue to lose preferential access to markets that motivate much of the inbound FDI in the garment sector (wages will also rise with development). Second, as GDP increases over the long term, capital inflows will also have to increase significantly to maintain the share of GDP, which will be harder and harder to attract without substantial reform in the investment climate.<sup>10</sup>

**What will it take for Cambodia to recover economic growth in the aftermath of Covid-19 and achieve its growth aspirations?** This study revisits Cambodia's growth model to identify constraints and opportunities for sustained economic growth and proposes policy options to address them. In the recovery from Covid-19, Cambodia's policymakers have the opportunity today to build a new and stronger growth path for tomorrow. This report identifies three key transformations that are needed to upgrade the country's development model:

- **Enable productive firms and workers.** Future growth will need to become more balanced with respect to the contributions of physical capital, labor quality, and TFP. A focus on firms and their workers is key to unleashing productivity.
- **Diversify exports.** Cambodia's export success can continue driving growth if the country can upgrade the growth contribution of exports. This means moving beyond the country's labor-intensive, low-value-added export model by achieving greater diversification and upgrading of exports.
- **Harness domestic investment.** Even higher investment levels are needed to achieve Cambodia's growth targets. A greater reliance on domestic investment is needed to finance the next phase of Cambodia's growth, which entails increasing domestic savings with a focus on removing inefficiencies in the financial system.

**The Royal Government of Cambodia (RGC) has a central role to play in forging a new growth path.**

To recover and sustain long-term economic growth, an ambitious reform agenda is needed that focuses on improving capabilities of Cambodia's firms, workers, and households; strengthening regulations to address market distortions and improve the enabling environment; and investing in infrastructure that supports higher-quality growth. To stimulate the public and policy debate, this report makes specific short- and medium-term policy proposals in each of these three areas. These recommendations are aligned to an economic recovery strategy that supports Cambodia to come back stronger after the Covid-19 crisis.

**Enable productive firms and workers**

**Cambodia's inability to grow the product basket is explained by low productivity.**<sup>11</sup> Despite high and sustained GDP and GDP per capita growth rates, Cambodia has not been able to increase its output per worker at similar levels. Globally, Cambodia's labor productivity lags behind most other countries when at Cambodia's level of development (figure 0.5).

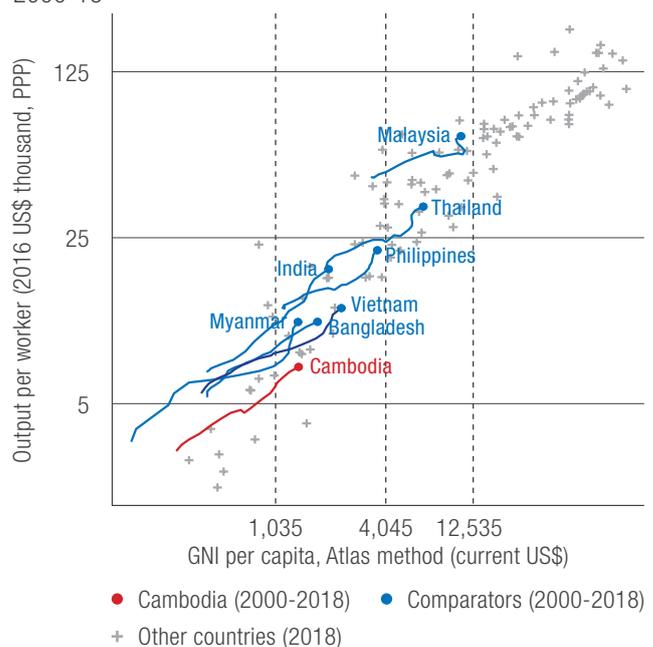
**The Covid-19 crisis threatens to further erode labor productivity gains.** Human capital and earning losses are likely to result from sickness, food insecurity, job losses, and school closures. Firm closures and disruption in firm-worker relationships could hurt productivity through a loss of intangible assets, while disruptions to trade and GVCs

could lead to less efficient resource allocation across sectors and firms, and dampen the diffusion of technology.<sup>12</sup> Improvements in labor productivity should be forefront to Cambodia's recovery and long-term economic growth.

**Low labor productivity in Cambodia reflects, at least in part, low human capital.**<sup>13</sup> According to the World Bank Human Capital Index (HCI), which measures how much human capital a child born today can expect to achieve in adulthood, Cambodia ranks 118th of 174 countries for which data are available—on par with India and Myanmar but far behind most other comparators.<sup>14</sup> Cambodia's low World Bank HCI score demonstrates deficiencies in early childhood nutrition and education—reflected by high rates of stunting particularly in poor households, and by high incidence of late school entry, grade repetition, and dropping-out. Income shocks due to Covid-19 further threaten educational outcomes and nutrition in poor and newly poor households. Key challenges facing the health and education systems are: lack of administrative and financial autonomy, outdated services, low professional qualification standards, and incipient social protection programs. These systemic problems ultimately result in low labor quality, which drags down labor productivity and inhibits future growth. In short, weak health and education systems result in weak human capital. Cambodia's labor force is growing rapidly, but the growth dividends of an expanding labor force will be lower without improvements in human capital.<sup>15</sup>

**FIGURE 0.5**  
Cambodia's labor productivity is low for its level of economic development

Labor productivity vs. gross national income (GNI) per capita, 2000-18



**Note:** Output per person employed. PPP = Purchasing power parity.  
**Source:** World Bank staff calculations using data from Total Economy Database.

**The largest contributor to Cambodia’s low labor productivity, and largest cause for concern, is low TFP.**<sup>16</sup> First, Cambodia’s TFP level is low for its income level (figure 0.6). High-growth countries like China, Malaysia, and Thailand had achieved much higher levels of TFP when at Cambodia’s level of economic development. Second, TFP growth has declined since the 2008 global financial crisis. Since 2011, TFP growth has fallen to just 0.2 percent per year, compared to 2.1 percent annual growth between 2000 and 2007. Although this trend is consistent around the world, the decline is more pronounced in Cambodia, widening the TFP gap with other countries and putting it further behind the labor productivity frontier. Third and finally, the contribution of TFP to GDP growth has been lower than physical and human capital.

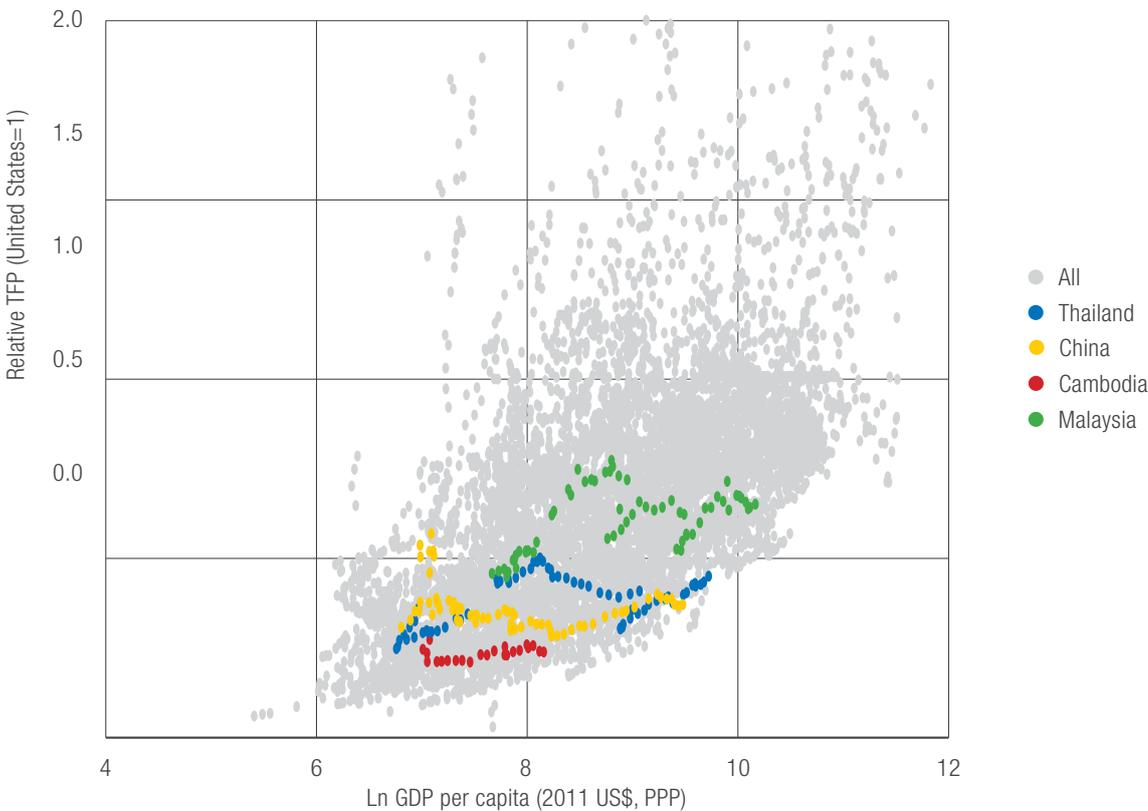
**Analysis of Cambodia’s firm-level data suggests that low labor productivity stems from two causes:** resource misallocation within sectors and, more important, low within-firm productivity growth.<sup>17</sup> Despite resources moving broadly from agriculture to manufacturing and services with higher labor productivity,<sup>18</sup> productivity growth within

manufacturing and services sectors has been suboptimal. Between 2007 and 2017, within-sector productivity growth has been flat across most services, industrial, and manufacturing subsectors including construction, garments, and food and beverages.

**Misallocation of resources is contributing to poor productivity outcomes.** Resource misallocation refers to inefficient enterprises commanding more resources (land, labor, and capital) than warranted by their productivity levels. In a sector with zero misallocation, firms’ rank by productivity level would be perfectly correlated with firms’ rank by input use. In Cambodia, there is a very weak correlation between the most productive firms within a sector and their use of production factors, particularly labor inputs. Resource misallocation is likely caused by shortcomings in market institutions—where resource allocation through market signals is efficient only to the extent that the signals are generated in competitive and well-regulated markets—and an incipient public investment management (PIM) system where value for money in public investment remains limited.

**FIGURE 0.6**  
Low labor productivity reflects low TFP

TFP trend relative to the United States vs. GDP per capita, 1980-2018



**Note:** Cambodia from 1995. PPP = Purchasing power parity.  
**Source:** World Bank staff calculations using data from Penn World Tables 9.1.

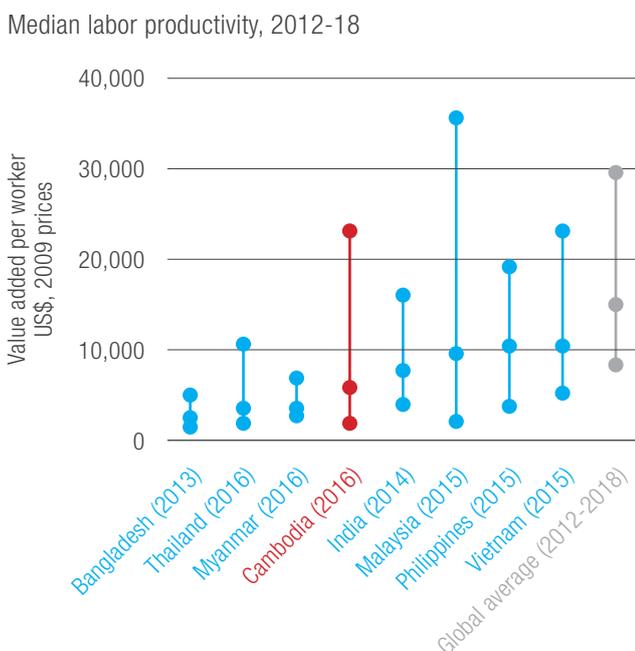
**Firm-level labor productivity appears to be the biggest challenge to overall productivity performance.**

Global evidence shows that within-sector productivity improvements—particularly through the expansion of highly productive firms and the entry of new firms—is much more important than inter-industry reallocation of production factors in driving aggregate productivity growth.<sup>19</sup> In Cambodia, however, labor productivity in firms underperforms comparator countries (figure 0.7). Moreover, data on labor productivity growth rates over 2013-15 suggests sales per worker has declined over this period in Cambodia, and this deterioration has been more pronounced than for the average EAP firm.

**Weak firm-level productivity is explained by a weak business environment that imposes severe obstacles to firms' operations.**

Firms report a variety of constraints to their operations, notably informal sector practices (having to compete against unregistered or informal firms), political instability, an inadequately educated workforce, and business regulations.<sup>20</sup> Moreover, firms also report availability and quality of services inputs used in production as obstacles to their operations, notably electricity and finance as well as transport and telecommunications.<sup>21</sup> On most of these issues, the perceptions of Cambodian firms are bleaker than firms in other countries.

**FIGURE 0.7**  
Labor productivity of Cambodian firms is lower than firms in comparator countries



**Note:** Similar results when using sales per worker (2009 US\$).  
**Source:** World Bank staff calculations using data from World Bank Enterprise Surveys.

**Empirical evidence confirms business environment constraints are associated with the lower productivity performance of Cambodian firms.**

Overall, the results suggest that poor access to finance, inefficient business regulations, informality, and inadequate electricity are the main constraints to firm productivity performance in Cambodia. Burdensome insolvency procedures remain a key issue for firms and are one of the reported reasons that micro and small and medium enterprises (SMEs) choose to stay informal, coupled with burdensome tax procedures and continued high costs of business registration.<sup>22</sup> Moreover, the cost of bank finance is high, with interest rates for small business loans ranging 15-18 percent or more per year.

**A business environment where investment opportunities can depend on knowing the right people breeds mistrust in rules-based transactions and makes the transition from informality to formality harder.**

Fair competition and a level playing field have been shown to matter in other countries. Efficient and fair markets are essential for catalyzing private sector development, and competition is central to the operation of markets. Crucially, competition facilitates greater equality of opportunity by breaking down the barriers that otherwise protect incumbent elites, thereby fostering innovation, productivity, and growth. Ultimately, lack of trust in rules-based business transactions could impede Cambodia's economic recovery in the short term and its diversification in the medium and long term.

**Improving productivity is central to Cambodia's long-term growth agenda.**

Government action can encourage a more productive and competitive private sector. This analysis suggests the primary focus should be reducing the cost of operating a business for firms, including by improving services inputs, followed by addressing misallocation, and finally by improving human capital. The RGC has committed to improving the business environment in Cambodia and has taken a number of recent initiatives in this regard. An inter-ministerial working group was established in April 2020 with members from around 20 relevant ministries and institutions. The Government has made a number of recent reforms, such as online business registration, with others ongoing. Nevertheless, it is an ongoing and medium-term agenda underpinned by a range of policy recommendations described below. The Covid-19 crisis adds urgency to this agenda and warrants a streamlined set of crucial policy options for the next three years to adapt to the new normal. Some of these areas are presented in Cambodia's Resilient Development Policy Matrix at the end of this Overview.

- Improving **capabilities** by investing in people. Human capital matters for the quality and productivity of the labor force and ultimately long-term growth. Improvements are needed in education and health services early in life. The RGC could consider giving more administrative and financial autonomy to health and education institutions, modernizing health and education services using technology, upgrading professional qualifications, and investing in teacher training. Expanding the maternal and child nutrition cash transfer program would improve early childhood nutrition and reduce stunting. This could be done by (i) expanding the eligibility criteria of households, (ii) improving targeting, and (iii) extending the program beyond two years old, for example through entry into primary school.
- Strengthening **regulations** to promote competition, improve PIM practices, and reduce the cost of operating a business for firms. A key step to improving market institutions is to make the recently promulgated competition law and competition regulator effective and implementable through sub-regulations including guidelines on merger control and ensure strong coordination of the competition regulator with the private sector. Dispute resolution can also be improved by creating a specialized commercial court for solving commercial disputes,<sup>23</sup> creating a small claims court, and developing an electronic case management system of judges and lawyers. Lawyers could also benefit from continual training. To improve PIM, the government should prepare PIM appraisal and implementation manuals that follow from the recently enacted PIM Sub-decree, and centrally monitor public investment project delays and cost overruns to strengthen in-year project monitoring by line ministries. The government should also build capacity for PIM at all relevant ministries and agencies including for project preparation and review to ensure quality.

Improved business regulations are needed. While the report does not identify policies to target informality explicitly, tackling relatively high business registration costs and burdensome tax and insolvency procedures will have the added benefit of creating incentives that reduce informality and its impact on the broader economy. Cambodia can review and further reduce the fees for business registration and continue integrating remaining agencies into the online business registration platform; simplify tax-audit compliance for businesses and streamline the current audit procedures; implement the insolvency legal framework by establishing an insolvency administration profession; improve the

overall efficiency of the courts to expedite bankruptcy proceedings (even more important during Covid-19); and review the corporate governance framework for investors in the Companies Law, particularly around corporate transparency, ownership and control, and shareholder rights.

- Investing in **infrastructure** to improve critical services inputs. Investments in services inputs—notably, electricity and finance—will strengthen domestic linkages. Continued efforts are needed to ensure reliable electricity and timely connections. To this end, the RGC should introduce time limits for issuing electricity contracts, consider setting up online processes for requesting new connections, improve the reliability of power supply, and establish an automated system to monitor power outages thereby reducing their frequency and duration. To reduce the cost of finance particularly for SMEs, Cambodia should scale up the recently enacted Credit Guarantee Scheme to ensure it is functioning well and to monitor access for SMEs. The RGC should develop incentives to attract early- and growth-stage venture capital to crowd in private capital. Operational efficiency of creditors can be improved by adopting measures that increase staff productivity or reduce the costs of decentralized delivery to expand outreach.

## Diversify exports

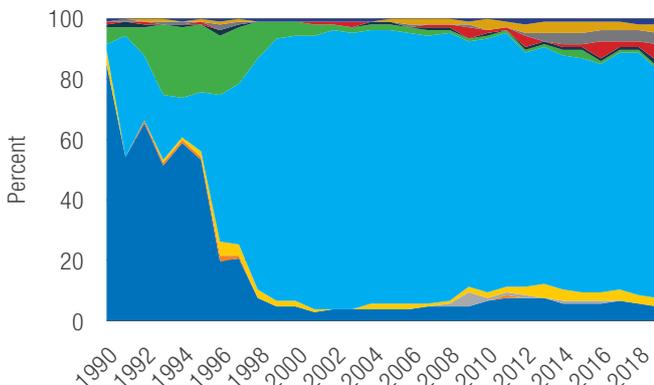
**Despite Cambodia's export success, low competitiveness and limited integration into GVCs have led to concentrated markets and trade.**

Manufacturing exports remain concentrated in garments unlike in some comparator countries that have been able to diversify into other GVC sectors (figure 0.8). But even within garments there has been limited upgrading to higher value-added products or more sophisticated tasks over the past two decades. Formal agriculture exports have increased twenty-fold over a decade, driven by a comparative advantage in exporting rice and cassava,<sup>24</sup> but Cambodia has yet to develop a similar advantage in vegetables or processed foodstuffs. In addition to low diversification, Cambodia's key manufacturing and agricultural exports have fallen even lower on the quality ladder. Cambodia outperforms counties in its services exports, but this is fully explained by the growing role of tourism, where Cambodia is among the most reliant in the world on travel and transport services. Cambodia's highly concentrated export basket made it particularly vulnerable to the Covid-19 shock.

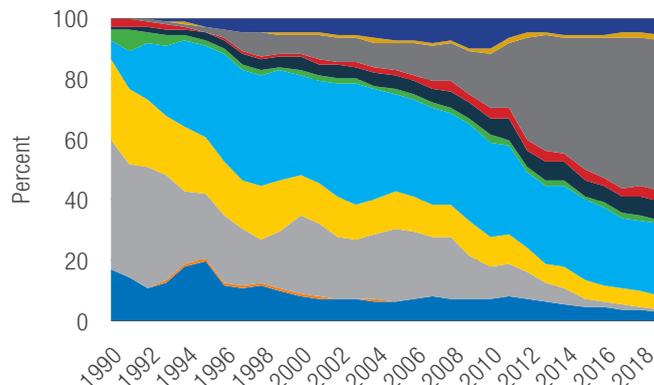
**FIGURE 0.8****Cambodia's exports are concentrated in garments with little diversification**

Sectoral export share, 1990-2019

a. Cambodia



b. Vietnam

**Source:** World Bank staff calculations using mirror data from UN Comtrade and Cambodia Economic Update (World Bank 2019a).**A primary cause of low diversification and inability to upgrade is the quality of FDI.**

Literature shows strong productivity spillovers from upstream linkages with FDI firms, but these linkages have not yet formed in Cambodia. When FDI firms do not create backward linkages and do not share knowledge, there are limited opportunities for technology transfer and productivity spillovers through GVC participation. Foreign manufacturing firms in Cambodia rely heavily on imported inputs, and Cambodia has relatively low shares of foreign firms with quality certificates or technologies licensed from foreign companies. This helps explain Cambodia's low within-firm productivity growth as discussed above.<sup>25</sup>

**Barriers in the business environment likely discourage FDI firms and block a key channel for productivity spillovers for those that do come.**

A World Bank survey found significant capacity and business-climate constraints for foreign manufacturing firms in Cambodia to source locally, due to unavailability of inputs, difficulty identifying domestic suppliers, or suppliers unable to meet the quality, cost, and delivery standards required (figure 0.9). Rapidly rising wages, together with electricity and logistics costs that are higher than in neighboring countries, also allegedly discourage the arrival of new investors. Instead, investment is increasingly concentrated in the construction and real estate sector alongside sharp increases in real estate prices, with a slowdown in the tradable sector. Domestic institutions play a complementary role in creating well-functioning and competitive services markets, but in terms of the broader business environment, Cambodia ranks lowest among comparators in rule of law as well as property rights protection.

**Cambodia's current investment and tax incentives regime also influences the quality of FDI.**

Tax incentives currently rely entirely on tax holidays for qualified investment projects, rather than cost-effective incentives like tax credits used to promote innovation, backward linkages, workforce training, or focusing on high-value-added sectors. Firms with Qualified Investment Project status reportedly prefer to source from abroad because they are exempt from paying value-added tax (VAT) on imports and claiming a VAT refund when dealing with local suppliers would be too cumbersome and time-consuming.<sup>26</sup>

**Low capability of firms and workers also constrains upgrading.**

More than 95 percent of Cambodia's apparel exporters are branch manufacturing plants of foreign-owned firms whose overseas headquarters undertakes all activities associated with functional upgrading, leaving little or no room for branch sites to take on more activities. The abundance of low-cost labor in low-income countries is often an entry point for participation in the labor-intensive manufacturing segments of GVCs. Upgrading knowledge and skills becomes necessary to transition into advanced manufacturing, services, and innovative activities that require a more educated workforce with appropriate technical skills and sophisticated managerial practices. Modern services in particular require a high-skilled workforce, absence of which poses a major constraint for diversification. The most recent World Bank Enterprise Survey revealed that a significant percent of firms said an inadequately trained workforce was among their top three constraints, with exporters twice as likely to report this constraint as non-exporters (42 percent compared to 21 percent).<sup>27</sup> Cambodia has not yet developed an effective system to upskill its existing workforce and this contributes to its skills deficit,<sup>28</sup> as do regulatory restrictions towards foreign professionals.

**FIGURE 0.9****Business environment constraints inhibit backward linkages from FDI to domestic firms**

Factors considered a barrier to source locally, as reported by surveyed firms in Cambodia, 2017

**Source:** World Bank staff calculations using data from World Bank Group 2017 FDI Survey and Economic Diversification Study (World Bank 2019a).

**A third key constraint to export diversification and upgrading is trade-related regulatory barriers that increase input costs and undermine productivity and competitiveness, particularly for agricultural exporters.** Mechanization can modernize agriculture and improve labor productivity through labor reallocation, but tariffs applied to some tools, implements, and spare parts increase modernization costs for smallholder farmers. While non-tariff measures (NTMs) are less pervasive in Cambodia compared to other countries, their associated cost, measured as the percentage increase in the price of imports, is steep and affects agricultural inputs like fertilizers, pesticides, and seeds. Tariffs also increase the cost of imported inputs for manufacturing production, where the average weighted tariff rate of manufacturing products is higher in Cambodia than most comparator countries.

**Gaps in trade-related infrastructure also help explain Cambodia's lack of export diversification, particularly for modern services.** New technologies are having a large impact on how services are delivered, and although internet prices are competitive, broadband access in Cambodia remains limited. The Covid-19 pandemic is further quickening the pace of technological change, as producers are looking for techniques that avoid face-to-face interaction. Investing in digital infrastructure now (and preparing the workforce for non-routine, knowledge-intensive jobs) will strengthen Cambodia's adaptability to embrace technological change, thereby increasing competitiveness. Additionally, quality national infrastructure needed for exports of fruits and vegetables—like certification systems, border risk management, pest surveillance, and laboratory testing—is missing.

**Finally, Cambodia has not leveraged regional trade agreements to support greater market access for its exports to other countries.** Market access through trade preferences has driven Cambodia's GVC participation, but the existing unilateral preferences will eventually expire. Cambodia participates in few deep trade agreements, which can facilitate higher participation, and it has not used regional trade agreements with services provisions to support market access for services exporters.

**Policy can help transform the country's international trade to a more diverse, higher quality, and better integrated export sector.** This agenda is paramount as trade offers vital channels for productivity improvements. Priority areas include upgrading skills, incentivizing domestic linkages, revising the tax incentive scheme, pursuing a “go-green” differentiation strategy in agriculture, and reducing regulatory hurdles for modern services providers. Cambodia's Resilient Development Policy Matrix at the end of this Overview presents policy actions for diversifying exports in the era of Covid-19.

- Improving **capabilities** by retraining workers and trade negotiators. The enterprise sector should be incentivized to play a larger and more structured role in providing, guiding, and advocating for a demand-driven skills development system—ideally involving internship programs. Cambodia can also introduce results-based financing for technical and vocational education and training institutions, explore individual learning accounts, and expand short course offerings to serve the working adult population.

Given the importance of the apparel and footwear sector, another opportunity for building capacity is to continue supporting vertical integration through joint ventures between the Garment Manufacturers Association in Cambodia and international brands and investors.

Cambodia's trade negotiators should be upskilled to negotiate deeper trade agreements with services provisions and maximize the potential benefits of international agreements for Cambodia. This can be done through modules covering recent developments in rulemaking in the field. Cambodia could also implement mutual recognition agreements and participate in Association of Southeast Asian Nations (ASEAN) Trade in Services Agreement that can also support market access.

- Strengthening investment and tax **regulations** and reducing trade barriers. Cambodia needs to attract a new wave of high-value-added FDI. Resolving challenges in investor protection and conflict resolution in sub-regulations to the new Investment Law is a first step. Subsequently, the tax incentives regime should be revised to move away from a blanket tax holiday scheme toward an investment incentives system that introduces reinvested dividends, investment tax credits, and investment depreciation on the value of acquired machinery and equipment, quality certificates, or new technologies. Raising and enforcing taxes on property and land can abate speculative investments, lowering business operation costs, and attracting investors to new projects.

Policies can pursue a “go green” agricultural differentiation strategy. Cambodia should introduce safety and quality standards for agricultural products and a national system for certification and labeling. Adapting institutional models supportive of agribusiness like incubators, farmer-enterprise productive alliances, and contract farming systems can promote a local agribusiness industry. In the short term Cambodia should review the effectiveness of its non-tariff barriers including licenses, quotas, and fees on imported agricultural inputs while also lowering tariffs and reducing costs related to transportation and trade facilitation.

To support modern services, Cambodia should reduce regulatory hurdles for services firms and entry restrictions to professional services sectors, particularly for accountants and lawyers. Enforcing intellectual property rights (IPR) legislation, implementing the e-Commerce Law, and improving digital infrastructure like broadband/4G would further improve the enabling environment for modern services.

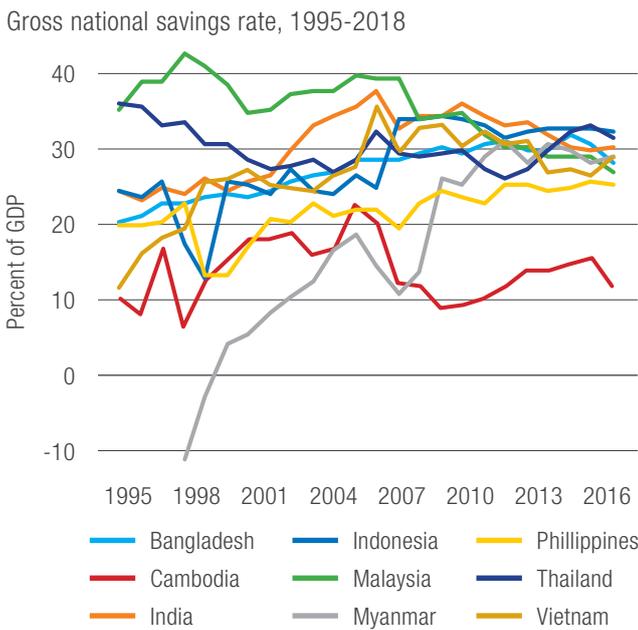
- Investing in trade and digital **infrastructure**. Foreign firms' high dependence on imported inputs suggests opportunities may exist for establishing and expanding local sourcing linkages—particularly with foreign investors—if local inputs are competitive in quality and price. In the short run, developing an online portal and digital app to offer basic matchmaking services can overcome information asymmetry between foreign firms and domestic producers. Over time, more established supplier development programs can be developed. With training, SMEs could become vendors in global e-commerce platforms. Simplifying VAT refund procedures could incentivize exporting firms to source from local SMEs. To facilitate the uptake of agriculture inputs, Cambodia can intensify market surveillance and traceability, and introduce a risk-management system at the border to lower cost and increase timeliness of agricultural inputs.

## Harness domestic investments

**Cambodia's low domestic investment reflects the country's low savings rate.** Cambodia's gross national savings rate was 11.5 percent of GDP in 2018, the lowest among comparator countries (figure 0.10). Moreover, the savings rate has declined since a peak in 2012 of 22.9 percent. Even more concerning is Cambodia's low and declining gross private savings rate in recent years, in place of large and growing government savings (figure 0.11). In 2018, government savings accounted for more than half of Cambodia's total savings, compared to 2010 when it made up less than 4 percent. Promoting higher savings to support domestically-financed private, productive investment will be critical to sustain the rapid expansion of fixed capital formation required to meet Cambodia's growth targets. Higher savings would also support greater macroeconomic stability for long-term growth. This is even more critical today, where the massive disruption in the international credit market brought on by the Covid-19 pandemic will likely threaten investment activity for years to come.

**Concern about low private savings is not necessarily how many households save but rather how much they are saving.** While data do not exist to disaggregate private savings into enterprise savings and household savings, evidence suggests that the level of household savings is low. More than half (55 percent) of adults reported having some type of savings in 2017, higher than expected given Cambodia's income per capita. However, other surveys report a much lower share of households with savings at a given point in time. For example, only 22 percent of households in the 2019 Living Standards Measurement Study reported having savings. Differences in these survey results could be capturing seasonality trends in

**FIGURE 0.10**  
Cambodia's savings rates are low



Source: World Bank staff calculations using data from International Monetary Fund (IMF) World Economic Outlook.

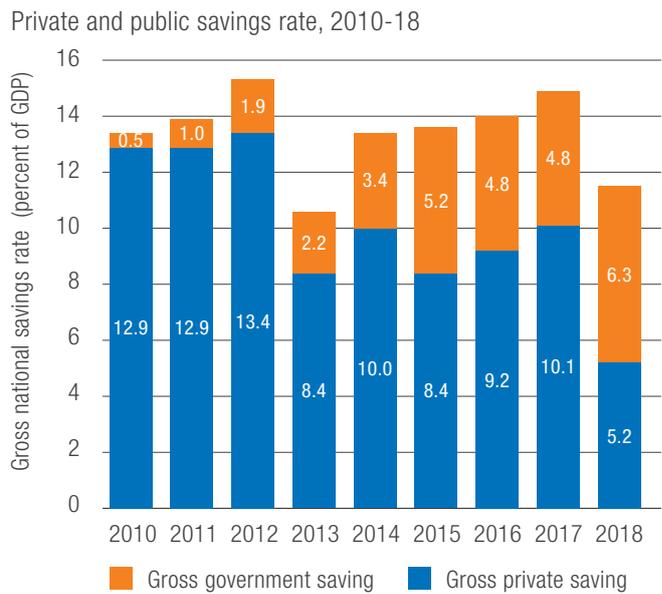
income (for example, agriculture) but is more likely explained by their different measures of savings. Whereas one survey counts discreet contributions, the other looks for sustained balances. Thus, some households would not be considered savers if they saved some part of their income but ran it down over the year. This suggest that savings are often modest and elude long-term accumulation.

**The large and persistent negative shock to livelihood unleashed by the Covid-19 pandemic has exposed Cambodian households to dire consequences, and they are unable to cope given their deficient savings.**

Cambodia has been one of the leading countries in poverty reduction and shared prosperity. But beyond extreme poverty, socioeconomic mobility has been limited with many households escaping poverty only by a small margin. Most Cambodians are economically vulnerable even if they are not below the poverty line. Recent developments have weakened the labor markets considerably, and with inadequate savings, households have limited means to absorb job loss shocks. Not surprisingly, low-income households are more adversely affected by the crisis.

**Income dynamics are key to explaining Cambodia's savings rate.** The share of adults with savings is strongly correlated with income level in Cambodia, where only 3 percent of households in the poorest income quintile in the 2019 Living Standards Measurement Study reported having savings, compared to 45 percent in the richest quintile. There is a similarly strong correlation between savings and income per capita across countries, where Cambodia's

**FIGURE 0.11**  
Cambodia's private savings have been declining in recent years



Source: World Bank staff calculations using data from IMF Article IV for Cambodia.

gross national savings rate is slightly below the average of other countries at a similar level of economic development (figure 0.12). Other demographics and the enabling environment also explain Cambodia's saving behavior, in line with literature.<sup>29</sup> A long-term growth strategy should consider promoting higher savings levels, including targeting households that do not currently save.

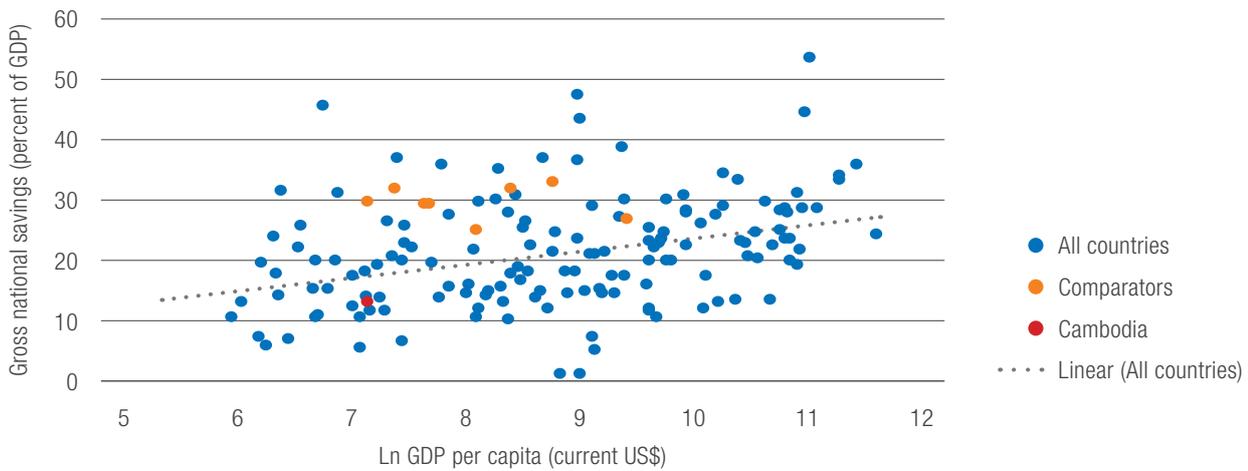
**Cambodia's high dollarization offers another potential explanation for low savings.** Together with rising FDI inflows, dollarization causes exchange rates to appreciate, boosting imports that are mostly for consumption, which undermines domestic savings. Dollarization could also affect savings by (i) increasing output volatility, in turn inhibiting growth and depressing savings; (ii) creating barriers to monetary policies that promote savings; and (iii) creating currency imbalances that can lead to a crisis.<sup>30</sup>

**How households save, however, appears to be a key factor impeding greater domestic investment, reflecting an inefficient formal financial sector.** Formal savings in financial institutions is not as prevalent in Cambodia as in comparator countries. Only 5 percent of adults participated in formal savings, significantly below other countries (figure 0.13). Instead, 69 percent of households that save choose to do so informally (usually at home in the form of cash or jewelry), and 22 percent through rotating savings and credit associations (ROSCAs), savings groups, or other semi-formal mechanisms. A bias towards informal savings impedes efficient allocation of credit, which drags down productivity growth.<sup>31</sup>

**FIGURE 0.12**

Cambodia's savings rate is slightly below other countries at a similar income level

Gross national savings vs. GDP per capita, 2018

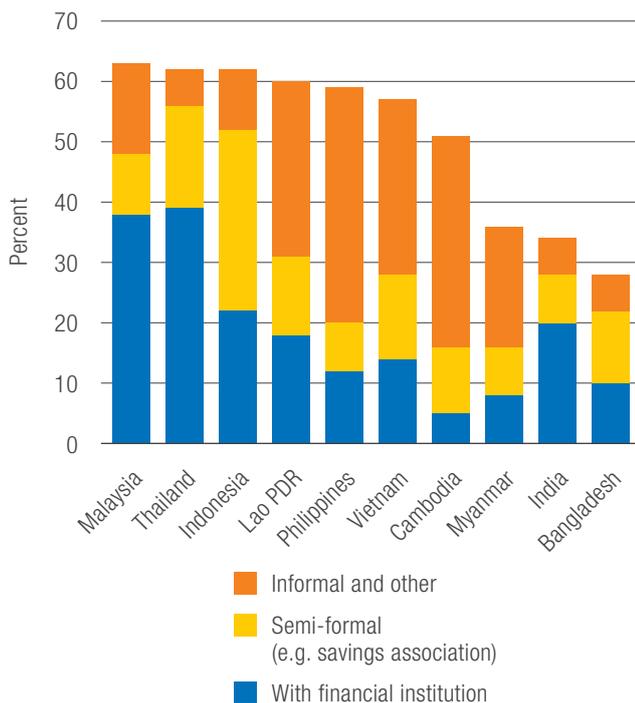


Source: World Bank staff calculations using data from IMF World Economic Outlook and World Bank World Development Indicators.

**FIGURE 0.13**

Most households save through informal mechanisms

Percent of adults with savings by saving method, 2017



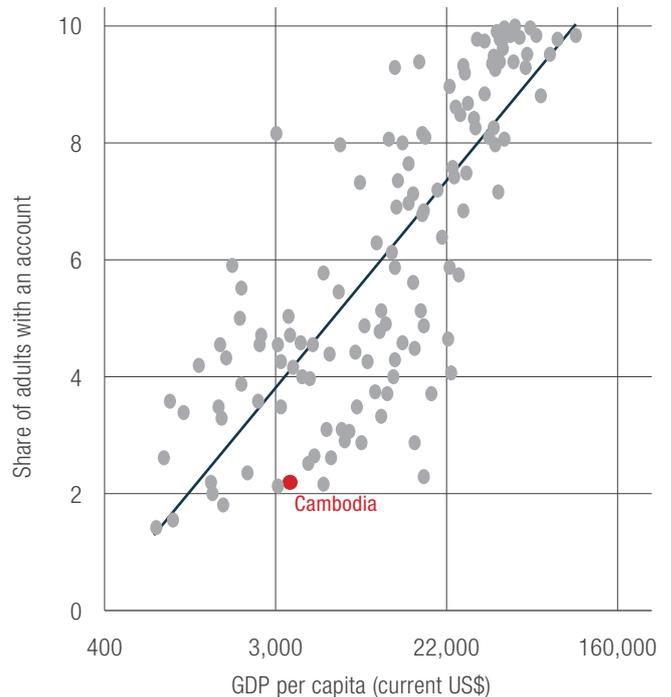
Source: World Bank staff calculations using data from World Bank Findex Database.

**Access to savings vehicles has increased, but the share of adults with an account is much lower than other countries at a similar level of economic development** (figure 0.14). While more adults are getting accounts, the share of adults saving formally has not increased at the same pace. Instead, most accounts were treated as mailboxes to receive funds and withdraw them almost entirely and immediately.

**FIGURE 0.14**

A low share of households in Cambodia have a financial account

Share of adults with an account vs. GDP per capita, 2017



Source: World Bank staff calculations using data from World Bank Findex Database.

**Regulatory issues in the financial sector pose more significant barriers to formal savings in Cambodia than in other countries.** Only 2 percent of Cambodian adults reported not needing financial services in 2017. Insufficient funds was the top reason for not owning a financial account in 2017, but many of the other reasons cited relate directly to financial sector issues. These include

lack of documentation, distance to a financial institution, cost of owning an account, and mistrust in financial institutions.<sup>32</sup> Around 11.5 percent of the population does not have a national ID, often an essential document for account ownership. According to FinScope data, for over half of the nation's population, the time to reach the nearest formal financial services provider exceeds 30 minutes. Residents that do save in financial institutions are subject to a 4 percent tax on interest income earned via savings accounts, and income from fixed deposits is liable to a 6 percent tax. For non-residents, a tax rate of 14 percent is levied on interest income, regardless of the savings vehicle. Key regulations that ensure financial sector stability are missing in Cambodia, which may impact households' trust in financial markets and institutions.

**Low financial literacy is the second reason for low formal savings.** A survey conducted in 2016 showed that Cambodia's population has among the lowest financial literacy scores relative to a global comparator set of 30 countries, including other ASEAN countries like Vietnam with high informal savings rates.

**A third challenge is limited technology adoption that would increase access to financial services.** DFS are untapped in Cambodia. Currently they are mostly limited to payments services rather than for borrowing, saving, or lending, and lack an adequate consumer payments and protection framework.

**Finally, beyond banks and microfinance institutions/microfinance deposit taking institutions (MFIs/MDIs), other financial instruments that can support savings have yet to develop.** Currently, neither the corporate nor government bond market in Cambodia is very active, so there is no facility to raise long-term funds or opportunity for the public to invest their long-term savings. The insurance market, which can substitute traditional savings in other assets, remains small though growing. The recently enacted social security law that establishes the principles and mechanisms to implement a system of pensions beyond public sector employees is not yet implemented.

**Even higher investment levels—through greater savings—will be needed to achieve Cambodia's long-term growth targets.** Policies can incentivize higher domestic savings rates and encourage savings in the formal financial sector through improved access to savings institutions, including DFS, lower financial and administrative costs of financial accounts and products, and greater support for financial sector stability and development more broadly. While a broader list of short- and medium-term policy areas is listed below, a set of policy actions for harnessing domestic investment over the coming years in

the era of Covid-19 are presented in Cambodia's Resilient Development Policy Matrix at the end of this Overview.

- Improving **capabilities** by investing in financial literacy. International experience shows that improved financial literacy, financial education, and financial planning can incentivize higher savings given a household's income. Key measures include: incorporating financial literacy education into the school curricula and textbooks under the purview of the Ministry of Education, Youth, and Sports; developing financial literacy materials on leasing, mobile banking, and new technologies to access finance; and supporting the efforts of National Bank of Cambodia, Association of Bankers Cambodia, and Cambodia Microfinance Association for financial literacy to clients, particularly low-income clients and those in rural areas.
- Strengthening **regulations** for deposit insurance and the domestic bond and insurance market. Several policy measures could boost savings in the formal financial system where it can earn higher returns, be better protected, and, from an efficiency perspective, be intermediated to the most productive uses. Cambodia should ensure financial sector stability by establishing a national deposit protection fund and strengthening a crisis preparedness regime for the whole financial sector. Some small changes could also address financial and administrative costs of savings accounts and products, like accepting other forms of ID to open an account in the short term until a national ID is ubiquitous.

Addressing regulatory gaps can support financial sector development more broadly. These include implementing the legal framework for government bonds; promulgating the Micro-insurance Sub-decree to strengthen the regulatory and supervisory regime, broaden insurance products, expand distribution channels, and protect policyholders; and establishing sub-regulations of the new Social Security Law to support its implementation.

- Investing in digital payment **infrastructure**. Digital savings products can improve access for those who cannot easily or cost-effectively access physical bank branches. Cambodia should support the development of nonbank e-money issuer-to-bank interoperability—the technological backbone for digital savings partnerships and distribution strategies. The country should also develop legal and regulatory frameworks that: ensure customer funds protection standards are robust for bank deposits and e-money accounts; and allow deposit-taking institutions to pursue digital savings partnerships with nonbank entities and conduct limited purpose banking services through retail agent networks.

## Cambodia's Resilient Development Policy Matrix

Objective	Improving capabilities	Strengthening regulations	Investing in infrastructure
<b>Enable productive firms and workers</b>	Build capacity for PIM at all relevant ministries and agencies including project preparation and review to ensure quality; prepare PIM appraisal and implementation manuals that follow from the recently enacted PIM Sub-decree; centrally monitor public investment project delays and cost overruns; strengthen in-year monitoring of projects by line ministries [MEF]	Make the Competition Law effective and implementable through sub-regulations including guidelines on merger control; ensure strong coordination of the competition regulator with the private sector [MOC]  Simplify tax-audit compliance requirements; streamline the current tax-audit procedures [MEF]	Scale up the Credit Guarantee Scheme; develop incentives to attract early- and growth-stage venture capital [MEF]  Initiate a media campaign and a 'Regulatory Reform' website to continuously update the private sector on recent reforms, and engage them in public-private dialogue throughout the reforms process [MEF]
<b>Diversify exports</b>	Build capacity of Cambodia's trade negotiators to negotiate deeper trade agreements that cover services and implement mutual recognition agreements [MOC]	Move away from a blanket tax holiday scheme to an investment incentives system that introduces reinvested dividends, investment tax credits, and investment depreciation on the value of acquired machinery, equipment, quality certificates, or new technologies [CDC & MEF]  Review the effectiveness of all licenses, quotas, and fees on imported agricultural inputs [MOC]	Develop an online portal and digital app to offer basic matchmaking services and overcome information asymmetry of foreign firms and domestic producers; establish a supplier development program [CDC]  Intensify market surveillance and traceability and introduce a risk-management system at the border to lower cost and increase timeliness of agricultural inputs [MAFF]  Develop and strengthen intermediation mechanisms (job matching platforms and the National Employment Agency) to collect data on job vacancies and create outreach programs [MLVT]
<b>Harness domestic investment</b>	Incorporate financial literacy education into school curricula and textbooks; develop financial literacy materials on leasing, mobile banking, and new technologies to access finance; support efforts of the National Bank of Cambodia, Association of Bankers Cambodia, and Cambodia Microfinance Association for financial literacy to low-income and rural clients [MOEYS & NBC]	Establish a national deposit protection fund; strengthen the crisis preparedness regime [MEF & NBC]  Implement the legal frameworks for government bonds; promulgate the Micro-insurance Sub-decree; finalize sub-regulations of the new Social Security Law to support its implementation [MEF, MLVT, & NBC]	Support the development of nonbank e-money issuer-to-bank interoperability, which is the technological backbone for digital savings partnerships and distribution strategies [NBC]  Develop legal and regulatory frameworks that allow deposit-taking institutions to pursue digital savings partnerships with nonbank entities [NBC]

**Note:** CDC=Council for the Development of Cambodia; MAFF=Ministry of Agriculture, Forestry, and Fisheries; MEF=Ministry of Economy and Finance; MLVT=Ministry of Labour and Vocational Training; MOC=Ministry of Commerce; MOEYS=Ministry of Education, Youth, and Sports; NBC=National Bank of Cambodia.

---

## Endnotes

- <sup>1</sup> A group of nine countries were selected as comparators used throughout the report to benchmark Cambodia's performance, including Bangladesh, India, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand, and Vietnam. These countries were selected based on similar income level, size, and/or region.
- <sup>2</sup> In addition to Covid-19, economic activity has also been impacted by the partial suspension of the country's preferential access to the EU market under the "Everything But Arms" agreement that came into effect in August 2020 and the ban on online gambling on January 1, 2020 that triggered large outflows of Chinese nationals. The Country Economic Memorandum focuses on Cambodia's long-term growth. The short-term impact of the Covid-19 pandemic on Cambodia's economy is analyzed in depth in the bi-annual Cambodia Economic Updates.
- <sup>3</sup> This entails sustaining GNI per capita growth at 9.3 percent until 2030 to achieve Cambodia's upper middle income target—which has only been achieved by China—or 7.2 percent until 2050 to achieve Cambodia's high income target—only achieved by the Republic of Korea. World Bank (2018a).
- <sup>4</sup> World Bank (2019a).
- <sup>5</sup> The World Bank's Cambodia Economic Diversification Study (World Bank 2019a) led by Miguel Eduardo Sánchez Martín was written as Part I of the Cambodia Country Economic Memorandum. This earlier study was subsequently extended in the areas of (i) firm-level productivity, (ii) services export diversification, and (iii) financing the next phase of growth as Part II of the Cambodia Country Economic Memorandum. This report summarizes the findings and recommendations of Part I and Part II.
- <sup>6</sup> World Bank (2019b).
- <sup>7</sup> Since 1995, goods exports have increased more than 17-fold, from US\$855 million to US\$150 billion in 2019. The increase in services exports has been even more dramatic, expanding 53-fold from US\$144 million in 1995 to US\$6.1 billion in 2019. Current US\$, Balance of Payments, from World Bank World Development Indicators.
- <sup>8</sup> Atlas of Economic Complexity.
- <sup>9</sup> World Bank (2018a).
- <sup>10</sup> World Bank (2018a).
- <sup>11</sup> Productivity improvement has long been recognized as a central driver of long-term economic growth and poverty reduction. A country's ability to improve its income per capita over time depends largely on its ability to raise its output per worker in the long run.
- <sup>12</sup> World Bank (2020b).
- <sup>13</sup> Three factors can explain low labor productivity at the macro level: insufficient physical capital, low human capital, and low levels of TFP. Usually, these factors work together. High and rising endowments of human capital combined with high rates of physical capital investment explain most of the growth success of the East Asian miracle countries, including the Republic of Korea, Malaysia, and Thailand. World Bank (2018a).
- <sup>14</sup> World Bank HCI.
- <sup>15</sup> Cambodia is in the early phases of a 'demographic dividend' with the pool of potential workers expected to expand by 135,000 per year on average for the next 35 years. World Bank (2019a).
- <sup>16</sup> Output that cannot be attributed to inputs of labor and capital is known as TFP. It captures innovation, managerial skill, technology adoption, and other aspects that cannot be directly modeled.
- <sup>17</sup> Improvements in TFP can come from various sources. First, greater allocative efficiency of resources, from the reallocation/structural transformation of economic activity to more productive sectors or to more productive firms within sectors, is a key source of aggregate productivity growth. Second, the exit of less productive firms and the entry of more productive firms can generate within-firm productivity improvements and aggregate productivity growth. Data do not exist to explore the contribution of firms exit and entry to aggregate productivity performance.

- <sup>18</sup> These sectoral productivity differences also allowed substantial wage differences across sectors—for example about 50 percent higher in manufacturing than agriculture. This transition from lower-wage and less productive jobs in agriculture to higher-wage and more productive jobs in services and industry helps explain the significant poverty declines achieved in Cambodia (in addition to the higher productivity growth within agriculture).
- <sup>19</sup> Lewrick, Mohler, and Weder (2014).
- <sup>20</sup> World Bank (2017c).
- <sup>21</sup> Professional services, ICT, transport, finance, and electricity are key inputs for other sectors including manufacturing. In Cambodia, firms rely much less on business services, finance, and ICT than firms in the Philippines or Thailand. World Bank (2019a).
- <sup>22</sup> While having been reduced recently from US\$420 to US\$252.5 (at the time of writing this report), there is still scope for further reductions. In many countries, for example, business registration is free.
- <sup>23</sup> The RGC is currently in the process of establishing a commercial court.
- <sup>24</sup> Total agricultural export growth is likely even higher. Agricultural trade statistics are limited to formal agricultural trade, which underrepresents trade in products that are informally traded (such as, crossing borders without passing through customs agencies). This is particularly relevant for exports of raw products such as mangoes, cashew nuts, pepper, rubber, and other crops.
- <sup>25</sup> International trade supports productivity improvements through various channels. Yet in Cambodia, counterintuitive to global experience, the median firm is more productive in terms of value added per worker than the median firm that exports goods, is large (70 or more full-time employees, which are also more likely to be exporters), is integrated into a GVC (imports and exports), or that is foreign-owned (more likely to be exporters).
- <sup>26</sup> Under the Cambodian Investment Law, projects that meet a minimum capital investment requirement may qualify for tax exemptions on both inputs and profits.
- <sup>27</sup> World Bank (2019b).
- <sup>28</sup> Cambodia's public and private skills development system is fragmented and small, and reform efforts so far have focused on setting standards rather than developing feedback mechanisms from the ultimate clients (the employers) or creating results-based incentives for training institutions. World Bank (2019b).
- <sup>29</sup> Land ownership, agricultural employment, formal employment, education, remittances, distance to financial institutions, and dependency ratio correlate with household savings in Cambodia. There is also a positive relationship between the coverage of MFIs and savings in Cambodia, suggesting the presence of MFIs has supported savings domestically. The deposit rate does not empirically explain the savings rate in Cambodia, consistent with global empirical evidence and the ambiguous theoretical prediction, based on offsetting substitution, income, and human-wealth effects (Grigoli, Herman, and Schmidt-Hebbel 2018).
- <sup>30</sup> Yeyati (2006), Ramey and Ramey (1999), Loayza, Schmidt-Hebbel, and Servén (2000), Grigoli, Herman, and Schmidt-Hebbel (2018), Balino, Bennett, and Borensztein (1999), Krugman (1999), Organisation for Economic Co-operation and Development (2001), and Hausamm and Velasco (2005).
- <sup>31</sup> A well-functioning financial system contributes to economic growth by allocating capital efficiently across the economy. This high reliance on informal savings implies less opportunity for these savings to be intermediated through financial markets and used for productive investment projects.
- <sup>32</sup> World Bank Findex Database.



# Chapter 1

## Improving Cambodia's Productivity Performance

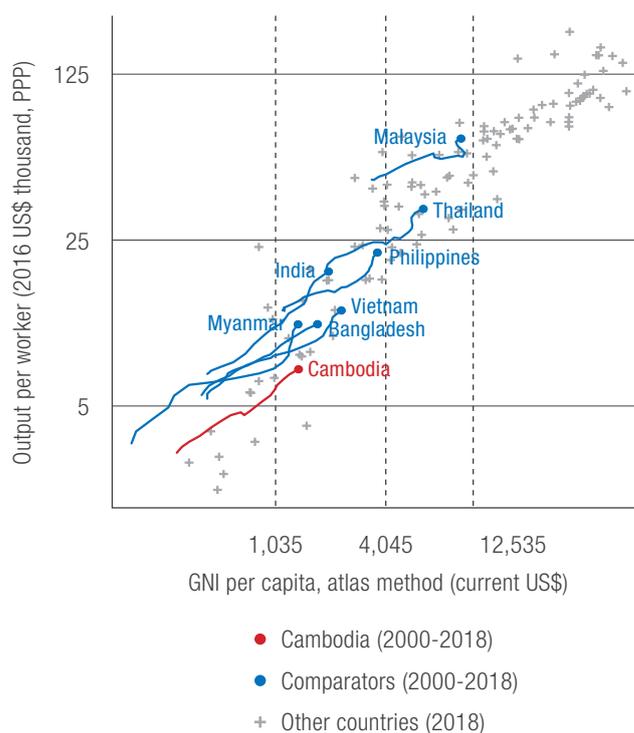
**Productivity has long been recognized as a central driver of long-term economic growth and poverty reduction.**<sup>33</sup> Across countries, productivity is correlated with income per capita; and within countries, reducing poverty and raising incomes largely depends on raising output per worker.<sup>34</sup> More productive firms have higher earnings, which they can use to invest in new technologies, create jobs, and pay higher wages. Enhanced productivity also enables cost reductions that result in lower prices of consumer goods, therefore improving the purchasing power and living standards of the poor.<sup>35</sup> In Paul Krugman's words, "productivity isn't everything, but in the long run, it is almost everything."<sup>36</sup>

**Cambodia needs to balance its accumulation-led growth model with a greater reliance on productivity-led growth if it is to achieve its long-term development goals.** To date, Cambodia has relied largely on factor accumulation—ever increasing amounts of labor and physical capital to produce goods and services in the economy. But there are limits to factor accumulation, and all economies must eventually improve productivity to continue to grow. Despite high and sustained gross national income (GNI) per capita growth rates, Cambodia has not been able to increase its labor productivity at similar levels, as measured by output per worker. Over the period 2000-18, GNI per capita increased 4.6 times to reach US\$1,380 (current US\$), elevating the country to lower-middle-income status. But over the same period, output per worker only increased 2.2 times, and remains low compared to most other countries at a similar development level (figure 1.1). In this context, productivity growth will be a key priority for promoting long-term economic growth.

**The Covid-19 pandemic and its impact on the global economy threaten to erode Cambodia's productivity improvements.** Covid-19 is projected to cause a short-term economic contraction in every geographic region and in most countries, and the medium- to long-term prospects are uncertain. Sickness, food insecurity, and job losses threaten to reverse recent improvements in Cambodia's human-capital growth, while school shutdowns could reduce the number of learning-adjusted years of education for the future workforce. Firm closures and disruption in firm-worker relationships could hurt firm productivity through a loss of intangible assets, and disruptions to trade and global value chains (GVCs) could lead to less efficient resource

**FIGURE 1.1**  
Cambodia's labor productivity is low for its level of economic development

Labor productivity vs. GNI per capita, 2000-18



**Note:** Output per person employed. PPP = Purchasing power parity.  
**Source:** World Bank staff calculations using data from Total Economy Database.

allocation across sectors and firms and dampen technology diffusion.<sup>37</sup> And extended periods of unemployment could erode skills and discourage workers from returning to or staying in the workforce.<sup>38</sup>

**Productivity growth should therefore be a major determinant of Cambodia's economic recovery and future growth model.** This chapter analyzes productivity performance in Cambodia. It attempts to explain Cambodia's weak productivity performance by exploring aggregate, sectoral, and firm-level productivity trends and factors driving those trends. It concludes with recommended reforms to alleviate obstacles, improve allocative efficiency, and boost firm-level productivity growth.

## Labor productivity is constrained by weak human capital and low total factor productivity

**Three factors can explain low labor productivity at the macro level: insufficient physical capital, low human capital, and low levels of total factor productivity (TFP).** Usually, these factors work together. For example, high and rising endowments of human capital, combined with high rates of physical capital investment, explain most of the growth successes of the East Asian miracle countries, including the Republic of Korea, Malaysia, and Thailand. In Cambodia, availability of physical capital has not been a major constraint to growth, but its human capital is low relative to its comparators, and low TFP is a significant concern.

### Physical capital

**The availability of physical capital has not been a major constraint to growth in Cambodia.** Over the last two decades, the average gross fixed capital formation averaged 18 percent of gross domestic product (GDP). Capital formation was by far the biggest driver of GDP growth in the country, and in recent years, capital was more important to Cambodia's GDP growth than any of its comparators. However, Cambodia still needs to attract more capital if it is to meet its development goals, as discussed in Chapter 3.

**TABLE 1.1:**  
Cambodia scores poorly on the World Bank HCI

HCI score, rank, and sub-index scores, 2020

Country	HCI score	HCI rank	Expected years of schooling	Learning-adjusted years of schooling	Adult survival rate	Fraction of children under five not stunted
Vietnam	0.69	38	12.9	10.7	0.87	0.76
Malaysia	0.61	62	12.5	8.9	0.88	0.79
Thailand	0.61	63	12.7	8.7	0.87	0.89
Philippines	0.52	103	12.9	7.5	0.82	0.70
India	0.49	116	11.1	7.1	0.83	0.65
Cambodia	0.49	118	9.5	6.8	0.84	0.68
Myanmar	0.48	120	10.0	6.8	0.80	0.71
Bangladesh	0.46	123	10.2	6.0	0.87	0.69

Source: World Bank HCI.

## Human capital

**Cambodia's human capital on the other hand is low relative to its comparators and the rest of the world.** According to the World Bank Human Capital Index (HCI), which measures the impact of investments in children today on future productivity and long-term economic growth, Cambodia ranks 118th of 174 countries for which data are available—on par with India and Myanmar, but far behind most comparators (table 1.1). Based on health and education outcomes, its overall index score of 0.49 indicates that a child born today is expected to be 49 percent as productive in adulthood as he or she would have been with complete education, good health, and a well-nourished childhood.<sup>39</sup>

**Education is Cambodia's biggest obstacle to improving human capital.** Cambodia ranks 138th on the World Bank HCI in expected years of schooling.<sup>40</sup> This reflects shortcomings in Cambodia's educational system, including late entry, high grade repetition, and high dropout rates. As of 2017, only about 60 percent of 15-year-old students were on track, meaning they had reached grade 10. In contrast, 73 percent of 15-year-old students in Thailand and 86 percent in Vietnam were on track. Grade repetition was the main reason, with 30 percent of Cambodian students repeating a grade at least once in primary or secondary school. The problem was especially pronounced for boys, who were 1.4 times more likely to repeat than girls.<sup>41</sup> School enrollment has increased over past decades, but overall educational attainment remains

low. Only 8.5 percent of the working age population (ages 15-64) is projected to have completed secondary education, and only 1.5 percent to have completed tertiary education by 2020. These educational attainment rates are lower than most countries with comparable income levels. Within the region, only Papua New Guinea and Lao People's Democratic Republic (Lao PDR) have similar or lower levels of secondary school completion rates, and only Papua New Guinea has lower tertiary completion rates.<sup>42</sup>

**A key challenge in the education system is low quality of education services.** Public educational institutions lack the requisite administrative and financial autonomy to modernize their services. Low professional qualification standards for educators also lowers the quality of education services, alongside low teacher capacity.

**Cambodia also faces challenges related to health, particularly child nutrition, which further weaken human capital and learning outcomes.** The fraction of children under five who are stunted (low height for age) is higher in Cambodia than in any of its comparators except India (table 1.1).<sup>43</sup> Stunted children are more susceptible to disease and infection. Stunting is also associated with late school enrollment, lower cognition, poorer executive function, and lower levels of educational attainment. At a societal level, stunting lowers human capital and undermines the economy. The problem is most severe for vulnerable populations. Health systems are in place, but many poorer families do not have the resources to access healthcare, and health emergencies threaten to push the near-poor into poverty. Covid-19 could compound these problems, first with the direct health impact on individuals, and second by placing extra strain on health systems. Indirectly, income losses due to Covid-19 could result in lower nutritional outcomes for children in poor households.

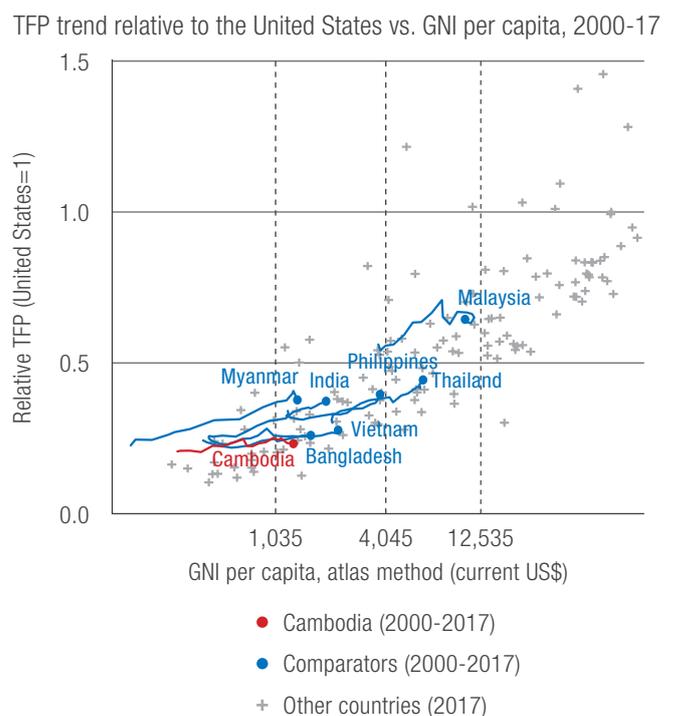
**Addressing the high degree of malnutrition and stunting will be critical for building human capital.** Evidence demonstrates that malnutrition, lack of stimulation and learning, and/or exposure to toxic stress when young has an irreversible impact on brain development. Children in the poorest quintile are more than twice as likely to be stunted as those in the richest quintile (42 percent and 19 percent, respectively). In July 2019, the Royal Government of Cambodia (RGC) introduced the maternal and child cash transfer program for pregnant women and children under two. This program targets poor women, with IDPoor cards given to households in the bottom 15 percent of the income distribution, conditional upon regular visits to a health facility from pregnancy through the first two years of their child's life, making it the first nationwide social assistance program.<sup>44</sup> By targeting children's health, the program seeks to improve Cambodia's human capital, particularly among families that otherwise may not be able to afford regular health visits or a nutritious diet for their children. However, a recent World Bank assessment shows that the amount received by each

beneficiary would need to be increased to have a substantial effect on consumption and poverty.<sup>45</sup> Moreover, stopping the program at age two leaves a gap in nutritional support until the age of five when children in poor households can participate in school nutrition programs. Inadequate nutrition in children can lead to deficiency and poor health outcomes, eroding child development and future productivity later in life.

## Total factor productivity

**The largest contributor to Cambodia's low labor productivity, and largest cause for concern, however, is low TFP.**<sup>46</sup> Cambodia's TFP is low for its income level and, in contrast to many of its comparators, Cambodia is not converging with the global productivity frontier. High-growth countries like China, Malaysia, and Thailand had much higher TFP at similar income levels. TFP growth is also low. Between 2000 and 2017, Cambodia's TFP barely improved relative to the United States.<sup>47</sup> And although TFP growth slowed for most countries in the wake of the 2008 global financial crisis, the decline for Cambodia was more severe. Since 2011, TFP growth has fallen to just 0.2 percent per year, compared to 2.1 percent annual growth over the period 2000-07. TFP growth was also stagnant for Vietnam and Bangladesh, but other comparators saw more improvement (figure 1.2). The widening TFP gap means Cambodia is not converging with its comparators, let alone the global productivity frontier.

**FIGURE 1.2**  
Cambodia's aggregate TFP is low and has grown slowly in recent years



**Source:** World Bank staff calculations using data from Total Economy Database.

**There are various ways to improve TFP.** First, improve allocative efficiency of resources. This entails redressing market distortions so that resources—including labor, capital, and land—are allocated to more productive sectors and more productive firms within sectors. At the broadest level, reallocation of resources constitutes whole-scale structural transformation whereby a country moves from a predominantly low-productivity agricultural economy to one dominated by higher-productivity manufacturing and services. Second, aggregate productivity growth can come from within-firm productivity improvements, the exit of less productive firms, or the entry of more productive firms. This entails redressing constraints in the business environment and improving the availability and quality of production inputs. This chapter explores each of these in detail to diagnose Cambodia’s low TFP performance.

## Structural transformation has contributed to productivity growth but is incomplete

**Structural transformation is well underway in Cambodia.** Between 2000 and 2019, workers moved from the lower-productivity agricultural sector to the higher-productivity

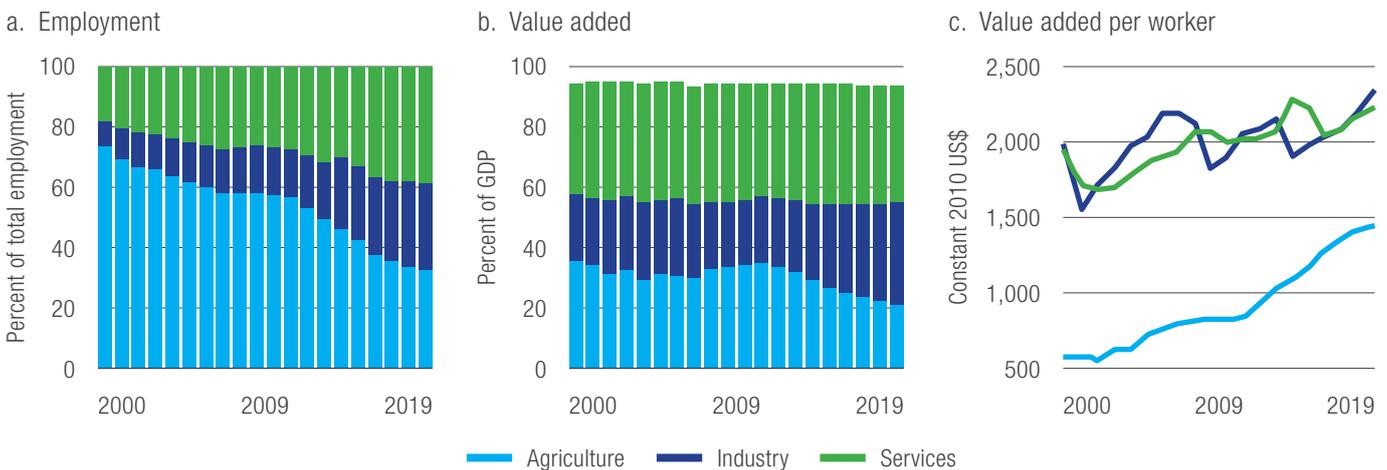
manufacturing and services sectors. A Shapley Decomposition confirms the large intersectoral reallocation of labor contributed to Cambodia’s aggregate productivity. Workers were incentivized by substantial wage differences, for example wages in manufacturing were about 50 percent higher than in agriculture. The result of individuals’ market-driven decisions was an increase in allocative efficiency, as resources moved to industries where they could achieve a higher return.

**The impact on agriculture was huge.** The sector’s share of the workforce declined by more than half (figure 1.3, panel a). As a result, the sector’s share of total value added in the economy declined as the share of other sectors grew (figure 1.3, panel b). Value added per worker increased in all sectors (figure 1.3, panel c). But it increased the most in agriculture, where declining numbers of workers—coupled with smallholder land-use expansion, gains in crop yields, and diversification into higher value-added crops—resulted in a near tripling of productivity from 2000 to 2019. The transition from lower-wage and less productive jobs in agriculture to higher-wage and more productive jobs in services and industry helps explain Cambodia’s significant poverty reduction. However, at the same time, Cambodia’s sectors are converging at a low level of productivity relative to its comparators, which could limit future gains in poverty reduction.<sup>48</sup>

**FIGURE 1.3**

Workers have moved from agriculture to industry and services, alongside large productivity increases in agriculture

Employment, value added, and value added per worker by sector, 2000-19

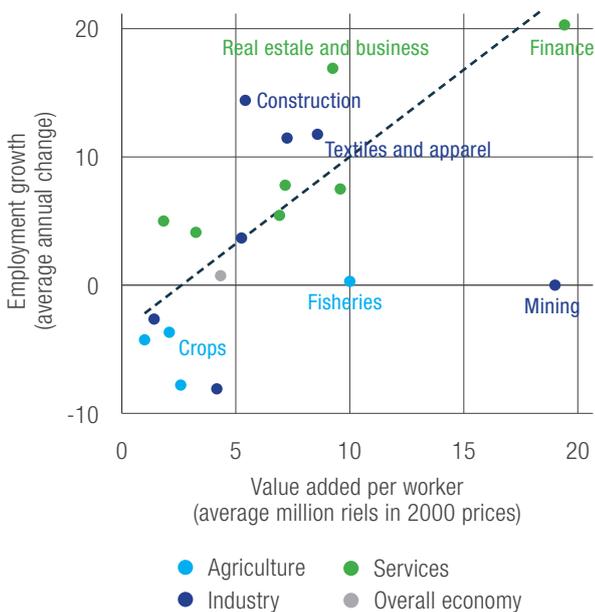


**Note:** Value added by sector does not add to 100 because of statistical discrepancies. When necessary the remainder is typically assigned to the services sector.

**Source:** World Bank staff calculations using data from International Labour Organization and World Bank World Development Indicators.

**FIGURE 1.4**  
Workers are moving to more productive industries,  
boosting overall productivity growth

Employment growth vs. labor productivity, 2009-17



**Note:** The rubber manufacturing sector is excluded because of incomplete data. Mining is excluded from the calculation of the fitted line because it is an outlier.

**Source:** World Bank staff calculations using data from Cambodia National Accounts and World Bank Cambodia Socio-Economic Survey (CSES).

**Within manufacturing and services, workers moved to more productive industries.** Excluding mining, there is a strong positive correlation between average annual employment growth and average productivity from 2009 to 2017 (figure 1.4).<sup>49</sup> The biggest relative gains in employment were seen in finance, real estate and business, construction, and textiles and apparel.<sup>50</sup> Meanwhile, all agricultural subsectors saw employment shrink.

**At the same time, Cambodia’s labor force is growing, and the process of structural transformation is incomplete, with further productivity gains still to be had.** First, Cambodia is in the early phases of its ‘demographic dividend’, with the pool of potential workers expected to expand by 135,000 yearly on average for the next 35 years.<sup>51</sup> Cambodia’s working age to total population ratio expanded from 54 percent in 1995 to 69 percent in 2019 and is projected to continue increasing to 78 percent by 2050. Second, a large share of workers is still employed in agriculture. Among Cambodia’s comparators, Myanmar, India, Bangladesh, and Vietnam have a greater share working in agriculture; Thailand is on par; and Malaysia and the Philippines have far less. According to recent household surveys, workers laid off in response to the Covid-19 crisis are returning to agriculture.<sup>52</sup> This could reverse some of the apparent gains in reallocation and disrupt future productivity

growth. Third, much of Cambodia’s labor force have emigrated, with potential for Cambodia to re-attract these workers if job opportunities existed back home. As of 2015, an estimated 1.19 million Cambodians (7.6 percent of the population) lived abroad, mostly in Thailand and the United States. More than 90 percent emigrated through irregular or illegal means, and most were young and low-skilled. And fourth, workers should theoretically move between sectors until the marginal product of labor is equal across all three. Even after major gains in the agricultural sector, the value added per agricultural worker is still less than two-thirds of the value added per services sector worker.

## Within-sector productivity growth has been flat

**Despite resources moving broadly to sectors with higher labor productivity, productivity growth within manufacturing and services sectors has been suboptimal.** Between 2007 and 2017, within-sector productivity growth has been flat across most services, industrial, and manufacturing subsectors including construction, garments, and food and beverages. Major industries that saw slow productivity growth include construction and real estate and business (figure 1.5). In many subsectors productivity growth was negative, particularly those in the services sector. In fact, no single industry in the services sector grew faster than the overall economy for the period 2009-17.

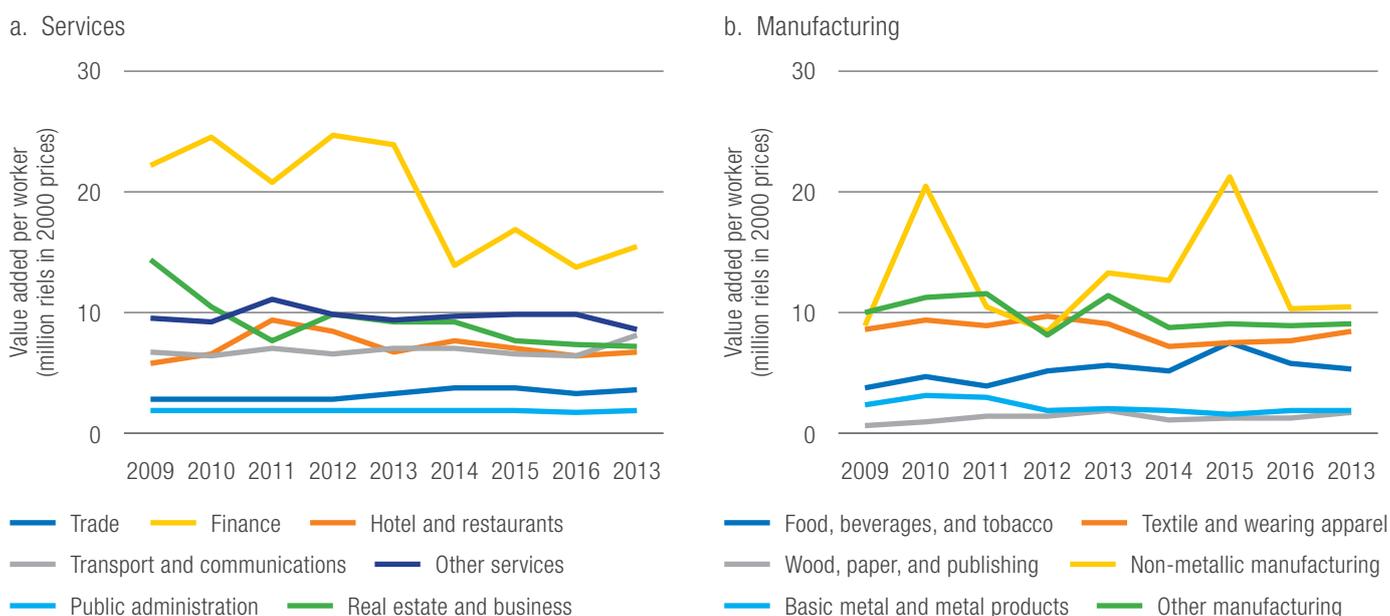
**Flat productivity growth stems from two causes at the micro level: misallocation of resources within sectors and low within-firm productivity growth.**<sup>53</sup> Two factors contribute to low productivity growth at the sector level and ultimately the aggregate level in Cambodia. First, misallocation of resources—including labor, capital, and land—between firms within sectors prevents those resources from being efficiently utilized. Second, both lower firm-level productivity and low within-firm productivity growth contribute to lower aggregate TFP, output, and economic growth for Cambodia’s economy as a whole. Each of these factors is discussed in detail in the following sections.

## Resource misallocation within sectors contributes to low sector-level productivity

**In Cambodia, more productive firms have fewer workers than warranted given their productivity levels, which decreases aggregate TFP and output.** Resource misallocation exists when inefficient enterprises command more resources (land, labor, and capital) than warranted by their productivity levels. According to rankings of firms in the 2014 Cambodia Inter-censal Economic

**FIGURE 1.5**  
Labor productivity has been stagnant in Cambodia's key sectors

Value added per worker, 2009-17



**Source:** World Bank staff calculations using data from Cambodia National Accounts and World Bank CSES.

**TABLE 1.2:**  
Firm employment and firm productivity are weakly correlated within sectors

Correlation between within-sector firm ranking by employment and labor productivity, 2014

Industry / Sector	Correlation
Food and beverages	-0.44
Textiles and apparel	0.24
Wood and paper printing	-0.32
Non-metallic minerals	-0.16
Metals	0.07
Wholesale and retail trade	0.04
Hotels and restaurants	-0.19
Information and communication technologies	-0.02
Finance and insurance	0.12
Administrative services	-0.44
Education, health, and social	0.00

**Note:** Labor productivity is measured as sales per worker. The lower the correlation between firms' labor productivity and firms' labor usage (as reported in the 2014 Cambodia Inter-censal Economic Survey), the greater the extent of misallocation.

**Source:** World Bank staff calculations using data from the 2014 Cambodia Inter-censal Economic Survey.

Survey, there is very low or negative correlation between labor productivity and the number of workers employed at a given firm, most present in food and beverages and admin services (table 1.2). A similar result is found when looking at capital.<sup>54</sup> If resources were allocated with perfect efficiency, the correlation would equal 1 for all industries. The mismatch in Cambodia shows that less productive firms tend to employ more factors of production, including workers, than are warranted by their productivity level.<sup>55</sup> If labor was more efficiently allocated, total productivity—and output—would increase. Although misallocation is high for all industries, it is less extreme for more productive (and larger) industries, like textiles and apparel.

**When competitive and well-regulated, markets provide the right signals to bring about efficient resource allocation.** Underdeveloped or poorly functioning market institutions can instead contribute to resource misallocation across firms within sectors. For example, rigid labor-market regulations coupled with a high degree of informality has been shown to increase relative labor costs for formal firms and result in lower overall productivity.<sup>56</sup> In addition, preferential treatment for state-owned enterprises could increase the relative costs of finance for privately owned firms, putting them at a competitive disadvantage and again lowering overall productivity.<sup>57</sup> Where markets fail—or where public goods are involved—the RGC needs to invest its fiscal resources. However, inefficient public investment can also contribute to resource misallocation within an economy.

**Improving allocative efficiency requires strengthening market institutions to better allocate resources to more productive firms within sectors.** In Cambodia, competition and contract enforcement within the court system are weak. Despite major gains in the past two decades, Cambodia’s competition framework is still in the early stages of development. A regulatory framework has only recently been enacted and a regulatory body only recently established. Contract enforcement through courts is another key market institution where significant improvements are needed, reflected by high costs and slow processing time. On average, it takes 483 days and costs over 100 percent of the claim value, in part because Cambodia lacks a specialized commercial court for resolving commercial disputes.<sup>58</sup> Lastly, low judicial quality reduces the overall performance of courts.

**The RGC can also improve the allocation of resources for public goods through greater efficiency of government investment.** Public investment has ramped up since the 1990s, improving access to electricity, education, and clean water. But value for money in public spending remains among the lowest in the region, and Cambodia could double the impact of its public investment through enhanced efficiency, improving the effectiveness of fiscal policy. Compared to the rest of the region, Cambodia’s public

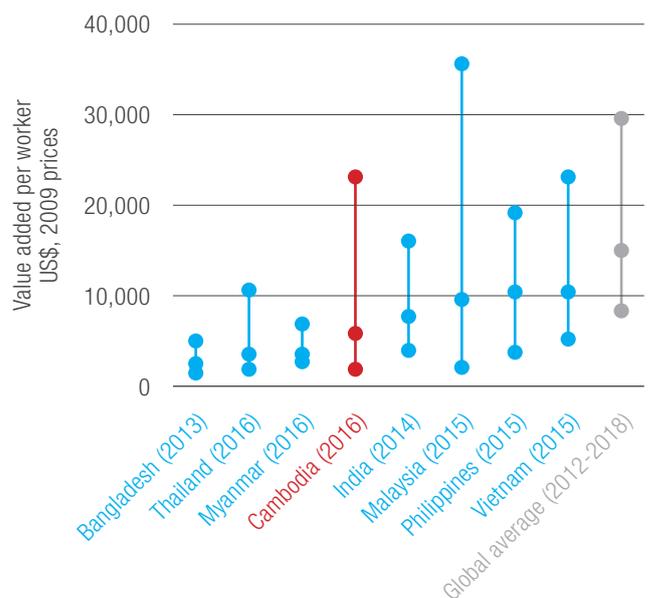
investment management (PIM) institutions excel at planning but underperform in the allocation and implementation phase. Cambodia has not fully implemented its medium-term fiscal framework; appropriations are made as a lump sum, not for individual projects; and budget documents do not cover all public investment projects. Moreover, Cambodia continues to rely heavily on external development partners, and coordination between government agencies could be strengthened.<sup>59</sup>

## Productivity and productivity growth are low at the firm level

**Low within-firm productivity also appears to be challenging aggregate productivity.** At the firm level, Cambodia performs poorly on labor productivity relative to its comparators. According to World Bank Enterprise Surveys conducted from 2013 to 2016, median productivity firms in Cambodia had lower labor productivity (measured by value added per worker) than median productivity firms in most comparator countries (except Bangladesh, Thailand, and Myanmar). Additionally, from 2012 to 2018 Cambodia’s labor productivity was below the world average (figure 1.6). More productive Cambodian firms above the 75th percentile of labor productivity exhibit labor productivity on par with more productive firms in Vietnam, but behind Malaysia and the world average.<sup>60</sup>

**FIGURE 1.6**  
Average firm-level labor productivity is low in Cambodia

Firm-level labor productivity, 2012-18



**Note:** Using data from most recent available year. The dots represent the 25<sup>th</sup>, 50<sup>th</sup>, and 75<sup>th</sup> percentile of labor productivity.

**Source:** World Bank staff calculations using data from World Bank Enterprise Surveys and World Bank (2018c).

**There is also larger dispersion in productivity performance across Cambodia's firms.** According to World Bank Enterprise Surveys, firms in Cambodia exhibit greater labor productivity dispersion than other comparator countries except Malaysia.<sup>61</sup> The high productivity differentials at the firm level in Cambodia are confirmed by the 2014 Cambodia Inter-censal Economic Survey. The largest labor productivity dispersions (measured as sales per worker) are found in transportation, finance and insurance, wholesale and retail trade, and construction. But despite large productivity differences, there is also high market concentration of firms within many of Cambodia's productive sectors. For example, the top four firms accounted for 92 percent of sales in transportation, 99 percent in construction, and 82 percent in wholesale and retail trade in 2014.

**Exploring productivity differences across firms shows the distribution of labor productivity varies by firm type.** In particular, the general population of firms in Cambodia perform worse than subsets that should theoretically be more productive. According to the 2016 World Bank Enterprise Survey, median firms in the overall sample are less productive in terms of value added per worker than median firms that are large (70 or more full-time employees), are integrated into a GVC (imports and exports), or are foreign-owned.<sup>62</sup> Firms that export

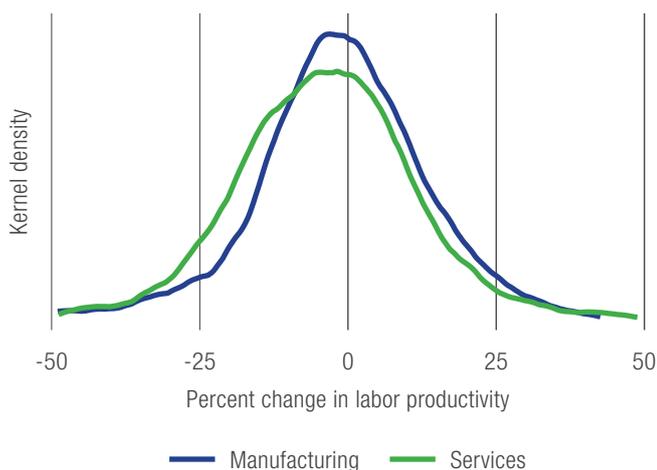
or are integrated into GVCs are exposed to international competition, and theoretically should be more productive. Likewise, large firms and foreign-owned firms theoretically have more access to technology, financial resources, and expertise than average firms, and should therefore be more productive. This pattern generally holds within sectors in Cambodia. The exception is firms that only export, which on average are less productive than firms that do not trade, though the difference is not statistically significant. Established firms—those that have been in business for ten years or more—as well as registered firms are also more productive on average, according to the 2014 Cambodia Inter-censal Economic Survey, when measuring productivity as sales per worker.<sup>63</sup>

**More concerning is the decline in firm-level labor productivity between 2013 and 2015.** According to the World Bank Enterprise Surveys, firms in the services sector fared worse than those in manufacturing, but only slightly (figure 1.7, panel a). This pattern was repeated across most of Cambodia's comparator group during the periods for which data are available, in 2011-15. Among Cambodia's comparators, only the Philippines saw positive productivity-growth in the period covered by the World Bank Enterprise Surveys (figure 1.7, panel b). The regional drop was largely driven by a decline in sales, as median firms in all but one country showed no change in employment.

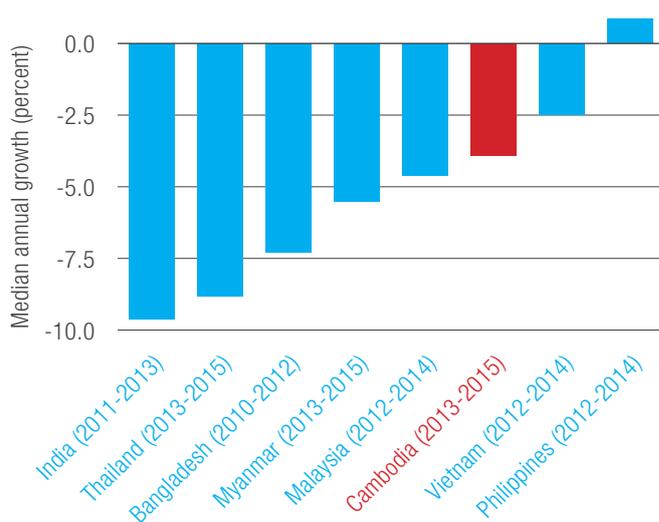
**FIGURE 1.7**  
Firm-level labor productivity declined in 2013-15

Distribution of labor-productivity growth in Cambodia and median annual growth, 2010-15

a. By sector



b. Versus comparators



**Note:** The kernel density plot estimates the underlying probability density function. Firms with greater than 50 percent productivity growth or less than -50 percent are not shown in the density plot. Labor productivity is measured here as sales per worker, not value added per worker as above, because historical data on the cost of materials and intermediate goods are not available. Data for Cambodia in panel a are for 2016. The median firm had positive sales growth but 0 employment growth in most countries, resulting in negative labor-productivity growth.

**Source:** World Bank staff calculations using data from World Bank Enterprise Surveys.

## A challenging operating environment constrains firm-level productivity

A growing body of literature has focused on the role of institutional and regulatory frameworks and the business regulatory environment to explain differences in firm-level productivity outcomes. A challenging operating environment—including burdensome regulations; low quality, expensive, and unreliable inputs; and low human capital—prevents firms from making the best use of resources they do acquire.<sup>64</sup> There are significant challenges in the Cambodian business environment. The RGC has committed to improving the operating environment for firms in Cambodia and has taken a number of recent initiatives in this regard. An inter-ministerial working group was established in April 2020 with members from around 20 relevant ministries and institutions. The Government has made a number of recent reforms, such as online business registration, with others ongoing. Nevertheless, it is an ongoing and medium-term agenda. Determining specific constraints—as identified by firm managers or through firm-level analysis—helps understand the cause of low within-firm productivity performance in Cambodia.

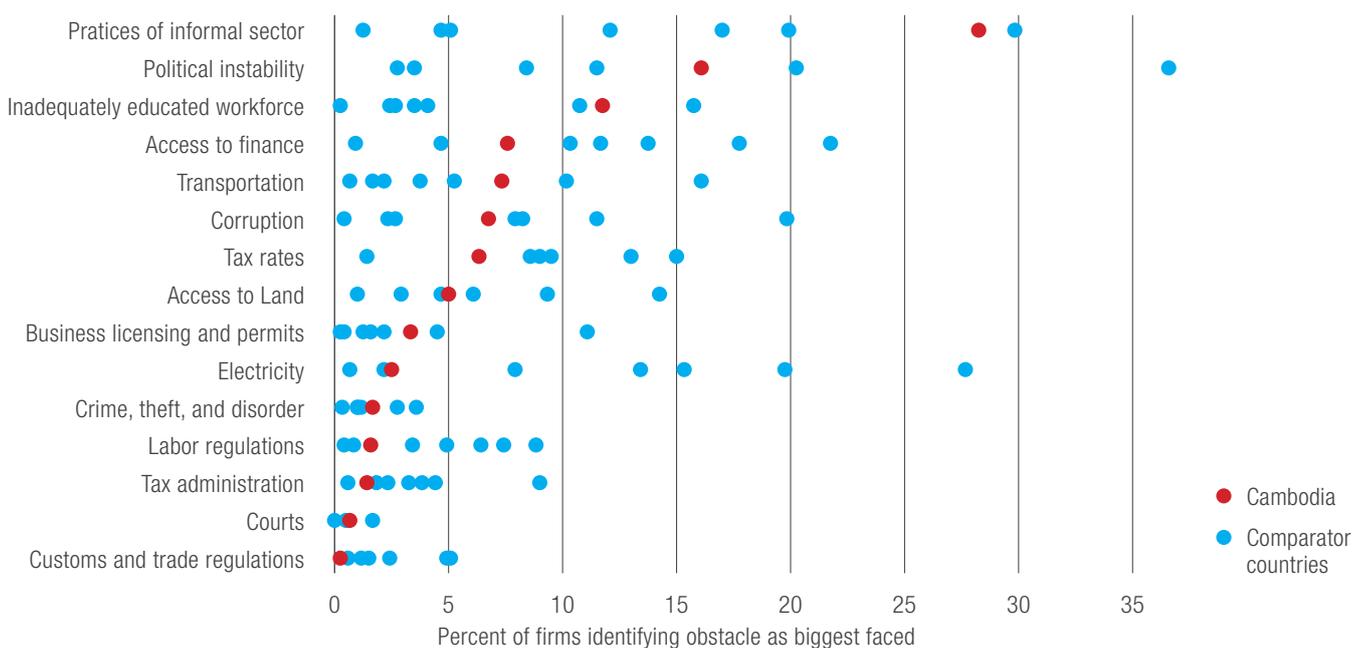
According to firm managers the biggest obstacles to operating a business in Cambodia are practices in the informal sector, political instability, and an inadequately educated workforce. These were identified by more than 10 percent of firms in the most recent World Bank Enterprise Survey—higher than the rates in all but a few of Cambodia’s comparators (figure 1.8).<sup>65</sup> Perceptions-based data provide

useful information on otherwise difficult to measure aspects of the business environment though they have shortcomings. For example, managers may not be honest, they may be unaware of or misinterpret the actual constraints faced by the firm, or they may not answer questions reliably for other reasons. That said, managers are assumed to know more about the immediate problems confronted by their firms than outside analysts and the constraints they identify provide the basis for further analysis.

**An empirical study conducted for this report echoes firm managers’ perceptions about obstacles and helps quantify the impact of those alongside objective constraints, finding that poor access to finance, inefficient business regulations, informality, and inadequate electricity services are the most significant constraints to firm performance in Cambodia.** The study used regression analysis to determine the relationship between five measures of firm performance—labor productivity, TFP, labor-productivity growth, employment growth, and sales growth—and dozens of controls and explanatory variables, including firm managers’ perceptions and objective measures like access to finance, backbone services and infrastructure, labor skills and regulations, business regulatory environment, and crime and corruption. The data comprise a cross-section of pooled data from firms in 139 countries collected by World Bank Enterprises Surveys from 2006 to 2019, including data for 842 Cambodian firms—472 surveyed in 2013 and 370 in 2016. To mitigate endogeneity of firm-level responses, subjective constraints are measured as the peer average for clusters defined by size-industry, excluding the firm’s own observation (see Annex 1 for the methodology).

**FIGURE 1.8**  
Informality was identified as the biggest obstacle by a plurality of non-agricultural firms

Percent of firms identifying an obstacle as the biggest faced, 2013-16



Note: Showing data from the most recent available years between 2013 and 2016.

Source: World Bank staff calculations using data from World Bank Enterprise Surveys.

**Taken together, firm managers' perceptions and the empirical study suggest four categories of constraints that need to be addressed if Cambodia is to successfully improve firm-level performance:** burdensome regulations; informality; low quality, expensive, and unreliable services inputs; and low labor quality.

### **Burdensome regulations**

**In general, countries with simpler business regulatory environments grow faster.**<sup>66</sup> But those regulatory environments also need to create the right incentives. A supportive regulatory environment that protects property rights, facilitates skill acquisition and technology transfer, and discourages corruption and expropriation is essential for generating high output per worker.<sup>67</sup> Other aspects of the business environment, like delays in obtaining construction permits, complex customs procedures, inefficient tax administration, and rigid labor markets, have also been linked to lower levels of innovation, investment, and productivity.<sup>68</sup> These ideas are supported in the literature where studies have found a positive association between the quality of governance and institutions—including the rule of law, political stability, and the absence of corruption—and economic growth.<sup>69</sup>

**Cambodia lags behind its comparators in the quality of its regulatory environment.** Burdensome insolvency procedures are a key issue for Cambodian firms.<sup>70</sup> Current legislation provides a solid base for insolvency practices in Cambodia, but steps can be taken to speed up insolvency proceedings and recovery rates for secured creditors. It takes about six years for creditors to recover credit through judicial reorganization, liquidation, or debt enforcement proceedings and they can only recover on average 14.2 cents on the dollar. Additionally, improvements could be made to regulate the insolvency administrators' profession and address early voluntary filings by debtors, post-commencement financing, the complicated set of priorities for creditors, overly stringent requirements for compromise plan approval, and the inability to transfer a business. The challenge similarly lies in lack of a specialized court, judges, lawyers and professionals. Finally, investors also need simpler, but stronger protections around corporate transparency, ownership and control, and shareholder rights.<sup>71</sup>

**According to the empirical study conducted for this report, tax administration and import regulations were the two most significant regulatory constraints to firm productivity and expansion.** Decreasing the average time (number of days) firms in Cambodia must wait to obtain an import permit by one standard deviation would increase sales and employment growth rates in 0.03 and 0.04 standard deviations respectively. According to the World Bank Enterprise Surveys, regulatory burdens

in Cambodia were particularly onerous compared to its regional comparators and getting worse. Between 2013 and 2016, the average time Cambodian firms spent addressing government regulations increased from 1.3 percent to 16.4 percent—more than six times longer than the East Asia and Pacific (EAP) average. On average, firms were required to meet with tax officials 5.8 times in a fiscal year, well above the regional average, and up from 2.3 times a year in 2013. It also takes longer than the EAP average for Cambodian firms to obtain an operating license, construction permits, and import licenses.<sup>72</sup>

**High wage growth has similarly eroded productivity gains.** Between 2009 and 2015, average wages in the apparel sector increased by 81 percent, reflecting big increases in Cambodia's minimum wage. Other sectors similarly saw high wage growth, like other manufacturing (61 percent) and services (47 percent). Yet evidence suggests that labor productivity in garment firms has not kept pace with increased labor costs, and in 2016 Cambodia had the highest unit labor costs as a percentage of value added in that sector.<sup>73</sup> Policymakers should therefore focus on efforts to improve labor productivity alongside any legislated wage increases. Focus areas could include, for example, incentivizing skills improvements through workforce training with cost-effective tax incentives and lowering the costs in the business environment such as transport costs.

### **Informality**

**Informality is both a cause and a consequence of the high regulatory burden.** In Cambodia, only 6 percent of small firms are registered. Sixty-four percent of medium-sized firms and 97 percent of large firms are registered while hardly any micro firms are.<sup>74</sup> A qualitative assessment in neighboring Lao PDR, where informality appears to create the same level of constraint on businesses, revealed that inadequate registration, tax evasion, complex and inconsistently enforced regulations, and a culture of noncompliance were among the main reasons why companies remained informal.<sup>75</sup>

**One reason for such high informality in Cambodia is the level, quality, and enforcement of regulations governing state-business transactions.** Anecdotal evidence suggests burdensome insolvency procedures are one of the main reasons micro and small and medium enterprises (SMEs) choose to stay informal. The difficulty and cost in obtaining operating licenses also directly encourage firms to stay informal. More broadly, informal firms may be able to avoid costly taxes and burdensome procedures related to tax, labor law, public health, environment, safety, and more. There is ample evidence that countries with excessively burdensome tax systems (including in many parts of the world with prohibitively high tax rates) create perverse incentives, including widespread tax evasion, informality, and,

not surprisingly, low levels of revenue collection. Additionally, medium to large formal firms attract a lot of inspections, which may increase the opportunities for corruption. According to the World Bank Enterprise Surveys, an informal payment or gift was expected in nearly 60 percent of public transactions in Cambodia in 2016, and nearly 65 percent of Cambodian firms reported experiencing at least one bribe payment request. On these two corruption measures, Cambodia performed significantly worse than its comparators.

**Informality appears to be more pervasive and problematic in Cambodia than in its comparator countries.** In 2016, the latest year for which data are available, more than 28 percent of non-agricultural firms identified practices of the informal sector as their biggest obstacle. Nearly 78 percent of firms reported having to compete against unregistered or informal firms, far higher than the regional average of 50 percent and the global average of 53 percent.<sup>76</sup>

**Informality puts formal firms—which pay taxes and follow regulations—at a relative disadvantage, and the high degree of informality itself signals a problem with the economy.** In general, informal firms are less productive, with lower shares of skilled workers and weaker TFP. Informal workers often do not have access to social protection programs, leaving them vulnerable to shocks including Covid-19. And a large informal economy erodes the tax base, depriving the government of revenue and making it more difficult to provide public services.<sup>77</sup> The empirical study conducted for this report confirms these patterns in Cambodia. All else equal, firms that were not registered when starting operations were less productive; being registered at the start of operations is associated with higher TFP and labor-productivity levels; and the longer a business remained informal, the weaker its performance. An increase in the informality time (number of days) by one standard deviation is associated with a decrease in sales of 0.02 standard deviation, and a decrease in employment growth rates of 0.01 standard deviation.

### Low quality, expensive, and unreliable services inputs

**The quality, cost, and reliability of inputs becomes more important as an economy develops and becomes more complex because of the proliferation of value-chain linkages between sectors.** Professional services, information and communication technologies (ICT), transport, finance, and electricity are key inputs for other sectors, like manufacturing and agriculture. Cross-country evidence suggests that productivity performance is affected by poor service provision—if an upstream services sector is not competitive, it will lower the competitiveness of downstream sectors to which it provides inputs. Productivity growth in services has been a key driver of GDP growth in both advanced and developing countries. In Indonesia,

for example, improved quality, variety, and cost of services inputs resulted in improved performance for firms in downstream sectors.<sup>78</sup> Analysis of Cambodia's broader services sector is presented in Section 2.3.

**In Cambodia, there exist weak linkages with services inputs used in manufacturing production.** For example, manufacturing firms in Cambodia rely much less on domestic business services, finance, and ICT than firms in the Philippines or Thailand<sup>79</sup> and report that the availability and quality of electricity, finance, transport, and telecommunications challenge their operations.

**Firm managers cited access to finance, in particular, as a major constraint to their business operations.** Cambodia's financial sector is at a nascent stage. Fewer than 40 percent of firms have bank accounts, which is half the EAP average and well below all comparator countries. Only 20 percent had obtained a bank loan or line of credit in the fiscal year before the survey.<sup>80</sup> The cost of bank finance is high, with interest rates for small business loans ranging 15-18 percent or more per year, according to recent information published on bank websites. This is in part due to limited competition and an imbalance of power between creditor and debtor.

**Poor access to finance constrains productivity and growth.** According to the empirical study conducted for this report, limited and costly bank financing is associated with the highest productivity losses for Cambodian firms. On average, firms that have a credit line or loan from a bank are more productive than those that do not. Many firms, particularly SMEs, face challenges in access finance due to for example collateral requirements by banks. Firms whose applications for bank loans were rejected in the previous year have lower labor-productivity levels and report lower average sales growth rates. The higher the collateral requirement firms face, the lower their TFP and labor-productivity levels, and the weaker their average employment growth rates. And heavy reliance on internal funds—for financing investments in fixed assets or working capital—is associated with lower productivity levels and weaker sales growth.

**Although not identified by firm managers as a top concern, poor electricity and water services nevertheless appear to have a substantial impact on labor productivity and constrain the ability of firms to grow.** Results from the empirical study show that the more power cuts and water insufficiencies a firm confronts, and the longer the duration of these events, the lower the average labor productivity of the firm. In addition, the longer a firm must wait to have electricity installed or reconnected after power cuts, the lower its average sales growth rates. This exacerbates the high cost of operating a business in Cambodia and erodes the international competitiveness of its businesses.

## Low labor quality

### **Low labor quality—reflecting Cambodia’s low human capital—is a major problem in the current workforce.**

According to the World Bank Enterprise Surveys, an inadequately educated workforce was the third-biggest obstacle faced by firms, behind informal sector practices and political instability.<sup>81</sup> Insufficiently skilled labor hinders production, reduces current profits, and slows business development. The problem is especially bad for SMEs, exporters, and foreign firms.<sup>82</sup> Low skills also make it harder for workers to transition to more productive (and higher paying) jobs, exacerbating the misallocation problem discussed earlier in this chapter.<sup>83</sup> Social factors like soft skills and attitude towards employment also affect labor productivity. Finally, firms’ top management experience in Cambodia lags. On average, the top manager of a Cambodian firm has worked 12 years in the firm’s sector—half as long as top managers in Thailand and barely one year more than top managers in the worst performing comparator country, India.<sup>84</sup> Cambodia’s policy agenda to improve skills is discussed in Chapter 2.

## Policy recommendations for productivity improvements

**Cambodia needs to boost productivity growth to achieve its long-term growth agenda.** Productivity growth is associated with higher income per capita, lower poverty, and higher standards of living for the poor. But there has been a global slowdown in productivity growth over the last decade, with the Covid-19 pandemic further threatening productivity improvements. And despite positive trends like Cambodia’s deepening structural transformation, problems remain. Policy reform in target areas can help the country meet its potential, including: investing in human capital through health and education; supporting more efficient resource allocation through improved market institutions and PIM; easing the regulatory burden for firms thereby reducing informality and its negative impact; and improving the performance of key services inputs to strengthen domestic linkages. In each of these areas, policy reforms support improving capabilities, strengthening regulations, and investment in infrastructure.

### Invest in human capital

**There is already a clear commitment from government to improve human capital.** Phase four of the government’s “Rectangular Strategy” puts human development first. Still, secondary school enrollment rates remain low, too many students repeat grades, and too many children are stunted due to inadequate nutrition. Even before the economic shock resulting from the Covid-19 pandemic, it was clear that Cambodia needed to improve its human capital. But

this reform is now even more critical as part of the effort to facilitate a robust recovery after the crisis. The Covid-19 income shock to poor and vulnerable households severely risks reducing educational attainment and increasing malnutrition and associated poor health outcomes due to inadequate dietary intake, lowering Cambodia’s human capital for years to come. To improve human capital in the future workforce, the RGC needs to make major investments, focusing on education and health services early in life. A strong social protection system can also enhance Cambodia’s resilience to future income shocks.

### **First, in the short term, invest in early childhood nutrition, parental education, and childcare.**

Addressing the high degree of malnutrition and stunting will be critical for building human capital. Disadvantages in early life are more significant for the poor, and prevent realization of their full potential, which dims their labor market prospects and future income-generating potential. Cambodia could consider scaling up the maternal and child nutrition cash transfer program by (i) expanding and better targeting households that can participate in the program, (ii) increasing the transfer amount for households, and (iii) continuing the program beyond age two (ideally until age five when children get support through school programs). Ideally, the maternal and child nutrition cash transfer program should only be one part of a wholistic and comprehensive approach to tackling stunting and malnutrition in Cambodia. The Ministry of Labour and Vocational Training, currently overseeing the maternal and child nutrition cash transfer program, could continue as the key implementing agency.

### **Second, in the medium term, invest in public services in education and health.**

Giving more administrative and financial autonomy to health and education institutions to modernize their services with technology will be critical. The RGC can capitalize on its decentralization efforts, by setting pro-growth, sustainable, and adequately resourced policies at the ministerial level and empowering provincial governments to implement them effectively. Upgrading health and education professional qualifications will also be important to improving the quality of services and capacity of health and education professionals. The Ministry of Education, Youth, and Sports and the Ministry of Health have leading roles in implementation.

### **Third, in the medium term, improve education curricula to align with the needs of a modern workforce and address skills gaps in the future workforce.**

(Improving the skills of the current workforce is discussed in Chapter 2.) A modern workforce increasingly requires a mix of higher-level skills like cognitive, socio-emotional, and digital literacy. Updating training methods and equipment will also be important for better learning outcomes. Consulting with private sector on the skill mismatches they face should also be undertaken during this process, which would help

alleviate the demand-supply skills mismatch reported by firms. Attracting Cambodians who study abroad to return back home can also help alleviate skills mismatches. In many countries, government-funded scholarships to study abroad are conditional on returning and working in the home country for a minimum number of years, for example. The Ministry of Education, Youth, and Sports would lead these improvements.

### **Strengthen market institutions and PIM**

**Cambodia needs to support more efficient resource allocation through improved market institutions and PIM.** Structural transformation is well underway, but misallocation is evident at the sectoral level, especially in the services sector. This prevents resources from being utilized by the most productive firms, lowering aggregate TFP and labor productivity. As businesses close and workers are laid off due to Covid-19, better allocative efficiency will be key to strengthening Cambodia's economic recovery and rebuilding its economy. To improve allocative efficiency, the RGC needs to strengthen market institutions to send clear signals and facilitate efficient allocation between firms and improve PIM.<sup>85</sup>

**To improve outcomes for the private sector, the RGC needs to issue sub-regulations to bolster the Competition Law in the short term (next one to two years).** The RGC needs to promote competition in key sectors of the economy and implement the competitive neutrality principle. A new Competition Law provides the foundation for market reforms. To promote competition, the RGC should make the Competition Law effective and implementable through sub-regulations including guidelines on merger control that could continue to be led by the Ministry of Commerce. Currently, the law lacks sub-regulations and guidance on key aspects of merger-control policy, including notification thresholds, elements of the administrative process, and substantive assessment and available remedies. These gaps increase the potential for discretionary decision-making and hinder legal certainty. At present, the law also provides inadequate protections for legitimate business practices. For example, the strict prohibition of vertical agreements risks affecting efficiency-enhancing business practices absent a consideration of whether the parties have some concerning degree of market power. Conduct should be permitted where objectively necessary and proportionate, or where the activities produce significant efficiencies to outweigh any anticompetitive effects on consumers.

**For the Competition Law to be effective, the RGC needs to ensure independence of the recently established competition regulator and ensure key**

**coordination with the private sector.** As a short-term priority, the government should ensure the competition regulatory is truly independent based on international best practices, with the ability to issue decisions, orders, and interim measures; impose fines; and draft rules and guidelines. This entails eliminating the bifurcated Cambodia Competition Commission and Directorate functions, consolidating all competition functions within the Cambodia Competition Commission.

**The Ministry of Justice should reform the way commercial disputes are handled by the courts.** Performance of Cambodia's courts, illustrated by weak contract enforcement, is another key market institution with scope for improvement. In the short-term, Cambodia can publish reports about the performance of courts (time to disposition, clearance rate, age of pending cases) as well as judgements for commercial decisions at all levels (first instance, appellate, supreme court). In the medium term, Cambodia should review the existing case management system for commercial disputes and proceed with creation of a specialized commercial court for solving commercial disputes, creating a small claims court, and developing an electronic case management system of judges and lawyers. Additionally, lawyers should be provided continual training, and the courts would benefit from a widespread campaign to improve dispute resolution processes and draw attention to the importance of alternative dispute resolutions.

**The RGC also needs to reform its PIM to provide sufficient public goods in an equitable and efficient way, by prioritizing reforms and building capacity to implement public investment project and program.** The government's new PIM strategy (2019-25) and budget system reform strategy (2018-25) provide the basis for reforming PIM. To further strengthen PIM, in the short term the RGC should prepare PIM appraisal and implementation manuals that follow from the recently enacted PIM Sub-decree, and centrally monitor public investment project delays and cost overruns to strengthen in-year project monitoring by line ministries. In the medium term, a full-fledged medium-term fiscal framework must be implemented to provide multi-year guidance on budget preparation and identify individual public investment projects during budget preparation. The government should also build capacity for PIM at all relevant ministries and agencies including for project preparation and review to ensure quality assurance. The Ministry of Economy and Finance could be the main implementing agency. In addition, improvement of institutional coordination among government institutions as well as between government and private sector will also promote more efficient resource allocation and improve competitiveness of the economy as a whole. This is a cross-government agenda.

## Reduce regulatory burdens and informality

### **The empirical analysis confirms that to achieve greater productivity outcomes Cambodia needs to reduce the regulatory burden faced by firms.**

In recent years, the RGC has undertaken reforms to address corruption, trade facilitation, and smuggling. The Anti-Corruption Unit under the Prime Minister is working with the private sector to build a culture of transparency and create an environment where corruption can be reported and disciplined. And the General Department of Customs and Excises has successfully rolled out the Automated System for Customs Data (ASYCUDA) and enhanced anti-smuggling measures.<sup>86</sup> But many obstacles remain. To ease the regulatory burden on the formal sector, Cambodia needs to reduce the time and cost of operating in a formal manner and ensure that regulations are applied fairly.<sup>87</sup> Linkages between domestic firms and foreign direct investment (FDI) firms can also improve firm-level productivity through learning and technology spillovers, as discussed in Section 2.1. While the report does not identify policies to target informality explicitly, by tackling high costs of business registration and burdensome tax and insolvency procedures this agenda will have the additional benefit of creating incentives that reduce informality and its impact on the broader economy.

### **First, as a short-term priority, Cambodia should review and further reduce the fees for starting a business and integrate remaining agencies into the online business registration platform.**

Quick, efficient, and cost-effective business registration processes are critical for fostering greater entrepreneurship in Cambodia as well as supporting firm formalization. Reforms that support firm creation and formalization are important now more than ever to help the economy recover from the Covid-19 crisis and provide access to government relief programs. Cambodia has recently set up online business registration, which has substantially reduced the time to register a business. Key ministries and agencies involved in the process of business registration (the Ministry of Commerce, the Ministry of Economy and Finance's General Department of Taxation, and the Ministry of Labour and Vocational Training including the National Social Security Fund) are now connected through the single online portal and coordinated back office. However, other agencies involved in the company licensing process are still being brought online, which would further reduce the time for businesses to start operations. The government should also review and reduce the registration and licensing costs of starting a business. While having been reduced from US\$420 to US\$252.5 (at the time of writing this report), there is still scope for further reductions. In many countries, for example, business registration is free. This initiative could be led by the Ministry of Economy and

Finance with involvement of other ministries and agencies across government.

### **Second, authorities should consider making it easier for firms to file for insolvency and bankruptcy.**

Burdensome and costly insolvency procedures are a key reason firms reported staying informal. Revisiting bankruptcy and insolvency procedures may become a priority during Covid-19. Asset deterioration will increase the risk of insolvency for many firms, with negative implications on credit markets, supply chains, and worker productivity, which will dissipate only gradually. The RGC can prepare for recovery by creating enabling environments to restructure debt in firms, including through strengthening insolvency resolution and legal frameworks for corporate and consumer debt restructuring. To this end, the RGC led by the Ministry of Justice should implement the insolvency legal framework by establishing an insolvency administration profession and improve the overall efficiency of the courts to expedite bankruptcy proceedings. While this is a medium-term agenda, implementation should be a short-term priority. Out-of-court conciliation and resolution measures will be particularly important to prevent a surge in insolvency, value-destroying liquidations, and asset fire-sales, helping to preserve employment. The RGC can review the corporate governance framework for investors in the Companies Law, particularly around corporate transparency, ownership and control, and shareholder rights.

### **Third, simplify tax administration procedures.**

The General Department of Taxation has made some progress in the last few years to modernize tax filing and payment procedures.<sup>88</sup> The likelihood of corporate income tax audits for a minor error in a corporate income tax return or an underpayment of a tax liability was high in Cambodia.<sup>89</sup> The time burden associated with audits is high; complying with a corporate income tax audit takes 31 hours, and it takes 35.1 weeks to complete the audit.<sup>90</sup> Similarly, after a large capital purchase, the audit for the value-added tax (VAT) cash refund takes about 50 weeks to process. Though it is important to protect the tax system against improper influences from the business community, it is also important for businesses to be unburdened by unnecessary requirements and procedures. In this regard, Cambodia should simplify tax-audit compliance for businesses and streamline the current audit procedures. This initiative could be led by the General Department of Taxation. Although this is a medium-term agenda, implementation should be a short-term priority. More broadly, in the immediate term, the Ministry of Economy and Finance can initiate a media campaign on improving the business environment, create a dedicated website to continuously update the private sector on recent reforms, and engage them in public-private dialogue throughout the reforms process.

## Improve quality, cost and reliability of services inputs

### **Cambodia should improve the performance of key services inputs to strengthen domestic linkages.**

Cambodia has substantially improved electricity services access in recent years, but continued efforts are needed to ensure the reliability of electricity and reduce the number and duration of power outages. Similarly, Cambodia has improved finance but could still expand access particularly for SMEs. Digital infrastructure is discussed in Section 2.3.

### **New regulations and investments can improve the reliability and accessibility of electricity connections.**

The RGC has increased electricity supplies through large investments in generation capacity and accelerated electricity connections for households and businesses. Electric Du Cambodge has recently set up an automated system to monitor power outages, which should help improve the reliability of the power supply. Nevertheless, access remains a concern for businesses. To continue improving access, the RGC can introduce time limits for issuing an electricity contract and finalize online processes for requesting new electricity connections in the short term. Electric Du Cambodge has a leading role in implementation. Investing in renewables such as solar power can also help improve reliability and accessibility of electricity in Cambodia over the medium term.

### **To lower the cost of finance, it will be important to enhance regulation and sector supervision.**

<sup>91</sup> This is a short-term priority that could be led by the National Bank of Cambodia. Managing risks and containing nonperforming loans are a key part of reducing the cost of credit. Sector supervision should be enhanced, including by fully implementing and closely monitoring the new Prakas on Credit Risk Grading and Impairment Provisioning. Regulatory and licensing requirements are also needed for the diversity of actors providing credit, including pawn shops, which currently fall outside the regulatory supervision of the National Bank of Cambodia.

### **Operational efficiency of creditors can further be improved by adopting measures that increase the productivity of staff or reduce the costs of decentralized delivery and expand outreach.**

Such measures would include supporting business processes optimization (including through leveraging technology) and adopting innovative delivery models to reduce distribution costs and increase outreach. Chapter 3 will discuss how authorities, including the National Bank of Cambodia, can also introduce a framework and clarify regulations for electronic banking, mobile banking, and agent-based banking as a cost-effective mechanism for banks and microfinance institutions (MFIs) to reach new customers and lower costs. Authorities should also enhance capacity by strengthening financial literacy so consumers can better choose among lending options—from discerning the most attractive terms across lenders to selecting the appropriate financial products for their needs.

### **To improve access to finance, it will be important to target support for SMEs.**

While the financial sector has grown significantly over the past decade in terms of the number of banks, access to finance remains a significant challenge for SMEs. The Covid-19 crisis amplifies the importance of providing SMEs immediate financing and cash flow at reasonable and affordable rates to help operators in key economic sectors weather the storm and maintain employment levels. Cambodia should scale-up the recently enacted Credit Guarantee Scheme to ensure it is functioning well, and monitor access for SMEs. Strengthening the Khmer Enterprise to provide both beyond-credit financial support (for example, start-up grants, equity financing) and non-financial support to firms and to develop incentives to attract early- and growth-stage venture capital to crowd-in private capital can also help provide financial support to micro firms and SMEs. Each of these could be implemented in the next one to two years, with the Ministry of Economy and Finance in the lead.

## Improving productivity to drive growth

Objective	Improving capabilities	Strengthening regulations	Investing in infrastructure
<b>Invest in human capital</b>	<p>Upgrade health and education professional qualifications [MT; MOEYS &amp; MOH]</p> <p>Support teacher upskilling through greater teacher training [MT; MOEYS]</p>	<p>Improve quality of public services by giving more administrative and financial autonomy to health and education institutions; modernize health and education services using technology [ST; MOEYS &amp; MOH]</p> <p>Align curricula with the needs of a modern workforce, which increasingly requires a mix of higher-level skills like cognitive, socio-emotional, and digital literacy, while updating training methods and equipment [MT; MOEYS]</p>	<p>Invest in early childhood nutrition, parental education, and childcare for improved quality of life by scaling up the maternal and child nutrition cash transfer program [ST; MLVT]</p>
<b>Support more efficient resource allocation through improved market institutions and PIM</b>	<p>Provide continual training for lawyers; conduct a more widespread campaign to draw attention to the importance of alternative dispute resolutions; improve dispute resolution processes [MT; DOJ]</p> <p>Build capacity for PIM at all relevant ministries and agencies including project preparation and review to ensure quality [MT; MEF]</p>	<p>Make the Competition Law effective and implementable through sub-regulations including guidelines on merger control [ST; MOC]</p> <p>Ensure strong coordination of the competition regulator with the private sector [ST; MOC]</p> <p>Publish reports about the courts' performance (time to disposition, clearance rate, age of pending cases) as well as judgements on commercial decisions at all levels (first instance, appellate, supreme court) [ST; DOJ]</p> <p>Prepare PIM appraisal and implementation manuals that follow from the recently enacted PIM Sub-decree [ST; MEF]</p> <p>Centrally monitor public investment project delays and cost overruns; strengthen in-year project monitoring by line ministries [ST; MEF]</p> <p>Implement the full-fledged medium-term fiscal framework to provide multi-year guidance for budget preparation; identify individual public investment projects during budget preparation [MT; MEF]</p>	<p>Create a special court for solving commercial disputes; create a small claims court; develop an electronic case management system for judges and lawyers [MT; DOJ]</p> <p>Review the existing case management system for commercial disputes [MT; DOJ]</p>

Objective	Improving capabilities	Strengthening regulations	Investing in infrastructure
<b>Reduce the cost of operating a business for firms</b>		<p>Review and reduce the fees for starting a business; integrate remaining agencies into the online business registration platform [ST; MEF]</p> <p>Review the corporate governance framework for investors in the Companies Law, particularly around corporate transparency, ownership and control, and shareholder rights [MT; MOC]</p> <p>Implement the insolvency legal framework by establishing an insolvency administration profession; improve the overall efficiency of the courts to expedite bankruptcy proceedings [MT; DOJ]</p> <p>Simplify tax-audit compliance requirements for businesses; streamline the current tax-audit procedures [MT; MEF]</p>	<p>Initiate a media campaign and a 'Regulatory Reform' website to continuously update the private sector on recent reforms, and engage them in public-private dialogue throughout the reforms process [ST; MEF]</p>
<b>Improve the performance of key services inputs to strengthen domestic linkages</b>	<p>Strengthen Khmer Enterprise to provide both beyond-credit financial support (for example, start-up grants, equity financing) and non-financial support to firms [ST; MEF]</p>	<p>Introduce time limits for issuing electricity contracts; finalize the online processes for requesting new electricity connections [ST; EDC]</p> <p>Enhance financial sector regulation and supervision by fully implementing and closely monitoring the new Prakas on Credit Risk Grading and Impairment Provisioning [ST; NBC]</p> <p>Impose regulatory and licensing requirements for the diversity of actors providing credit, including pawn shops [ST; NBC]</p> <p>Develop incentives to attract early- and growth-stage venture capital to crowd-in private capital [ST; MEF]</p>	<p>Set up an automated system to monitor power outages and improve the reliability of the power supply to reduce the number and duration of outages [MT; EDC &amp; MME]</p> <p>Scale up the recently enacted Credit Guarantee Scheme to ensure it is functioning well, and monitor access for SMEs [ST; MEF]</p>

**Note:** ST=short term; MT=medium term. DOJ=Department of Justice; EDC=Electric Du Cambodge; MEF=Ministry of Economy and Finance; MLVT=Ministry of Labour and Vocational Training; MME=Ministry of Mines and Energy; MOC=Ministry of Commerce; MOH=Ministry of Health; MOEYS=Ministry of Education, Youth, and Sports; NBC=National Bank of Cambodia.

---

## Endnotes

- <sup>33</sup> Productivity measures output per unit of input. Improving productivity means increasing that ratio by more efficiently combining inputs, applying technological innovations, or implementing new ideas. At the aggregate level, productivity can be calculated as GDP or GNI per employed person or hours worked. At the firm level, productivity can be measured as sales or profits per unit of labor, capital, or other factor of production.
- <sup>34</sup> Caselli (2005), Hall and Jones (1999), and Krugman (1994).
- <sup>35</sup> Cusolito and Maloney (2018).
- <sup>36</sup> Krugman (1994). See also Hall and Jones (1999), Easterly and Levine (2001), and Caselli (2005). On productivity growth and the prospects for economic development, see Lewis (1954) and Chenery (1960).
- <sup>37</sup> World Bank (2020b).
- <sup>38</sup> World Bank (2020d) and World Bank (2020e).
- <sup>39</sup> World Bank HCI.
- <sup>40</sup> World Bank HCI.
- <sup>41</sup> Ministry of Education, Youth, and Sports (2018).
- <sup>42</sup> Projected educational attainment for total population based on historical school enrollment and completion statistics. Barro and Lee (2021).
- <sup>43</sup> World Bank HCI.
- <sup>44</sup> Women receive US\$50 at childbirth plus US\$140 total for fourteen health visits spread over the course of pregnancy through the first two years of the child's life (or US\$10 per visit).
- <sup>45</sup> World Bank (2020f).
- <sup>46</sup> Output that cannot be attributed to labor and capital inputs—the “residual” in growth decompositions—is known as TFP. It captures innovation, managerial skill, technology adoption, and other aspects that cannot be directly modeled. By nature, TFP is high for countries that experience rapid growth without similarly rapid increases in labor or capital inputs. TFP can be negative if growth in labor and capital outpaces overall economic growth. This signals an inefficient use of inputs and has been a regular occurrence in Cambodia over the last decade and a half.
- <sup>47</sup> TFP is calculated as the residual of real GDP growth from real-capital accumulation, human-capital accumulation, and employment assuming a Cobb-Douglas production function with a return to capital of 1/3 and a return to labor of 2/3.
- <sup>48</sup> World Bank (2017a).
- <sup>49</sup> There is also a statistically significant positive relationship between employment growth and lagged productivity, using linear regression, with or without mining excluded. Similarly, there is a statistically significant negative relationship between productivity growth and lagged productivity, but only when mining is excluded.
- <sup>50</sup> Mining was an outlier on both measures. A small and capital-intensive part of the economy, it saw large productivity gains but little employment growth.
- <sup>51</sup> World Bank (2019a).
- <sup>52</sup> High-Frequency Phone Survey of households in Cambodia undertaken in May and August 2020.
- <sup>53</sup> Data do not exist to explore the contribution of firms' exit and entry to aggregate productivity performance.
- <sup>54</sup> World Bank staff calculations using data from the 2014 Cambodia Inter-censal Economic Survey.
- <sup>55</sup> However, there are substantially fewer observations for firms, so results are not reported.
- <sup>56</sup> Kim and Loayza (2017).
- <sup>57</sup> Hsieh and Klenow (2009).
- <sup>58</sup> The RGC is currently in the process of establishing a commercial court. World Bank (2020g).
- <sup>59</sup> International Monetary Fund (2020a) and World Bank (2019e).
- <sup>60</sup> Cambodian firms fare better in terms of TFP, where there is less variation. World Bank Enterprise Surveys, various years, and World Bank (2018c).

- <sup>61</sup> Several caveats exist to measuring firm-level productivity. Unlike aggregate productivity, firm-level productivity measures use estimated factor shares, which face potential estimation biases. Moreover, the 2016 World Bank Enterprise Survey for Cambodia only covers non-agricultural sectors from select provinces and has a sample of 373 firms.
- <sup>62</sup> Results are obtained by regressing labor productivity on a dummy to control for sector fixed effects. For example, if a firm only exports, only imports, both exports and imports, or is foreign owned.
- <sup>63</sup> That registered firms and more established (older) firms are more productive is confirmed with the 2014 Cambodia Inter-censal Economic Survey when measuring productivity as sales per worker.
- <sup>64</sup> A third factor, barriers to entry and exit, is beyond the scope of this chapter because the necessary panel data to measure firm entry and exit are not available. Aggregate productivity is lower when there are barriers to the exit of less productive firms, and the entry of more productive firms. This conclusion is well grounded in empirical research. Divanbeigi and Ramallo (2015), for example, find that an overall sound business environment is associated with higher levels of new business entry, and indirectly, with higher income per capita. Similar research by Barseghyan (2008) shows that an increase in entry costs reduces both TFP and labor productivity.
- <sup>65</sup> World Bank Enterprise Surveys, various years.
- <sup>66</sup> Djankov, McLiesh, and Ramalho (2006).
- <sup>67</sup> Hall and Jones (1999) and Easterly and Levine (2003).
- <sup>68</sup> Dall’Olio et al. (2013), Dutz et al. (2011), and Chang, Kaltani, and Loayze (2009).
- <sup>69</sup> Barro (1991), Rodrik, Subramanian, and Trebbi (2004), and Acemoglu, Johnson, and Robinson (2004).
- <sup>70</sup> World Bank (2020g).
- <sup>71</sup> World Bank (2017b).
- <sup>72</sup> World Bank Enterprise Surveys, various years.
- <sup>73</sup> World Bank (2019b).
- <sup>74</sup> World Bank (2019b).
- <sup>75</sup> World Bank (2018b).
- <sup>76</sup> World Bank Enterprise Surveys, various years.
- <sup>77</sup> World Bank (2019f).
- <sup>78</sup> Duggan, Rahardja, and Varela (2016).
- <sup>79</sup> World Bank (2019a).
- <sup>80</sup> World Bank Enterprise Surveys, various years.
- <sup>81</sup> 2016 World Bank Enterprise Surveys for Cambodia.
- <sup>82</sup> World Bank (2019b).
- <sup>83</sup> Organisation of Economic Co-operation and Development (2017).
- <sup>84</sup> 2016 World Bank Enterprise Survey for Cambodia.
- <sup>85</sup> Data constraints prevent linking the empirical findings of resource misallocation directly to its causes, and instead the policy areas are based on economic literature of key causes of misallocation matched with Cambodia’s own context. For example, the importance of a competitive environment as well as public investment decisions for resource allocation correspond with Cambodia’s nascent competition framework and PIM regulation.
- <sup>86</sup> World Bank (2018b).
- <sup>87</sup> The key policy areas have been informed by the econometric analysis that links productivity differences across firms with barriers in the business environment, with the recommendations informed by Cambodia’s own country context and existing analytical work.
- <sup>88</sup> To simplify the process of tax audits, the General Department of Taxation has divided the audits into three types: desk review, limited scope, and comprehensive audits. Corporate income tax correction involves desk review, while VAT refund involves limited scope audits. In addition, the General Department of Taxation has also tried to improve its process of tax audits by training auditors and providing gold status to companies with good record of tax compliance.
- <sup>89</sup> World Bank (2020g).
- <sup>90</sup> World Bank (2020g).
- <sup>91</sup> World Bank (2019g).

# Chapter 2

## Economic Transformation Through Exports

**Over the past two decades, Cambodia has achieved stellar export performance, expanding dramatically both goods and services exports.** Since 1995, goods exports increased more than 17-fold, from US\$855 million to US\$15 billion in 2019. The increase in services exports has been even more dramatic, expanding 53-fold from US\$144 million in 1995 to US\$6.1 billion in 2019 (current US\$).<sup>92</sup> Today, services exports represent about 28 percent of Cambodia’s total export basket.

**Thanks to this rapid growth, Cambodia’s exports outperform globally in both goods and services.** Merchandise export values amounted to 55 percent relative to gross domestic product (GDP) in 2019, and services export values amounted to 22 percent.<sup>93</sup> Cambodia outperforms countries at its level of economic development, as well as most comparators (figure 2.1).

**Exports have supported non-agricultural job creation, driving structural transformation and poverty reduction.** Cambodia’s key export sectors contribute more than a third of all paid employment. In 2019, garment and footwear

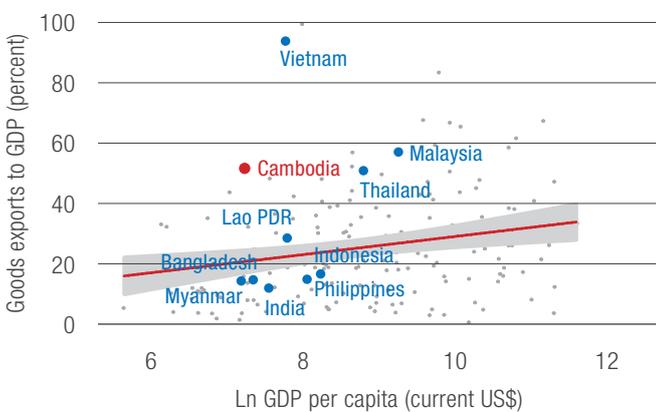
manufacturing accounted for 941,000 jobs or 21 percent of paid employment, while tourism accounted for 620,000 jobs or 13.9 percent of paid employment.<sup>94</sup> Cambodia’s labor-intensive manufacturing and agricultural exports played a crucial role in poverty reduction, which declined fell from 47.8 percent in 2007 to 13.5 percent in 2014.

**Cambodia’s export success has been driven by a few products and markets in which it has been able to specialize.** Cambodia has been extremely successful in what it does well, but it seems to only do a few things well. Its success has been built around three products, one in each sector—namely, garments in manufacturing, rice and cassava in agriculture, and tourism in services. In 2018, textiles, wearing apparel, and leather products represented 81 percent of manufacturing exports, rice and cassava represented 79 percent of agricultural exports, and tourism represented 89 percent of services exports (figure 2.2). Cambodia’s endowments have favored the current pattern of economic specialization: a young but low-skilled labor force; rainfall and topography that favor rice production; and the magnificent landmark of Angkor Wat.<sup>95</sup>

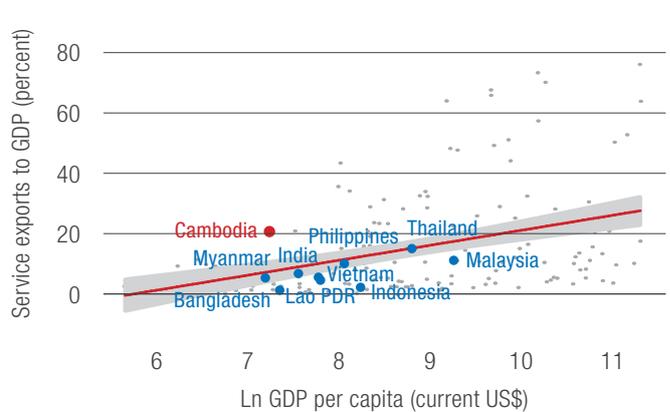
**FIGURE 2.1**  
Cambodia’s exports outperform globally

Exports to GDP vs. GDP per capita, 2016-18

a. Goods exports



b. Commercial services exports

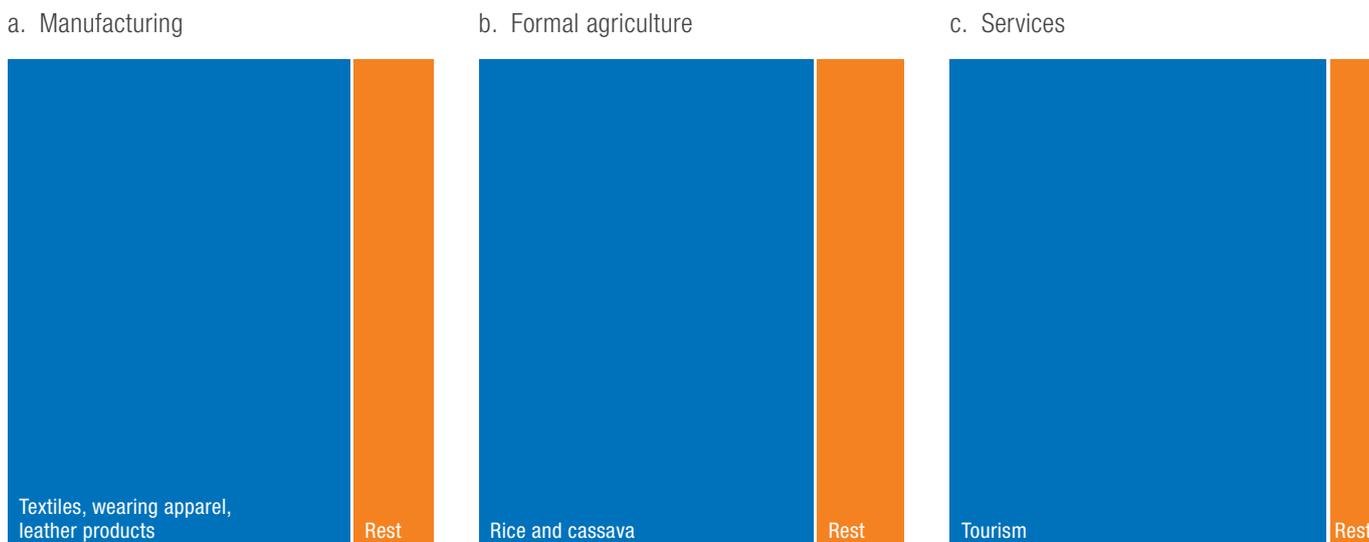


**Note:** Commercial services are total services excluding government services.

**Source:** World Bank staff calculations using data from World Bank World Development Indicators and Cambodia Economic Diversification Study (World Bank 2019a).

**FIGURE 2.2**  
Cambodia's exports have a narrow base

Products' share of sector exports, 2018



**Source:** World Bank staff calculations using data from UN Comtrade and UN Conference on Trade and Development and Cambodia Economic Diversification Study (World Bank 2019a).

**But global megatrends and an uncertain global environment are putting Cambodia's labor-intensive, low-value-added export model increasingly under pressure.** Export diversification is a top priority, featuring prominently in many of Cambodia's national policies such as the Rectangular Strategy Phase IV, Industrial Development Policy, Cambodia Trade Integration Strategy, e-Commerce strategy, among others. Cambodia now faces a series of headwinds that require strengthening its existing growth drivers, which are weakening, while building new drivers.<sup>96</sup> In recent years, garment sector competitiveness has weakened due to rapid escalation in legislated minimum wages, which tripled between 2012 and 2019. This, coupled with stagnant productivity (see Chapter 1), threatens the sustainability of Cambodia's key garment export sector. In addition, global megatrends like automation of routine jobs, protectionism, and the reconfiguration of global value chains (GVCs) have added uncertainty to Cambodia's prospects for continued export success in its current activities. The sources of foreign direct investment (FDI) are also changing, where outward FDI by Asian countries, particularly China, into other developing countries will continue to become a much more important share of global FDI, but Cambodia has not yet been successful as a key supplier in regional value chains. The escalation of trade tensions in recent years between global mega-powers adds additional uncertainty in the global trade environment.

**The Covid-19 pandemic and the partial loss of preferential access to the European Union (EU) market further risk Cambodia's export-oriented growth model.** The severe impact of Covid-19 on Cambodia's economy

reflects the significant concentration of export products and markets, which have been affected by the global supply and demand shocks. Due to travel restrictions and lockdowns, Cambodia's tourism and hospitality sector has collapsed, with international arrivals falling by 71.9 percent during the first eight months of 2020 (year-on-year). Global supply and demand shocks have shrunk Cambodia's key merchandise export sectors, where garment, footwear and travel goods exports had fallen 11.5 percent by August 2020 (year-on-year). The Covid-19 shock has been worsened by the partial suspension of the country's preferential access to the EU market under the "Everything But Arms" agreement that came into effect in August 2020, affecting approximately 20 percent of Cambodia's exports to the EU. While the duration of the suspension is still undecided, it affects select garments and footwear products, travel goods, and sugar amounting to \$1.1 billion in exports to the EU and the United Kingdom. The potential negative impact of this suspension, coupled with Covid-19 and global megatrends, adds to the urgency to act on Cambodia's trade integration and diversification agenda.

**Cambodia's labor-intensive, low-value-added export model also helps explain Cambodia's productivity challenge.** International trade supports productivity improvements through various channels. One key channel is through firm-to-firm relationships with international suppliers or buyers—particularly characteristic of trade in GVCs—which supports the international diffusion of technology. There is strong evidence that firms that either export or import are more productive than non-traders, while firms that both import and export are more productive than one-way traders.<sup>97</sup>

Although FDI has supported exports and FDI firms tend to be more productive than non-FDI firms, FDI firms in Cambodia do not create backward linkages or share knowledge, preventing productivity spillovers, as discussed later in this chapter. Moreover, Cambodia's export specialization is in low complexity and low technological content.<sup>98</sup>

**Transformation of Cambodia's international trade is needed to ensure better jobs, create domestic value addition, and support productivity improvements.**

Considering the limited diversification and the emerging challenges, this chapter aims to renew a sense of urgency for reforms targeting Cambodia's exports. The purpose is to identify policy options to help Cambodia pursue further diversification, upgrading, and domestic linkages—ultimately to promote economic recovery from Covid-19 and strengthen their export performance to drive long-term growth. The discussion focuses separately on manufacturing exports through GVC participation, followed by agricultural exports and services exports.<sup>99</sup>

## 2.1 Economic upgrading through GVC participation in manufacturing<sup>100</sup>

**Integrating into the global economy through GVCs is appealing to governments in developing countries for a variety of reasons.** GVCs—or the fragmentation of production across countries—grew swiftly after 1990 as technological advances—in transportation, information, and communication—and reductions in trade barriers caused manufacturers to extend production processes beyond national borders.<sup>101</sup> Two features distinguish GVC trade from traditional trade.

First, countries import not only for domestic consumption, but also to export. As such, GVCs involve hyper-specialization. Countries do not need to produce a whole good, they can focus on one part of that good. This makes participation in trade easier and allows countries to better exploit comparative advantage and reach economies of scale.

Second, in contrast to “standard” trade carried out in anonymous markets, GVC transactions typically involve longer-term firm-to-firm relationships. Firms have a shared interest in specializing in specific tasks, exchanging technology, and learning from each other. GVCs thus deliver easier access than ever before to capital, technology, skills, and expertise.

**Because of these two key features of GVCs—hyper-specialization and strong firm-to-firm relationships—GVC trade has a greater effect than standard trade**

**on reducing poverty and enhancing productivity and job growth.** Empirical evidence strongly suggests GVCs greatly boost productivity and income and support poverty reduction beyond what countries can achieve through one-way trade in anonymous markets.<sup>102</sup> The “relational” nature of GVCs makes them a particularly powerful engine for growth, as they represent a natural vehicle for technology transfer. As discussed in Chapter 1, Cambodian firms that both import and export tend to be more productive than non-trading firms.

## Cambodia successfully integrated into GVCs...

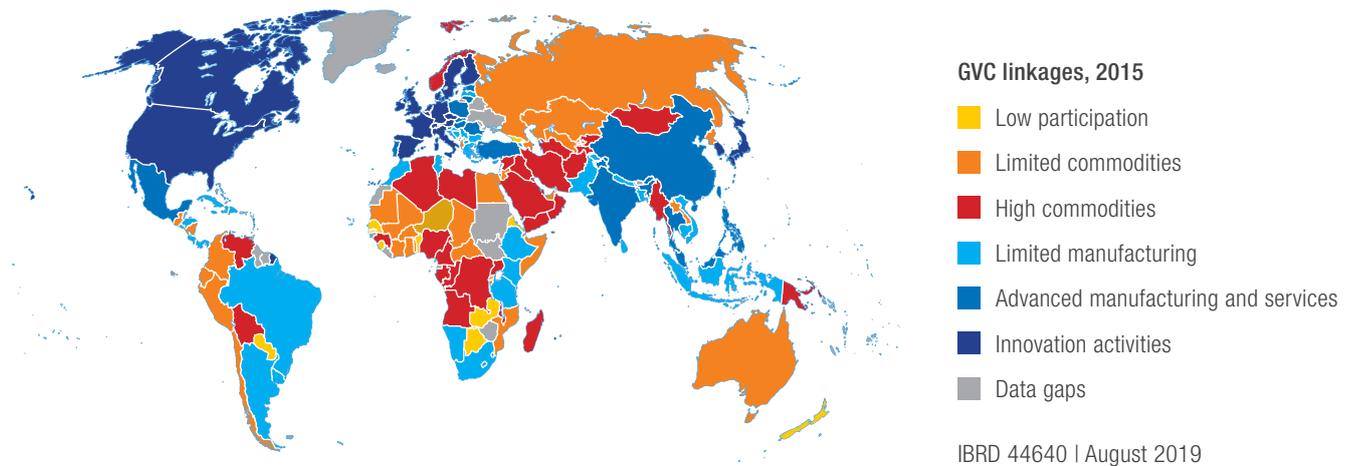
**Cambodia's participation in GVCs has grown steadily since the 1990s with the arrival of garment manufacturing and footwear.** Cambodia integrated into GVCs much faster than countries like Malaysia, Thailand, and Vietnam as well as other developing countries like Bangladesh and Sri Lanka, both as a buyer (importing inputs to produce exports, or ‘backward’ GVC participation) and a seller (exporting intermediate inputs used in the production of a third countries' exports, or ‘forward’ GVC participation). Between 1990 and 2018, backward GVC participation grew faster than these comparator countries, at an average annual growth rate of 12.5 percent. Forward GVC participation, at 13.6 percent annual growth, also surpassed other countries' performance.<sup>103</sup> Cambodia's position in GVCs—primarily in garment assembly—increased the share of manufacturing in total domestic value added in exports. Thirty years later, Cambodia continues to specialize in limited manufacturing tasks within GVCs (figure 2.3).

## ...but with little diversification or upgrading since

**Cambodia's participation has been concentrated in garments, but with little diversification into other GVC sectors since then, unlike some comparator countries.** The garment and footwear sector remains the largest exporting sector of Cambodia's economy, representing about 78 percent of total merchandise exports in 2018. Transitioning to advanced manufacturing and services GVCs presents a much bigger challenge for countries, an experience not unique to Cambodia. Yet other countries in the region have seen more progression than Cambodia. Thailand and Malaysia, for example, have transitioned into advanced manufacturing GVCs, while Vietnam has diversified into other manufacturing GVCs, most notably electronics (figure 2.4).

**FIGURE 2.3**  
Cambodia specializes in limited manufacturing GVC tasks

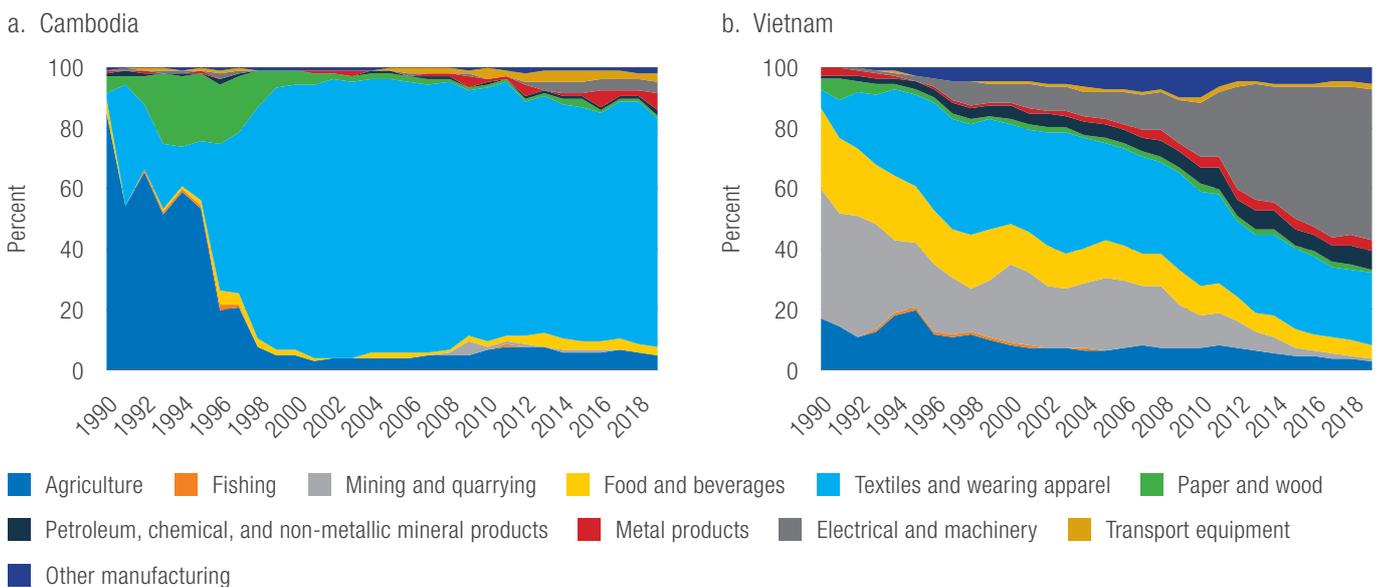
Taxonomy of GVC participation, 2015



Source: World Development Report 2020 (World Bank 2019c).

**FIGURE 2.4**  
In Cambodia there has been little diversification into other GVC sectors, unlike in Vietnam

Sectoral export share, 1990-2019



Source: World Bank staff calculations using data from UN Comtrade and Cambodia Economic Update (World Bank 2019d).

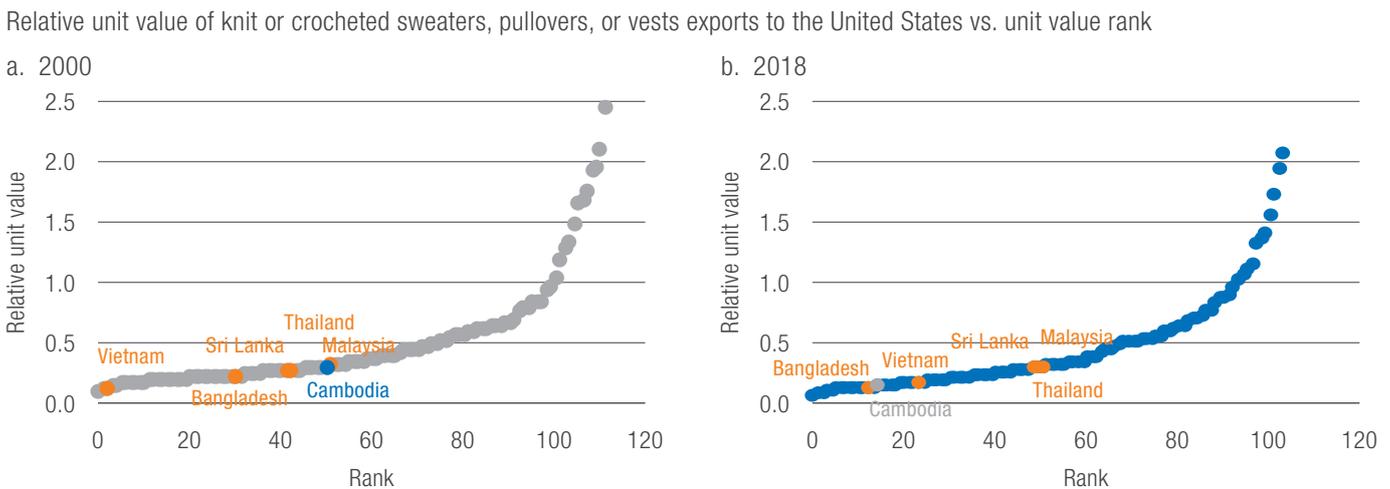
**Cambodia’s top garment exports compete at the low end of price and value addition and have fallen on the global quality ladder.** Within garments, there has been little upgrading within products between 2000 and 2016/17. Cambodia’s top export garment products (harmonized system 6-digit products 611020 and 611030) are on the lower end of the quality ladder globally. More striking is that comparator countries including Vietnam experienced a significant increase in their relative unit

values between 2000 and 2018, moving up the quality ladder, while Cambodia has fallen behind globally. For example, for knit or crocheted sweaters, pullovers, and vests (harmonized system 6-digit product 611030) to the United States market, Vietnam improved in relative unit-value rank from 3rd to 24th between 2000 and 2018, while Cambodia fell from 51st to 15th of 104 countries exporting that product to the United States in the same period (figure 2.5).

**There has also been little discovery of new garment products, despite some signs of diversification outside of garments.** This already mature sector is no longer incorporating new product groups into the export basket, with almost no new apparel products exported since 2003 (figure 2.6). Moreover, the composition of top garment products in Cambodia has also not changed significantly; four of the top five garment products in 2017 were also the top five garment products in 2000. Overall, most of

Cambodia's merchandise export growth is on the extensive margin by selling existing products in established markets, but with slight signs of new products in established markets (figure 2.7). In 2015, new products were discovered in precision instruments, machinery, and chemical and allied industries. Cambodia achieved some diversification into other manufacturing exports like auto part assembly (Denso Group, Sumi), electrical devices and motors, smart phone parts (Minibea), and optical parts (Tanaka Foresight).

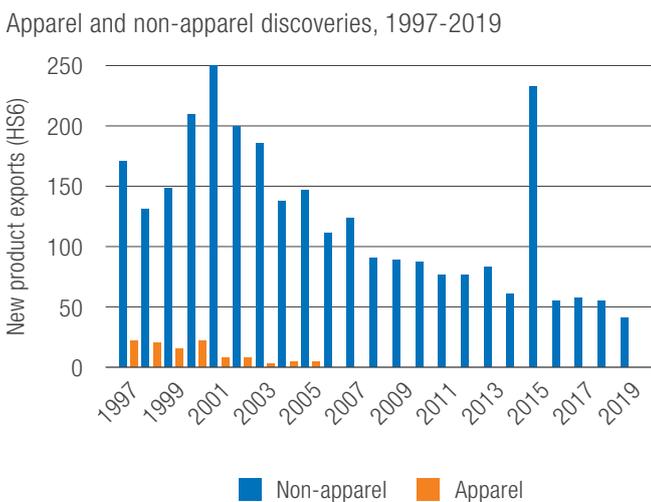
**FIGURE 2.5**  
Cambodia's top GVC exports have fallen on the global quality ladder



**Note:** For each product (HS6=611030 in this case), year (2000 and 2018 here), and importing country (the United States in this case), the relative unit value is calculated as a country's unit value exported to the importing country, relative to that unit's value at the 90<sup>th</sup> percentile of the unit-value distribution across countries that export that product.

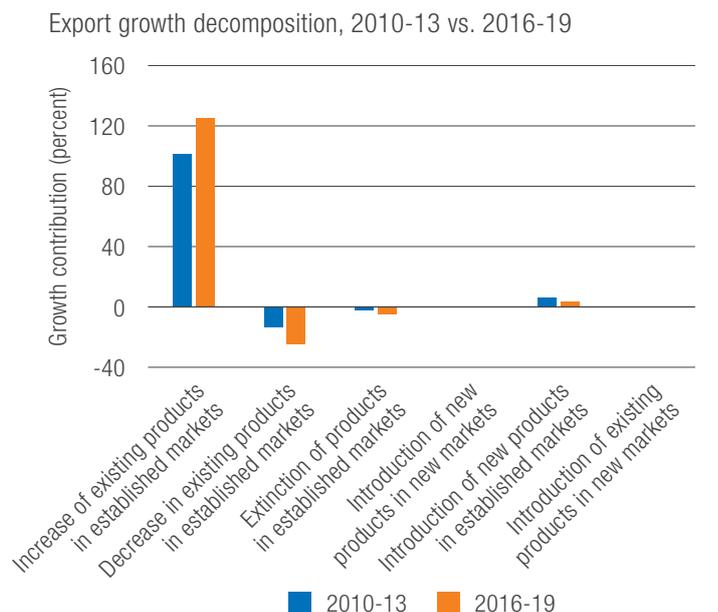
**Source:** World Bank staff calculations using data from Centre d'Etudes Prospectives et d'Informations Internationales and Cambodia Economic Update (World Bank 2019d).

**FIGURE 2.6**  
There has been little discovery of new garment products...



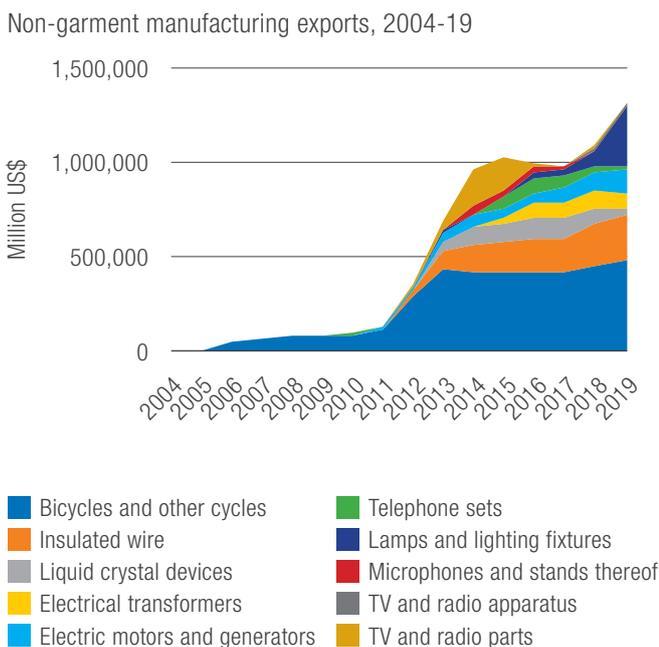
**Note:** Apparel includes harmonized system chapters 61-64.  
**Source:** World Bank staff calculations using data from UN Comtrade and Cambodia Economic Diversification Study (World Bank 2019a).

**FIGURE 2.7**  
...with some signs of diversification outside of garments



**Source:** World Bank staff calculations using data from UN Comtrade and Cambodia Economic Diversification Study (World Bank 2019a).

**FIGURE 2.8**  
Non-garment manufacturing export growth has slowed

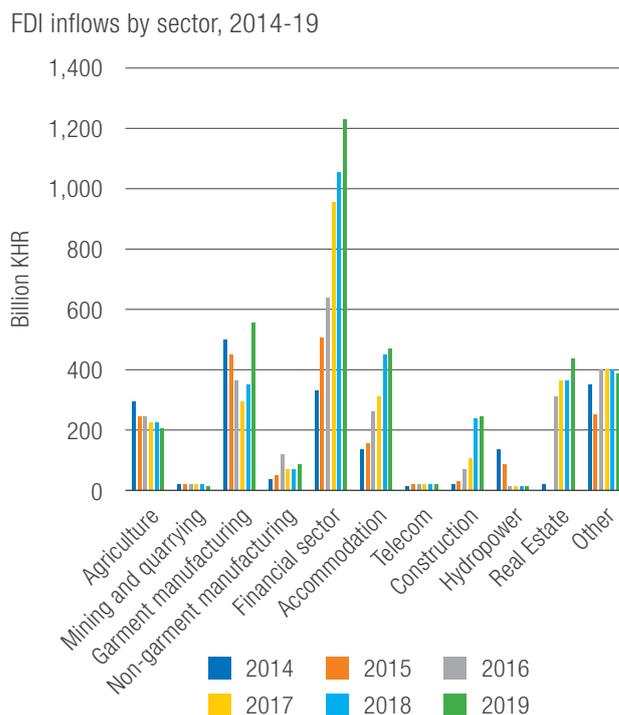


**Source:** World Bank staff calculations using data from UN Comtrade and Cambodia Economic Diversification Study (World Bank 2019a).

**Despite a promising start, there are signs that non-garment manufacturing exports may not live up to expectations.**

While Cambodia has attracted a few pioneer producers of bicycles, electrical appliances, and auto parts, it has yet to form industrial clusters in these value chains, and export diversification remains limited. The boom in non-garment manufacturing exports seems to have plateaued except for lamps and lighting fixtures (figure 2.8). In fact, some export products, like television and radio parts, experienced a drop since 2015-16, and other emerging exports like bicycles and other cycles have not taken off as expected, where export growth to the EU market has slowed due to difficulty meeting rules of origin. The wave of supplying firms that would be expected to follow the pioneer firms has not materialized yet. In fact, FDI inflows to non-garment manufacturing has barely grown since 2014, while FDI into non-tradable sectors like construction, real estate, and finance is booming (figure 2.9). Discussions with stakeholders confirm this trend. In particular, Japanese FDI into manufacturing seems to be drying up, with no investments in special economic zones in 2018. Regional trade agreements that grant preferential access to new markets and promote investment targeting these burgeoning sectors would support diversification. Deeper trade agreements that cover both goods and services, along with a broader set of regulatory areas like e-commerce or intellectual property rights (IPR) would further help address

**FIGURE 2.9**  
FDI inflows to manufacturing have tapered



**Source:** World Bank staff calculations using official data and Cambodia Economic Diversification Study (World Bank 2019a).

the disruptions caused by global megatrends, and support diversification of export products and markets.

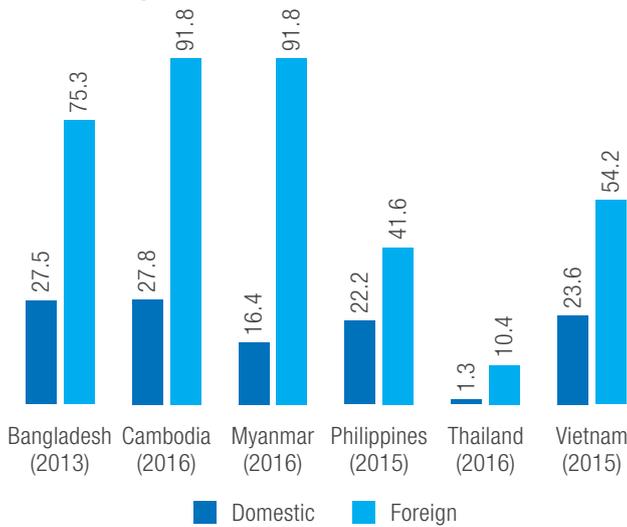
**Exploring possible explanations for Cambodia's low quality and inability to upgrade in the apparel value chain and its limited diversification into other value chains can inform policy recommendations to support economic upgrading through GVC participation.** This agenda is even more imperative today, given the significant impact Covid-19 has had on Cambodia's GVC exports in garments and footwear.

**Low diversification and inability to upgrade reflect in part the quality of FDI**

**Although FDI has supported exports, quality of FDI appears to be a problem, where FDI firms in Cambodia do not create backward linkages.** Cambodia is among the top countries in the world in attracting FDI, and most manufacturing export firms in Cambodia are foreign owned. Literature shows strong productivity spillovers can occur from upstream linkages with FDI firms, but these linkages have not yet formed in Cambodia. Instead, foreign manufacturing firms rely largely on foreign inputs, with limited domestic linkages (figure 2.10). In Cambodian manufacturing firms, 91.8 percent of total production inputs are of foreign origin,

**FIGURE 2.10**  
Most manufacturing inputs are imported

Percent of foreign inputs in total production inputs, manufacturing firms, 2013-16

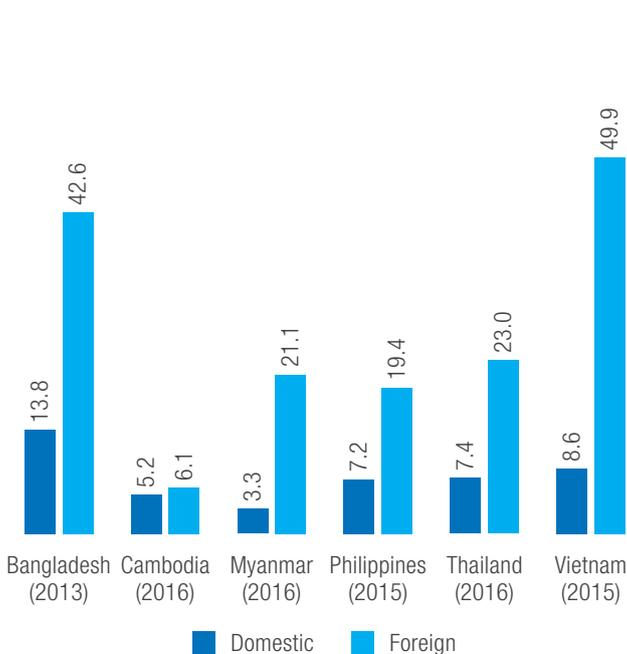


**Note:** Foreign ownership is 10 percent or more foreign ownership share.

**Source:** World Bank staff calculations using data from World Bank Enterprise Surveys and Cambodia Economic Diversification Study (World Bank 2019a).

**FIGURE 2.11**  
Cambodia has relatively low shares of foreign firms with quality certificates...

Percent of firms with an internationally recognized quality certification, 2013-16



**Source:** World Bank staff calculations using data from World Bank Enterprise Surveys and Cambodia Economic Diversification Study (World Bank 2019a).

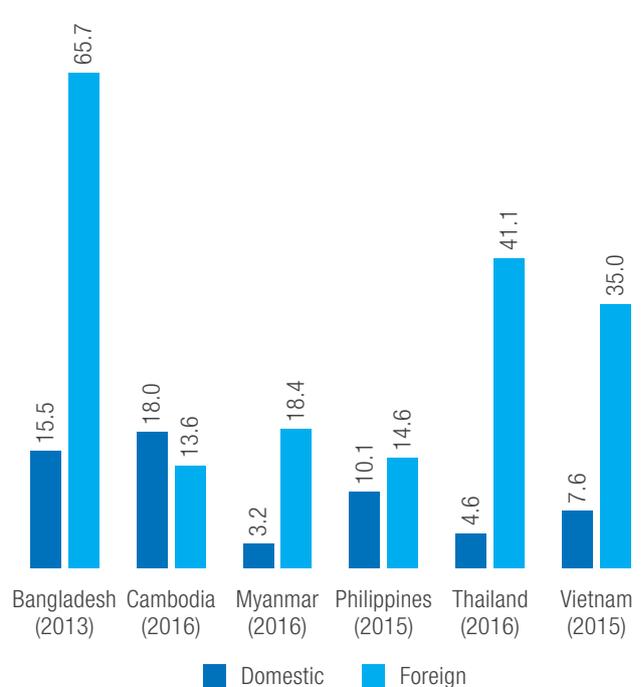
compared to 10.4 percent in Thailand, 54.2 percent in Vietnam, and 75.3 percent in Bangladesh. This is because Cambodia remains a small market whose manufacturing sector receives mostly export-oriented FDI. The high dependence of foreign firms on imported inputs suggests opportunities may exist for establishing and expanding local sourcing linkages—particularly with foreign investors—if local inputs are competitive in quality and price.

**The potential for technology spillovers from foreign investors in Cambodia also seems limited.**

Cambodia has relatively low shares of foreign firms with quality certificates (figure 2.11) or technologies licensed from foreign companies (figure 2.12), providing limited opportunities for technology transfer. In Cambodia, just 6.1 percent of foreign firms have an internationally recognized quality certification and only 13.6 percent use technology licensed from foreign companies. In Vietnam, the shares with quality certification and technology licenses are 49.9 percent and 35.0 percent, respectively. This limited potential for spillovers is further diminished by the weak linkages to domestic input firms described above.

**FIGURE 2.12**  
...or technologies licensed from foreign companies

Percent of manufacturing firms using technology licensed from foreign companies, 2013-16



**Source:** World Bank staff calculations using data from World Bank Enterprise Surveys and Cambodia Economic Diversification Study (World Bank 2019a).

## A poor business environment blocks linkages between FDI and domestic firms

**Barriers in the business environment likely create negative selection of FDI firms, and also block a key channel for productivity spillovers for those that do come.** A recent World Bank survey found significant capacity and business-climate constraints for foreign-owned manufacturing firms to source locally (figure 2.13).<sup>104</sup> Two-thirds of the surveyed foreign-owned companies said the production inputs they require are not available in Cambodia. Even when inputs are available, foreign firms report that identifying domestic suppliers is too time-consuming (50 percent), and when they do find potential suppliers, the suppliers often do not meet the quality, cost, and delivery standards required (46 percent). A particularly concerning issue is that firms with Qualified Investment Project status prefer to source from abroad because they are exempt from paying value-added tax (VAT) on imports and claiming a VAT refund when dealing with local suppliers would be too cumbersome and time-consuming (43 percent).<sup>105</sup>

**The business environment also influences the transition to and upgrading in more advanced manufacturing GVCs.** Global evidence shows more advanced manufacturing and services tasks require better

access to finance for domestic firms, more advanced logistics, competitive energy costs, access to more sophisticated services inputs, and enhanced contract enforcement.<sup>106</sup> Policy predictability, in addition to macroeconomic stability, becomes an increasingly important dimension of good governance for GVCs. An agenda for improving the business environment is discussed in Chapter 1.

**The slowdown in investment in Cambodia is also attributed to rapidly rising wages, not matched with improvement in the business environment.** Conversations with stakeholders in the manufacturing sector reveal that a large and young workforce, coupled with preferential access to key markets, investment incentives, and relative stability made Cambodia their preferred choice when deciding to invest. Currently, manufacturers are facing the challenges of quickly rising real wages and high turnover rates. The minimum wage in the garment sector was around US\$80 a month in 2013.<sup>107</sup> In recent years, the minimum wage in garments has been increasing rapidly, which has led to an overall increase in garment firms' wages.<sup>108</sup> By 2019, the minimum wage in Cambodia had increased to US\$182 a month,<sup>109</sup> while in Vietnam it ranged between equivalent of US\$126 to US\$180 per month,<sup>110</sup> and approximately the equivalent of US\$95 a month in Bangladesh.<sup>111</sup> Together with electricity and logistics costs that are higher than in neighboring countries, these rising wage costs allegedly discourage the arrival of new investors.

**FIGURE 2.13**

### Business environment constraints inhibit backward linkages from FDI to domestic firms

Factors considered a barrier to source locally, as reported by surveyed firms in Cambodia, 2017



**Source:** World Bank staff calculations using data from World Bank Group 2017 FDI Survey and Cambodia Economic Diversification Study (World Bank 2019a).

## Trade policy also determines GVC participation

**International trade agreements enable GVC-related trade growth, especially when they go beyond issues of market access and national treatment,** to include agreements to protect certain types of intellectual property, to adopt common approaches to regulate services sectors, or to implement a competition law that embodies criteria mirroring those of trading partners. In fact, GVC trade is greater between countries sharing deep trade agreements.<sup>112</sup> For example, in Vietnam's case, the United States-Vietnam Bilateral Trade Agreement of 2001 resulted in a boom in garments exports (and other products) to the United States.<sup>113</sup>

**Market access through trade preferences has been a key determinant of Cambodia's GVC participation, but Cambodia should look to deeper trade agreements to promote future participation.** One key question confronting Cambodia is how loss of preferences and increased trade protectionism in major markets globally will impact future GVC trade. Most of Cambodia's trade preferences are granted on a unilateral basis as a least developed country (LDC) under Generalized System of Preferences schemes operated by developed countries (without negotiation/agreement of reciprocal trade concessions by Cambodia). Cambodia's preferential access to the EU market under the "Everything But Arms" agreement was recently partially suspended, and preferential access to other markets is expected to erode as the country graduates from LDC-status in the coming years. Cambodia's only existing trade agreements in force are through the Association of Southeast Asian Nations (ASEAN) Free Trade Area including those negotiated with the Republic of Korea, Japan, India, China, and Australia-New Zealand. Cambodia recently signed a bilateral free trade agreement (FTA) with the Republic of Korea and ratified its recently-signed FTA with China. A stronger focus on regional trade agreements that grant preferential access to new markets, promote e-commerce, and promote investment targeting burgeoning sectors would support diversification of products and markets. Stronger regional trade agreements would also address the trade disruptions caused by recent global megatrends and the greater uncertainty in the global trade environment. Instead, Cambodia participates in few deep trade agreements—an agenda discussed in Section 2.3.

**In a world of GVCs, where firms import to export, higher costs of importing intermediate inputs can be another barrier to participation.** Trade liberalization has a more positive effect on GVC trade than on traditional exports.<sup>114</sup> Though tariffs declined following Cambodia's World Trade Organization (WTO) membership, the average weighted tariff rate of manufacturing products is higher in Cambodia than comparator countries except Bangladesh. In Cambodia, the average weighted tariff is 9.7 percent, relative to, for example, Vietnam, where it is 2.6 percent.

## Skills and firm capabilities are vital for upgrading

**Moving beyond assembly-type processes and into higher value-added goods requires a more skilled workforce.** While the abundance of low-cost labor in low-income countries is often an entry point for participation in the labor-intensive manufacturing segments of GVCs, upgrading knowledge and skills becomes necessary for transitioning into advanced manufacturing and services and innovation activities that require a more educated workforce, and better managerial practices and technical skills. For example, evidence from countries across the world shows a positive correlation between higher skills and integration in innovative GVCs: countries with a relatively low endowment of low-skilled labor in the 2000s were more likely to be specialized in innovative activities by 2011.<sup>115</sup>

**As expected with weak human capital, an 'inadequately skilled labor force' appears to be a binding constraint for firms.** The most recent World Bank Enterprise Survey revealed a majority of firms said an inadequately trained workforce was among their top three constraints, but exporters were twice as likely to report this constraint as non-exporters (42 percent compared to 21 percent).<sup>116</sup> According to a National Employment Agency survey, insufficient skills led to lower worker productivity and hurt business in many ways like: delays in developing new products and services, increased workload for skilled workers, difficulties in meeting customer service objectives and quality standards, and business lost to competitors.<sup>117</sup>

**Low skills reflect low educational outcomes.** Only 8.5 percent of the working age population were projected to have completed secondary education, and only 1.5 percent to have completed tertiary education by 2020—lower than most countries with comparable income levels.<sup>118</sup> Moreover, the returns on education are low: workers with only one year of education earn similar wages to those with 11 years of education. This suggests that the education system is not a solution for the current workforce, and instead an effective skills development system is needed to address current skills gaps.<sup>119</sup>

**Cambodia has not yet developed an effective system to upskill the existing workforce, contributing to Cambodia's skills deficit.** Cambodia's public and private skills development system is fragmented and small, and reform efforts so far have focused on setting standards rather than developing feedback mechanisms to identify what skills employers need or creating results-based incentives for training institutions.<sup>120</sup> Moreover, there is little participation from the private sector to ensure skills development matches skills demand.

**Cambodian firms' absence in the garment and footwear value chain limits upgrading opportunities.** Over 95 percent of Cambodian apparel exporters are branch plants of foreign-owned firms. It is difficult for countries dominated by foreign firms to upgrade in this industry because of relationships between global lead firms, multinational apparel manufacturers, and their foreign branch plant locations. All the activities associated with functional upgrading take place at the headquarters location of foreign firms, leaving little or no room for branch manufacturing sites to take on more activities like textile sourcing, sales/buyer acquisition, and technical product development. Opportunities for functional upgrading of these multinational corporations is further limited because the apparel industry is buyer driven. The company or brand responsible for setting the final price and selling the product is not the same company that owns manufacturing facilities. Apparel manufacturers (whether at the headquarters or branch locations) do not control retail, marketing, branding, or creative new product development, which are the most lucrative and knowledge-intensive activities in the sector. Thus, branch plants of foreign operations—like those operating in Cambodia—have little opportunity for functional upgrading.

**Many upgrading opportunities require private domestic firms to develop in the industry.** Upgrading opportunities can come from domestic firms assuming the preproduction and production stages. This would also allow them to undertake full package or original equipment manufacturer production—currently done abroad at the headquarters of foreign multinational corporations with manufacturing locations in Cambodia—including sourcing, logistics, and client management. Once skills are developed, eventually firms can upgrade to creative design, branding, and top management.<sup>121</sup>

## Technological change will reshape the skills needed in GVCs

**One important question confronting the region is what changing production technology means for developing countries' future participation in GVCs.** Machines are taking over routine tasks or parts of the production process, and there has been a global shift away from manual, routine jobs into non-routine, knowledge-intensive jobs. These labor-saving technologies, especially automation and 3D printing, will likely pose both opportunities and challenges for countries' future participation in GVCs, including Cambodia's. For example, there is a risk that these technologies could bring production closer to consumers and reduce labor-intensive imported inputs from developing countries, but evidence shows these technologies also contributed to higher productivity and a larger scale of production, which has increased the demand for imported inputs from developing countries. Cambodian

firms' slow uptake of these new technologies risks their global competitiveness and ultimately the sustainability of their GVC exports. For example, while the garment sector is currently less automated than other GVC-intensive sectors like automotive, there is evidence Cambodian garment firms' technology adoption—like the use of Enterprise Resource Planning or automated cutting systems—is lower than in other countries. Consequently, a key policy recommendation is to ensure an adequate tax incentive framework that is conducive to technology uptake, while also providing the requisite training and/or re-skilling.

**Technological change means 21st century workers require a more complex skill set than in the past, making human capital and skills development more important for GVC participation going forward.** The Covid-19 pandemic is accelerating the pace of technological change, as producers are looking for techniques that avoid face-to-face interaction. Preparing the workforce today for non-routine, knowledge-intensive jobs will make Cambodia more competitive when these changes come—an agenda related to skills discussed below.

Incentives are also needed to promote increased technology adoption in garments. Anecdotal evidence suggests automation in Cambodia's garment sector has fallen behind regionally. For example, there is relatively low use of the management reporting systems within management control systems that can provide important business information or automated processes along the production line like fabric cutting. These technologies can help firms move into higher value-added products. Slow adoption is in part linked to low skills (including in management functions), the type and quality of Cambodia's FDI, and lack of incentives promoting more sophisticated production techniques—an agenda related to quality of FDI discussed below.

## Policies to support diversification and upgrading in GVCs

**Cambodia is at a critical juncture where to sustain economic growth it needs to ensure diversification and value addition do not falter.** Participation and upgrading in GVCs can help achieve these goals. Cambodia has already successfully integrated into the apparel GVC, and currently has a comparative advantage in assembly-type labor-intensive processes. However, to remain competitive as production costs rise, Cambodia would need to increase value addition in mature industries like garment manufacturing, while establishing new clusters around pioneer non-garment manufacturing exporters, strengthening the capacity of local firms, and fostering domestic value addition. Policy measures in each of these areas that focus on improving capabilities, strengthening regulations, and investing in infrastructure can transform Cambodia's participation in GVCs.

## Attracting a new wave of high-value-added FDI

**To support Cambodia's diversification into light manufacturing exports like electronics and auto parts, Cambodia needs to appeal to a new generation of FDI by ensuring investor protection.** With the right incentives in place, this could also help the country tap into foreign knowledge and facilitate productivity spillovers and incentivize adoption of new digital or automation technologies that will likely take-off in a post-Covid-19 world. This is an immediate priority, which could be led jointly by the Ministry of Economy and Finance and the Council for the Development of Cambodia. It will be important to simultaneously support developing skills in new digital technologies during the upgrading process. Removing remaining import tariffs and participating in deep trade agreements could further improve Cambodia's attractiveness to FDI firms in new GVC sectors, as discussed in Section 2.2 and Section 2.3, respectively. The importance of the business environment for attracting FDI is discussed in Chapter 1 and Section 2.2.

**First, legislation should resolve challenges in investor protection and conflict resolution, including by increasing shareholders' rights and role in decision-making, and strengthening courts.** Despite some improvements in business registration and electricity access in recent years, Cambodia continues to struggle in several aspects of its business environment, including the protection for minority investors and contract enforcement, which affect potential joint ventures and FDI firms in particular. The recent passage of a new Investment Law could be an opportunity to resolve some of the remaining challenges in investor protection and conflict resolution through sub-regulations. It will be important for the Investment Law to cover all investors, beyond those given qualified investment project status.

**Second, investment tax credits can be introduced on the value of acquired machinery and equipment, quality certificates, or new technologies.** Cambodia could shift to cost-effective tax incentives to promote machinery acquisition and human-capital formation. Currently, tax incentives in Cambodia are not being used to encourage the provision of public goods like technology acquisition, human-capital building, or innovation. In this context, Cambodia could rethink its investment incentives mix, limiting tax holidays and moving toward more cost-effective incentives. For example, it could introduce investment tax credits on 80 percent of the value of acquired machinery and equipment, as well as super deductions for firms that acquire quality certificates or new technologies, or that train their workers. This would help attract FDI that aims for higher value added and could boost learning and upgrading in the Cambodian economy. Cambodia should consider developing a new tax incentive regime with specific guidelines that detail eligibility criteria for each incentive.

Cambodia has currently revised the Investment Law, which creates an opportunity to introduce these suggested policy changes through sub-regulations. In the medium term, it will be important to collect data on firms that use tax incentives to monitor and evaluate while developing a strategy to minimize tax risks from the scheme. This could be led by General Department of Taxation.

## Building the skills of the workforce

**Among the most pressing issues the Royal Government of Cambodia (RGC) needs to tackle is addressing skills gaps in the current workforce.**

So far, reform efforts have focused on setting standards rather than developing feedback mechanisms to identify the appropriate mix of skills in demand by employers. All told, only 22 percent of Cambodian employers offer formal training courses, far less than the regional average of 57 percent.<sup>122</sup> Improving labor mobility and job matching can help firms find the right worker. This cross-cutting policy agenda could be led by the Ministry of Labour and Vocational Training, while sector-specific measures can also be taken to strengthen manufacturing skills. This is also an opportunity to build a system that is geared toward 21st century jobs, especially as Covid-19 speeds the pace of digital technology adoption and automation, and would simultaneously support upgrading in the garment sector as well as enhanced competitiveness and diversification in other GVC-intensive sectors.

**To improve skills in the current workforce, Cambodia needs to make its technical and vocational education and training system more agile, flexible, and responsive to the market so that workers can regularly upgrade their skills.**<sup>123</sup> The RGC could introduce results-based financing technical and vocational education and training institutions and expand the provision of short courses to serve the working adult population in the short term. In the medium term, the government can also support establishing vocational and digital education centers aligned with industry needs, in cooperation with private sector and development partners, and expand the certification system to ensure that skills acquired through vocational training can be formally certified. Tailoring adult learning by expanding technical short courses and offering individual learning accounts can further facilitate access to skills development.

**The enterprise sector should be incentivized to play a larger and more structured role in providing, guiding, and advocating for a demand-driven skills development system** including facilitating the use of internship programs. These should ideally be complemented with foreign investors' efforts to identify and support talent currently enrolled in tertiary education, for example through scholarships like those provided by Samsung Vietnam. The

RGC can also encourage collaborations between domestic and international technical training institutions and attract trainers with industry experience. Both are short-term policy priorities.

**In the short term, Cambodia can leverage professional associations and other intermediaries like special economic zone management or recruitment agencies to implement training programs and provide professional certification to trainees at different skill levels, if a governing framework is provided.**<sup>124</sup>

The professional associations and other intermediaries could help aggregate knowledge and implement training programs and professional certification for trainees at different skill levels, based on the needs and requirements of the employer at the sector, industry, and firm level. In cases where intermediaries are weak, incentivizing in-house training for mid- to high-skilled workers could be another potential avenue to explore. The government could partner with foreign investors (for example, from Japan, the Republic of Korea, and China) and development partners to establish industry-specific training centers. For example, drawing from lessons from the Republic of Korea's experience, Cambodia could establish vocational high schools.<sup>125</sup>

**More attention should also be given to promoting efficient labor mobility and job matching.** In the short term, authorities can collect and disseminate user-friendly information to students, jobseekers, employers, and education and training institutions to enable them to make skills development choices that are aligned with market demand. In the medium term, authorities can invest in hardware and software for the labor-market information system and establish and strengthen intermediation mechanisms (job matching platforms and the National Employment Agency) like developing outreach programs and collecting increasingly timely data on job vacancies.

### **Supporting domestic firms' integration in the apparel and footwear sector**

**A possible strategy for the Cambodian garments industry would be to offer higher value-added goods, by developing or linking to supporting industries.**

A few firms have already started to move away from the cut-make-trim segment of the apparel value chain toward offering free-on-board type products with higher value added, which helps them increase margins and cope with the significant increase in labor costs in recent years. One possibility for Cambodia to achieve higher value-added garment manufacturing would be by attracting or linking to supporting industries such as (i) apparel trims (that is, materials to differentiate garments) and accessories (for example, zippers, thread, elastic, labels, hangers); (ii) nonessential inputs such as packaging (for example, cartons and poly bags); (iii) capital equipment and machinery-parts

manufacturers or suppliers; (iv) subcontractors that perform finishing activities (for example, sewing, embroidering, screen printing); and (v) broad services applicable to a range of industries like transportation, logistics, catering, information technology, construction, cleaning, security, human resources, and training.<sup>126</sup>

**Fostering joint ventures between the Garment Manufacturers Association in Cambodia and international brands and investors can facilitate sector upgrading (including by integrating design functions into the offering).**

To access the expertise and technology needed to produce certain apparel-making fabrics, the Garment Manufacturers Association in Cambodia and other public and private stakeholders could engage with suitable foreign partners to foster value addition and learning, which could be overseen by the Ministry of Commerce. As an example, Sri Lanka has benefited from this type of partnering. However, this would require having more internationally-competitive domestic apparel producers to act as potential joint venture partners which necessarily means building capacity of indigenous firms.

### **Strengthening domestic firm linkages**

**Building the capacity of domestic firms may take several years, but policy options could be implemented in the short term to strengthen backward linkages.**

The Industrial Development Policy already outlines a series of measures to build the capacity of domestic firms, including support to small and medium enterprise (SME) parks, machinery and inputs acquisition, and skills development. Additional policies are needed to address the specific problems highlighted in the above-mentioned FDI linkages survey.

**First, establish an online portal and digital app (in collaboration between relevant ministries, chambers of commerce, and private industry associations) to offer basic matchmaking services and overcome information asymmetries.**

In some cases, specific government programs can assist foreign investors' research efforts to identify local suppliers and provide them with more detailed capabilities evaluations in the medium term.<sup>127</sup> Since reinvestment plays a large role, aftercare services are also important as a short-term policy objective, and include collecting feedback from existing investors to ensure investor satisfaction. Such an agenda would best be implemented by Council for the Development of Cambodia.

**Second, authorities would need to simplify VAT procedures and reduce the time needed to claim refunds,** since domestic suppliers are currently disadvantaged when competing with tax-exempt imported inputs. This is a short-term priority that could be overseen by the General Department of Taxation.

**Third, in the medium and long term, establish a supplier development program, linked to the Entrepreneurship Development Fund, to build local firms' capacity to serve FDI exporters.** This could be jointly implemented by the Ministry of Commerce and the Ministry of Economy and Finance. Country case studies show policies fostering linkages as part of systematic supplier development programs, industrial upgrading programs, and spatial development programs, which integrate investors and their requirements and emphasize local capacity building have been most successful. Such policies can be found in countries like Singapore, Malaysia, Chile, Costa Rica, and South Africa. The RGC's recently established Entrepreneurship Development Fund and Khmer Enterprise could help address some of the constraints local SMEs face, like lack of managerial and planning capacity needed to grow and produce more efficiently.<sup>128</sup> Training and marginal incentives for SMEs to become vendors in global e-commerce platforms should also be considered.

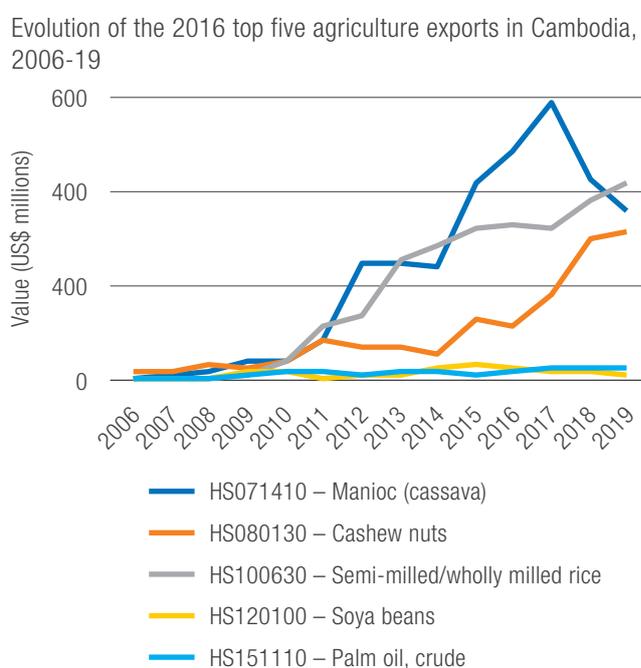
**Fourth, enact policy to ensure domestic firms comply with international standards required in GVCs.** The complexity and heterogeneity of international standards in GVCs increases costs for firms.<sup>129</sup> SMEs face greater challenges in complying with product standards and certification requirements, which are very important when entering, for example, the food processing segment of the agribusiness GVC. This applies to quality and safety standards and environmental and social sustainability standards. Adopting standards requires the necessary incentive schemes and a long-term commitment by the RGC. The Industrial Development Policy 2015-25 formulates ambitious goals for special economic zone development to meet international standards, not only in terms of the necessary physical infrastructure and management systems but also environmental and safety standards for investment projects located in these zones. The initiatives to improve industrial standards outlined in the Industrial Development Policy are headed in the right direction, but they focus mainly on building capacity of standard-setting national institutions. These efforts could be complemented by sequencing the introduction of standards. Some SMEs may need to participate in regional value chains first to benefit from learning and economies of scale, before adopting stricter international standards.<sup>130</sup> This is a medium-term agenda that could be led by the Ministry of Commerce with other relevant ministries and agencies involved (for example, the Ministry of Agriculture, Forestry, and Fisheries).

## 2.2 Value addition in Cambodian agriculture<sup>131</sup>

**Formal agriculture exports have increased 20-fold over a decade, driven by a comparative advantage in exporting rice and cassava.** The value of Cambodia's agriculture, forestry, and fishing exports has increased from just US\$55 million in 2007 to US\$1.1 billion in 2018.<sup>132</sup> Agricultural export growth has been driven by rice and cassava (figure 2.14), in which Cambodia has maintained a comparative advantage since 2010.<sup>133</sup> Together these two products represented 79 percent of total formal agricultural exports in 2018.<sup>134</sup>

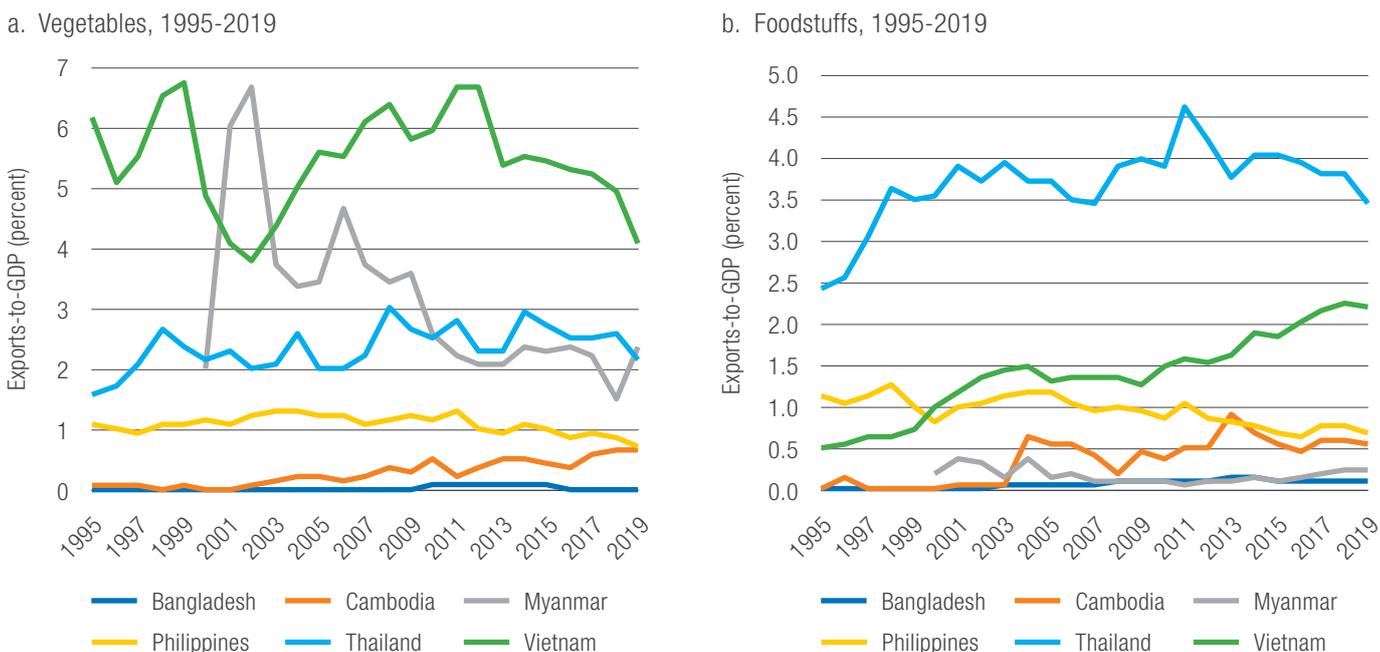
**Total agricultural export growth is likely even higher.** Agricultural trade statistics in Cambodia are limited to formal agricultural trade, which fail to capture informally traded products (that is, those crossing borders without passing through customs agencies). This is particularly relevant for raw products exports like mangoes, cashew nuts, pepper, rubber, and other crops that have experienced recent export growth to neighboring countries. This chapter therefore analyzes formal agricultural trade, and underestimates trends in key products that tend to be traded informally.

**FIGURE 2.14**  
Rice and cassava have driven Cambodia's agricultural export growth



**Source:** World Bank staff calculations using data from UN Comtrade and Cambodia Economic Diversification Study (World Bank 2019a).

**FIGURE 2.15**  
Foodstuffs exports underperform against comparator countries



**Note:** Cambodia excludes cassava, rice, and cashew.

**Source:** World Bank staff calculations using data from UN Comtrade and Cambodia Economic Diversification Study (World Bank 2019a).

### Low diversification, limited survival, and poor quality characterize Cambodia’s agricultural exports

**Diversification is a key challenge, as Cambodia has yet to develop a similar advantage in vegetables or processed foodstuffs.** Cambodia’s agriculture remains highly concentrated in unprocessed rice and cassava, with little diversification over time into other crops like fruits, vegetables, animal products, or processed foodstuffs. As a share of GDP, Cambodia’s agriculture products exports have exceeded most comparators, in contrast to foodstuffs exports that are below most comparators (figure 2.15). One exception is bananas, which have reported strong export growth since 2018, from US\$18.8 million to \$132 million in 2020. In terms of destination markets, exports of cassava, soya beans, cashew nuts, and palm oil reach only two to three markets, whereas exports of rice (milled, broken, and paddy) are more diversified. Moreover, the concentration of the export basket in these two products has made agriculture performance highly exposed to swings in commodity prices and weather events.

**Cambodia’s vegetable products also face difficulty surviving in export markets.** Most export relationships (at the product-country level) forged by developing countries do not survive more than a few years. In Cambodia, the probability of export survival is higher for manufacturing goods than for agricultural goods. The survival of Cambodian agriculture export relationships is shorter than in comparator

**FIGURE 2.16**  
Survival rates of vegetables in export markets are lower than in Vietnam and Thailand



**Note:** Vegetables include harmonized system chapters 06-14.

**Source:** World Bank staff calculations using data from UN Comtrade and Cambodia Economic Diversification Study (World Bank 2019a).

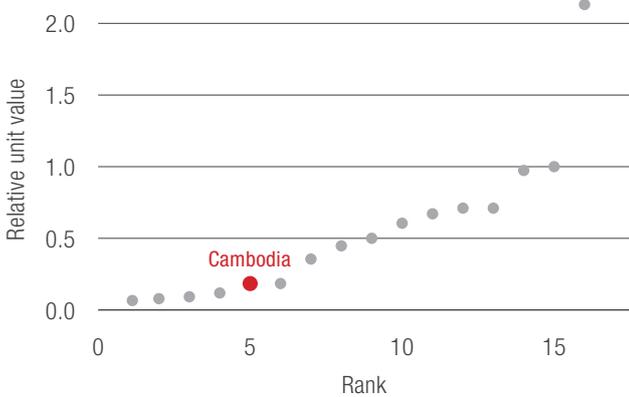
countries. Cambodian vegetable exports have much lower survival rates than those of Vietnam and Thailand (figure 2.16), suggesting challenges confronting agricultural goods are more severe for Cambodia than comparator countries. The survival rate for Cambodian vegetable products in five years is 36 percent, compared to 66 percent in Vietnam and 70 percent in Thailand. The survival of Cambodia’s rice exports is also lower than in Thailand and Vietnam, despite having relatively more destinations and relatively longer export relationships as recorded in the data.

**FIGURE 2.17**

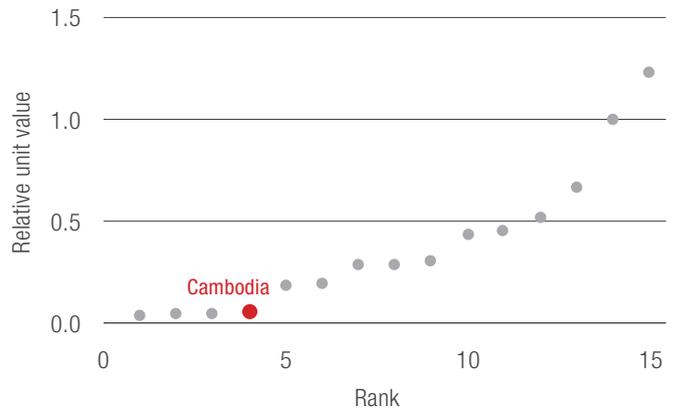
Cambodia's key agricultural exports are positioned low on the quality ladder

Relative unit value of cassava exports to ASEAN vs. unit value rank

a. 2010

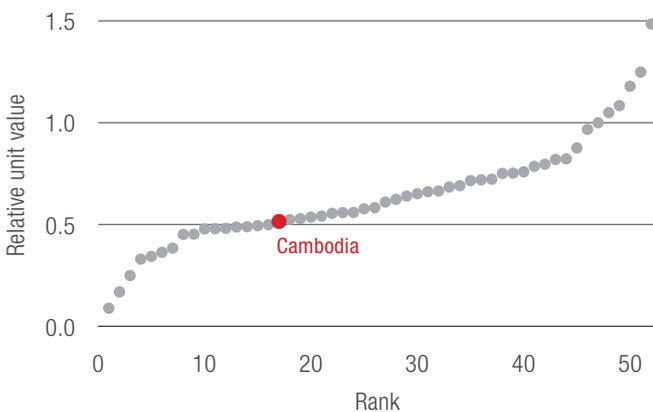


b. 2016

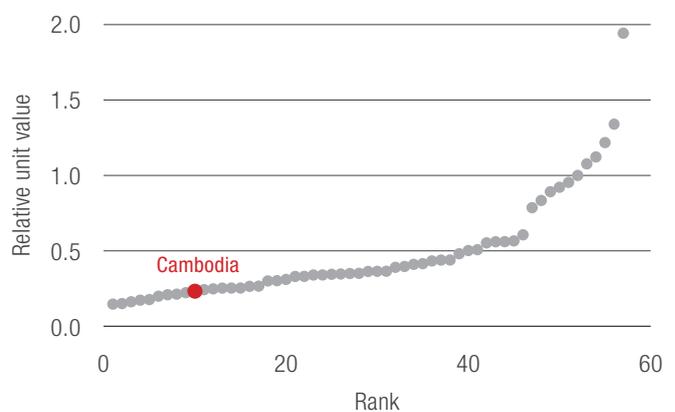


Relative unit value of milled rice exports to the EU vs. unit value rank

c. 2008



d. 2016



**Note:** The figure shows the relative unit value for cassava (top panel) or milled rice (bottom panel) exported by Cambodia and other countries to ASEAN (top) or EU (bottom) countries in 2010 and 2016 (top) or 2008 and 2016 (bottom), ranked by ascending relative unit values.

**Source:** World Bank staff calculations using data from UN Comtrade and Cambodia Economic Diversification Study (World Bank 2019a).

**Quality also appears to be a challenge, where Cambodian agriculture exports remain positioned relatively low on the unit value/quality ladder.**<sup>135</sup> Cambodia's relative unit value of cassava exports to ASEAN has not increased relative to other exporters, and the relative unit value of Cambodia's milled rice exports to the EU has fallen (figure 2.17).

**Agriculture linkages with other sectors are still emerging.** The agriculture sector relies mainly on domestic inputs from the same sector, with low sourcing from other domestic sectors that could help increase product value. Moreover, the use of domestic agriculture products in hospitality is limited, and the agro-processing industry is nascent.

**In addition, agriculture growth has decelerated significantly in recent years and is no longer the main driver of poverty reduction.** Agriculture has played an important role in growth and poverty reduction in Cambodia and remains a major source of jobs. Recently, however, agricultural GDP growth has slowed dramatically, stagnating in 2014 and 2015 and averaging just 1 percent from 2013 to 2019. Deceleration is explained by the fact that previous drivers of agriculture growth—like high international commodity prices, land expansion, and cheap labor—have not persisted.

## There are opportunities to diversify Cambodia's agricultural exports

**There are new opportunities for Cambodia to grow its agriculture exports, particularly within the East Asia and Pacific (EAP) region.** First, recent evidence suggests that Covid-19 has further boosted the trend toward EAP trade regionalization. Faster recovery in the EAP region meant that intra-regional trade suffered less than trade in and with other parts of the world. In the first six months of 2019, China's import growth from ASEAN+5 was negative, but it had positive growth of 8 percent in the first six months of 2020. This is despite China's total import growth being negative, including from both the United States and the EU.<sup>136</sup> This finding is consistent with Cambodia's agricultural exports, where agriculture has been the sector least affected by the Covid-19 crisis. During the first seven months of 2020, Cambodia's milled rice export (of which fragrant rice accounts for about 80 percent) surged, rising 45.3 percent year-on-year, reaching 0.4 million metric tons. China is the largest market for Cambodia's milled rice exports, capturing 35.5 percent of total milled rice exports or 160 thousand metric tons.

Second, the recently signed China-Cambodia FTA aims to improve market access for Cambodia's agricultural products to China. An additional 340 tariff lines currently not offered under the ASEAN-China FTA have been agreed (4 percent of the total), covering most of chapters 1 to 10 of Cambodia's ASEAN Harmonized Tariff Nomenclature, ranging from live animals/animal products to meat, fish, and cereals. Immediate benefits of the China-Cambodia FTA—when it becomes effective—may come from exporting non-rice, high-value (raw and processed) agricultural products like cassava, rubber, and soybean since China has already provided quotas for Cambodia's milled rice and mango exports. The Cambodia-Republic of Korea FTA as well as the Regional Comprehensive Economic Partnership (if signed) could further enhance market access for Cambodia's exporters.

Third, other global megatrends are changing consumption patterns and demand for what will be produced. Incomes are rising in Cambodia and Asia, and consumption is both increasing and diversifying into higher value-added goods and services. Non-poor households purchase more expensive food baskets than poor households do—including non-rice cereals, fruits, and meat—and they expect these goods to meet solid hygiene and food safety standards.<sup>137</sup>

**To reap these opportunities Cambodia needs to address constraints that currently inhibit diversification and upgrading of its agricultural exports.** Cambodia's low value added in agriculture can be explained by high inputs cost and low adoption and high cost of mechanization due in part to tariffs and non-tariff barriers, which lower

productivity of key agricultural products. The business environment appears to be further inhibiting diversification and upgrading into agro-processing.

## High inputs costs lower value addition in agriculture

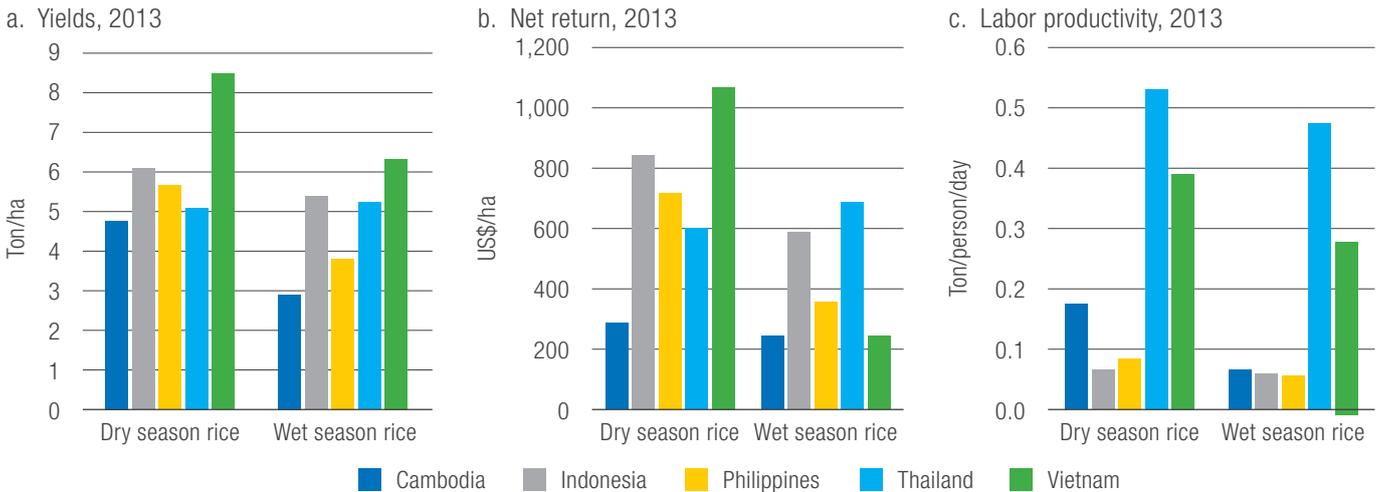
**While rice yields—Cambodia's main agricultural product—improved over the past decade, labor productivity and returns remain low due to high input costs.** A 2013 survey shows Cambodian rice yields per hectare have caught up to those of other producing countries, but net returns remain below comparator countries, and labor productivity is relatively low (figure 2.18). Cambodia's labor use per season was between labor-intensive producers (Indonesia and the Philippines) and more capital-intensive producers (Thailand and Vietnam), but low labor productivity played a role in keeping net returns below competitor countries. The survey further identified increases in input costs affected net returns, with the cost of seeds and labor tripling and fertilizer prices doubling.<sup>138</sup> Moreover, many Cambodian farmers cannot grow dry season rice or other multi-cropping alternatives due to lack of water and irrigation for dry season cultivation. In contrast, Vietnamese farmers generally cultivate three rice crops per year, increasing annual labor demand and farmer income.<sup>139</sup>

## Mechanization of agriculture can improve labor productivity and output growth through labor reallocation and modernization of production.

Increased use of modern technologies has a clear positive effect on productivity and profitability in both per hectare and per labor terms. In absolute terms, mechanization has been increasing in Cambodia (figure 2.19). A comprehensive survey of Cambodian agriculture showed all crops, except for dry season rice, had significantly higher economic returns per hectare when using "modern" technologies, with average gross margins (revenue less cost) per hectare between 1.6 to 3.4 times higher than those of "traditional" producers.<sup>140</sup> The effect was especially pronounced for small farm vegetable producers: gross margin per hectare was 3.6 times higher when using modern technology than traditional technology. The survey further showed that for all crops, the return on labor increased by factors of 1.15 to 10.3 when using modern technology, showing the impact of modern input use on productivity performance.<sup>141</sup> Evidence also indicates technology adoption explains nearly all scale advantages in rice and maize cultivation, as larger farms in these crops seem to benefit from labor savings in management and monitoring, and better access to capital and therefore labor-saving equipment. Beyond mechanization, use of irrigation, contract farming, marketing, and processing can also support diversification.

**FIGURE 2.18**

Cambodian rice yields have improved but net returns and labor productivity are low

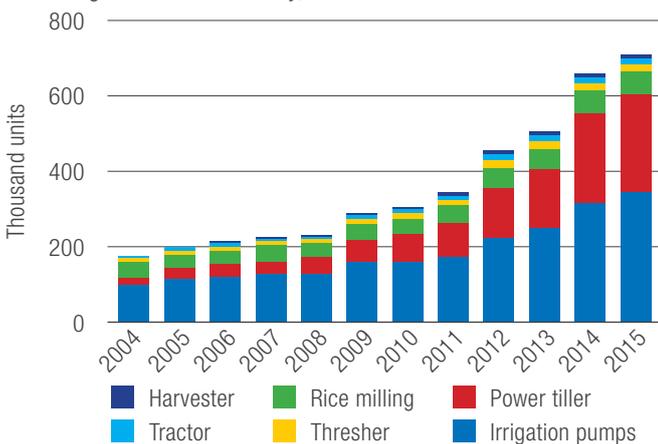


Source: World Bank (2015), Bordey et al. (2016), and Cambodia Economic Diversification Study (World Bank 2019a).

**FIGURE 2.19**

Mechanization has been increasing in Cambodia

Use of agricultural machinery, 2004-15

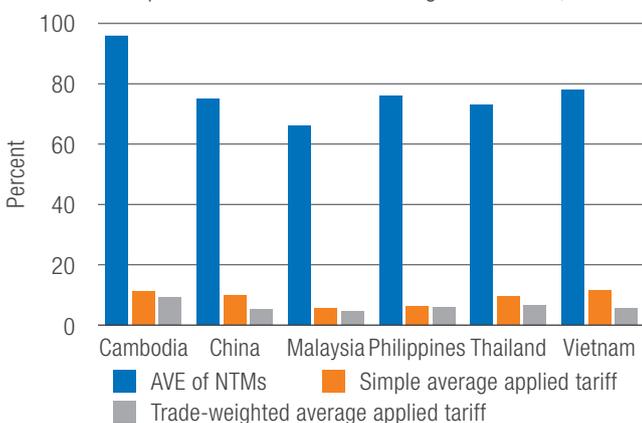


Source: Department of Agricultural Engineering of the Ministry of Agriculture, Forestry, and Fisheries and Cambodia Economic Diversification Study (World Bank 2019a).

**FIGURE 2.20**

NTMs increase the cost of agricultural inputs

Ad-valorem equivalent of NTMs and average tariff rates, 2015



Note: AVE = Ad-valorem equivalent.

Source: Niu et al. (2018) and Cambodia Economic Diversification Study (World Bank 2019a).

**Yet production costs increase with modern input use, and farmers said high cost was the main constraint to adopting or expanding use, due in part to high tariffs on equipment.** Machinery can be prohibitively expensive for smallholders, and various factors increase their cost. Although Cambodia does exempt tractors and some agriculture machinery from import duties, tariffs are still applied to some tools and implements. Moreover, spare parts are expensive and considerably increase costs to farmers. Tariffs ranging between 15-25 percent are paid on imported implements, and tractors' spare parts face 15-35 percent tariffs. Maintenance for some agricultural equipment (including spare parts as well as skilled professionals) can equal the initial purchasing cost over the life of a machine, increasing farming costs considerably.

**While non-tariff measures (NTMs) are less pervasive in Cambodia than in other countries, their associated cost is steep and affects agricultural inputs like fertilizers, pesticides, and seeds.** Only about one in three tariff lines in Cambodia are affected by NTMs. This coverage ratio is much smaller than what is observed in other countries around the world, and is lowest among ASEAN countries with available data except the Philippines. In China, for example, NTMs cover about 90 percent of tariff lines. In Cambodia, however, those that do exist are highly taxing. The ad-valorem equivalent of Cambodia's NTMs, which measures the percentage increase in the price of imports, are the highest in the region (figure 2.20). Cambodia's NTMs increase the cost of imported products by 96 percent, compared to around 75 percent in China. The average ad-valorem equivalent is almost 10 times higher than the average tariff, which are equal to 9 percent of the import value. Tariff and non-tariff barriers are increasing the cost of key agriculture inputs like tractor implements, fertilizers, irrigation equipment, and greenhouse materials, thus limiting the potential for productivity improvements.

## Addressing infrastructure gaps to support upgrading

**Supporting infrastructure can improve productivity for farmers by greater connectivity to markets, improved production techniques, and reduced inputs costs.** In Cambodia there are some gaps in the key infrastructure that supports agricultural production. Low survival reflects challenges related to quality, conservation, and transportation of agricultural products, as well as associated sanitary and phytosanitary standards (SPS) risks. Cambodia has insufficient quality assurance standards and SPS compliance mechanisms, which inhibit quality upgrading of agricultural exports.

**Investments in and policy towards land management and natural resource preservation are also vitally important for the future growth potential of Cambodia’s agriculture exports.** With low population density, land availability is not a constraining factor for investment in larger plantations and agribusinesses, which mainly produce and process for export. But the management of public land and the on-going reallocation of concessional land continues to result in ownership grievances. A key issue is lack of transparency in the land management system. To address this, it will be important for the RGC to finalize agricultural land policy. This policy needs greater transparency around the rules, regulations, and fees so they are implemented according to a clear system. This could support greater FDI for agriculture in the long term and more sustainable agriculture export systems.

**Exploitation of protected areas however is a broader concern for natural resource preservation in Cambodia.** According to the World Database on Protected Areas, Cambodia has one of the highest ratios of protected land areas in the world at 41 percent. Yet few protected

areas have been zoned, and therefore many lack a map of where productive activities can be undertaken (for example community and sustainable land-use areas) and where they cannot (for example conservation and core areas). As a result, most protected areas are under high pressure from logging, poaching, and land clearing, with a significant share having already been heavily degraded or converted to agriculture production. Strengthening the capacity for protected area landscape planning and management, preparing Protected Area and Community Protected Area management plans, implementing an effective natural resource management system (including financial management and procurement, environmental and social management, and revenue and fee management), and providing technical assistance on a protected area enforcement framework would help ensure environmental, social, and economic sustainability.

## Business environment constraints inhibit upgrading into processing and establishing domestic linkages

**There are substantial opportunities to establish processing plants to add value to basic products for export and domestic consumption and create jobs in Cambodia, but business environment constraints put Cambodian processing firms at a disadvantage.** A 2016 survey of existing processing firms and input importers in Cambodia identified numerous business-environment challenges that constraint agro-processing firms and input importers in Cambodia. Insufficient market information, informal payments, lack of supportive public policies, and high energy costs were the most binding constraints for agro-processing (figure 2.21). To illustrate, high fuel and electricity costs caused average rice milling costs to be 30 percent higher for Cambodian millers than for Vietnamese and Thai millers in 2013.<sup>142</sup>

**FIGURE 2.21**

The business environment constrains agro-processing firms and input importers

Key constraints in the agro-processing sector identified by existing enterprises in Cambodia, 2016

<b>Top five constraints</b>	Market information and information systems
	Informal payments/corruption
	Absence of reliable market
	Lack of government policies and encouragement for the agro-processing sector
	High energy and electricity cost
<b>Other constraints</b>	Irregular and insufficient supply of raw materials
	High cost of transportation
	Lack of skilled labor/workers for maintenance and operation of agricultural machinery
	Poor road connections from farm to factory
	Marketing and branding of Cambodian products (perception of Cambodian products as inferior)
	Access to technology and modern machinery
	Costly exporting procedures which require significant paperwork

**Source:** Bdlink (2017) and Cambodia Economic Diversification Study (World Bank 2019a).

## Policies can support value addition in Cambodian agriculture

**A multidimensional strategy is needed to increase value addition in Cambodia's agriculture export sector.** Given opportunities provided by vegetables as well as agro-processing and foodstuffs, Cambodia could pursue new drivers of agriculture growth that would boost value addition and job creation in the sector. These are crop diversification, differentiation, agro-processing, and improved use of agriculture inputs. Within each of these objectives, a range of policies are identified that focus on improving capabilities, strengthening regulations, and investment in infrastructure.

### Promoting diversification toward higher-value fruits and vegetables

**Supporting diversification toward crops like fruits and horticulture products may be a first avenue toward high-value-added agriculture in Cambodia.** Horticulture crops show high gross margins and, given the labor-intensive production involved, would contribute to maintaining employment, while also being compatible with smallholder farming due to limited scale advantages.<sup>143</sup> Domestically grown fruits and horticulture products have potential both as substitutes to imports in the domestic hospitality industry and local markets, and as differentiated Cambodian export products. Diversification would also help reduce monocrop dependency and associated risks.

**In the short term, Cambodia should support the private sector in assessing market potential for new crops (fruits and vegetables) that are suitable for Cambodia's climate, with the Ministry of Commerce in the lead.** Identifying market potential through market assessments is integral to crop investment decisions and important for ensuring success. For instance, the increasing demand for plant-based protein may make protein-rich beans preferable to other legumes that would otherwise be equally suitable for cultivation in the same plot. Although no document or person can provide all the answers up front, some indication can be given based on general climatic conditions.<sup>144</sup> Alongside support to the private sector, the government should also strengthen its own institutional capacity to provide support services such implementation of standards around food safety and SPS (discussed below).

**Success will depend on area-by-area assessments and irrigation investment.** Agriculture is inherently uncertain and carries risk. Which crops to grow and how they should be used is never completely certain until attempted, and the specific characteristics of each location require trial and error and experimentation. The suitability of crops is also heavily influenced by the irrigation systems available, as varying degrees of water control and availability are

an essential precondition for all crops. Planned irrigation investments should consider how they can support farmers in cultivating a diversified range of crops. For example, flood control irrigation is insufficient to grow tree crops, which require year-round water access as well as flood prevention. This is a short-term agenda that could be led by the Ministry of Agriculture, Forestry, and Fisheries.

**In the medium and long term, Cambodia should foster public-private partnerships that envisage contract farming and extension services to support investments in selected crops.** This could be led by the Ministry of Agriculture, Forestry, and Fisheries. Some crops, particularly tree crops, may require financial interventions or arrangements (for example contract farming) to support smallholder entry, as these crops typically require significant up-front investment and three to five years of growth before significant yields can be harvested and returns realized. To support smallholders in cultivating higher-value, high-quality crops, extension services and irrigation systems must be adapted accordingly. Farmer extension services would need to support relevant crop types and related practices, empowering farmers to engage in higher-value crop production. One way for the government to achieve this is to provide extension services in collaboration with local private sector actors through public-private partnerships. Support to bring agricultural products to markets can also be provided to smallholders through these institutional arrangements.

### Focus on upgrading through quality assurance and branding

**Introducing and marketing food safety and quality standards to pursue a 'go green' differentiation strategy for high-quality food products presents an opportunity for Cambodian producers and exporters.** Fruit and horticulture products are especially well-suited to target niche markets, as they make up the largest component of the United States' organic market demand at 43 percent of the total.<sup>145</sup> Targeting part of fruit and horticulture goods production to organic markets could generate higher farmer incomes and employment in processing, sales, and distribution services. Forecasts expect world demand for organic products to increase from US\$110.25 billion in 2016 to US\$323.09 billion by 2024.<sup>146</sup> Growth is forecast primarily in the traditional European and American markets, but demand is also expected to more than double in the Asia-Pacific region.<sup>147</sup>

**First, improve implementation of pest and disease surveillance, quarantine services, and laboratory testing for contaminants and residues, among other food safety functions.** Producing fruits and horticulture products that meet food-safety and/or organic requirements in advanced economies would require capacity building and appropriate institutional arrangements to ensure better

traceability and quality assurance mechanisms, as well as successful communication of safety and quality to buyers. At the production level, improved capacity will be needed in relation to a broad array of SPS service functions, both for the domestic market and for supporting exports. The Ministry of Agriculture, Forestry, and Fisheries could lead this medium-term agenda.

**Second, introduce a national system to certify both SPS compliance and organic labeling.** This is particularly important for exports, because trading partners, modern food retail distributors, and tourist facility operators need assurance that purchased commodities conform to the expected standards of food safety, quality, and desirable characteristics (for example, organic production, adapted varieties).<sup>148</sup> A trusted certification is a convenient assurance. In the long term, certification should be provided by national institutions, which would require laboratories, systems, and procedures to be approved by target market authorities.<sup>149</sup> In the short term, a simpler procedure for obtaining third-party certification could be considered.<sup>150</sup> Capacity building will also be needed to implement certification and higher standards, for example training of lab technician. Targeted outreach to farmers on organic agricultural practices, fertilizer use, or other technologies will be required for compliance with new standard, which would also improve food safety, productivity due to more efficient use of inputs, and better environmental outcomes. Here, the Ministry of Agriculture, Forestry, and Fisheries could lead this medium-term agenda.

**Third, develop a national branding strategy and communication campaign for other fresh fruits and horticulture products (beyond rice and pepper).** Cambodia already has an internationally established reputation in premium fragrant rice (declared the World's Best Rice for several years) and Kampot pepper, and it could build on this momentum to enhance and implement a strategy to establish an internationally-recognized national brand in fruits and horticulture products. For a credible national brand based on quality, some fundamental steps must be taken. For example, a list of safety and quality requirements must be established for all products intended for inclusion, and third-party entities must be accredited to certify producers, processors, and packing operators against those requirements. Subsequently, efforts are needed to promote the brand both for expansion among producers and for market acceptance by communicating the value to consumers. Beyond these fundamentals, brand credibility must be strengthened and the certification process simplified (without compromising on safety and quality standards), in collaboration with private sector actors. This medium-term agenda could be led by the Ministry of Commerce.

**Fourth, in the medium and long term, establish geographical indicator arrangements and blockchain technology to improve traceability through the agriculture supply chains.** Another possible avenue for branding and differentiation is geographical indication. A geographical indication signals certain quality and production-related qualities to consumers, with the possibility of obtaining better market access, increased sales, or increased unit value/price, as well as possibilities for tourism in producing areas. The minimum requirements for establishing a geographical indication is a product with certain existing market recognition, producers (or government entities) who want to protect the product, and a legal framework enabling protection.<sup>151</sup> Once these are established, further efforts are required to delineate the coverage, characteristics, and responsibilities of the geographical indication and its enforcement.<sup>152</sup> Blockchain technologies could be introduced to manage the geographical indication brand by improving traceability through the agriculture supply chain. Such an agenda would best be led by the Ministry of Agriculture, Forestry, and Fisheries.

#### **Improve conditions for agro-processing and the promotion of higher value-added products**

**The food processing sector has strong potential for domestic upstream linkages and export growth, increased value addition, and job creation.** Despite some positive developments in recent years, agro-processing activity in Cambodia remains incipient. Most processed food products are imported from neighboring countries like Thailand or Vietnam, who acquire raw materials from Cambodia.

**In the short term, Cambodia can establish a local agribusiness industry by continuing to lower energy costs (led by the Ministry of Mines and Energy) and improving trade infrastructure for better market access (led by the Ministry of Commerce).** Cambodia has substantially improved trade facilitation and logistics in recent years, but continued efforts are needed to streamline processes to boost competitiveness and reduce cost for agricultural importers and exporters. Here, Cambodia should fully implement the national single window by: i) integrating remaining agencies; ii) building capacity and training for customs officials on the new national single window or Automated System for Customs Data (ASYCUDA) system; iii) automating and integrating the remaining border processes like SPS certification into the system iv) and reviewing customs requirements for export and import permits while also linking the Certificates of Origin systems (to automate their issuance) and the customs ASYCUDA system. Authorities should also focus on reducing constraints in the business environment discussed in other parts of this report, rather than providing sector-specific support.

**In the medium and long term, authorities should consider adapting institutional models supportive of agribusiness.**

To further support SME agribusiness development and ensure inclusive agricultural growth, Cambodia can adapt institutional models that have worked elsewhere, including agribusiness incubation, farmer-enterprise productive alliances, and contract farming systems, which could be spearheaded by the Ministry of Agriculture, Forestry, and Fisheries.<sup>153</sup> Strengthening capacity of agricultural cooperatives will also help ensure stable and adequate supply of local agricultural inputs for agro-processing firms and encourage FDI into the agro-processing sector. The RGC should also investigate the availability of financing mechanisms and facilitate contact between local entrepreneurs, national development finance institutions, and active, developmental, and temporary shareholders to promote access to long-term financing.<sup>154</sup>

A business model that integrates primary, secondary, and tertiary activities (medium-scale processing, on-site primary production, smallholder cooperation, and sales and distribution) could be a viable alternative for Cambodia. One example of such an integrated value chain is Malawi's "Nyama World," which secured investment from Development Finance Institutions to achieve necessary expansion.

**Improve the availability and affordability of agricultural inputs**

**Facilitating the uptake and appropriate use of agriculture inputs to improve productivity involves ensuring competitive cost of agricultural inputs to farmers.** Agricultural inputs include high-quality seeds, fertilizers, and tractor implements and facilitating uptake should include education to ensuring appropriate use. Output prices of agricultural products have declined, making the cost of inputs an even greater barrier to adoption.

**First, in the short term, the RGC could review the effectiveness of all licenses, quotas, and fees on imported agriculture inputs.** Authorities could extend the current policy applying to tractors and remove import duties on implements and tractor parts to facilitate improved access to agricultural tools and equipment. This could be accompanied by a certificate issued by a business chamber to confirm their intended use for agricultural machinery. Import duties on other agriculture machinery implements could be phased out as well. These policies could be led by the Ministry of Commerce.

**Second, in the short term, Cambodia could intensify market surveillance and traceability of fertilizers, including by using mobile testing facilities.** Pesticide use has increased substantially and must be managed efficiently in the future to avoid raising food safety and environmental concerns. Unfortunately, the cumbersome

and non-transparent licensing system for importing fertilizers and pesticides, which is meant to support food safety and product quality, results in smuggling and the presence of potentially hazardous products in domestic markets. The RGC, led by the Ministry of Agriculture, Forestry, and Fisheries, could streamline fertilizer import requirements. These reforms would decrease smuggling, improve competition, lower fertilizer prices, and improve fertilizer quality available in the market, while increasing fertilizer consumption by farmers and enhancing the competitiveness of Cambodian agricultural exports. The reform of the fertilizer licensing and permit requirements can be embedded in the RGC's overall effort to improve its trade facilitation regime. The reforms could be introduced with a modular approach, prioritizing organic fertilizers that can be used in organic farming.

**Third, in the medium and long term, authorities could introduce a risk management system at the border profiling importers, exporters, and products.**

This would ensure food safety and sufficient quality standards in products like fertilizers or pesticides, without comprising the timeliness of import procedures. Key to implementation will be building capacity of inspectors and border staff. Risk management could potentially be introduced as a module in phase II of the national single window and led by the Ministry of Agriculture, Forestry, and Fisheries in coordination with the Ministry of Commerce.

## 2.3 Increasing competitiveness to export modern services

**The increasing tradability of modern services is recognized as one of the major changes in global trade patterns during the last quarter of the 20th century.**<sup>155, 156</sup> The explosion of services trade—and services more generally—in the global economy resulted from falling trade and investment barriers and new digital technologies that have reduced the costs of delivering services across borders.<sup>157</sup> For developing countries in particular, services offer an increasingly important avenue for integrating into global markets.

**Services support a country's trade through a dual role.**

First, services are key inputs enabling export competitiveness of agriculture and manufacturing sectors. Indeed, the higher the costs of services like transportation, electricity, utilities, financial, distribution, accounting, engineering, consulting, and legal services, the higher the final cost of those agricultural and manufacturing products using them. As the Cambodian manufacturing and agriculture sectors face increasing competition from abroad, both in domestic and external markets, the greater the need for these sectors to rely on efficient services inputs.

Second, supporting firms' competitiveness to export a diverse set of modern services provides a direct avenue for export growth. Countries like India, the Philippines, and Vietnam have benefitted from the expanding opportunities offered by new technologies, to be exporters of modern services activities. Literature has demonstrated the positive effect of services trade on economic growth, productivity, jobs, and knowledge transfer.<sup>158</sup>

**Cambodia has similarly witnessed an explosion of services trade over the past decades.** Services exports in Cambodia have grown at an impressive rate of 17 percent annually on average between 1995 and 2019, compared to goods export growth of 12 percent. As a result, the share of cross-border services trade in total trade has grown steadily during the last decades. Services exports now account for about 28 percent of Cambodia's total trade.

### Services exports are concentrated in tourism

**Cambodia's services export performance is dominated by the growing role of tourism (travel and transport).** Since 2005, Cambodia has outperformed EAP comparator countries in services export growth. Most of this growth has been driven by the expansion of the tourism sector, which accounts for nearly all of Cambodia's services exports. In 2018, travel services represented 83 percent of Cambodia's services exports, and transport services constituted another 13 percent (figure 2.23). The magnificent landmark of

Angkor Wat temple complex facilitated the revival of tourism in the aftermath of three decades of war and instability. Cambodia's tourism continues to draw heavily on visitors to Angkor Wat, the main destination for tourists; arrivals to Siem Reap province where the temple is located account for 60 percent of total international arrivals by air.

**There are some worrying trends that could threaten tourism development as a central pillar of an inclusive economy.** Cambodia has globally significant tourism resources that are diverse and well placed to be a pillar for socioeconomic development as identified by the government. Yet Cambodia is ranked 98th on the global tourism competitiveness index, lowest in South-East Asia.<sup>159</sup> Value captured per tourist has not changed much in the last decade (from US\$585 in 2005 to US\$655 in 2016), low-end businesses have mushroomed, stays remain short with limited repeat visits, and there are signs of overcrowding and degradation of the key assets at the Angkor temples.<sup>160</sup> The average expenditure per visitor in 2016 in Cambodia (US\$655) was much lower than it was in Thailand (US\$1,489) or Vietnam (US\$925). While some progress has been made in diversifying destinations, especially to the coastal region, the potential for ecotourism as a more sustainable growth model remains untapped (box 2.1). Covid-19 and the collapse of international arrivals has illustrated the fragility of the concentrated reliance on tourism, with a sluggish recovery expected in the coming years.<sup>161</sup>

#### BOX 2.1: Ecotourism can promote upgrading in tourism

Cambodia's spectacular and pristine natural assets provide a potential comparative advantage in ecotourism. Ecotourism includes tourism activities related to nature-based tourism in natural areas like birdwatching, fishing, camping in natural areas, hiking, kayaking, ziplining, and adventure tourism. There are already examples of successful mid- to high-end ecotourism operations in Cambodia, yet there are enormous opportunities to expand the ecotourism industry. For example, the Cardamom Mountains have natural assets to enable development of high-end tourism experiences for both younger and wealthier North American, European, ASEAN, Chinese, and Khmer tourists.

Given the current situation—with the sharp slowdown in Cambodia's international arrivals—investing in the development of sustainable ecotourism now would be strategic for diversifying Cambodia's tourism product. Marketing Cambodia as a place to visit, with a unique biodiversity, nature-based experiences, and remoteness will help attract tourists in a post-Covid-19 world. Ecotourism also has the potential to bring in higher tourism revenues, create better jobs, and provide stimulus for rural communities.

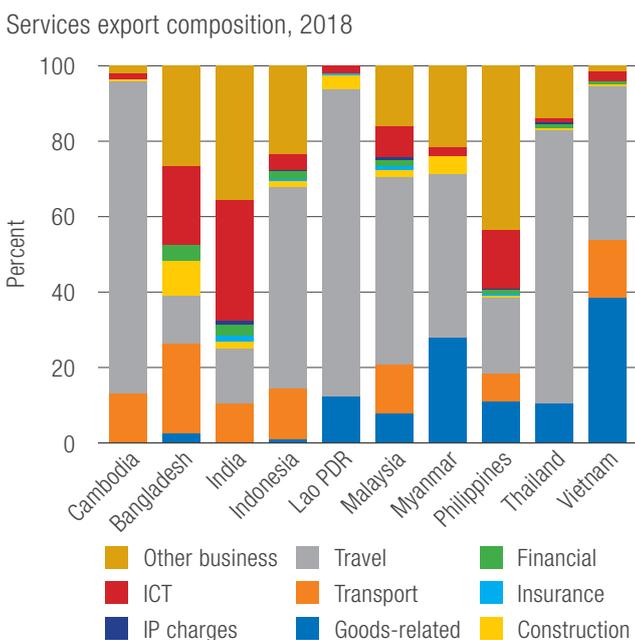
Key policy priorities are to i) improve the enabling environment for private sector investing in ecotourism with new policies and clear guidelines for ecotourism development in protected areas; ii) develop the Cardamom Mountains as an ecotourism destination and support the private sector in destination marketing and branding, developing new ecotourism products, and investing to enable connectivity to ecotourism sites within the Cardamoms; and iii) integrate protection of forest resources into ecotourism development including strengthening protected area management and promoting inclusive growth of rural communities.

**Source:** World Bank (2020c).

**In contrast, development of modern services has been limited.** Cambodia has seen little diversification over the past decade in its services exports, particularly in modern services where Cambodia underperforms against comparators. In 2018, other commercial services (other than travel and transport services) represented less than 4 percent of total services exports. Examples of modern services include information and communication technologies (ICT), banking, insurance, business services, business process outsourcing, knowledge process outsourcing, and education. Other business services, like lawyers and accountants, were more important in Bangladesh (28 percent of total commercial services exports), the Philippines (43 percent), and Thailand (14 percent) than Cambodia (2 percent) (figure 2.22).

**Covid-19 is reshaping services trade, which may offer new opportunities for countries like Cambodia.** Covid-19 is likely to shift the pattern of services globalization from trade in face-to-face services like tourism and transport to trade in digitally delivered services like telecommunications, business processes, and software. The ICT revolution has already led to a rapid growth in business services exports from countries like Vietnam and the Philippines. Since Covid-19 is making face-to-face transactions difficult, firms and people are investing heavily in digital equipment and literacy.<sup>162</sup> The results may mean new opportunities for developing countries to advance into more sophisticated services exports.

**FIGURE 2.22**  
Cambodia relies heavily on tourism and has not diversified into modern services



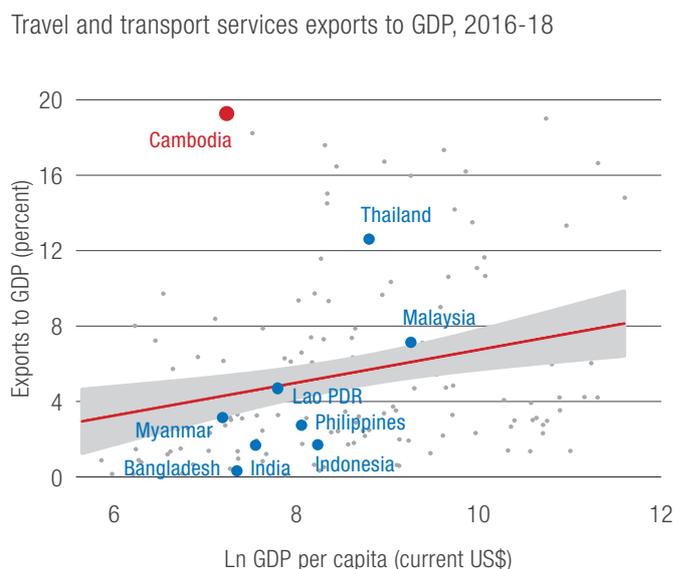
**Source:** World Bank staff calculations using data from UN Conference on Trade and Development.

**Cambodia has substantial room for further growth in services trade beyond tourism, mainly in other commercial services.** Cambodia is among the most reliant in the world on travel and transport services (figure 2.23). While other commercial services exports are on par with Cambodia's current level of development, their growth is significantly lagging in relation to similar countries. For example, according to WTO data, ASEAN growth rates in other commercial services averaged 23.1 percent from 2005 to 2018, compared to 9.7 percent in Cambodia over this period. Consequently, ASEAN's world market share of other commercial services increased from 3.3 percent to 5.3 percent from 2005 to 2018—almost a 60 percent increase. Meanwhile Cambodia's world market share fell from 0.007 percent to 0.006 percent in that period—almost a 10 percent decrease.

### Services sector linkages are minimal

**In Cambodia, the services sector has relatively few linkages with other sectors.** Professional services, ICT, transport, finance, and electricity are key inputs for other sectors like manufacturing and agriculture. Literature has established the importance of services inputs for firms' outcomes in downstream sectors. Productivity growth in services has been a key driver of GDP growth for Organisation for Economic Co-operation and Development (OECD)

**FIGURE 2.23**  
Cambodia outperforms in tourism-related services



**Source:** World Bank staff calculations using data from World Bank World Development Indicators.

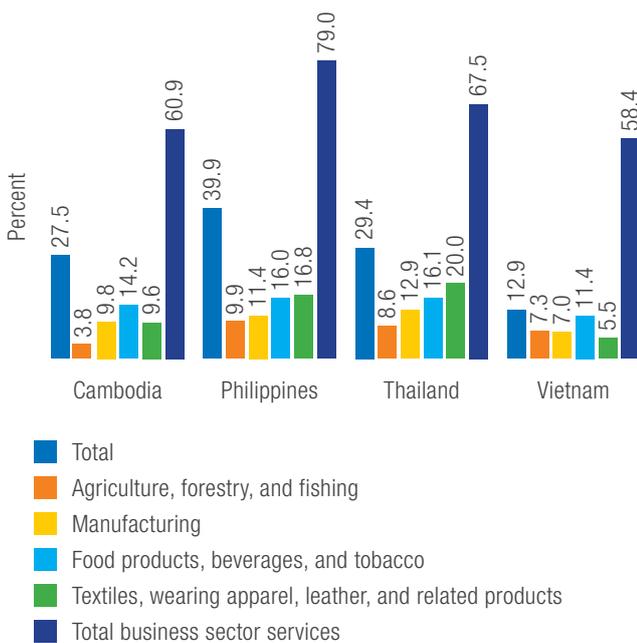
countries as well as developing countries. In Indonesia, improved services input quality, variety, and cost resulted in improved performance for firms in downstream sectors. However, Cambodia lags behind comparator countries in the use of domestically sourced services in the production of its manufactured exports (figure 2.24), particularly financial, insurance, and utility services. Instead, wholesale and retail services account for approximately half of all domestic services inputs to manufacturing, and transportation and storage services represent approximately 18 percent, the second-largest share (figure 2.25).

## Key enablers in the domestic policy environment are missing

**Targeted policies and enabling factors could facilitate a competitive modern services sector and increase domestic firms' potential to export a diverse set of modern services.** There are two main complementary ways of diversifying economic growth through services-related policies. First, services sector diversification can be achieved through national policies that strengthen the domestic enabling environment. Competitive, modern services exports require a variety of fundamental enabling factors like a strong domestic regulatory environment, market access, infrastructure, high skills and human capital, and institutions.

**FIGURE 2.24**  
Compared to the Philippines and Thailand, services are used less as inputs

Domestic services value added in exports by export sector, 2015



**Source:** World Bank staff calculations using data from OECD Trade in Value Added Database and Cambodia Economic Diversification Study (World Bank 2019a).

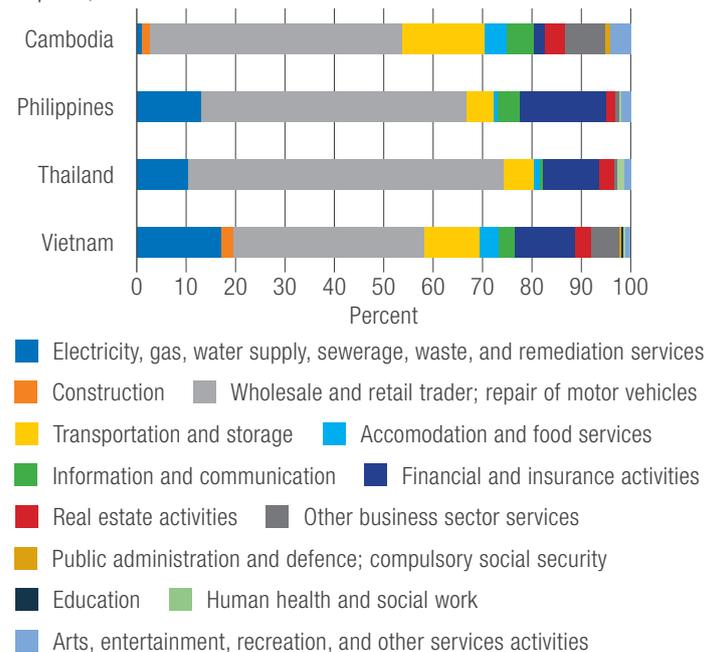
Second, international trade policies can help modernize and internationalize services sectors through preferential trade agreements (PTA) and other trade agreements. This section explores these options to understand Cambodia's inability to diversify into modern services exports.

## National regulatory environment

**Reforms to improve regulatory policies and remove barriers to entry facilitate well-functioning and competitive services markets, inflows of foreign services, and ultimately modern services trade.** This happens through various channels. Services liberalization policies increase foreign investment in services sectors, which increases international competition and can spur exports. Services liberalization can also affect a country's comparative advantage and thus the composition of trade. For example, better business services can help countries move up the value chain towards more complex goods.<sup>163</sup> Services reforms can also lead to knowledge spillovers and network effects, increasing the productivity of capital and labor inputs and affecting total factor productivity (TFP). There are a growing number of studies using firm-level data demonstrating that liberalization of services through FDI increased the productivity of firms by 7 percent in Chile, 3.8 percent in the Czech Republic, 2.4 percent in Romania, and 9.1 percent in India.<sup>164</sup>

**FIGURE 2.25**  
Sectors rely most heavily on traditional domestic services inputs, rather than domestic modern services

Composition of domestic services value added in manufacturing exports, 2015



**Source:** World Bank staff calculations using data from OECD Trade in Value Added Database and Cambodia Economic Diversification Study (World Bank 2019a).

### Cambodia has significantly liberalized its services trade regime compared to other ASEAN countries.

Cambodia undertook an ambitious program of liberalization when it joined the WTO in 2004, including in the services sector. Cambodia is one of the most open countries in the EAP region with low levels of restrictiveness against foreign services providers, as measured by the World Bank's Services Trade Restrictiveness Index (figure 2.26).<sup>165</sup> Cambodia has left the provision of cross-border services (mode 1) unrestricted in most sectors and there are almost no limitations on foreign ownership (mode 3).<sup>166, 167</sup>

### So how can Cambodia's high services liberalization yet low diversification of services exports be reconciled?

Notably, many of the other key enabling factors of modern services exports in the domestic policy environment are underdeveloped, suggesting additional steps are needed. These are cross-cutting, but also affect growth of specific sectors like Cambodia's burgeoning creative services industry, as discussed in box 2.2.

## Institutions

### Domestic institutions play a complementary role in creating well-functioning and competitive services markets.

Cambodia ranks lowest among comparators in rule of law (figure 2.27) and property rights protection (figure 2.28). Though Cambodia adopted laws on copyrights, trademarks, and patents in 2002-03, enforcement is reported to be weak, and initiating procedures in Cambodian civil court can be cumbersome and costly (as discussed in Chapter 1). The RGC also reserves the right to revoke patents, utility model certificates, and industrial design certificates, shorten the time of protection, or use intellectual property to promote public interests, and there is no approved legislation on trade secrets.<sup>168</sup> As a result, according to the World Economic Forum, Cambodia scores just 3 out of 7 on the IPR protection index, compared to a regional average of 4.7.

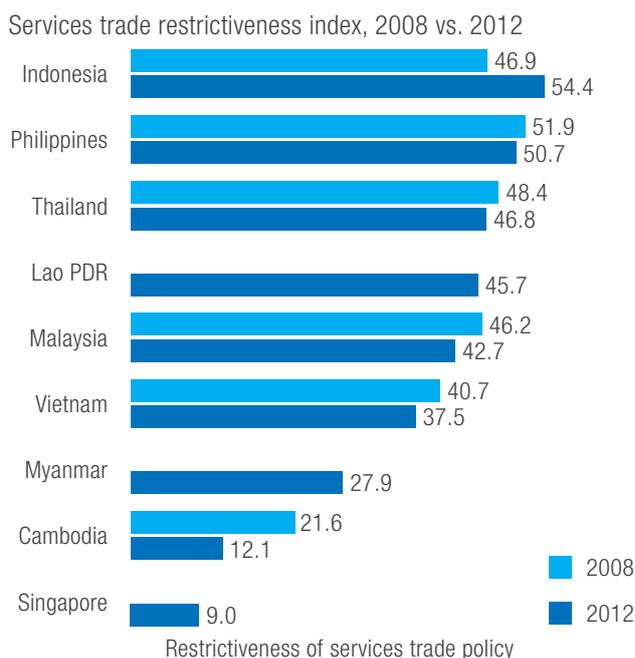
## Infrastructure

### New technologies are having a large impact on how services are delivered, and access to high-bandwidth telecommunications infrastructure is key to countries' participation in modern services exports.

Although internet prices are competitive, broadband access remains limited in Cambodia (figure 2.29). Fixed-broadband subscriptions, at 0.6 per 100 inhabitants in 2016, were well below regional and global averages, and most mobile broadband subscriptions operate in 2G and 3G services since 4G coverage remains limited. Low fixed-broadband adoption in Cambodia may be due to a combination of factors, including limited availability of optical fiber in rural areas, the low number of households with a computer,

## FIGURE 2.26

### Cambodia has significantly liberalized its services trade regime



Note: Lao PDR, Singapore, and Myanmar not covered in 2008.

Source: Gootiiz and Mattoo (2015).

and the relatively low price of mobile-broadband internet compared to fixed-broadband internet.<sup>169</sup>

### Other trade-related infrastructure associated with better services export performance is also lagging.

Modern services also depend on the quality of transport infrastructure like port or airport facilities and reliable and cost-effective electricity supply. Cambodia has substantially improved trade facilitation and logistics in recent years, but continued efforts are needed to streamline processes at the border, as discussed in Section 2.1 (figure 2.30). Efforts are also needed to ensure the reliability of electricity and address the high costs discussed in Chapter 1. At 17.5 cents per kilowatt hour, Cambodia has the highest commercial electricity rates in the region.<sup>170</sup>

## Human capital

### Appropriate educational standards and ICT competency of graduates are essential for developing and sustaining modern services exports in developing countries.

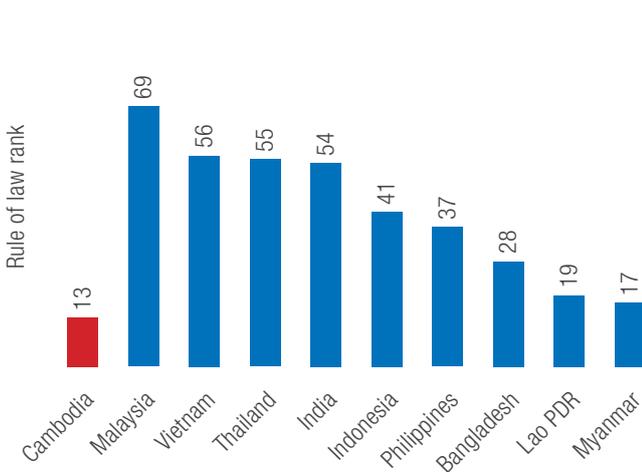
A workforce trained in a common global language like English also supports bilateral services exports between countries. Cambodia ranks lowest among comparators in foundational human capital as measured by the World Bank Human Capital Index (HCI), discussed in Chapter 1, and lowest in educated workforce as measured by the share of the population aged 15 and over with tertiary education (figure 2.31).

## Restrictions on professional services

**Restrictions remain in some key sectors, particularly professional services.** Firm performance correlates with objective measures of professional services in addition to access to transport and telecommunications, discussed above.<sup>171</sup> Despite services reforms, in Cambodia there is still room for improvement in the regulatory environment for professional services including legal and accounting

**FIGURE 2.27**  
Cambodia scores low on rule of law...

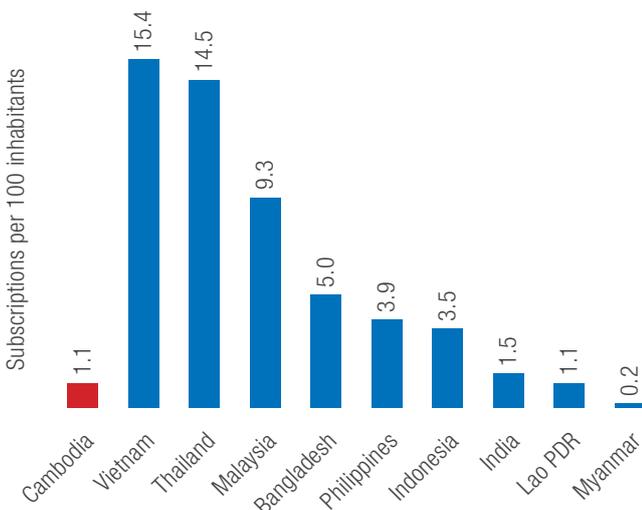
Rule of law rank, 2020



**Source:** World Bank staff calculations using data from World Bank Governance Indicators.

**FIGURE 2.29**  
Broadband access is limited

Fixed broadband subscriptions per 100 inhabitants, 2018

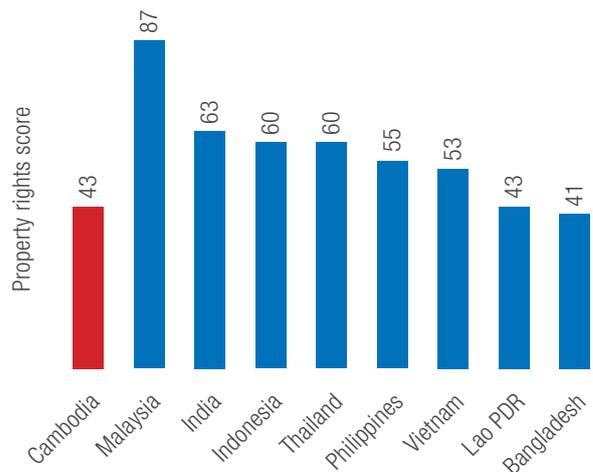


**Source:** World Bank staff calculations using data from World Bank World Development Indicators.

as well as transportation and telecommunications where some restrictions remain in mode 1 as well as mode 3 (figure 2.32). In accounting services, only Cambodian accountants can sign off audited reports. In legal services, foreign lawyers cannot register with the Bar. Restrictions also remain in mode 1 in audiovisual services, maritime transport, land transport, and internal waterways transport, and in mode 3 in telecommunications, travel agencies, and tour operators.

**FIGURE 2.28**  
...and property rights protection

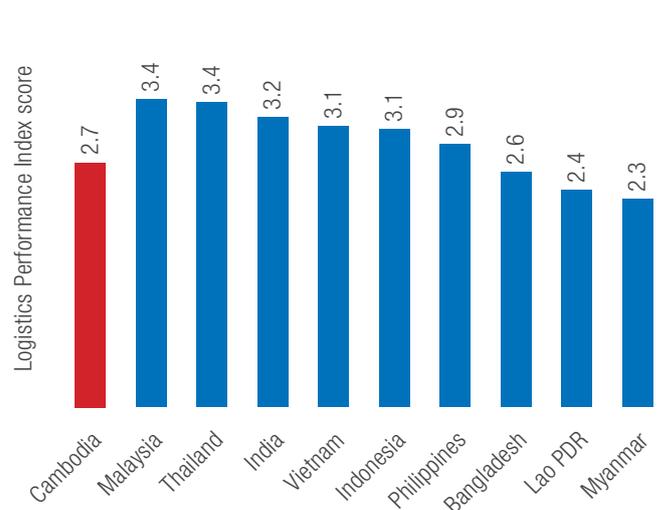
Property rights score, 2020



**Source:** World Bank staff calculations using data from Heritage Foundation.

**FIGURE 2.30**  
Improvements are needed in trade infrastructure

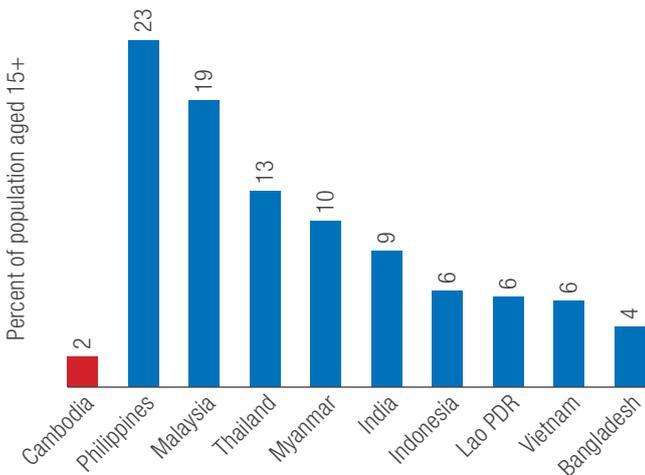
World Bank Logistics Performance Index score, 2018



**Source:** World Bank staff calculations using data from World Bank Logistics Performance Index.

**FIGURE 2.31**  
Cambodia has a low-educated workforce

Tertiary education, 2020



**Source:** World Bank staff calculations using data from Barro-Lee Educational Attainment Dataset.

### Market access through PTAs

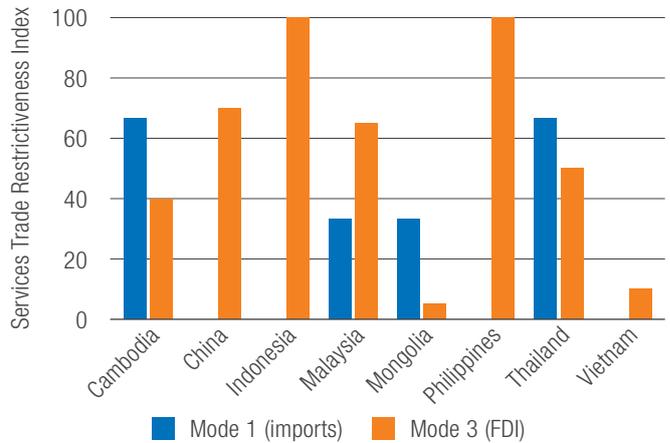
**Modern services exports require good access to global markets, and PTAs can be instrumental for boosting that.** There are two main channels through which PTAs can help boost services exports. First, there is an “external” dimension, which refers to the greater export opportunities derived from FTAs for domestic exporters and new investors who may be lured into the host country as a result. Second, there is a domestic or “internal” dimension, by which modern FTAs—by including certain in-built mechanisms—facilitate a political-economic dynamic fostering gradual domestic reforms towards services trade liberalization. However, whether a particular FTA achieves such goals depends on the quality of the commitments included therein.

**The benefits of PTAs stem largely from limited multilateral liberalization achieved under the General Agreement on Trade in Services (GATS).** The GATS<sup>172</sup> was the first general international trade agreement on services ever negotiated. Because of its novelty, the GATS’s architecture provided significant leeway to WTO members as to whether or not to undertake commitments on services liberalization. It was not only based on a positive list, but also did not commit members to bind nor to list—for transparency—their existing regulatory barriers affecting services trade. Further, GATS did not include any mechanism to capture any unilateral liberalization by WTO members after its entry into force. Consequently, a quarter of a century later, GATS-led liberalization and transparency of restrictions to services trade has been quite limited.

**Because of Cambodia’s already relatively high level of openness, the benefits of PTAs are largely in the “external” dimension.** Although Cambodia’s modern services sector is nascent, better market access for services

**FIGURE 2.32**  
Restrictions remain in professional services

Services Trade Restrictiveness Index for professional services, 2012



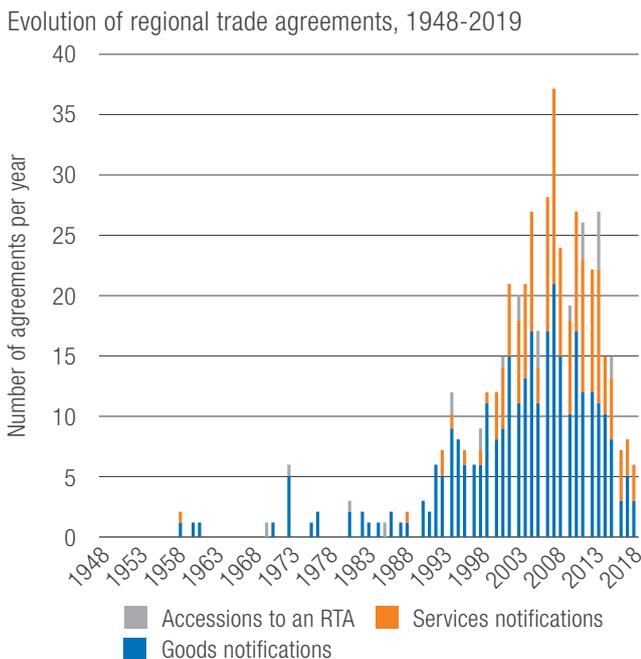
**Source:** World Bank staff calculations using data from World Bank Services Trade Restrictions Database.

could attract export-oriented FDI and offer greater export opportunities for domestic service providers as they develop in the medium term.

**There is evidence that PTAs can be essential for boosting international services trade (GATS supply mode 1).**<sup>173</sup> Regulation of services is not homogeneous, but heterogeneous between countries, and heterogeneity in regulation negatively impacts bilateral services trade.<sup>174</sup> Services trade negotiation should therefore create mechanisms to promote pro-competitive domestic regulatory reform and international regulatory cooperation.<sup>175</sup> For this reason, “optimum regulatory areas” emerge as an important element to facilitate integration.<sup>176</sup> More important, by signing a PTA, countries ensure that: i) their services exports cannot be hampered from measures taken by their trade partners, as the most advanced PTAs “bind” the status quo on discriminatory barriers and non-discriminatory market access restrictions and ii) certainty enables FDI, which entails high sunk costs and requires long-term predictability for business planning.

**While services are increasingly integrated in the design and implementation of FTAs, Cambodia’s few trade agreements that cover services are through ASEAN.** In 1995, only five PTAs included a services provision globally.<sup>177</sup> By 2019, 154 PTAs had been negotiated with some type of services provision, and nearly 70 percent of these took effect between 2005 and 2015 (figure 2.33). In 2019, Cambodia participated in six PTAs, four of which contained services provisions (figure 2.34). All of these were negotiated through Cambodia’s participation in ASEAN. The China-Cambodia FTA is Cambodia’s first bilateral FTA and contains provisions to liberalize services trade. It was signed in October 2020 and is expected to take effect in 2021.

**FIGURE 2.33**  
Trade agreements are increasingly covering services

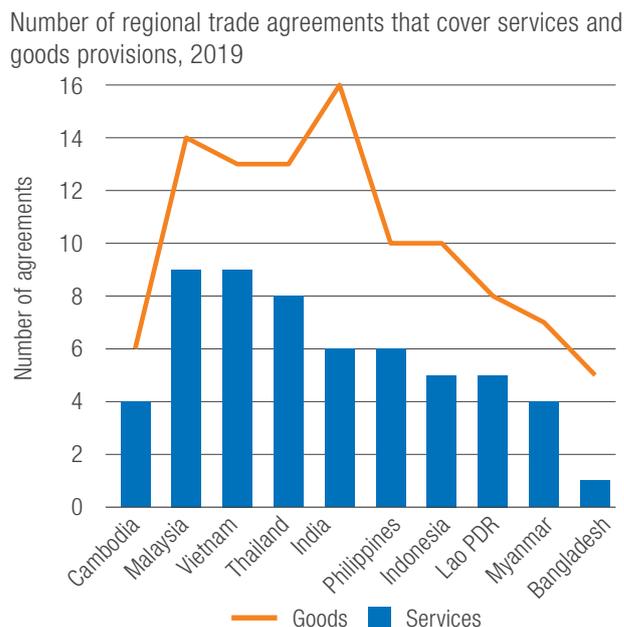


Source: World Bank staff calculations using data from WTO Regional Trade Agreements Database.

**The shortcomings of GATS were reproduced in many earlier regional trade agreements that used it as a model for their own services trade frameworks, including ASEAN.** Cambodia has participated in ASEAN for many years, and it is a signatory of the ASEAN Framework Agreement on Services. The ASEAN Framework Agreement on Services has been used to promote services liberalization in the region since 1995, by expanding the scope and coverage of its commitments in successive rounds. However, the ASEAN Framework Agreement on Services suffers from limitations that prevent it from fostering effective services trade liberalization in the region. Liberalization is important, given that ASEAN has, on average, more restrictive policies in the services sector compared to other regions of the world. The World Bank's Services Trade Restrictiveness Index, which measures the extent of policy restrictiveness in services, indicates that the average Services Trade Restrictiveness Index for ASEAN was 60 percent higher than the global average in 2012.

**Modern FTAs (or deep trade agreements) are more effective at fostering liberalization policies that boost services trade than earlier traditional FTAs.** Modern FTAs like those followed by the EU-Canada, United States Treaties, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership agreement or even the recently negotiated ASEAN Trade in Services Agreement tackle a wider variety of topics like digital trade, regulatory coherence, labor and environmental standards, and investment. They provide greater opportunities for services trade liberalization due to the inclusion of a horizontal standstill obligation, coupled with a list-or-lose negative list, and complemented by a ratchet mechanism. There are three main ways modern FTAs are more effective.

**FIGURE 2.34**  
Cambodia participants in relatively few regional trade agreements with services provisions



Source: World Bank staff calculations using data from WTO Regional Trade Agreements Database.

First, modern FTAs are based on a negative list approach. That is, as a matter of principle, all services sectors are bound and subject to the disciplines of the services agreement, except those measures explicitly reserved in an annex of "non-conforming measures". Any other restriction to services trade not included in the annex is considered subject to roll-back. This technique forces countries to list absolutely all measures they may deem to be inconsistent with the agreement, leading to a great outcome: total transparency of all restrictions to services trade, which remain standing after the enactment of the agreement.

Second, the non-conforming measures included in the annex will be subject to a standstill commitment regarding their level of dissidence with obligations of the agreement, preventing countries from introducing new restrictions to services trade. This approach provides total transparency regarding each discriminatory barrier.

Third, modern FTAs also include a ratchet clause, by which any unilateral liberalization of an existing restriction to services trade will become the new standstill bound under the agreement, ensuring gradual services trade liberalization, even if no successive rounds of negotiations are undertaken. The ratchet provision locks in the existing level of restrictions and ensures that any autonomous liberalizing measure enacted after a PTA's entry into force becomes the new reference level. This ensures easy adoption and flexible implementation in a one-way direction towards gradual liberalization of services trade.

**On the external dimension, modern FTAs include high-level regulatory standards that signatories adhere to, and compliance is ensured by efficient enforcement mechanisms included in the agreements.** Regulation greatly opens access for Cambodia's exports to foreign markets, which can further induce FDI into the country to benefit from enhanced market access. The experience of many developing countries like Costa Rica, Chile, Morocco, Turkey, and Colombia (among others) shows how effective implementation of a modern FTA with a major trade partner (like the United States, China, Japan, or the EU) has led to increased FDI in services sectors.

**Recognizing its limitations and based on their experience negotiating deep trade agreements with major trade partners, ASEAN countries opted to negotiate the new ASEAN Trade in Services Agreement in 2019 to advance services liberalization**—and that is a promising step. The ASEAN Trade in Services Agreement has been completed and is expected to be signed following domestic approval by member states. In addition to the ASEAN Trade in Services Agreement, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership is a modern FTA that comprises most of the important trade partners and sources of investment for Cambodia in the EAP region. The Comprehensive and Progressive Agreement for Trans-Pacific Partnership may provide powerful engagement for Cambodia to facilitate services modernization by signaling to international investors a strong commitment to free trade in services and new investment opportunities in this sector.

### **Policies to export modern services**<sup>178</sup>

**Given Cambodia's relatively open regulatory environment for services, policies should focus on strengthening other aspects of the enabling environment to support competitiveness to export modern services.** This can be done by improving capabilities and investing in infrastructure while strengthening regulations by removing remaining restrictions in some key subsectors. As Covid-19 shifts the pattern of trade from face-to-face services to trade in digitally delivered services, improving the enabling environment for modern services could support Cambodia's diversification and its economic recovery.

#### **Facilitate the emergence of modern services by reducing regulatory hurdles**

**The services trade openness that has been achieved should be complemented with clear and transparent application of regulations governing the sector**

**and effective enforcement.** The development goal of establishing a modern services-based economy will require an open, investment-friendly, and sound regulatory environment for the services sector with fewer regulatory hurdles for services firms.

**First, streamline licensing requirements (including in services) through effective implementation of the one-stop shop.** Licensing requirements are currently carried out across various ministries and departments depending on the sector/type of firm. Cambodia could consider setting up a one-stop shop for licensing requirements, including in services, led by the Ministry of Economy and Finance as a short-term policy priority. Consolidated management has helped reduce business start-up time and costs in countries like the Philippines.<sup>179</sup> To reduce face-to-face interaction in a post-Covid-19 world and reduce the time for businesses, licensing could further be integrated into the online business registration system by incorporating other agencies into the portal (for example, the Council for Development of Cambodia, the Ministry of Industry, etc.).

**Second, make all laws and regulations on trade and investment in services publicly available through a Cambodia services trade portal.** This is a short-term agenda that could be led by the Ministry of Commerce. Using a single website, the portal would contain legislation, measures, procedures, forms, services trade commitments, news and other information. Information would be published in both English and Khmer to improve search functionality. It should also allow viewers to submit comments or questions to the relevant authorities via a services portal focal point, who can provide answers through the portal management and maintenance team. The main objective is easier electronic access to necessary information for business operations related to services trade and investment for business, domestic and foreign investors, and the Cambodian public. This process would also allow the RGC to review and reject procedures that do not facilitate domestic business and domestic and foreign investors to access services more easily. Lao People's Democratic Republic (Lao PDR), for example, has successfully implemented a services trade portal that parallels its goods trade portal.

**Third, in the medium term, ensure that regulations establish a clear authority among different regulatory agencies for business licensing in the services sector and prevent overlaps.** Regulation and administrative procedures could also be streamlined by a one-stop shop, led by the Ministry of Economy and Finance. This could be undertaken in the context of ASEAN commitments, to ensure that domestic regulation is done in a way that does not invalidate the common regulatory objectives.<sup>180</sup>

## Remove remaining entry restrictions in professional services

**Cambodia needs to build up its human capital to meet the demands of the services sector.** As discussed in Chapter 1 and Section 2.1, Cambodia needs to ramp up the skill level of its current and future workforce by making deep and broad educational investments in its youth—which will yield long-term returns—as well as practical, applied, and short-term skill upgrades for its existing workers. In the interim, Cambodia should also take steps to encourage the entry of foreign labor to temporarily alleviate any skills constraints in its services sectors, particularly in professional services.

**First, in the short term, drop the proposal allowing only Cambodian accountants to sign off audited reports.** Reliable financial services are critical for attracting foreign investment and administering domestic finances. Cambodia's open and dynamic regulation of the sector has helped enhance capacity in the accounting sector and has resulted in a strong foreign presence in the country. Specific to professional services, Cambodia would benefit from maintaining the open regulatory environment for accounting services providers. The proposal allowing only Cambodian accountants to sign off audited reports should be dropped as it could restrict foreign expertise from operating in Cambodia and deter foreign investment. The National Accounting Council could take the lead on this topic.

**Second, in the short term, amend the 1995 law to allow foreign lawyers to register with the Bar Association.** To provide legal services in Cambodia, lawyers must be registered with the Bar Association of the Kingdom of Cambodia. Legal services in Cambodia are governed by the 1995 Law on the Bar, which created the Bar Association of the Kingdom of Cambodia and charged it with oversight and registration of the legal profession. Foreign firms are allowed to operate with less than 51 percent foreign ownership. However, only lawyers who are registered with the Bar Association of the Kingdom of Cambodia can practice in Cambodia, as specified in Articles 5 and 6 of the Law on the Bar. A priority for the legal services subsector is to establish a formal process for registration for foreign legal services providers. The 1995 Law on the Bar should be amended to allow foreign lawyers to register with the Bar Association of the Kingdom of Cambodia, with clear registration requirements. This could be led by the Department of Justice.

**Third, in the medium term, establish a formal process of registration for foreign legal services providers.** Lack of a clear framework for the provision of legal services by foreign practitioners in Cambodia reduces transparency and brings into question Cambodia's compliance with its GATS commitments on services trade. The Department

of Justice could lead this agenda. One model that could be explored is that used by Singapore. After passing the Foreigner Practice Examinations conducted by the Singapore Institute of Legal Education, a foreign-qualified lawyer can be registered with the Legal Services Regulatory Authority as a foreign supplier and practice permitted areas of Singapore law: banking law, corporate law, intellectual property law, and maritime law.

## Improve the enabling environment for services firms

**Cambodia should improve the enabling environment for modern services including IPR, property rights, and trade-related infrastructure.** Domestic enabling factors—like human capital, natural resources, infrastructure (including digital infrastructure), and institutions—are an important complement to good trade policies and regulations to support modern services exports. In Cambodia, targeted policy can improve these key enablers. As mentioned above, this will be particularly important for reaping new opportunities for exports of non-face-to-face services that are likely to become increasingly important post-Covid-19. Improving human capital and skills is also integral to improving the enabling environment for modern services, an agenda discussed in Chapter 1 and Section 2.1.

**First, improve the implementation and enforcement of existing Cambodian IPR legislation.** The Ministry of Commerce could lead this short-term agenda. Cambodian civil court can be cumbersome and costly. To address some of the existing weaknesses, Cambodia could revisit its regulation of IPR protection, including the ability of the RGC to revoke patents, utility model certificates, and industrial design certificates.

**Second, in the medium and long term, the RGC with the Department of Justice could establish a special court or judicial channel to deal with IPR protection-related cases.** While Cambodia adopted laws on copyrights, trademarks, and patents in 2002-03, enforcement is reported to be weak, and initiating civil procedures is costly and time consuming.

**Third, in the short term, the Ministry of Commerce should implement the new Law on Electronic Commerce and introduce legislation on data protection, cybersecurity, and e-payments with the Ministry of Posts and Telecommunications.** Cambodia passed the Law on Electronic Commerce in October 2019 that establishes legal provisions for regulating domestic and cross-border commercial and civil transactions via electronic systems. The law fills many important legislative gaps governing e-commerce in Cambodia. It outlines the legitimacy and processes of electronic communications, legalizes electronic records and electronic

signatures (including contracts), sets the responsibilities of intermediaries and e-commerce services providers, sets protections for consumers for data protection and unrequested, fake, or malicious communications, and establishes licensing requirements and responsibilities of electronic payments providers and/or electronic funds transfers. Authorities should implement the law, and continue to fill in missing legislation including a National Payment Systems roadmap and cybersecurity and data protection that are not yet passed.

**Fourth, in the medium to long term, improve access to digital infrastructure including broadband and 4G/5G.** The RGC has accumulated substantial resources in its Universal Services Obligation Fund, started in 2017 as a levy on gross revenue for the country's telecom operators, to help fund growth of telecom networks in rural Cambodia. However, so far there has been little use of these funds. The RGC should leverage the Universal Services Obligation Fund to improve digital infrastructure and close the digital divide, particularly in rural areas currently without 4G access where the private sector is unlikely to invest in the short term. Other regulatory reforms can be implemented to support the private sector to continue investing in broadband and 4G/5G access in the short term. This includes the RGC releasing bandwidth for the 4G and 5G spectrum in some areas, allowing private investment in the spectrum (including through updating licensing arrangements). This would ensure the private sector can invest and compete in new key infrastructure and promote tower and other investment sharing among private firms. The Ministry of Posts and Telecommunications with the Telecommunication Regulator of Cambodia are well-suited to lead this policy and investment reform agenda. More broadly, the government should work across ministries and agencies to implement the new Digital Government Masterplan and Digital Economy and Society Policy Framework.

### **Leverage international trade agreements to foster services exports**

**Cambodia should strengthen its capacity to participate in deep trade agreements with provisions on services to support market access and attract export-oriented FDI.** A stronger focus on regional trade agreements that grant preferential access to new markets would support diversification of products and markets while also addressing the trade disruptions caused by recent global megatrends and greater uncertainty in the global trade environment. FTA strategies cannot be one-size-fits-all: each country follows different strategies and each one must find their own best option. The strategies must be adapted to the geographical context, the development stage, and the particular assets of the country. This is an agenda that could be led by the Ministry of Commerce.

A short-term step could be to upskill Cambodian officials in charge of negotiating and implementing international services trade agreements. Officials could benefit from modules covering recent developments in rulemaking in the field to maximize the potential benefits of international agreements for Cambodia.

To foster a fundamental level of transparency on restrictions affecting services trade, another key step would be for Cambodia to undertake a regulatory audit of the services sector. Regulatory audits examine all laws and regulations of a country applicable to a sector's trade and aim to measure the country's openness by identifying restrictions (and eventual non-conforming measures under PTAs). As part of the capacity building activities discussed above, government officials could learn about the audit, how to keep the audit updated, and how to use it for policymaking.

From a policy dimension, four key recommendations may be worth considering for Cambodia.

**First, in the short term, use the LDC's services waiver that offers preferential treatment on market access for services to WTO members.** Cambodia currently does not leverage trade agreements for services and underutilizes the LDC's services waiver. This legal instrument, adopted by WTO members in 2011, allows members to grant preferential treatment to services and service suppliers from LDC members to facilitate the increasing participation of developing countries in services trade. However, so far, few developed and developing country members have used the LDC's services waiver and offers for preferential treatment on market access, particularly in creative services, has been very limited.

**Second, in the short term, Cambodia should participate in the ASEAN Trade in Services Agreement to advocate for services liberalization in other ASEAN member countries.** Although the agreement has not entered into force yet, it is not yet clear whether Cambodia has made the political decision to leverage the ASEAN Trade in Services Agreement, as the agreement allows only those ASEAN Member who consider themselves ready to fully engage.

**Third, in the medium to long term, implement mutual recognition agreements for services professionals within ASEAN and with other trading partners.** ASEAN have made progress in developing mutual recognition agreements, including Engineering Services (2005), Nursing Services (2006), Architectural Services (2007), Surveying Qualifications (2007), Accountancy Services (February 2009 and 2014), Dental Practitioners (2009), Medical Practitioners (2009), and Tourism Professionals (2012). Cambodia should actively implement these mutual

recognition agreements, which are now in various stages of progress in ASEAN member states. Other measures to address short-term shortages of skilled workers could include exploring guest worker programs, loosening entry requirements in sectors with skills shortages, adopting quota systems for foreign workers on the basis of economic needs tests, and allowing services growth sectors to enter into direct agreements with the government to fill labor shortages.

**Fourth, in the medium to long term, Cambodia should seriously consider whether to participate in other deep trade agreements that include services provisions, like the Comprehensive and Progressive Agreement for Trans-Pacific Partnership.** The preceding three recommendations would also be a good way for Cambodian authorities to prepare and better assess the importance of diversifying the potential sources of FDI in services, which could be critical for diversifying Cambodia's services exports into new markets.

## BOX 2.2: Diversifying through creative services in Cambodia

**Trade data show some commercial services subsectors are growing rapidly in Cambodia from a low base.** Available statistical data show a noticeable growth in 'other business' and telecommunications services in the past decade (table 2.1). This growth signals a near-term opportunity for Cambodia to diversify its economy away from tourism through other services export avenues. The vast majority of these high-growth sectors comprise creative services sub-categories.

**TABLE B2.1:**

Smaller services subsectors have experienced fast export growth in Cambodia

Commercial services exports, US\$ millions, 2005 vs. 2018

Industry / Sector	2005	2018
Transport	136	688
Travel	840	4,362
Construction	2	14
Insurance and pension services	1	3
Financial services	11	15
Charges for use of IPR	0	2
Telecommunication, computer, and information services	34	65
Other business services	39	98
Personal, cultural, and recreational services	1	2

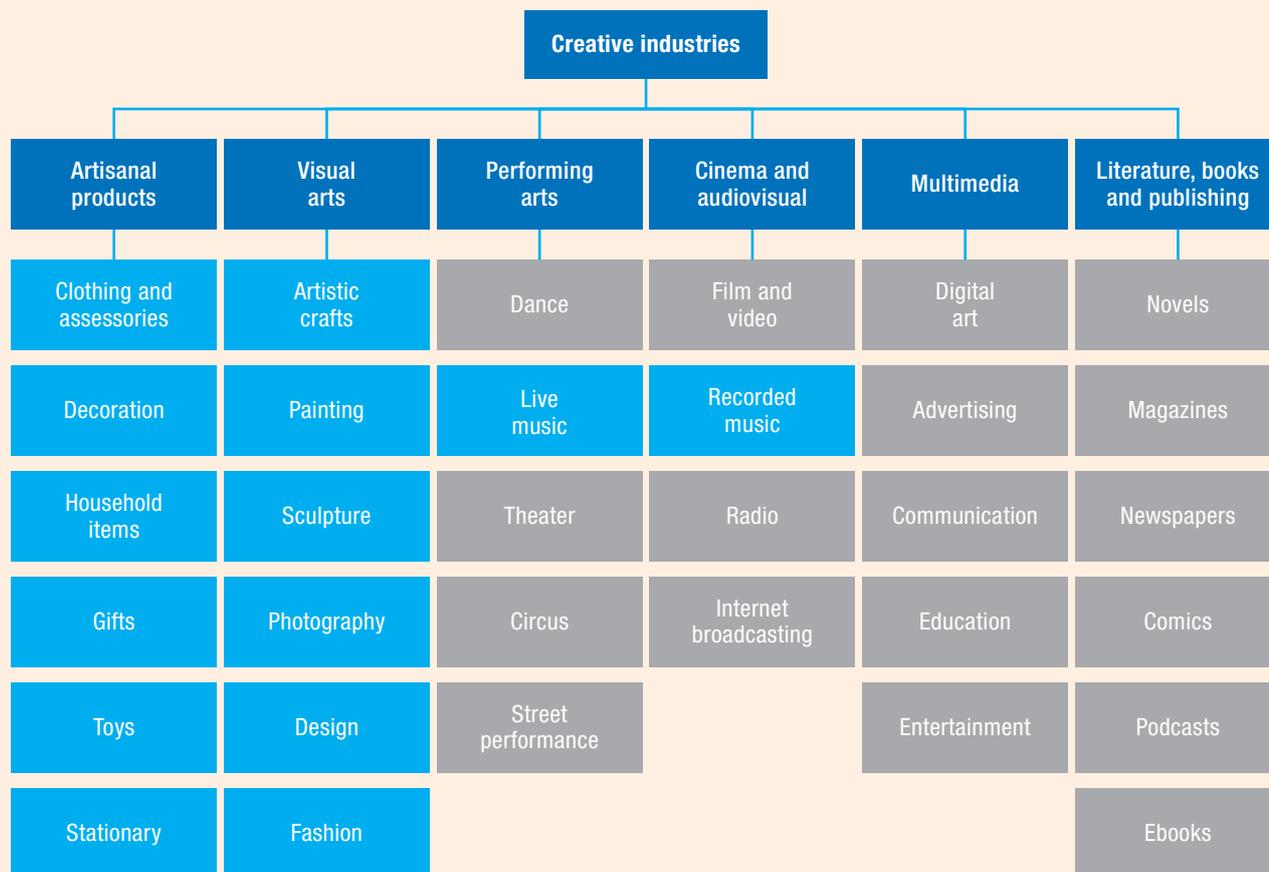
**Source:** World Bank staff calculations using data from UN Conference on Trade and Development.

**Though no universally agreed definition exists, 'creative industries' are all the activities that use people's creativity, skills, and talent to create jobs and grow wealth through generating and exploiting intellectual property.** A vast and heterogeneous field, creative industries cover both goods and services. Creative services—a subset of creative industries—covers a variety of subsectors including advertising, architecture, photography, printing and publishing, audiovisual services, online content, and entertainment services (figure B2.1).

**FIGURE B2.1**

Creative services are a subset of creative industries

Creative industries sub-sectors



Source: International Trade Center (2004).

**Anecdotal evidence confirms this ‘other services’ export growth is mainly related to Cambodia’s emerging creative services industry.** Cambodia is slowly but steadily exporting film production and animation services in response to the surge in international demand. 2D and 3D animation studios in Cambodia are already exporting high-value-added niche services, like digital animation. In 2014, 64 film projects were shot in Cambodia, with the majority originating from Japan (15), France and Europe (12 each), followed by the United States, Thailand, Canada, and Australia. Local film production is showing timid but encouraging signs of growth. And some firms are now outsourcing knowledge-intensive business services like content creation, website design, and video production to overseas customers.

**Other creative services are emerging in the domestic economy but could have potential for export in the future.** The rapid growth of the construction industry in Cambodia has been accompanied by a dramatic increase in architectural services, both local and international. Cambodia is experiencing growth in its digital advertising, media, and services market, as evidenced by the increase in advertising spending, for example. In 2017, two Cambodian companies deployed a video streaming platform and a subscription-based video-on-demand service for online content into the local market, providing movies, television shows, and original content to Cambodian audiences with an internet connection, for an affordable price.

**Creative services are becoming increasingly traded in the digital economic era.** Access to internet and technological development have enabled creative industries—and creative services in particular—including their tradability. Recent estimates suggest that creative services account for a significant and growing portion of total services trade in developed countries. Between 2011 and 2015 the annual growth rate of creative services trade for developed countries was 4.3 percent, with creative services contributing almost 20 percent of total services trade.

#### **Four key developments that characterize the digital economic era facilitate creative services:**

- i.** The Fourth Industrial Revolution has led to a shift from goods to services production, a trend that is poised to accelerate. Cases in point are e-books, digital news, and online streaming services for movies and music (for example, Netflix, Spotify), which are replacing physical goods like printed books and newspapers, DVDs, and CDs.
- ii.** Ubiquitous mobile connectivity can also be considered an essential feature of the digital economy. This translates to increased demand for quality content, whether for information or entertainment, opening up new opportunities for developing countries to focus on the creation of audio-visual content to access foreign markets.
- iii.** In the digital era entry barriers for creating content have drastically reduced, thus providing opportunities for small services operators in developing countries to actively participate in the creative services industry. For example, photographers, bloggers, musicians, videographers, dancers, and cross-cutting multi-media specialists can now use social media and a wide range of new internet-based tools to create and distribute their work and profit from it.
- iv.** Services are undergoing a transformation whereby digital services show greater potential for growth than traditional services. In 2018, for example, 73 percent of information technology-services exports, which account for the largest share of total export services (59 percent), was attributable to other business services, including animation and game and software development.

**Developing countries are increasingly becoming key players in a number of creative services subsectors, especially in Asia.** India, China, and Malaysia are emerging centers in the visual effects industry and Thailand's animation industry grows at an annual rate of 10 percent. Also, LDC's share in exports of personal, cultural, and recreational services has been growing at 17.1 percent a year since 2012.

**Limited data and anecdotal evidence suggest that the most dynamic segments in the creative services industry with the highest potential for growth are film, television and video, music, publishing, animation and video games.** Animation, which has expanded from cartoons to live films and animated movies, as well as advertising and video games, boasts a worldwide annual growth rate of 2 percent, recording a global output value of approximately US\$259 billion in 2018. The Republic of Korea and India are among the main exporters in animation services in Asia.

**Information technology-enabled creative services, like animation and videogame design, can have profound implications for development.** Making use of their rich supply of creativity and cultural assets, many developing countries can seize this opportunity to establish new economic and trading relations, foster income generation, encourage job creation, and create synergies with other sectors (for example, crafts, textiles, and tourism) from which they can draw business development.<sup>181</sup> Moreover countries can promote social cohesion, preserve cultural heritage and cultural diversity, and celebrate human development. For example, in Jamaica, a decrease in youth unemployment can be partly attributed to a government-backed animation certificate program and the KingstOOOn Fest initiative, both supported by the World Bank.<sup>182</sup> Ancillary services, creative and otherwise, used during film production—such as set preparation, photography, props, costumes, extras, drivers, food and beverage services, etc.—also offer local job opportunities. A few developing economies have started to design specific economic road maps targeting creative services to become a primary source of growth in the next decade.

**The RGC views creative services as a promising new source of growth that could be instrumental in achieving economic transformation.** The National Strategic Development Plan 2014-18 signals film production as a key priority area, indicating plans to further encourage the production of foreign films in Cambodia. The Rectangular Strategy-Phase IV promotes development of the entertainment and audiovisual services sector (for example, literature, arts, animation, and movies) as a key priority, due to their high potential for creating value added and jobs while encouraging domestic production and consumption. The Cambodia Trade Integration Strategy lists animation services as a priority services export sector, highlighting its impact for economic growth, youth employment, and inclusiveness. The National Policy for Culture also refers to the strategic importance of the creative services industry. In early March 2020, on Culture Day, the Prime Minister of Cambodia reiterated the importance

of the creative services sector, and film production in particular, by highlighting the need to continue creating new mechanisms to support Cambodians to produce quality, original, local content that honors Cambodian culture and to do this through training programs in schools, universities, or art associations.

**Cambodia has many strengths that support creative services sector growth.** Cambodia in particular could capitalize on the combination of three key assets: a young labor force, reliable urban information-technology infrastructure, and a supportive regulatory environment. First, Cambodia has a young population, with a median age of 26 years. Young Cambodians are digital natives in smartphone technologies and eager to profit from their expertise, though anecdotal evidence suggests they are not as proficient in computer skills. In Cambodia there are over 12 million internet users, and 8.4 million active social media users, with the vast majority being active mobile social media users. Cambodian artists, animators, and designers use social network platforms like Facebook to self-promote, showcasing their art to local and worldwide audiences. For example, Rounh Creative Studio, a wholly-owned Cambodian company specialized in motion graphics, graphic design, and digital marketing, whose Kolab Pailin 2D animation trailer, based on one of Cambodia's most famous novels, proved a hit when it was posted to Facebook.<sup>183</sup>

Second, for the vast majority of suppliers of creative services like animation, advertising, and entertainment services, digital technologies are crucial to accessing foreign markets, reducing geographical distances, and allowing direct contact with a larger share of potential final users. With satisfactory internet access (especially in urban areas), Cambodia is at an advantage.

Third, Cambodia's regulatory environment can also play a central role in supporting the country to become an outsourcing hub for creative services and attracting foreign investment in the sector. For example, in its GATS and ASEAN schedules, Cambodia inscribed full commitments in architectural services and cinema theater services including cinema projection services across all supply modes except movement of natural persons. Recent reforms, including the adoption of the new Law on Electronic Commerce, legalizing digital contracts and prohibiting data localization requirements, are expected to have a positive impact on the growth and internationalization of Cambodia's creative services industry.

Cambodia's geographic location and fast-growing economy are other assets that make Cambodia an attractive market for creative services suppliers interested in setting a commercial presence abroad to serve the Asian region.

**However, the creative services industry requires key elements with a strong enabling environment to flourish.** Participation in the creative services industry and export capabilities depend on a variety of enabling factors, whose relevance may vary from subsector to subsector.

**For Cambodia to develop the creative services sector, foster its internationalization, and wield it as a tool to diversify the economy, it must overcome a few significant hurdles.** Governmental action should be directed, in particular, at addressing: human resource constraints, national branding, taxation, access to finance, regulatory implementation and enforcement, and good governance. Other factors that policymakers should target to stimulate the creative services economy include access to digital technologies, enabling creative ventures to be launched from any location at scale, and adequate regulation and incentives to create the right conditions for creative economies to flourish.

**i. Human resources constraints stem from a variety of challenges related to education and skills development.** There is a marked disconnection between the skills and competences the young Cambodian population acquires in the school system and the technical and visual expertise required by public and private entities operating in the creative services industry. Cambodia's educational curriculum falls short of adequately preparing students in using and managing new digital technologies. Low proficiency in English may also affect Cambodia's ability to participate more actively in the creative services industry, especially in sectors like film production and online content creation where English is the lingua franca. Additionally, there is no adequate framework for recognizing industry qualifications through accreditation.

- ii. Cambodia's reputation affects the country's ability to diversify its economy through creative services trade.** Currently, Cambodia is not perceived as major player in the sector, nor does it have an established national reputation as a reliable and high-quality outsourcing hub for creative services, though examples exist at the firm level (for example, Ink Animation, Mango Tango Asia).
- iii. Among the main challenges that Cambodian companies operating in the creative services industry face when attempting to grown and internationalize is the tax system, both at the domestic and international level.** Lack of transparency on how the tax system actually applies to film production companies makes it difficult for these service suppliers to embark on long-term projects with potential foreign business partners. Additional taxes imposed on foreign funds to finance film production disincentivize international trade in film production. The absence of international tax treaties further disincentivizes foreign companies from establishing export-oriented operations in Cambodia. Moreover, there are few tax/investment incentives targeting the industry, particularly for smaller enterprises.
- iv. Access to finance is paramount for companies, especially SMEs, to grow and internationalize; creative services suppliers need the scale to transform Cambodia into an outsourcing hub.** Firms in the creative services industries cite limited and inadequate access to finance as a key barrier. Collateral is a key issue, where services firms rarely have tangible assets they can use as collateral to obtain credit, with Cambodian banks unable to grant loans on the basis of purchase orders or letters of intent alone. Cambodia also does not participate in any international co-production agreements that could help offset this lack of access to finance in film production.
- v. Notwithstanding the remarkable reforms of the last two decades, the country's regulatory system requires further fine tuning to properly support the growth and internationalization of the local creative services industry.** Particularly relevant for the creative services industry that relies on intellectual property and knowledge creation, Cambodia's IPR framework is still early in its development, is yet to achieve WTO compliance, and has poor implementation and enforcement. Data protection has not yet been aligned with international standards, and there are no privacy nor data protection laws in Cambodia. Moreover, companies struggle to access information on services trade and investment regulations without an online central repository.
- vi. Attention should also focus on addressing governance and policy-making hurdles that constrain capacity for creative services suppliers.** There is currently a limited role of public institutions like sectoral associations and trade promotion agencies, which also means there is inadequate statistical data to develop appropriate evidence-based policies. Cambodia also has not leveraged trade agreements like the LDC's services waiver.

**Developed and developing countries implement a variety of measures to support the development and internationalization of their creative industry, and its services segment in particular.** Below are more detailed policy recommendations to help Cambodia take advantage of the opportunities offered by emerging digital technologies and the abundant creative and cultural knowledge within its national borders. Institutional intervention should aim primarily at: enhancing, supporting, and strengthening skills and competences of individuals; creating a supportive business environment; boosting Cambodia's reputation and international standing; and improving data collection and management.

### **Enhancing, supporting, and strengthening skills and competencies of individuals**

**Individual talent and imagination are the core of the creative services industry.** To nurture those, Cambodia must confront human resources constraints like low-quality education and inadequate technical training as well as misconceptions and unawareness of job opportunities in the creative services industry. Addressing them requires a multilayered approach that would involve implementing a variety of policy actions.

**First, encourage collaborations between domestic and international technical training institutions** like film schools and art schools including faculty and staff exchanges to promote the transfer of knowledge and best practices. Additional in-kind and/or financial support could be provided to existing training programs and schools specialized in creative services fields.

**Second, encourage collaborations between educational institutions and the private sector.** This includes encouraging and facilitating internship programs and providing tax incentives for creative services firms to partner with vocational training institutions. Ensuring that the private sector participates in designing and implementing learning programs helps bridge the gap between skills development and the demands of the job market.

**Third, expand the certification system to ensure vocational skills can be formally certified.** Cambodia could introduce certified courses on business management open to young entrepreneurs who are not eligible to enroll in tertiary education, in collaboration with the Cambodian Chamber of Commerce, sector-specific trade associations, vocational training centers and/or the private sector.

**Fourth, organize job fairs for secondary and tertiary education students specifically dedicated to the creative services industry.** These types of programs can help match job seekers with prospective employers, while also raising broader awareness of job opportunities in the industry.

**Fifth, in the medium term, revise the national curriculum to include visual and applied arts** like, painting, drawing, printmaking, sculpture, ceramics, photography, video, filmmaking, design, crafts, and architecture, industrial design, graphic design, fashion design, interior design, and decorative art.

**Sixth, introduce formal training in specific sectors for the creative services industry.** For example, in the form of government-certified animation and film schools or summer/winter academies (organized by universities) on filmmaking, architecture, design, digital creation, online content creation, and the like.

### **Creating a supportive business environment**

**Creating a supportive business environment encourages and promotes the development of a creative services industry that matches international standards of quality and reliability.** The RGC should focus policy intervention on tackling access to finance, IPR protection, investment attraction, and other constraints to the business environment.

**First, in the short term Cambodia should consider providing tax breaks, tax holidays, or tax exemptions to attract FDI and internationalize creative services.** Government financial support should ensure compliance with Cambodia's GATS and ASEAN scheduled commitments on services subsidies.

**Second, Cambodia should improve the implementation and enforcement of existing Cambodian IPR legislation.** Intellectual property consists of both industrial property (patents, designs, and trademarks) and copyrighted property (in sectors like music, art, and literature), and comes from applying imagination, talent, and creativity to the production of creative services. Owning or licensing local creative assets is a key feature of this particular industry. Ensuring IPR protection, therefore, is paramount for the Cambodian creative services sector to grow sustainably and expand beyond the national borders. In the short term, Cambodia should focus especially on addressing issues that hinder the (under-resourced and overburdened) judicial system. A national campaign with practical guides on IPR would increase public awareness and help end-users and suppliers learn how to respect and use IPR in creative services. In the medium term, establishing a collective management organization would help copyright holders better administer their rights and deal with IPR infringements.

**Third, implement the new Law on Electronic Commerce and introduce legislation on data protection and cybersecurity.** The Law on Electronic Commerce contains disciplines on digital contracts that would make it easier for creative services companies to operate digitally. This needs to be implemented through the formulation of relevant Prakas.

**Fourth, establish a business forum specifically dedicated to creative services.** This will improve communication between the public and private sector, whereby parties can discuss challenges in developing and internationalizing the industry, and agree on potential solutions.

**Fifth, in the medium and long term, set up an online portal specifically dedicated to advertising the Cambodian creative services industry abroad.** It could include information on companies operating in the field, regulations affecting in creative services trade, and investment opportunities in the sector.

**Sixth, in the medium and long term, liberalize the audiovisual services sector, especially in digital media.** This needs to happen through the removal or reduction of market access restrictions, possibly by negotiating new commitments under the GATS and ASEAN frameworks, or at least in the short term, through unilateral (uncommitted) action.

### Improving Cambodia's reputation and international standing

**For Cambodia to participate more actively in the creative services industry, it will be crucial to build a stronger national brand and move beyond the 'cheap workforce' label.** While the country has the potential to increase the competitiveness of its creative services sector, efforts may not yield the expected results unless the government also intervenes to promote Cambodia as a reliable supplier of high-quality creative services.

**In the short term, design a national branding strategy focused on promoting Cambodia as a creative services outsourcing hub.** Cambodia could follow the strategy adopted by the Republic of Korea, which established a Presidential Council on Nation Branding to promote the country's global image through the support, control, and integration of effective national branding projects with public participation and cooperation.<sup>184</sup> The RGC could also collaborate with regional partners to present South East Asia (including Cambodia) as a viable and reliable supplier of high-quality creative services. Supporting creative services suppliers to participate in trade fairs and international film festivals abroad through financial assistance, and by sponsoring booths at these events, the RGC would help raise Cambodia's international profile in the industry. The government could organize a creative services trade fair in Cambodia and offer financial and logistical support to the private sector so they can hold B2B / B2C meetings in Cambodia to provide potential foreign business partners and clients with first-hand experience of the creative services industry to attract their business.

### Improving data production, quality, and use

**Data can help advance the understanding of the size, composition, and main characteristics of the creative services industry in Cambodia.** The lack of disaggregated services trade data and statistics to measure the economic importance of the creative services sector in Cambodia likely hinders attempts to design evidence-based policies to support diversification through creative services trade.

**In the short term, improve overall data collection and statistical reporting on size and composition of the creative services industry and value and characteristics of creative services trade.** This primarily will involve training new and current staff of the National Institute of Statistics—especially those based in the statistical units in the provinces and districts—on international standards and methods for data collection and statistical reporting. Surveys should include information on number of companies operating in the creative services industry (overall and in each subsector), size of the companies (for example, annual revenue, number of employees), main services exported abroad, main services imported in Cambodia, ownership composition (for example, joint-venture, wholly foreign owned, wholly local owned), and type of firm (for example, headquarters, branch, representative office).

**In the medium term, revise the national data collecting and reporting system to better capture the realities of the creative services industry.** For example, by adopting a classification system based on international best practices that better identifies the wide array of sub-segments of the creative services industry.

## Economic upgrading through GVC participation in manufacturing

Objective	Improving capabilities	Strengthening regulations	Investing in infrastructure
<p><b>Attracting a new wave of high-value-added FDI</b></p>		<p>Resolve challenges in investor protection and conflict resolution, including by increasing shareholder rights and their role in decision-making through sub-regulations to the new Investment Law and strengthening the courts [ST; CDC &amp; MEF]</p> <p>Broaden the Investment Law to cover all investors, beyond those given qualified investment project status [ST; CDC &amp; MEF]</p> <p>Move away from blanket tax holiday schemes to an investment incentives system that introduces reinvested dividends, investment tax credits, and investment depreciation on the value of acquired machinery, equipment, quality certificates, or new technologies [ST; CDC &amp; MEF]</p> <p>Develop specific guidelines that detail eligibility criteria for each incentive [ST; CDC &amp; MEF]</p>	<p>Collect data on firms that use tax incentives to conduct monitoring and evaluation while developing a strategy to minimize tax risks from the scheme [MT; MEF]</p>
<p><b>Building the skills of the workforce</b></p>	<p>Professional associations and other intermediaries like special economic zone management or recruitment agencies can implement training programs and provide professional certification to trainees at different skill levels, if a governing framework is provided [ST; MLVT]</p> <p>Encourage collaborations between domestic and international technical training institutions and attract trainers with industry experience [ST; MLVT]</p>	<p>Introduce results-based financing for technical and vocational education and training institutions and expand the provision of short courses to serve the working adult population [ST; MLVT]</p> <p>Provide incentives for in-house training of mid- to high-skilled workers [ST; CDC &amp; MEF]</p> <p>Develop and strengthen intermediation mechanisms (job matching platforms and the National Employment Agency) to collect increasingly timely data on job vacancies and create outreach programs [MT; MLVT]</p> <p>Expand the certification system to ensure vocational skills can be formally certified [MT; MLVT]</p> <p>Facilitate access to skills development by exploring individual learning accounts; tailor adult learning by expanding technical short courses [MT; MLVT]</p> <p>Incentivize the enterprise sector to play a larger and more structured role in providing, guiding, and advocating for a demand-driven skills development system including internship programs [ST; MLVT]</p>	<p>Support establishing vocational and digital education centers aligned with industry needs, in cooperation with private sector and development partners [MT; MLVT]</p> <p>Invest in hardware and software for a labor market information system [MT; MLVT]</p> <p>Collect and disseminate user-friendly information to students, jobseekers, employers, and education and training institutions to enable them to make skills development choices that are aligned with market demand [ST; MLVT]</p>

Objective	Improving capabilities	Strengthening regulations	Investing in infrastructure
<b>Supporting vertical integration in the apparel and footwear sector</b>	Foster joint ventures between the Garment Manufacturers Association in Cambodia and international brands and investors to facilitate sector upgrading [MT; MOC]		
<b>Strengthening domestic firm linkages</b>	<p>Assist foreign investors' research efforts to identify local suppliers and provide them with more detailed capabilities evaluations and aftercare services [ST; CDC]</p> <p>Establish a supplier development program linked to the Entrepreneurship Development Fund to build local firms' capacity to serve FDI exporters [MT; MEF &amp; MOC]</p> <p>Provide training and marginal incentives (from Entrepreneurship Development Fund) for SMEs to become vendors in global e-commerce platforms [MT; MEF &amp; MOC]</p>	<p>Simplify VAT procedures and reduce the time needed to claim refunds to level the playing field of domestic suppliers competing with tax-exempt imported inputs [ST; MEF]</p> <p>Enact policy to ensure domestic firms' compliance with international standards [MT; MOC]</p>	Develop an online portal and digital app to offer basic matchmaking services and overcome information asymmetry of foreign firms and domestic producers (in collaboration with relevant ministries, chambers of commerce, and private industry associations) [MT; CDC]

## Value addition in Cambodian agriculture

Objective	Improving capabilities	Strengthening regulations	Investing in infrastructure
<b>Promote diversification toward higher-value fruits and vegetables</b>	Support the private sector in assessing market potential for new crops (fruits and vegetables) that are suitable for the Cambodian climate [ST; MOC]		Undertake area-by-area assessments and irrigation investment based on crop suitability [ST; MAFF]  Foster public-private partnerships that envisage contract farming and extension services to support investments in the selected crops [MT; MAFF]
<b>Focus on upgrading through quality assurance and branding to pursue a “go green” differentiation strategy</b>	Build capacity and appropriate institutional arrangements to ensure better traceability and quality assurance mechanisms as well as SPS service functions [MT; MAFF]  Invest in building capacity to meet regional and international standards [MT; MOC]	Introduce a national system to certify both SPS compliance and organic labeling [MT; MAFF]  Develop a national brand strategy and communication campaign for other fresh fruits and horticulture products (beyond rice and pepper) [MT; MOC]	Improve pest and disease surveillance, quarantine services, and laboratory testing for contaminants and residues, among other food safety functions [MT; MAFF]  Establish geographical indication arrangements and blockchain technology to improve traceability through the agriculture supply chains [MT; MAFF]
<b>Improve conditions for agro-processing and the promotion of higher value added</b>	Build capacity and train customs officials on the new national single window or ASYCUDA system [ST; MOC]	Fully implement the national single window by integrating remaining agencies; automate and integrate the remaining border processes into the national single window system like SPS certification [ST; MOC]  Review customs requirements for export and import permits while also linking the origin certification system (to automate their issuance) and the customs ASYCUDA system [ST; MOC]  Consider adapting institutional models supportive of agribusiness, including incubators, farmer-enterprise productive alliances, and contract farming systems [MT; MAFF]	Continue lowering energy costs and improving infrastructure for better market access [ST; MME & MOC]
<b>Improve the availability and affordability of agricultural inputs</b>		Review the effectiveness of all licenses, quotas, and fees on imported agriculture inputs [ST; MOC]	Intensify market surveillance and traceability of fertilizers, including by using mobile testing facilities [ST; MAFF]  Introduce a risk-management system (profiling importers, exporters, and products) at the border to ensure food safety and sufficient quality standards in products like fertilizers or pesticides, without comprising timeliness of import procedures, potentially as a module in phase II of the national single window [MT; MAFF & MOC]

## Increasing competitiveness to export modern services

Objective	Improving capabilities	Strengthening regulations	Investing in infrastructure
<b>Facilitating the emergence of modern services by reducing regulatory hurdles</b>		<p>Streamline licensing requirements (including in services) through effective implementation of a one-stop shop [ST; MEF]</p> <p>Ensure that regulations establish a clear authority among different regulatory agencies for business licensing in the services sector and prevent overlaps [MT; MEF]</p>	<p>Make all laws and regulations on trade and investment in services publicly available online through a Cambodia services trade portal [ST; MOC]</p>
<b>Removing remaining entry restrictions in professional services</b>		<p>Drop the proposal allowing only Cambodian accountants to sign off audited reports [ST; NAC]</p> <p>Amend the 1995 Law on the Bar to allow foreign lawyers to register with the Bar Association [ST; DOJ]</p> <p>Establish a formal process of registration for foreign legal services providers [MT; DOJ]</p>	
<b>Improve the enabling environment for services firms</b>		<p>Improve the implementation and enforcement of existing Cambodian IPR legislation [ST; MOC &amp; MPTC]</p> <p>Establish a special court or judicial channel to deal with IPR protection-related cases [MT; DOJ]</p> <p>Implement the new Law on Electronic Commerce; introduce legislation on data protection, cybersecurity, and the National Payment Systems roadmap [ST; MOC &amp; MPTC]</p> <p>Release bandwidth for 4G and 5G spectrum in some areas, allowing private investment in the spectrum (including through updating licensing arrangements); ensure the private sector can invest and compete in new key infrastructure; promote tower and other investment sharing within the private sector [ST; MPTC &amp; TRC]</p>	<p>Improve access to digital infrastructure including broadband and 4G by leveraging the Universal Services Obligation Fund to improve infrastructure in lagging regions [MT; MPTC &amp; TRC]</p>
<b>Leverage international trade agreements to foster services exports</b>	<p>Build capacity of Cambodia's trade negotiators to negotiate deeper trade agreements that cover services [ST; MOC]</p> <p>Use the LDC's services waiver that offers preferential treatment on market access for services to WTO members [ST; MOC]</p>	<p>Implement mutual recognition agreements for services professionals within ASEAN and with other trading partners [MT; MOC]</p> <p>Participate in the ASEAN Trade in Services Agreement to advocate for services liberalization in other ASEAN member countries [ST; MOC]</p>	

**Note:** ST=short term; MT=medium term. CDC=Council for the Development of Cambodia; DOJ=Department of Justice; MAFF=Ministry of Agriculture, Forestry, and Fisheries; MEF=Ministry of Economy and Finance; MLVT=Ministry of Labour and Vocational Training; MOC=Ministry of Commerce; MPTC=Ministry of Posts and Telecommunications; NAC=National Accounting Council; TRC=Telecommunication Regulator of Cambodia.

---

## Endnotes

- <sup>92</sup> World Bank World Development Indicators.
- <sup>93</sup> World Bank World Development Indicators.
- <sup>94</sup> World Bank (2020a) and official estimates.
- <sup>95</sup> World Bank (2019a).
- <sup>96</sup> World Bank (2019a).
- <sup>97</sup> World Bank (2019c).
- <sup>98</sup> Economic complexity is a proxy measure of all the productive capabilities (infrastructure, land, laws, machines, people, ideas, etc.) of a society that, in combination, determine the frontiers of what it can produce, and has been identified as a determinant of growth (Hidalgo and Hausmann 2009). World Bank (2019a).
- <sup>99</sup> The recently signed China-Cambodia FTA and Cambodia-Republic of Korea FTA offer potential for Cambodia to leverage new export opportunities to transform its economy. These FTAs were signed after this report's analysis was undertaken, and, as such, an analysis of potential market access opportunities is left to follow-up work.
- <sup>100</sup> This section draws on Chapter 2 of the Economic Diversification Study (World Bank 2019a) prepared as Part I of the Cambodia Country Economic Memorandum as well as the Special Focus of the November 2019 Cambodia Economic Update (World Bank 2019d).
- <sup>101</sup> World Bank (2019c).
- <sup>102</sup> World Bank (2019c).
- <sup>103</sup> OECD Trade in Value Added Database.
- <sup>104</sup> The World Bank Group conducted a survey to assess the scope of FDI linkages, identify demand for local sourcing, and highlight concrete barriers to building FDI linkages in Cambodia. World Bank (2018b).
- <sup>105</sup> Under the Cambodian Investment Law, projects that meet a minimum capital investment requirement may qualify for tax exemptions on both inputs and profits. More detail on Qualified Investment Project status is provided by the Council for the Development of Cambodia at <http://www.cambodiainvestment.gov.kh/investment-scheme/investment-incentives.html/>.
- <sup>106</sup> World Bank (2019c) and World Bank (2019d).
- <sup>107</sup> The country's minimum wage legislation has been in effect since 1997, when the regular minimum wage was set at US\$40, and has been revised multiple times since then.
- <sup>108</sup> World Bank (2019b).
- <sup>109</sup> Unlike many countries in the region, the Cambodian economy is highly dollarized, and employees are paid in US dollars.
- <sup>110</sup> <https://www.vietnam-briefing.com/news/vietnam-hikes-minimum-wages-by-5-3-percent-in-2019.html/>.
- <sup>111</sup> <https://fashionunited.uk/news/business/bangladesh-raises-minimum-wage-for-garment-workers/2018091438912/>.
- <sup>112</sup> World Bank (2019a).
- <sup>113</sup> World Bank (2019a).
- <sup>114</sup> World Bank (2019c).
- <sup>115</sup> World Bank (2019c).
- <sup>116</sup> World Bank (2019b).
- <sup>117</sup> World Bank staff calculations using data from National Employment Agency (2014 and 2015) and World Bank (2019b).
- <sup>118</sup> Projected educational attainment for total population based on historical school enrollment and completion statistics. Barro and Lee (2021).

- <sup>119</sup> World Bank (2019b).
- <sup>120</sup> World Bank (2019b).
- <sup>121</sup> World Bank (2019c) based on Frederick (2018).
- <sup>122</sup> World Bank (2019b).
- <sup>123</sup> World Bank (2019b).
- <sup>124</sup> World Bank (2019a).
- <sup>125</sup> Lee, Vannady, and Peou (2017).
- <sup>126</sup> Staritz and Frederick (2014).
- <sup>127</sup> World Bank (2018b).
- <sup>128</sup> World Bank (2019i).
- <sup>129</sup> Cusolito, Safadi, and Taglioni (2016).
- <sup>130</sup> Cadot and Malouche (2012).
- <sup>131</sup> This section is a summary of Chapter 3 of the Economic Diversification Study (World Bank 2019a) prepared as Part I of the Cambodia Country Economic Memorandum.
- <sup>132</sup> UN Comtrade reported data.
- <sup>133</sup> The revealed comparative advantage index is the ratio of a country's export share in a specific sector to the world share in that sector in total world exports. A revealed comparative advantage index above 1 indicates that the country's share of exports in a sector exceeds the global export share of that product and is thus a measure of its competitiveness.
- <sup>134</sup> Cambodia's exports of milled rice to the EU have been affected by safeguards imposed following an investigation that concluded a significant increase in imports of rice from Cambodia and Myanmar has caused economic damage to EU farmers.
- <sup>135</sup> To assess the quality of Cambodia's exports, the unit value of an exported Cambodian product to a given destination was calculated, which is the ratio of trade value to physical volume and provides a proxy for perceived quality. This unit value was compared with the unit values of the same product exported by other countries to the same destination. Since similar products with heterogeneous quality may be included in the calculation of unit values and will bias this statistic, the calculations were done at the most disaggregated level—that is, at the harmonized system 6-digit level—to reduce this risk.
- <sup>136</sup> World Bank (2020b).
- <sup>137</sup> World Bank (2019b).
- <sup>138</sup> World Bank (2015).
- <sup>139</sup> Bordey et al. (2016).
- <sup>140</sup> The categorization was made through a principal component factor analysis, used to reduce the optimal combination of several independent variables into one score index that ranked farmers along one dimension. Farmers were characterized as modern or traditional based on their level of use of modern inputs, labor, and services. These variables were used to compute the rank of each farm into one latent variable, the projection of each farm from a multi-dimensional to a one-dimensional space. The analysis was conducted per crop. World Bank (2015).
- <sup>141</sup> World Bank (2015).
- <sup>142</sup> World Bank (2015).
- <sup>143</sup> World Bank (2015).
- <sup>144</sup> Meitzner, Price, and Sobel (1996).
- <sup>145</sup> United States Department of Agriculture (2019).
- <sup>146</sup> TechSci (2017) and Zion Market Research (2018).

- <sup>147</sup> TechSci (2017).
- <sup>148</sup> A report on the relationship between third-party certification and exports to target markets found significant benefits to increased numbers of certified exporting firms. Zheng, Muth, and Brophy (2013).
- <sup>149</sup> An example of a setup process for a national certification system can be found in Thailand's shrimp aquaculture sector. Diaz-Ros and Jaffee (2013).
- <sup>150</sup> For an introduction to the GLOBAL Good Agricultural Practice certification, see [https://www.globalgap.org/uk\\_en/what-we-do/globalg.a.p.-certification/](https://www.globalgap.org/uk_en/what-we-do/globalg.a.p.-certification/).
- <sup>151</sup> Diaz-Ros and Jaffee (2013).
- <sup>152</sup> Steps include: i) define the name of the region and the product to be protected; ii) characterize the product in terms of its essential characteristics/features (physical, chemical, microbiological, and organoleptic) or cultural aspects, etc.; iii) define the geographic boundaries of the geographical indication; iv) establish the rules/standards of production for the product; v) define the factor(s) that link the product with the specific origin; vi) define the institutions responsible for the control; vii) establish the labelling elements; and viii) meet other requirements according to different national rules. Diaz-Ros and Jaffee (2013).
- <sup>153</sup> World Bank (2017a).
- <sup>154</sup> The evolving sector of national developmental venture capital provides potential partners and financiers for ambitious entrepreneurs in developing countries. Examples include Sweden's Swedfund, Britain's CDC Group, and the Entrepreneurial Development Bank (FMO) from the Netherlands.
- <sup>155</sup> Sáez and Taglioni (2016).
- <sup>156</sup> 'Modern services' are those delivered through Mode 1, that is, they can be traded without the buyer and seller being in the same place but with some knowledge content such as ICT, banking, insurance, business services, business process outsourcing, knowledge process outsourcing, and education. Modern services are associated with higher productivity and better-quality jobs. Hollweg and Sáez (2019).
- <sup>157</sup> Hollweg and Sáez (2019), Van der Marel (2016), Baldwin and Forslid (2019), and World Trade Organization (2019).
- <sup>158</sup> Hoekman and Mattoo (2008), Mattoo, Subramanian, and Rathindran (1999), Javorcik (2004), and Ehandi, Krajcovicova, and Qiang (2015).
- <sup>159</sup> World Economic Forum (2019).
- <sup>160</sup> World Bank (2017a).
- <sup>161</sup> Similar to countries around the world, Cambodia's tourism exports have collapsed, with international arrivals falling by 72 percent (year-on-year) during the first eight months of 2020.
- <sup>162</sup> World Bank (2020b).
- <sup>163</sup> Sáez and Villant (2010) and Sauvé and Roy (2016).
- <sup>164</sup> Fernandes and Paunov (2012), Javorcik and Li (2013), and Arnold et al. (2016).
- <sup>165</sup> EAP is one of the regions with higher Services Trade Restrictiveness Index (43.9), more than 15 points above the world average (28.3).
- <sup>166</sup> The GATS classifies services trade in four different modes of supply: direct cross-border trade (mode 1, services are delivered from one country into another); consumption abroad (mode 2, foreign consumers move to the provider country); commercial presence (mode 3, services are supplied through presence in another country) and, presence of natural persons (mode 4, a country moves persons to another country to provide services).
- <sup>167</sup> World Bank (2014).
- <sup>168</sup> Information provided by the EU's South-East Asia IPR SME Helpdesk, accessed on June 21, 2019 at [https://ebn.eu/index.php?Ink=K2tiZmlkaWp5MVZzVWF6SzFUWkpHNHEyaEdLR0g5NlpKeEILNWczQmEzd0=](https://ebn.eu/index.php?Ink=K2tiZmlkaWp5MVZzVWF6SzFUWkpHNHEyaEdLR0g5NlpKeEILNWczQmEzd0=/).
- <sup>169</sup> World Bank (2019h).
- <sup>170</sup> World Bank (2018b).

- <sup>171</sup> World Bank (2019a).
- <sup>172</sup> Negotiated as part of the Marrakesh Agreement establishing the WTO in 1995.
- <sup>173</sup> Several studies have shown the complementarity between FDI (mode 3) and trade (mode 1), including Fontagné (1999), Markusen (2005), and Van der Marel and Sheperd (2013).
- <sup>174</sup> Shingal, Roy, and Sauv  (2018).
- <sup>175</sup> Hoekman and Mattoo (2013).
- <sup>176</sup> Hoekman and Mattoo (2011) and Shingal, Roy, and Sauv  (2018).
- <sup>177</sup> WTO Regional Trade Agreements Database.
- <sup>178</sup> This section draws on policy recommendations in Chapter 4 of the Economic Diversification Study (World Bank 2019a) prepared as Part I of the Cambodia Country Economic Memorandum.
- <sup>179</sup> ASEAN Secretariat and World Bank (2015).
- <sup>180</sup> ASEAN Secretariat and World Bank (2015).
- <sup>181</sup> International Trade Centre (2004), ProTrade Consult and International Economics (2015), and Simatupang, Rustiadi, and Situmorang (2012).
- <sup>182</sup> Crane (2016).
- <sup>183</sup> Tourism of Cambodia (2019).
- <sup>184</sup> For more information on its functioning and strategy, see Presidential Council on National Branding of the Republic of Korea, available at <http://17koreabrand.pa.go.kr/gokr/en/cms/selectKbrdCmsPageTbl.do?cd=0116&m1=1&m2=1/>.

# Chapter 3

## Financing the Next Phase of Growth

**Capital accumulation has been the primary driver of long-term economic growth in Cambodia.** It accounts for nearly two-thirds of real gross domestic product (GDP) growth since 1995 and almost three-quarters of real GDP growth since 2011. Other growth drivers have played only a secondary role. For instance, changes in employment together with changes in hours worked explain about a quarter of the growth since 1995. An increase in labor quality over the years has also yielded only marginal impact. The contribution of total factor productivity (TFP) has been volatile but has remained low in general. Since 1995, TFP has accounted for just 7 percent of the growth, with its share being even lower in the past decade.

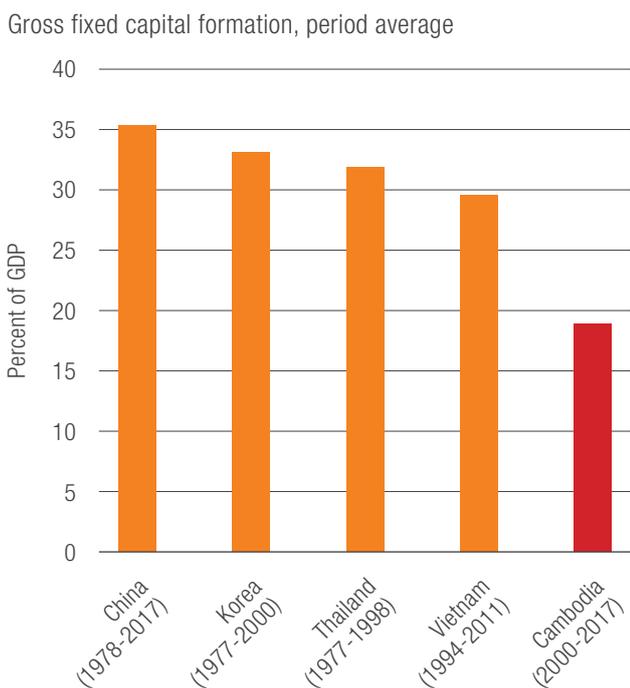
**Yet Cambodia needs to sustain—and even accelerate—the rapid expansion of fixed capital formation in the next phase to meet its growth targets.** Growth projections from the World Bank's Long-Term Growth Model show that Cambodia will surpass the high income gross national income (GNI) per capita target threshold by 2050 only if the country manages to expand its investment rate to 33 percent, compared to the average gross fixed capital formation over the last two decades standing at 18 percent.<sup>185</sup> Simulations further show that the high income status remains distant in 2050 under an investment paralysis in which the capital formation rate remains stuck at the current level. The Republic of Korea's growth experience provides a blueprint for Cambodia. The Republic of Korea's investment rate was not different from Cambodia when it was at its level of development. However, the country managed to grow it steadily over 15 years and maintained an average investment rate of 33 percent for almost two decades.

**The rapid expansion of fixed capital formation is needed alongside increases in other growth engines, notably human-capital accumulation and TFP.** The abovementioned growth projections assume human capital and TFP will grow by an average of 1.5 and 2.0 percent each year. This growth rate of human capital matches the Republic of Korea's long-term average rate during 1960-2014. On the other hand, the assumed TFP growth rate outpaces that of the Republic of Korea's in each decade except the 1980s and is significantly above Cambodia's recent performance.<sup>186</sup> Since 2009, TFP has grown annually on average by 1.0 percent, but only 0.2 percent since 2011. As such, the projections use a best-case scenario for the other growth drivers, and the possibility of a positive surprise to reduce the burden on capital accumulation remains unlikely.

**Given the low base, global experience suggests a sizable increase in the investment rate over a medium- to long-term horizon is achievable.** Until now, this below 20 percent rate of investment has proved sufficient in delivering robust economic expansion. The growth efficiency of investment has been supported by Cambodia's relatively lower capital-to-output ratio (figure 3.1). However, the marginal productivity of capital is declining as it is becoming less scarce, which reduces the effectiveness of investment in boosting growth. To keep the growth engine running, Cambodia can aim to follow in the footsteps of economies that managed considerably higher rates during their period of rapid economic growth. For instance, China and the Republic of Korea averaged around 35 percent during 1978-2017 and 1977-2000, respectively. Not far behind, the average gross fixed capital formation in Thailand and Vietnam came at 33 and 31 percent during their boom years. Thus, Cambodia has ample room to grow its investment before it reaches such levels.

**FIGURE 3.1**

Capital formation remains low relative to high-growth countries at Cambodia's stage of development



**Source:** World Bank staff calculations using data from World Bank World Development Indicators and Cambodia Economic Update (World Bank 2018a).

**A substantial expansion in capital formation requires finance, and sourcing it successfully is a critical component of the growth strategy.** Cambodia faces two options that are not necessarily exclusive: external capital inflows through foreign savings and domestic investment through domestic savings. The former has been instrumental in financing capital formation to date. But can the country continue to rely on foreign direct investment (FDI) to finance its investment in the next phase? If so, how can it attract FDI to reap the maximum benefits? Or should Cambodia also look inwards by trying to boost the anemic rate of domestic investment? This chapter aims to answer these questions by exploring the challenges and opportunities in attracting FDI as well as boosting domestic investment through domestic savings that would be needed to deliver growth going forward. Deciding whether to continue relying on external sources to finance its next growth phase, or to start looking for ways to build domestic financial sources through domestic savings, requires careful evaluation of the challenges and opportunities of the two alternatives. Covid-19 further increases the importance of this question today, as human capital, TFP, and foreign investment are all likely to be negatively impacted in the coming years. The chapter concludes with vital policy recommendations based on the analysis.

## Two options for obtaining finance

**To boost capital formation, Cambodia will need to find ways to finance the underlying investments.**

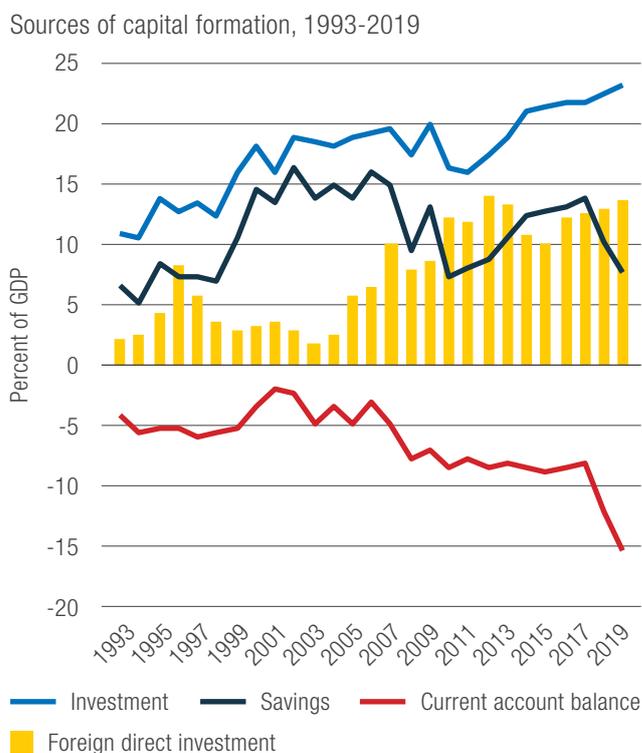
There are two broad alternatives for raising finance. First, the country can look to grow its domestic savings, which can then translate into domestic investment. Domestic savings can come from either the private (both households and enterprises) or the public sector. Second, the country can source the required incremental finance externally via foreign investments in firms operating domestically.

### External capital has been a critical source of finance

**External capital inflows in the form of FDI have been a critical source of finance in recent years** (figure 3.2). FDI inflows have averaged 11.8 percent of GDP from 2015-19, accounting for more than 70 percent of Cambodia's capital and financial account on average. In 2019, FDI inflows accounted for nearly 60 percent of aggregate investment (figure 3.3). In contrast, FDI constitutes a much smaller share of aggregate fixed capital formation in other countries: 25 percent in Vietnam, with Myanmar, India, and Bangladesh reporting considerably lower figures. Though certainly active, domestic investment remains a more limited source of finance in Cambodia relative to many other countries.

**FIGURE 3.2**

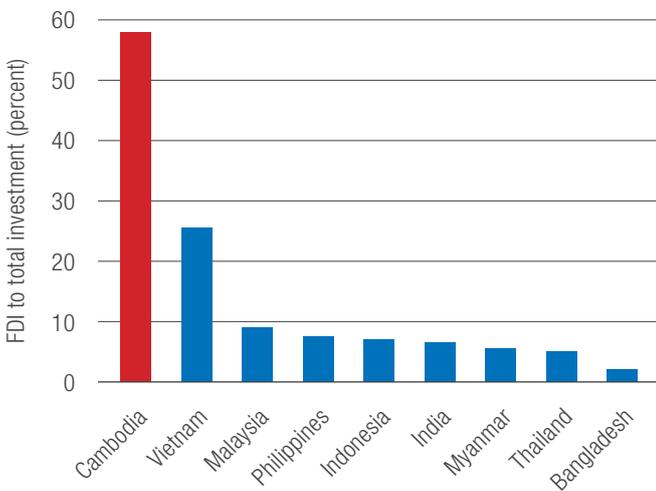
Investment has largely been financed by FDI



**Source:** World Bank staff calculations using data from International Monetary Fund (IMF) World Economic Outlook and World Bank World Development Indicators and Cambodia Economic Update (2018a).

**FIGURE 3.3**  
Cambodia's reliance on FDI for capital formation is much higher than comparator countries

Net FDI inflows as percent of gross fixed capital formation, 2019



**Note:** Data not available for Lao PDR.

**Source:** World Bank staff calculations using data from World Bank World Development Indicators.

### Attracting greater FDI might prove challenging in the coming years

**An increase in FDI inflows can help meet investment targets, but a weak investment climate creates headwinds** (discussed in more detail in Chapter 1). Moreover, the current investment and tax regime contribute to the low quality of FDI (discussed in more detail in Chapter 2). Cambodia not only misses out on additional FDI but also fails to attract high-quality FDI because of its current investment environment. In recent years Cambodia has made efforts to improve the investment climate including prioritizing reforms to improve the business environment, passing the new Investment Law, and signing new free trade agreements (FTAs) with key trade partners.

**Aside from a weak business environment, other factors make attracting FDI at required levels increasingly more difficult.** Owing to its status as a least developed country (LDC), Cambodia's exports receive preferential treatment by many countries. The United States' Generalized System of Preferences program provides duty-

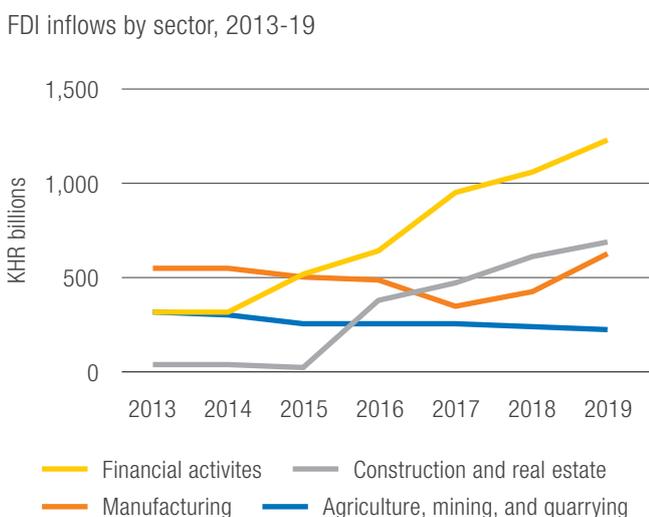
free access for up to 5,000 products. Though partially and temporarily suspended, the "Everything But Arms" agreement exempts all exports to the European Union (EU) from import duty and quota. Such preferential arrangements have spurred FDI inflows into export sectors. A considerable share of the investment in the garment sector—the dominant export sector—flows through such channels. However, Cambodia's preferential standing is temporary. Strong economic growth will lead to the country's graduation from LDC status sometime in the future. A resulting decline in the competitive edge of its exports will make export-oriented FDI relatively less attractive. Moreover, economic growth threatens export competitiveness through channels exogenous to loss of preferential treatment. Wages are likely to grow as a result of the overall development (in addition to rapidly rising minimum wages over the past years), which will increase production costs and make Cambodian exports less competitive without equally improving productivity.

**The preferential agreements are subject to regulatory requirements, and the recent suspension of the "Everything But Arms" agreement further jeopardizes FDI inflows.** The European Commission temporarily suspended Cambodia's preferential privileges in August 2020, which is likely to have a significant impact on trade, at least in the short term. However, FDI flows will also feel the heat should the suspension (or the threat of suspension) continue for long.<sup>187</sup>

**Cambodia's high GDP growth puts further pressure on the needed FDI levels.** Even if FDI inflows continue to grow in nominal value, they will shrink as a share of GDP if they are unable to keep up with GDP growth. The current account balance increased from around 8.5 percent of GDP in the early-to-mid 2010s to 16 percent by 2019. Underlying the expansion is the impressive surge in external capital flows that have outpaced the high rate of output growth. However, the IMF projects a considerable revision in the current account balance ratio in the long term and anticipates it to reach 7.5 percent by 2025.<sup>188</sup> In part, the expected decline reflects the waning short-term demand forces. But the projections do not imply that FDI flows will deteriorate in nominal terms. Instead, inbound FDI in dollar terms appears large as a share of GDP because GDP is still relatively low. As GDP increases over the long term, the real dollar value of capital inflows will also have to increase significantly simply to maintain the share of GDP. As it becomes harder to attract these additional flows each year to help sustain FDI as a share of GDP, the growth rate of FDI will likely fall below the GDP growth rate.

**The likelihood of raising the investment rate through FDI is also constrained by the economy's high rate of dollarization.** Adopting the managed-float regime has been beneficial in reducing the exchange-rate risk. With the United States being the primary trading partner for many years, dollarization also preserved the competitiveness of Cambodia's exports. But with the EU recently replacing the United States as Cambodia's top export destination, the strong United States (US) dollar makes exports to other countries less competitive, limiting export growth and investments in export-focused sectors. Research shows that episodes of US dollar appreciation relative to the Euro (and other currencies) are associated with a net fall in garment exports. The tourism industry also bears the brunt, as visits from non-United States' tourists become more expensive. Specifically, a one standard-deviation increase in the United States federal funds rate (~0.45 percentage points), which leads to the appreciation of the US dollar, reduces Cambodia's trade balance with the EU by 0.15 percent.<sup>189</sup> In effect, an increase in the US dollar value indirectly erodes the competitiveness of the FDI-favored tradeable sectors due to Cambodia's high dollarization. Furthermore, as returns on investment in these sectors diminish, investment decisions get distorted in favor of non-tradable sectors. Dollarization is likely to be one of the main drivers of the rise in the share of credit flowing to construction and real-estate sectors (figure 3.4).<sup>190</sup> In fact, Cambodia's large and relatively stable FDI inflows may in part be owed to dollarization minimizing the risk of depreciation in asset prices compared to other countries that require investments in their own currency. Because the non-tradable sectors are geared towards domestic consumption, US dollar appreciation deals a blow to domestic savings as well.

**FIGURE 3.4**  
FDI has increased faster in non-tradable sectors



Source: World Bank staff calculations using official data.

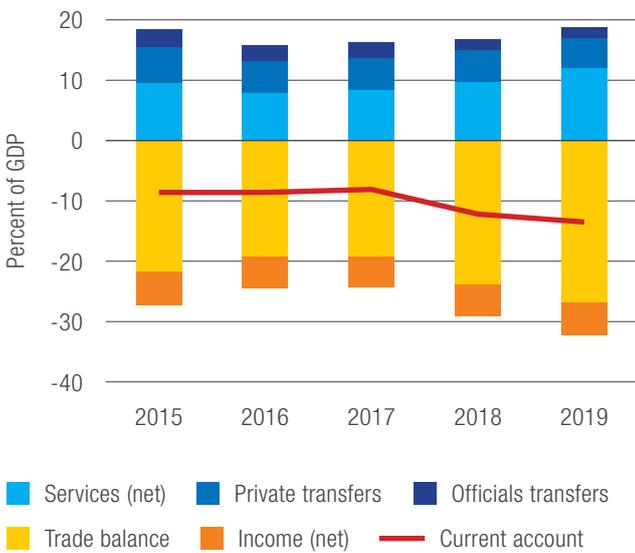
## Moreover, FDIs are volatile and create risks to macroeconomic stability

**An FDI-led investment strategy also exposes the economy to risks associated with macroeconomic stability.** Cambodia carries a persistently high current account deficit. The current account deficit averaged around 9 percent of GDP over the last decade and has further enlarged in recent years (figure 3.5). FDI flows have financed the lion's share of the deficit over the years (figure 3.6). A perennially high current account deficit exposes the country to macroeconomic risks. Countries logging higher deficits bear the risk of sharp economic contraction in the event of a financial crisis. High rates of credit expansion and borrower indebtedness in Cambodia in the past years and sharp income declines resulting from the Covid-19 shock are further risks to Cambodia's macroeconomic stability (although average capital positions of banks and microfinance institutions/microfinance deposit taking institutions [MFIs/MDIs] nevertheless remain fairly strong—that is, above the 15 percent regulatory capital requirement). Countries are also likely to experience an erosion of their creditworthiness with the banking sector coming under severe stress.<sup>191</sup> Financial crises can trigger a reversal of capital flows or create sudden stops, not only disrupting economic activity in the near-term but also causing a protracted stagnation in the medium-term.<sup>192</sup> Besides, FDI flows are volatile, and their sustainability in the long term is subject to tremendous uncertainty. However, the evidence that links FDI flows to volatility comes from other countries and may not apply to Cambodia, especially in the short to medium term. Moreover, the uncertainty associated with non-FDI capital flows is often higher. These two reasons caution against overestimating the FDI-related risks, particularly because inflows have been fundamental to Cambodia's growth over the years.

**The massive disruption in the international credit market brought on by the Covid-19 pandemic can threaten investment activity for years to come.** The outbreak of Covid-19 has led to unprecedented outflows of capital from developing economies (figure 3.7). The IMF reports that during a short period of five weeks, these economies saw more than US\$100 billion of foreign investment—equaling 3.5 percent of total external financing—leave their shores.<sup>193</sup> The sudden flight of capital during the Global Financial Crisis pales in comparison, as only 2.0 percent of total foreign investment was pulled back. In Cambodia, the loss of financing is felt strongly in the construction and real-estate sectors. Activity in these sectors has almost come to a standstill. Moreover, recoveries from crises in the past have only been partial, and FDI flows will likely rebound at a slow pace. Hence, it becomes critical to look beyond FDI finance to prevent the capital accumulation process from stalling.

**FIGURE 3.5**  
Cambodia's large current account deficit...

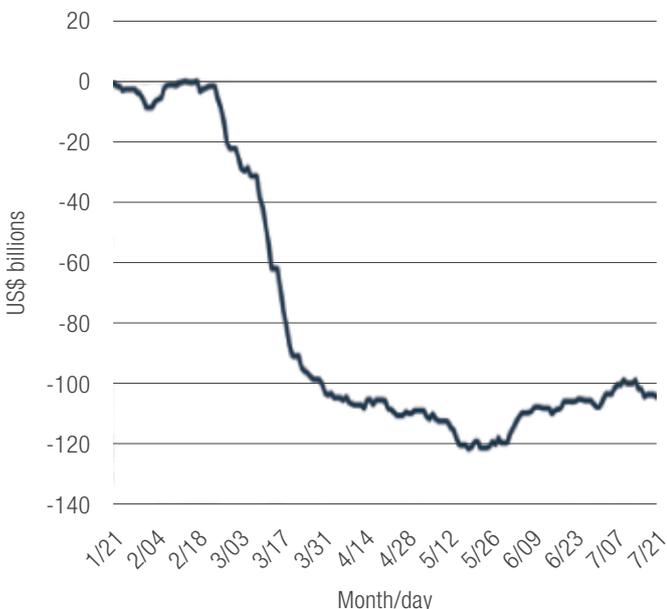
Composition of current account, 2015-19



Source: World Bank staff calculations using data from IMF International Financial Statistics.

**FIGURE 3.7**  
Covid-19 threatens foreign investment in developing economies

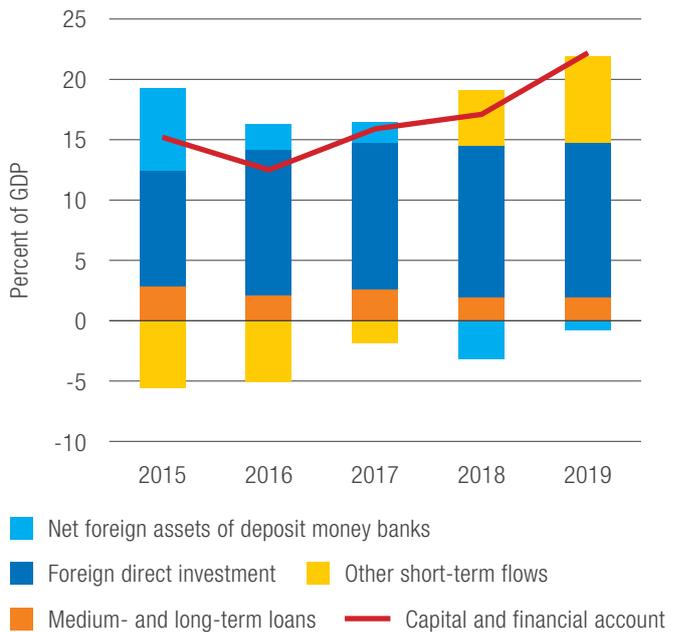
Cumulative portfolio flows from emerging markets, 2020



Source: IMF (2020b).

**FIGURE 3.6**  
...has been largely financed by FDI

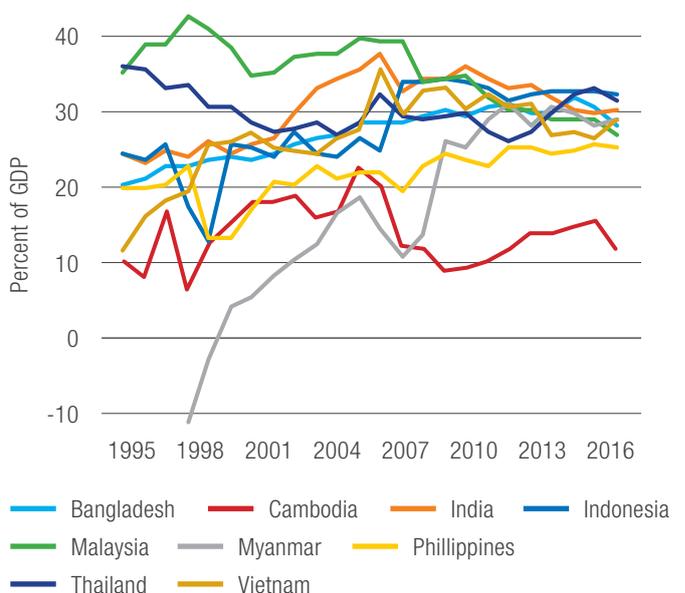
Composition of capital and financial account, 2015-19



Source: World Bank staff calculations using data from IMF International Financial Statistics.

**FIGURE 3.8**  
Cambodia's savings rate is lowest among comparator countries...

Gross national savings rate, 1995-2018



Note: Data not available for Lao PDR.

Source: World Bank staff calculations using data from IMF World Economic Outlook.

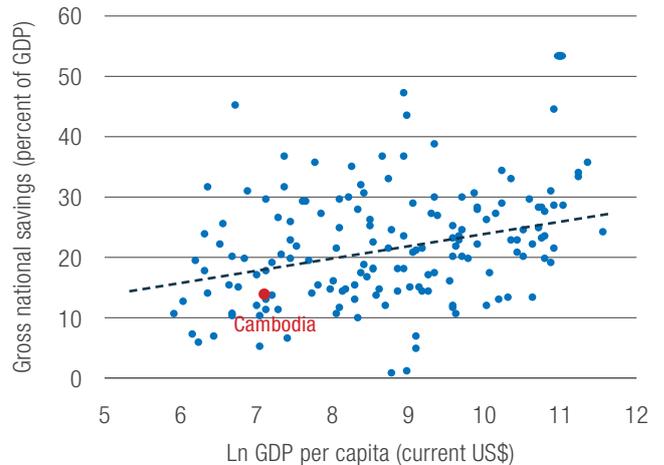
## Domestic savings can provide an alternative to external finance, but the savings rate remains low

Another avenue to finance investment is to grow domestic savings, which will also help in mitigating the aforementioned macroeconomic risks. Reducing the burden on FDI inflows with domestic savings to fuel investment will keep the current account deficit within reasonable limits, thereby reducing the economy's exposure to a financial crisis.

Still, adopting a savings-led investment strategy is not devoid of challenges. Gross domestic savings as a share of GDP has always remained below 20 percent, placing Cambodia's savings rate lowest among comparator countries (figure 3.8).<sup>194</sup> Moreover, it has remained stubbornly stagnant over the years and has failed to breach the 15 percent mark since 2007. Malaysia holds a leading position with its savings usually fluctuating between 30-40 percent of GDP. The average savings rate during the last ten years (2009-18) in India and Indonesia has been above 29 percent. Cambodia's average during the period lies more than 20 percentage points below that of these countries. Cambodia has fallen significantly behind Myanmar, which has steadily increased its savings from below-zero levels to above 30 percent of GDP by the late 2010s. As savings typically rises with GDP per capita, Cambodia's low income partly explains why its savings rate lags behind that of its comparators. However, income differences are not enough. The savings rate remains 5 percentage points below trend even after accounting for income variations (figure 3.9). Nonetheless, like with investment, a low base also provides an opportunity to emulate the savings path undertaken by the Republic of Korea and Malaysia. These two countries managed an average savings rate of around 30 percent in the 15+ years after they were at Cambodia's current level of economic development. Thailand had a similar savings rate to Cambodia when at Cambodia's current level of development, but was able to gradually grow its savings rate over a decade to reach that of Malaysia (figure 3.10).

**FIGURE 3.9**  
...and is low given income level

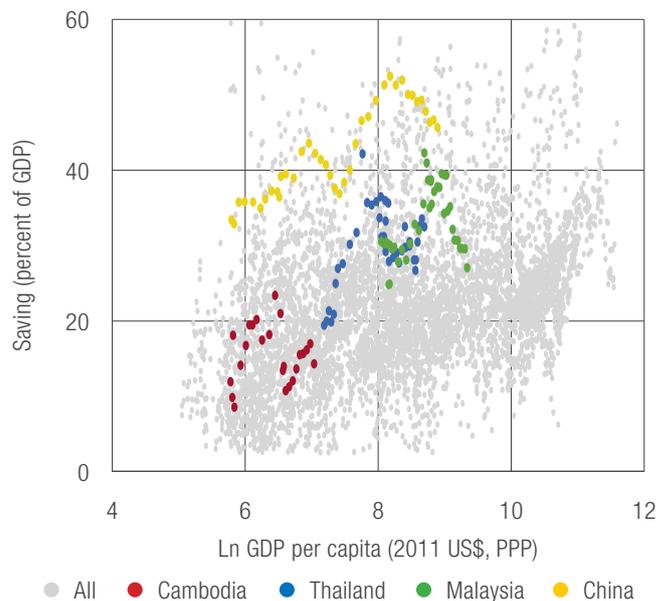
Gross national savings vs. GDP per capita, 2018



**Source:** World Bank staff calculations using data from IMF World Economic Outlook and World Bank World Development Indicators.

**FIGURE 3.10**  
Cambodia's savings trajectory falls below that of high-growth countries

Gross national savings vs. GDP per capita, 1980-2018



**Note:** Cambodia from 1995. PPP = Purchasing power parity.

**Source:** World Bank staff calculations using data from IMF World Economic Outlook and World Bank World Development Indicators.

**A steady and substantial increase in the savings rate is therefore essential to sustain the growth momentum.**

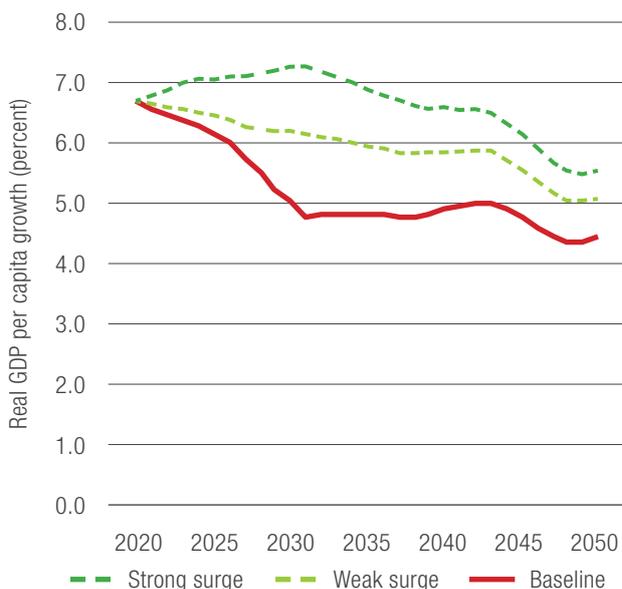
It is unlikely that the country will catch up with the gross fixed capital formation rates of high-growth comparators without any considerable shift in saving patterns. Growth simulations show that at Cambodia’s current savings profile, GDP growth could drop to 4.8 percent by 2031 (figure 3.11, see box 3.1 for more details). The country can maintain its high GDP growth if it is able to replicate the Republic of Korea’s or Malaysia’s savings—and thus investment—experience. Average annual GDP growth in the next decade is projected to be just under 6.5 percent under a weak surge scenario in which the savings rate expands to 18.5 percent by 2030. If savings undergo a strong surge, with the savings rate growing to 23.5 percent, GDP growth is projected to average 7 percent.

**In summary, both instruments—FDI and domestic savings—offer opportunities to finance the required high rate of investment that will sustain the growth momentum.** FDI inflows already constitute a large share of fixed capital formation as preferential trade agreements (PTAs) have funneled external capital into export-oriented sectors. On the other hand, the savings rate in the country remains extremely low and lags behind that of its comparators. But the low-level savings base also provides ample legroom, which makes a substantial expansion less daunting.

**However, both financing options come with their own set of challenges.** Cambodia is bound to lose its preferential trade status with its eventual graduation out of LDC status, which will make it a less attractive FDI destination. Moreover, efforts to raise FDI, especially high quality FDI, are likely to be frustrated under the current weak investment climate and muted global capital flows triggered by the Covid-19 pandemic. Kick-starting the savings boom is also going to be challenging as the savings rate has remained stagnant over the years. Hence, it is essential to understand what causes savings to be depressed in Cambodia. The next section takes a comprehensive look at the country’s savings situation to identify the barriers.

**FIGURE 3.11**  
Growth declines without an increase in the savings rate

Real GDP per capita growth under various scenarios, 2020-50 projections



**Note:** Simulations do not reflect the Covid-19 shock.

**Source:** World Bank staff calculations.

### BOX 3.1: Required savings for meeting upper middle income 2030 and high income 2050 targets

While weak and strong surges in savings help sustain the growth momentum, meeting long-term targets to transition into upper-middle-income and high-income statuses require an even higher savings path (figure B3.1). To attain upper-middle-income status in 2030, savings will have to be higher than 40 percent of GDP by then. Transitioning into high-income status by 2050 also makes sufficiently higher demands. On average, required savings rates in the next 10 years exceed the strong surge scenario by 6 percentage points.

**FIGURE B3.1**

Cambodia falls short of its growth targets without significant increases in savings

Gross national savings under various scenarios, 2019-50 projections



**Note:** Simulations do not reflect the Covid-19 shock.

**Source:** World Bank staff calculations.

The projections are obtained using the World Bank's Long-Term Growth Model, which helps assess how the economy grows under various savings scenarios. The Long-Term Growth Model builds on the Solow-Swan growth model and accounts for projected demographic dynamics, together with many other factors that are critical in driving growth.<sup>195</sup>

For the baseline case shown in figures 3.10 and 3.11, the model assumes the current account deficit as a share of GDP decrease over the long term as short-term demand effects wane—reaching 8.9 percent (near to the 10-year average) by 2025 and 5.0 percent by 2030. Moreover, private savings recover from 4.0 percent of GDP to 8.0 percent by 2025, but do not increase further. Government savings are assumed to decline gradually to a long-term steady-state level of 5.5 percent of GDP by 2025. The resulting effect of these dynamics is that the investment rate declines steadily to reach a steady state of 18 percent by 2030. The savings profiles associated with weak and strong surge scenarios are shown in figure B3.1.

Other drivers of growth include human-capital accumulation, productivity expansion, and demographic dynamics. Projections assume an annual human-capital growth of 1.5 percent. This human-capital growth rate is considerably high and is similar to what the Republic of Korea achieved over the decades (1960–2014). Annual rate of TFP growth is assumed to be 1 percent and demographic dynamics are adopted from the United Nation's population projections.

## Analysis of Cambodia's savings situation

### A comprehensive approach to savings diagnostics

**The diagnostics that follow aim to uncover the ultimate causes of low savings in Cambodia and employ several complementary approaches.** For instance, the analysis weighs Cambodia relative to other countries to identify where it falls short. The investigation also considers the within-country variation of saving behavior. This exercise not only helps separate households and individual characteristics associated with marginal-to-no savings but also enables the identification of factors leading to such behavior with certainty. Finally, when possible, the diagnostics look at the time trend to uncover the variables that have lost steam over time.

**The diagnostics use data from multiple sources to cover as much ground as possible.** These data fall under two broad categories. The first type corresponds to macroeconomic-level indicators. These include national income accounts aggregates, which have been traditionally used in analyzing saving behavior, as well as other financial and socioeconomic variables. The second class of data takes a micro approach and focuses on household and individual decisions directly through surveys. The study primarily relies on two sources of microdata—the World Bank Findex Database and the World Bank Cambodia Socio-Economic Surveys (CSES)—and a small qualitative survey of households commissioned for this report. The World Bank Findex Database is a collection of nationally representative surveys that aims to capture details of how adults save, borrow, make payments, and manage risk. The CSES are also nationally representative but have a much broader scope and provide useful information that sheds light on saving decisions of households. In addition to simple measures, the diagnostics use rigorous econometric techniques that are suitable to address the savings query under consideration (see box 3.2 for more details of these empirical approaches).

## BOX 3.2: Econometric analysis of saving behavior in Cambodia

### Methodology 1: Cross-country analysis using macro panel data

The principal objective of the econometric analysis is to see how saving behavior in Cambodia compares to other countries. Specifically, two possibilities can explain the low savings rate in the country. First, it may be that factors that promote saving are ineffective. For example, savings not responding to increases in income, or rising at a lower rate than in other countries. Second, it may be that the factor is potent but not developed. For instance, the national savings is low because of low income since it rises with income at a rate consistent with the global experience.

Based on literature, the empirical exercise exploits the macro panel data to shed light on the low savings rate. Following Loayza, Schmidt-Hebbel, and Servén (2000) and more recently Grigoli, Herman, and Schmidt-Hebbel (2018), the savings rate  $y_{it}$  is modeled as

$$y_{it} = \gamma y_{i,t-1} + \beta X_{i,t} + \delta Z_{i,t} + c_i + \tau_t + u_{i,t}$$

where  $X_{i,t}$  and  $Z_{i,t}$  represent the set of endogenous and (strictly) exogenous variables, and the subscripts  $i$  and  $t$  correspond to countries and years, respectively. To test whether Cambodia deviates from other countries, an interaction term with both endogenous and exogenous variables is introduced. The analysis compares Cambodia to the global sample as well as to the countries in the East Asia and Pacific (EAP). The analysis uses all the exogenous and endogenous variables from the Grigoli, Herman, and Schmidt-Hebbel (2018) study. In addition, it complements them by bringing in data on business environment, access to microfinance, and the banking sector. The parameters of the dynamic panel model are estimated using the two-step system, generalized method of moment method.<sup>196</sup>

### Methodology 2: Within-country analysis using CSES microdata

This econometric analysis focusses on Cambodian households to identify characteristics associated with saving behavior. Comparing the findings from this exercise with what is already obtained for other countries sheds light on whether the household saving behavior in Cambodia is any different.

Following the existing literature, the following equation is estimated

$$S_i = \alpha + \beta X_i + \epsilon$$

where  $S_i$  is household  $i$ 's savings rate. The vector  $X_i$  are the household-level controls, which are posited to influence saving decisions. These include owning the land and house where the household resides, the household size and location, and characteristics of the household head (age, education, occupation, gender, and marital status). The regression introduces controls for geospatial features of villages where a household is located. Among these, distance to the nearest bank or MFI is of particular interest.

The analysis truncates the savings rate  $S_i$  at both ends. A lower bound of 0 is set for negative household rates, and an upper bound of 1 applied to rates that lie above unity. Under truncation, the Tobit estimates are superior to those obtained using Ordinary Least Squares, as the latter are biased and inefficient. The findings of the Tobit model are checked for robustness using Probit and Heckman selection models. Table B3.1 reports the results of the Tobit regressions.

**TABLE B3.1:**

Demographics and other household characteristics correlate with higher savings

Variable	Model 1	Model 2	Model 3	Model 4
Land <sup>D</sup>	-0.99 (0.94)	1.25 (1.03)	-1.50 *** (0.23)	0.66 ** (0.28)
House ownership <sup>D</sup>	0.68 (1.47)	1.86 (1.61)	-0.53 (0.36)	0.19 (0.43)
Rural <sup>D</sup>	2.48 *** (0.96)	4.81 *** (1.05)	1.69 *** (0.25)	2.40 *** (0.30)
# of HH members aged 15-64	4.74 *** (0.28)	6.13 *** (0.31)	2.66 *** (0.07)	4.25 *** (0.08)
# of dependent HH members	-1.94 *** (0.31)	-1.50 *** (0.34)	-0.90 *** (0.07)	-0.80 *** (0.09)
Age of HH head	-0.39 ** (0.19)	-0.11 (0.21)	-0.22 *** (0.04)	-0.21 *** (0.05)
Square of age of HH head	0.00 ** (0.00)	0.00 (0.00)	0.00 *** (0.00)	0.00 *** (0.00)
HH head in formal sector <sup>D</sup>	7.95 *** (0.84)	8.67 *** (0.92)	4.42 *** (0.22)	5.83 *** (0.26)
HH head in agriculture <sup>D</sup>	-1.88 ** (0.93)	-3.93 *** (1.03)	-1.32 *** (0.22)	-3.41 *** (0.27)
HH head educated <sup>D</sup>	-0.17 (0.98)	3.36 *** (1.08)	-0.15 (0.26)	1.68 *** (0.31)
HH head male <sup>D</sup>	1.22 (1.51)	0.67 (1.67)	-0.86 ** (0.37)	-1.19 *** (0.44)
HH head married <sup>D</sup>	-4.81 *** (1.56)	-3.78 ** (1.71)	-1.87 *** (0.38)	-1.10 ** (0.46)
Distance to nearest bank (kms)	-0.06 (0.04)	-0.05 (0.04)	-0.02 ** (0.01)	-0.03 *** (0.01)
HH received remittances <sup>D</sup>	2.59 *** (0.78)	3.42 *** (0.86)	1.16 *** (0.20)	1.76 *** (0.24)
Constant	13.55 *** (4.73)	9.19 * (5.20)	6.54 *** (1.06)	4.94 *** (1.27)
<b>Observations</b>	<b>3,785</b>	<b>3,790</b>	<b>49,140</b>	<b>49,215</b>

**Note:** D=dummy variable. HH=household. Standard error in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.10. Savings is defined as the difference between annual net income and consumption in Models (1) and (3), while Models (2) and (4) also treat durable goods, medical, and educational expenses as savings. Negative savings are set to zero. Models (1) and (2) are for 2017 and Models (3) and (4) are pooled across the CSES 2009-17. Models (3) and (4) feature year fixed-effects.

**Source:** World Bank staff calculations.

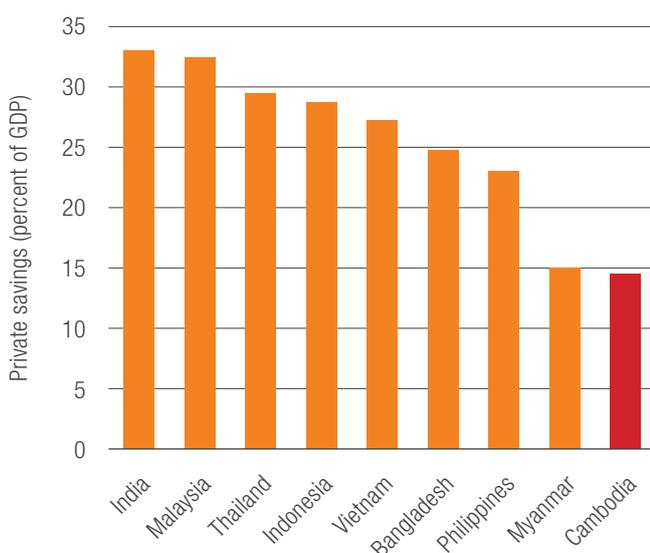
## National savings are low primarily because of private-sector savings

**The aggregate savings rate in Cambodia lags behind those of comparator countries primarily due to differences in private sector savings.** Private savings as a share of gross private disposable income averaged below 15 percent during 2000-12 (figure 3.12). Barring Myanmar, the corresponding figures are considerably higher in each comparator country. For instance, Cambodia's average is almost half that of Thailand and Vietnam, countries in the middle of the spectrum. In general, a percent increase in gross private disposable income per capita raises private savings by 17 basis points. But Cambodia's low income does not fully explain its depressed state of private savings. Private savings rates have been below the expected levels in most years, even after accounting for income variations.

**More alarmingly, the private savings rate has been decaying in recent years.** While public savings have grown substantially over the last decade, a relatively stronger contraction in private savings has dragged the aggregate rate downward (figure 3.13). Public savings as a share of GDP stood at a meagre 0.5 percent in 2010. Since then, the public savings rate exhibited a phenomenal surge to reach 6.3 percent by 2019. Yet, the aggregate savings rate has shrunk by over 2 percentage points over the same period due to a severe decline in private savings. The private savings rate in 2018 was around 7.5 percentage points lower than at the beginning of the decade.

**FIGURE 3.12**  
Cambodia's private savings is lowest among comparator countries

Private savings, 2018

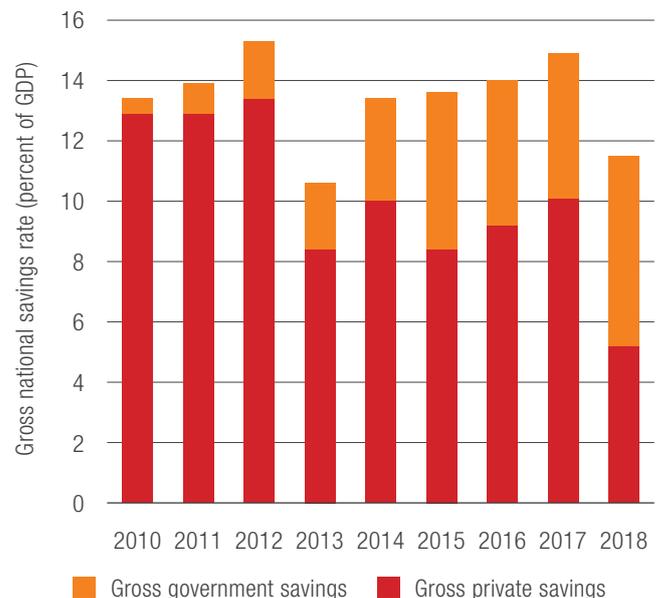


**Note:** Data not available for Lao PDR.

**Source:** World Bank staff calculations using data from Grigoli, Herman, and Schmidt-Hebbel (2018).

**FIGURE 3.13**  
Government savings have been growing while private savings have been declining

Private and public savings rate, 2010-18



**Source:** World Bank staff calculations using data from IMF Article IV for Cambodia.

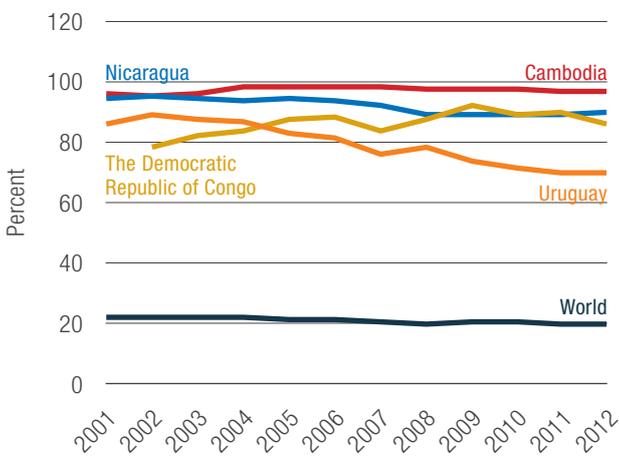
## Mechanisms that foster (or hinder) saving are relatively less (or more) active

**Some dimensions of the saving behavior in Cambodia vary markedly from those observed in the EAP region and create barriers for savings expansion.** For example, the savings rates decline with the share of the old-age population in both Cambodia and the EAP. However, the channel is more vigorous in Cambodia as a percentage increase in the old-age dependency ratio leads to a larger reduction in savings. The finding suggests that the elderly in Cambodia rely more on accumulated savings in the absence of social safety nets. Like in the EAP, a rise in bank credit depresses savings in Cambodia as well. Credit expansion makes it easier to finance consumption and investment and reduces dependency on private savings. Still, the analysis shows that Cambodia realizes relatively larger savings contractions as a result of similar increases in credit.<sup>197</sup> Finally, an increase in foreign lending by an EAP nation reduces its domestic private savings but that reduction is greater in Cambodia.<sup>198</sup>

**On the other hand, improvements in the business environment generate a watered-down impact on savings in Cambodia.** The cross-country analysis extends the standard model by bringing in data on the business environment, which relates to several facets of production activity—incorporating an operation, obtaining utility connections and necessary permits, receiving judicial support in contract enforcement, etc. Advances in the business environment make production more rewarding and encourage firm entry and growth, which catalyzes investment activity in the economy. The cross-country analysis of macro data confirms the presence of this channel in Cambodia. Nonetheless, the channel is not as effective as in the EAP region, which may be due to non-linearities where the effects remain muted below a certain threshold. The business climate in Cambodia leaves substantive room for improvement. Hence, improvements in the business environment may become more influential in driving investment in the future as Cambodia moves beyond the limiting threshold.

**FIGURE 3.14**  
Dollarization in Cambodia is among the highest globally

Share of foreign currency deposits in total deposits, 2001-12



**Note:** World consists of 87 countries for which data is available for each year during 2001-12.

**Source:** World Bank staff calculations using data from IMF International Financial Statistics.

**Cambodia is among the most dollarized economies of the world, which might be creating roadblocks for domestic savings growth.** The dollarization rate in the country exceeds that of Nicaragua, the Democratic Republic of Congo, and Uruguay (figure 3.14). Economic theory suggests dollarization can bear an inverse impact on savings. Cross-country evidence has established that savings increase with an increase in the income level and income growth.<sup>199</sup> But income growth is lower in economies that experience higher output volatility,<sup>200</sup> and a higher rate of dollarization is associated with an increase in volatility.<sup>201</sup> Hence, it is via this channel that dollarization hampers national savings. Dollarization-induced volatility can be severe, especially during a financial crisis, and economies with high dollarization rates are increasingly at risk. They carry substantial amount of currency imbalances that arise because of a mismatch in foreign-denominated debt and loans. A financial crisis ensues when the exchange rate depreciates rapidly as US dollar denominated debt becomes unserviceable under such conditions.<sup>202</sup> Dollarization can affect savings via other channels as well. As discussed previously, in a dollarized economy, investment decisions get distorted in favor of consumption-oriented non-tradable sectors whenever the US dollar appreciates. In this way, dollarization props consumption and disincentivizes savings.<sup>203</sup>

### Many households engage in savings but save too little

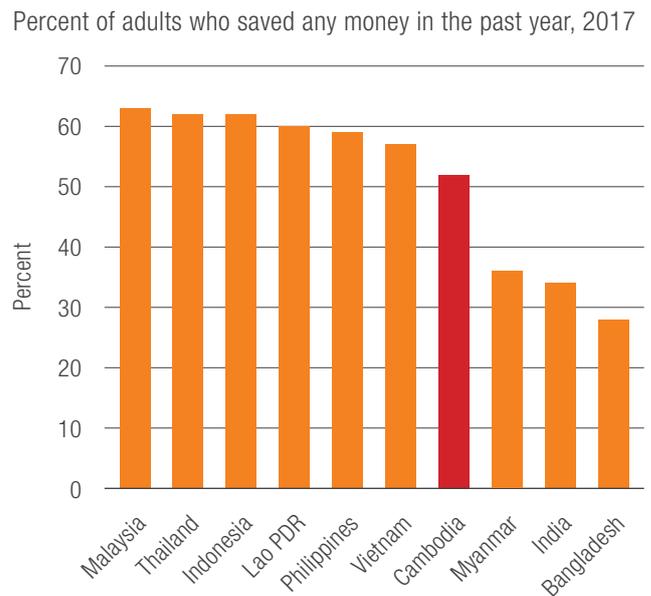
**Concern about low household savings is not how many households save but rather how much they are saving.** The savings rate in Cambodia lags behind that of many countries at the same level of development (figure 3.15), and is behind that of Malaysia, Thailand, and Indonesia by approximately 10 percentage points (figure 3.16). Yet, the World Bank Findex data show the share of individuals reporting making any savings in the past year is around 10 percentage points higher than expected given Cambodia's GDP per capita. This means that though a relatively large share of households is saving, the actual amount saved remains marginal. Data from other sources further support this possibility. According to the World Bank's Living Standards Measurement Study survey conducted in 2019, only 22 percent of households had any savings at the

time of the survey. The figure is 30 percentage points lower than what the World Bank Findex data suggests. However, the two surveys are not consistent in the definition of savings. The World Bank Findex survey uses a more flexible definition of savings, and a positive contribution in the past year is sufficient. On the other hand, the 2019 Living Standards Measurement Study requires households to have some current balance. Thus, households in the 2019 Living Standards Measurement Study are not considered savers if they saved some part of their income but ran it down over the year. These facts suggest that savings are often modest and elude long-term accumulation.

**FIGURE 3.15**  
The share of adults saving is high given Cambodia's income level...



**FIGURE 3.16**  
...but below most comparators



Source: World Bank staff calculations using data from World Bank Findex Database and World Bank World Development Indicators.

**The large and persistent negative shock to livelihood unleashed by the Covid-19 pandemic has exposed Cambodian households to dire consequences, and they are unable to cope given their deficient savings.** Food insecurity has spiked in many developing countries as a result of Covid-19. In Kenya, which is at a similar level of development as Cambodia, the share of food-insecure respondents increased by nearly 40 percent.<sup>204</sup> Not surprisingly, low-income households are more adversely affected by the crisis and were more likely to engage in food-based coping strategies such as missing meals or reducing overall food consumption. These facts also attest to the limitations of both formal and informal credit in providing timely relief. Yet, the pandemic could have an even more severe impact in Cambodia, given the economy's reliance on trade (garments, tourism) and external capital (construction and real estate). Recent developments have weakened the labor markets considerably, and with inadequate savings, households have limited means to absorb job loss shocks without the additional support of safety nets.

**After the effect of the pandemic wanes and the economy starts recovering, Cambodia should aim to advance its rate of savings participation.** While the amount saved remains a primary issue as far as aggregate savings are concerned, Cambodia should aim to bring more households under the savings umbrella for equity reasons.

### BOX 3.3: Why do households save and what factors explain the variation in saving behavior across households?

Research in developing economies has revealed that households engage in savings for a multitude of reasons. Primary functions of savings include acting as a reserve for future contingencies, preparing for anticipated change in future income and needs, building wealth, financing large consumption expenditures and speculative business investments, leaving bequests, etc.<sup>205</sup>

Households report a variety of motivations for saving in Cambodia as well (figure B3.1). Saving enables dealing with financial needs that arise on a day-to-day basis. Saving is also effective as self-insurance against future shocks. Such precautionary motives—like unforeseen healthcare-related expenditures—also drive households to save. In general, savings are a last resort to fund various expenditures if credit is not readily available. For instance, domestic savings are often the only way to pay for relatively large asset acquisitions. Many households also save to pay for their agricultural expenses. Other lesser critical factors, which are often associated with access to finance, include saving for children’s education, earning interest, accumulating wealth, and making investments.

#### FIGURE B3.2

Household needs, health care, asset purchase, and agricultural expense are the most important reasons for households to save in Cambodia

Reasons why households save in Cambodia, 2019



Source: World Bank staff calculations using data from a 2019 World Bank household survey.

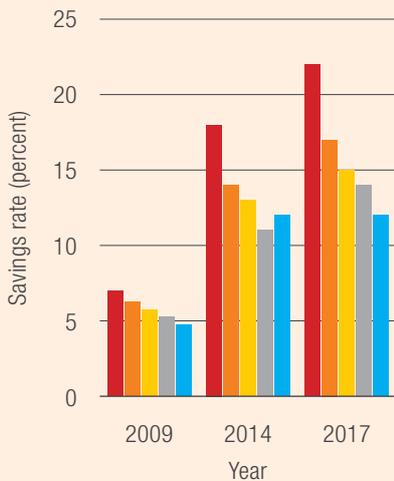
Demographic patterns too directly affect saving behavior as higher dependency ratios imply allocating a larger share of income to consumption. With either the number of very young or very old increasing, there are fewer people who earn income. Still, income goes into supporting dependents also, thereby putting pressure on the savings rate. The share of households that save declines with the number of dependents in the family (figure B3.3). In 2017, 22 percent of CSES households with no dependents cited having savings of some kind. The savings rate fell steadily with the number of dependents and was 10 percentage points lower for households with four dependents.

Saving decisions are also related to life-cycle effects in which people build on their savings over time and use it to fund consumption in the later periods (figure B3.4). The savings rate increases with the age of the household head and reaches a peak around 50-59 years. The rate drops after age 59, as people reach retirement age and withdraw from the labor force. The 2017 household survey shows that households with heads over 70 years of age were around 10 percentage points less likely to save than those with heads in the age group of 50-59. The post-retirement period is characterized by dissaving in which retirees use the accumulated savings as sources of income dry up.

Households with higher incomes are more likely to build savings (figure B3.5). Saving essentially involves not spending the whole income on consumption. For households with low levels of income, setting aside a part of earnings is difficult due to subsistence requirements. In 2009, the bottom four deciles of households reported not having any savings. However, income at the bottom end has risen over the years due to economic growth. This expansion in livelihood is potentially enabling some of the poorest households to save. Barring the lowest decile, households at all other levels reported having savings in 2017. Nonetheless, the expansion in the share has been faster for higher-income households leading to an increase in the savings gap across the income deciles.

**FIGURE B3.3**  
The dependency ratio is negatively correlated with savings

Savings rate by number of dependents, 2009 vs. 2014 vs. 2017



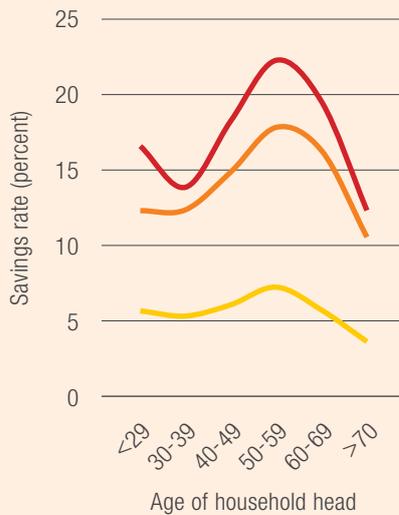
■ 0 ■ 1 ■ 2 ■ 3 ■ 4

**Note:** Any observed savings rates below zero are set to zero.

**Source:** World Bank staff calculations using data from World Bank CSES.

**FIGURE B3.4**  
Saving patterns follow the life cycle

Savings rate by age of household head, 2009 vs. 2014 vs. 2017



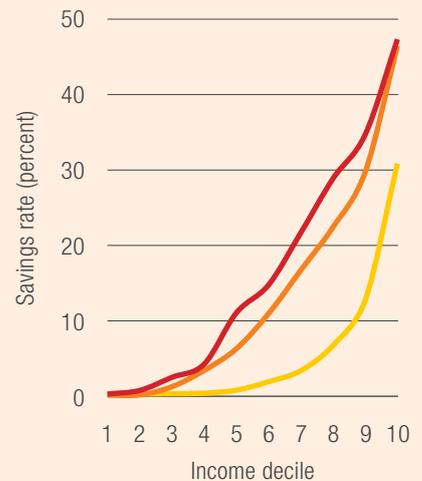
— 2009 — 2014 — 2017

**Note:** Any observed savings rates below zero are set to zero.

**Source:** World Bank staff calculations using data from World Bank CSES.

**FIGURE B3.5**  
Savings rate increases with household income decile

Savings rate by income decile, 2009 vs. 2014 vs. 2017



— 2009 — 2014 — 2017

**Note:** Any observed savings rates below zero are set to zero.

**Source:** World Bank staff calculations using data from World Bank CSES.

## When saving, households prefer informal instruments over formal

### Formal savings is far less prevalent in Cambodia and the phenomenon appears to be related to low aggregate savings.

Global evidence shows that the two variables are tightly linked, that is, informal methods are less popular in countries where a larger share of the population engages in savings. For instance, on average, 70 and 40 percent of adults report saving in developed and developing countries, respectively. Of these, more than three quarters do so via formal means in developed economies. In contrast, less than 50 percent use formal means in developing economies. The relationship between formal savings and savings indicates that how people save influences aggregate savings. A mechanism that explains the connection operates through differences in risk-adjusted returns of formal and informal instruments, with the former being more rewarding. Hence, the inability to access formal products not only limits saving in them but also savings on aggregate if the informal risk-adjusted return is lower than the marginal utility of consumption. If so, Cambodian households' reliance on informal instruments seems ominous. Saving using formal or semi-formal techniques remains far less prevalent. Of all the adults who save, almost 70 percent reported doing so via informal means, for example in the form of cash or jewelry at home (figure 3.17). Barring the Philippines, no other comparator country exhibits such skewed dependence on informal methods. Only 9 percent use informal instruments in Thailand, and less than 30 percent of savers use informal means in developing economies on average.

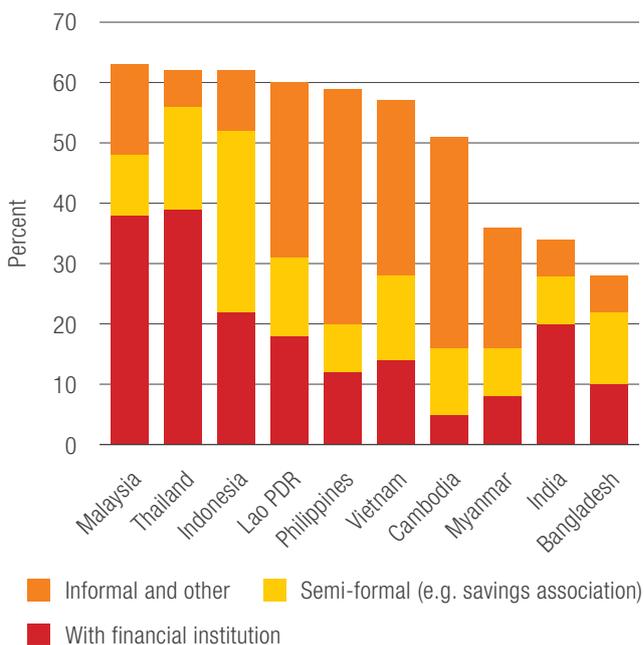
**Even more concerning is the depressed level of participation at financial institutions.** Cambodia's formal participation rate of 5 percent is the lowest among all comparator countries. In contrast, 8 and 12 percent of adults reported saving formally in Myanmar and the Philippines. The developing country average is much higher at 21 percent.

**A bias towards informal savings impedes efficient allocation of credit, which drags down productivity growth.** A well-functioning financial system contributes to economic growth by allocating capital efficiently across the economy. It serves as a central market in which borrowers and suppliers of credit interact indirectly through intermediaries. With competing projects vying for scarce credit, ones with higher returns drive out investments with inferior returns. Suppliers gain from the expertise of the intermediaries who act as arbitrators of credit and have the know-how of distinguishing between projects. In general, countries with developed financial markets invest more in their growing sectors. The informal financial sector fails to perform this fundamental function. Aggregate credit may be lower if savings are held in the form of jewelry or cash, for

**FIGURE 3.17**

Formal savings is far less prevalent in Cambodia than in comparator countries

Percent of adults with savings by saving method, 2017



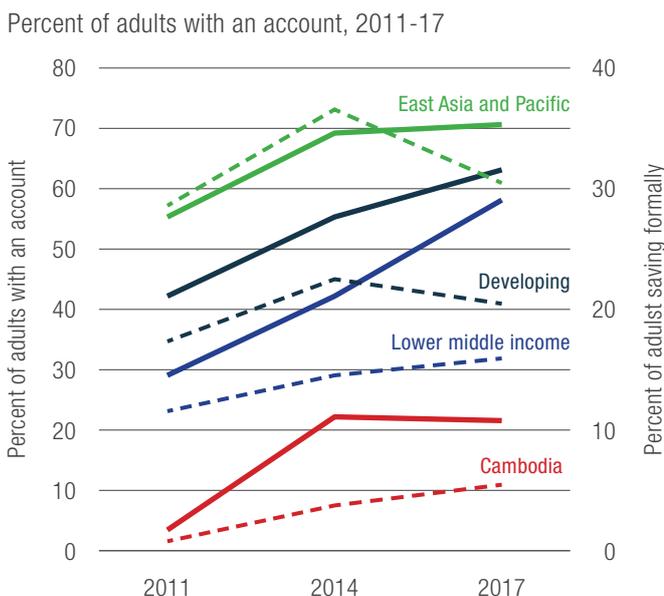
Source: World Bank staff calculations using data from World Bank Findex Database.

example, or remains confined to multiple small exchanges as the interaction between informal groups is lacking. Hence, a conversion of informal savings to formal will lead to more credit flowing to productive investment projects, even if the aggregate level of savings remains unchanged.

## Lack of access contributes to low participation in formal savings vehicles

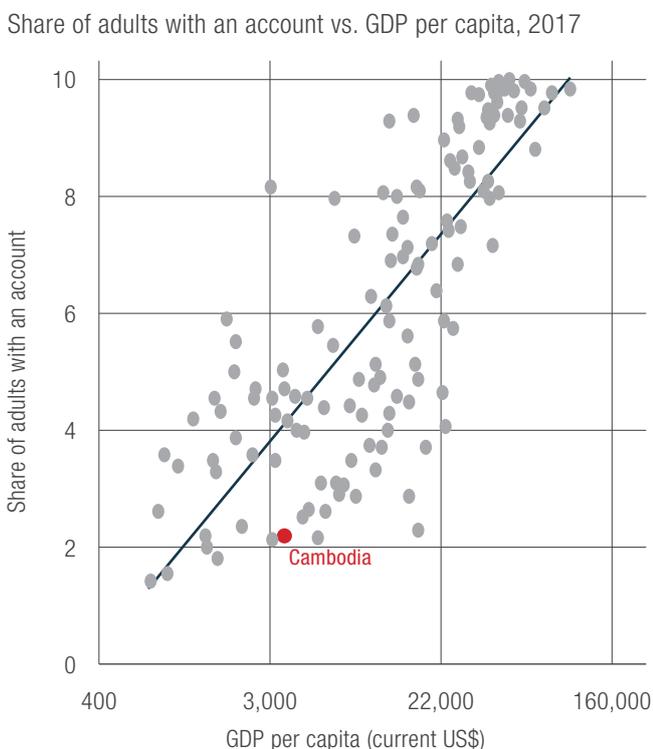
**Access to basic financial services—a prerequisite for formal savings—remains widely unavailable.** Fewer than one in four adults in the country have an account at a financial institution (figure 3.18). From a low base of around 4 percent in 2011, financial inclusion grew substantially during the first half of the decade to reach 22 percent in 2017. Still, Cambodia lags behind many countries as inclusion grew elsewhere as well. Inclusion in Cambodia is 41 percentage points lower relative to the developing country average. More concerning is the fact that the inclusion rate in lower-middle-income countries exceeds that of Cambodia by 36 percentage points. Furthermore, Cambodia's low GDP per capita is not sufficient to account for the low inclusion (figure 3.19). Cambodia sits around the 20th percentile of the world income distribution. Yet, its position drops to the 6th percentile of the global inclusivity distribution. Hence, the country's low level of inclusion is not because of its income level, but despite it.

**FIGURE 3.18**  
Financial inclusion has grown...



**Note:** Dashed lines denote the share of adults saving formally.  
**Source:** World Bank staff calculations using data from World Bank FinIndex Database.

**FIGURE 3.19**  
...but lags behind most countries



**Source:** World Bank staff calculations using data from World Bank FinIndex Database and Penn World Tables 9.1.

**The rise in financial inclusivity over the years has been widespread, with most groups reporting higher access.** The expansion in the financial inclusivity of women has kept pace with that of men, and there was no discernible gender gap in inclusion in 2017. Account ownership has also increased for rural residents, and the inclusion rate in rural areas is close to the national average. Financial inclusivity of the poor has advanced extensively over time—from almost 0 percent in 2011 to 14 percent in 2017. Still, there exists an inclusion gap between rich and poor Cambodians. The recent trend in inclusivity across income groups raises some concerns. While access has increased for the richest by 60 percent since 2014, there has been a decline in account ownership for the remaining population that has dragged the national rate down.

**Still, the widespread extension in account ownership has not translated into an equally strong expansion of savings at financial institutions.** The increase in the share of adults engaged in formal savings from 2011 to 2017 (by less than 5 percentage points) was substantially milder than the increase in the inclusion rate (by 18 percentage points). The evidence of account ownership not necessarily leading to saving formally extends to other countries. Formal savings declined during 2014-17 in the EAP and developing economies at large, even when financial inclusion was swelling.

**The relative ineffectiveness of financial access in generating savings is related to a deterioration in account activity.** According to the FinScope survey, 20 percent of accounts were not accessed even once during 2014. In contrast, only 8 percent of accounts exhibited such dormancy in 2011. The share of accounts with more than three uses per month was only 18 percent in 2014, representing a 3 percentage point decline since 2011. The survey also shows that more than three in five accounts are treated as mailboxes akin to checking or payment accounts. Households exclusively use them to receive funds and withdraw them almost entirely and immediately. Hence, these accounts do not serve as vehicles for long-term savings. It is important to note, however, that the inclusion-savings link is not absent in Cambodia. It is just that the savings response has been mild, and further extension is likely to foster savings (see box 3.4 for more details on the inclusion-savings link).

### BOX 3.4: Exploring the inclusion-savings link

A large share of households and businesses do not have access to even the most basic financial services in developing economies. Instead, they often resort to saving in assets like jewelry or livestock, which carry relatively higher risks. Given this, it is reasonable to assume that expanding financial access to the excluded population will promote savings. But does the inclusion-savings link hold up in practice? In other words, does expanding financial access lead more households to save, and others to save more?

Indeed, some studies do find evidence of financial inclusivity leading to higher savings. In 2007, mobile banking services were introduced by M-PESA in Kenya. The use of these services became near-universal over the next decade, with 96 percent of the households having at least one member who used the service. Suri and Jack (2016) find that financial inclusion had a quantitatively significant impact on savings, which also led to consumption growth and poverty alleviation. Total financial savings (cash and balances in accounts, savings clubs, and mobile money) increased with access, and the effects were more potent in female-headed households. In another study conducted in the same country, Dupas and Robinson (2013) randomized access to non-interest-bearing bank accounts among self-employed individuals. A substantial share of female market vendors used their accounts and managed to build up savings, which helped them increase their investment expenditure.

However, the evidence of inclusion leading to higher savings is far from perfect, and the inclusion-savings link is very context-specific. For instance, randomized access to bank accounts was also provided to self-employed bicycle-taxi drivers in the Kenyan experiment. In most cases, the drivers were men. The study found no statistical impact of access on the saving behavior of these self-employed workers.

In another study, rural individuals in three countries—Malawi, Uganda, and Chile—were offered basic account services for free.<sup>206</sup> The focus was to isolate the effect of safekeeping benefits on saving behavior. As such, these accounts provided low interest on deposits. The rate of account opening was high in the two African countries. In contrast, less than 20 percent of the treatment households opened an account in Chile. Among the unbanked who participated, the share of active users was marginal in each country. Bank balances increased in Malawi and Uganda. Unsurprisingly, the effects were larger for active users. However, the increase in bank balances was not associated with a corresponding rise in aggregate savings. Approximately half of the expansion was coming from users converting their informal savings into formal. The increase in total savings was quantitatively meaningful (from 20 to 26 percent) for active users. Yet, there was no evidence that financial access led to statistically significant changes in business inventory or investments in education and health.

Why did financial access exert only marginal effects on savings and resulting outcomes? A primary explanation is that financial exclusion is often voluntary. Like in Cambodia, nearly 90 percent of the households in Malawi and Uganda reported not using the accounts because they did not have enough surplus. In Chile, the universality of store credit and a functioning social safety program reduces the need for formal savings. Though playing a secondary role, barriers exist in Malawi and Uganda that make exclusion involuntary (distance to banks, low interest in the presence of high inflation). Finally, the absence of treatment effects could be due to the small scale of intervention, as any general equilibrium effects continue to be dormant. In India, where a large-scale program extended account access to 255 million of the unbanked population, regions with low banking presence ex-ante experienced an increase in aggregate lending.<sup>207</sup>

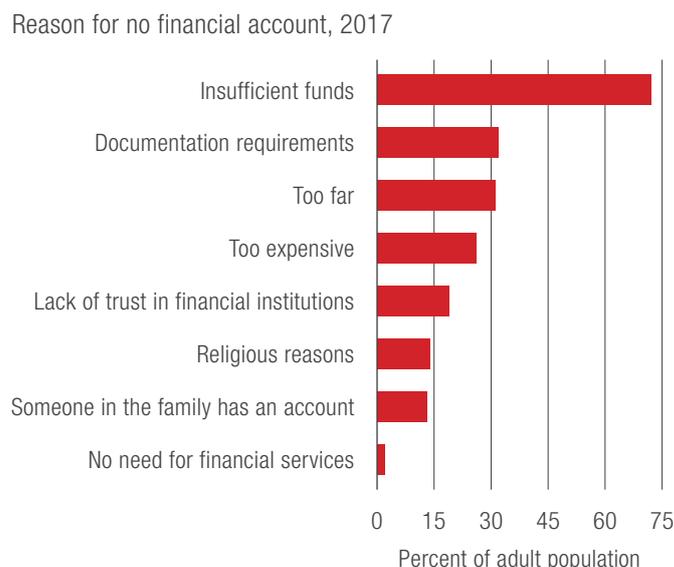
In summary, providing access to finance can be a powerful tool for encouraging savings and promoting investment growth. However, this inclusion-savings-investment link is sensitive to the contextual factors that lead households into the unbanked territory.

## Financial inclusion suffers from both voluntary and involuntary barriers

**A variety of factors are responsible for the low financial inclusion in the country, many relating to the financial sector.** Ultimately, these different reasons for lower financial inclusion impede efficient allocation of credit, which drags down productivity growth, and ultimately savings. However, the insufficiency of funds is by far the most prevalent reason, with nearly three in every four adults citing it as a barrier (figure 3.20). Households do not have any surplus left since almost all income is spent on meeting subsistence requirements. Analysis of the World Bank CSES data reveals that saving depends heavily on the availability of household resources, which makes saving considerably arduous for lower-income households. The bottom four income deciles reported having no savings in 2009. The situation has improved since then, and only the bottom-most decile was without any savings in 2017. Still, savings is highly skewed. Nearly one in every two households in the top decile had some savings in 2017. In contrast, the corresponding share for the fifth and sixth decile ranges between 10-15 percent (see box 3.3 for more details). While this constraint will dissipate as Cambodia develops, other factors related to the financial sector explain low financial inclusion. Many adults report not having an account because of religious reasons or because someone in the household already had one. Such voluntary non-ownership is not a barrier to saving, and non-lending mechanisms might be more effective in addressing these concerns. Yet, not all of the financial exclusion in Cambodia is voluntary. Documentary requirements and distance to financial institutions prevent a third of adults from participating in the formal sector. One in every four adults also foregoes opening an account because of the direct costs of availing banking services, with lack of trust also among the top five reasons for not having a financial account.

**Involuntary barriers to financial inclusivity in Cambodia are higher than in many other countries.** More than 30 percent of adults report lack of documentation as a binding constraint to account ownership in Cambodia. On average, only 18-20 percent of adults in developing, low-middle-income, and EAP economies cite this reason (figure 3.21). Distance to financial institutions is also a concern for 30 percent of Cambodian adults, a figure which is 7-10 percentage points higher than the other country groups. On average, the cost of ownership is as prohibitive in Cambodia as in other developing countries. The country lags marginally behind the lower-middle-income country average but substantially lower relative to EAP economies.

**FIGURE 3.20**  
Financial sector issues are among the top reasons cited for not banking...



Source: World Bank staff calculations using data from World Bank Findex Database.

**FIGURE 3.21**  
...posing a larger constraint in Cambodia than in other countries

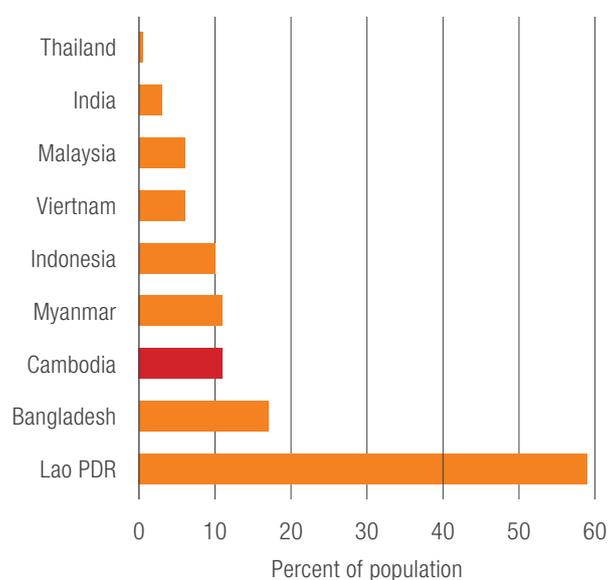


Source: World Bank staff calculations using data from World Bank Findex Database.

**Opening a deposit account requires satisfying documentary requirements that are deceptively benign.** Many residents face difficulties in presenting official IDs, often an essential document for opening an account. National IDs are not ubiquitous, which compounds the problem. Around 11.5 percent of the population does not have a national ID. This share is higher than in all comparators except Bangladesh and Lao People's Democratic Republic (Lao PDR) (figure 3.22). As yet, there is no digital ID application, making procurement even more burdensome. Filing a formal application for a deposit account demands a certain level of literacy that may also create obstacles for some segments of the population, especially in rural areas.

**FIGURE 3.22**  
A large share of Cambodia's population does not have a national ID

Percent of population without a national ID, 2017



**Note:** Data not available for Philippines.

**Source:** World Bank staff calculations using data from World Bank Findex Database.

**Distance to financial institutions raises the cost of engaging in formal savings methods and is among the primary reasons behind not owning an account** (figure 3.20). The econometric analysis of the World Bank CSES microdata provides further support for the above finding. Specifically, a one-kilometer increase in distance to a bank decreases a household's savings rate by 2-3 percentage points. According to the FinScope data, for over half of the nation's population, the time to reach the nearest formal financial services provider exceeds 30 minutes. Anecdotal reports also suggest that branches of commercial and specialized banks and MDI branches are mostly located near the urban areas. For example, the largest Cambodian MFI, PRASAC Microfinance Institution, collected US\$1.8 billion in deposits in 2019. However, only a small share of it came from rural areas, with Phnom Penh contributing 80 percent alone. As such, the rural use of formal financial services remains scarce.

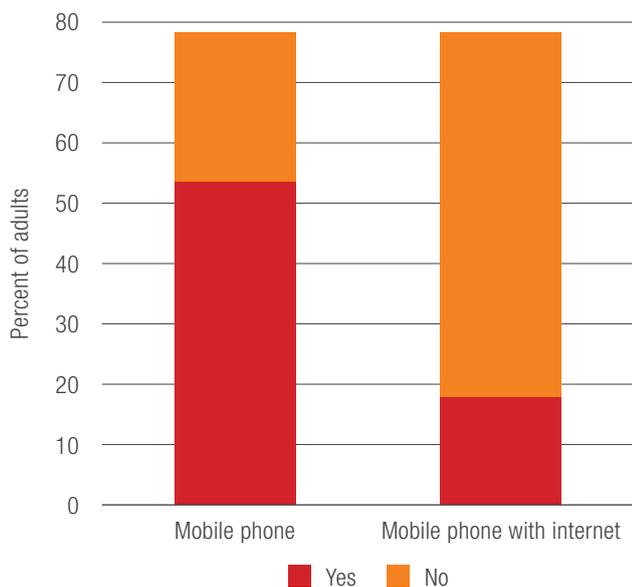
**Lower confidence in the financial system may be a possible reason why households refrain from depositing with formal institutions.** According to the World Bank Findex survey, nearly 20 percent of adults cite mistrust as a reason for not owning an account (figure 3.20). Policies that would aid financial sector stability are not in place yet. Except for Myanmar, Cambodia is the only Association of Southeast Asian Nations (ASEAN) nation that does not have a deposit protection fund.

**The inability to understand the benefits of formal savings instruments impedes household participation.** The lack of financial literacy is a concern for Cambodia. A 2016 survey placed the country last in financial literacy compared to 30 other countries. While the nations in the comparator sample consist primarily of Organisation for Economic Co-operation and Development (OECD) countries, Cambodia performed worse than some other ASEAN countries like Vietnam with a prevalent informal saving behavior. Relatedly, the analysis of the World Bank CSES data shows that saving is associated with education, as households headed by more educated members are more likely to save. Thus, Cambodia's low level of human capital might also be accountable for its low private savings.

**Digital financial services (DFS) that can help overcome challenges associated with the direct and the indirect costs of account ownership remain nascent.** Currently, DFS are limited to payment services, and products enabling borrowing, saving, or lending remain largely absent. Weak infrastructure also make the adoption of DFS arduous. While 70 percent of Cambodians without a bank account have access to a mobile phone, only a third of them have access to the internet via their phones (figure 3.23).

**FIGURE 3.23**  
DFS remain nascent

Percent of adults with a mobile phone and internet access via a mobile phone, 2017



Source: World Bank staff calculations using data from World Bank Findex Database.

### Tax policy and banking sector regulation create distortions that favor the informal sector

**Formal institutions have to compete with the unregulated informal savings sector.** Community savings groups (for example, Tong Tin), village moneylenders, and door-to-door bankers offer similar services and offer a more competitive interest rate partly because they are not subject to regulations. However, the higher interest rate conceals the incremental risks of such instruments. The informal financial sector often engages in predatory lending and charges an extreme rate on its lending, which makes servicing loans difficult and raises the likelihood of defaults. Thus, savers are always at risk of losing their savings should an informal group be precipitated by defaults. Relative to formal institutions, the informal sector offers simplified loan procedures together with less stringent documentary requirements, making them a convenient one-stop location for financial services.

**Taxes on interest income might discourage households from using formal savings instruments and drive them towards the informal sector.** Residents are subject to a 4 percent tax on interest income earned via savings accounts, and income from fixed deposits is liable to a 6 percent tax. For non-residents, a tax rate of 14 percent is levied on interest income, regardless of the savings vehicle. The taxation distorts saving decisions

and makes informal methods more attractive, in case income from them is either not subject to the same tax structure or escapes tax enforcement. Still, the tax rate on deposit interest remains low but can potentially be removed altogether. Barring Indonesia, the Philippines, and Thailand, the tax policy in all other ASEAN countries exempts residents' interest income from taxation.<sup>208</sup>

### Non-bank financial instruments remain largely undeveloped

**Financial instruments—bonds, insurance, etc.—that originate outside banks and MDIs/MFIs are still in their early stages of development.** Except for the few issuances of corporate bonds in 2019, the debt market remains inert. The idleness is not only restricted to the corporate sector but extends to government issuances as well. Large investment thresholds and high transaction costs of the debt instruments reduce their viability. These markets also lack liquidity and do not allow for a benchmark yield curve against which other retail savings products can be priced. As a result, the predictability of returns and the term profile of debt issues remain low. This makes it difficult for investors to assess the relative returns of the various offerings, leaving debt instruments an underdeveloped channel for long-term savings in Cambodia.

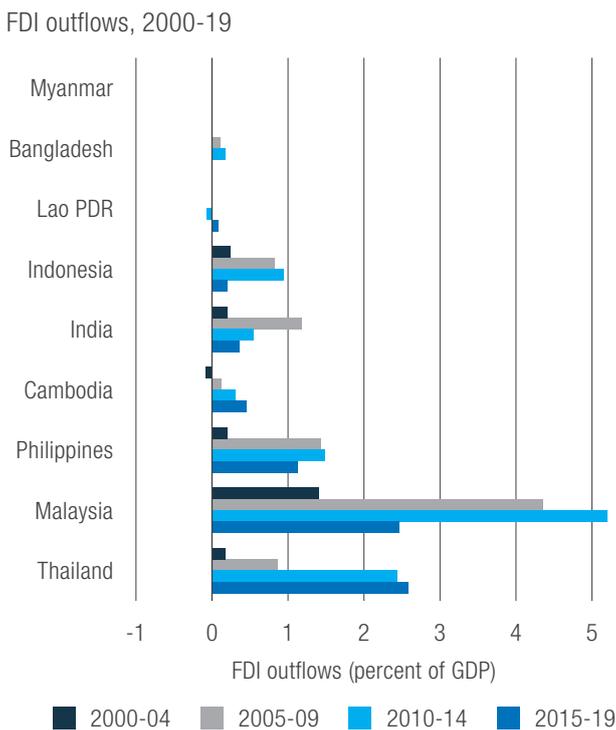
**While Cambodia's insurance market has experienced rapid growth since 2016, its size continues to be marginal.** Insurance has the potential to substitute precautionary informal savings instruments like keeping cash as contingency or holding non-financial assets that help mitigate shocks to income. Yet, the aggregate value of collected insurance premiums accounts for only 0.5 percent of financial sector assets. Participation in insurance schemes is limited, as only 5 percent of adults report using them. However, like with savings, the absence of insurance take-up is not entirely involuntary. Around 35 percent of adults have no insurable assets and, as such, have no real demand for insurance products.

**The social security system is still in its planning stage, and its successful roll-out requires substantial work.** Contributions to social security programs can serve as an instrument of domestic savings. Economic theory suggests that myopic individuals fail to save for the retirement period, even when pension benefits do not offer a superior rate of return relative to other investments. Cambodia has made progress towards satisfying the initial requirements. For instance, the recently enacted Social Security Law establishes the principles and mechanisms that will execute a social security system for pensions beyond the public sector employees, though the scheme is not yet implemented.

## Weakness in enterprise savings might also be a bottleneck

**Lack of data on the savings made at private enterprises makes it difficult to evaluate the role of corporate savings in keeping aggregate savings depressed.** Nonetheless, robust enterprise savings growth can help the country achieve its financing requirements, thereby boosting growth. Corporate savings have the potential to provide an impetus to economic expansion in developing economies. For instance, as a share of GDP, private enterprise savings in India grew to 7.9 percent during 2008-11 from a paltry 3.9 percent during 1997-2003.<sup>209</sup> The surge in savings coincided with the rapid rise in economic activity elsewhere. Productivity growth enables firms to become more profitable, which generates business surpluses. Hence, business savings may be underperforming potential in Cambodia, given that the overall productivity levels remain dampened (as discussed in Chapter 1).

**FIGURE 3.24**  
FDI outflows have been growing



**Source:** World Bank staff calculations using data from IMF Balance of Payments and International Investment Position Statistics.

**Though relatively modest, FDI outflows have been increasing over the years.** This may suggest that savings by firms is increasingly flowing out. Even as the country benefitted from increased FDI inflows, a share of capital has left the Cambodian shores in search of investment opportunities abroad. The country reports substantially lower rates of FDI outflows compared to Malaysia, the Philippines, and Thailand, but outflow growth outpaces many other comparator countries. More concerning is the fact that the outflows have been growing over time. The average share increased from almost nothing during 2000-09 to just about half a percent of GDP during 2015-19 (figure 3.24). In contrast, FDI outflows have either been shrinking or growing much slower in other comparator countries. It is possible that these flows are originating from the surplus generated at private enterprises. If so, steps should be taken to uncover the factors that drive these resources across the borders so that appropriate responses could be designed.

## Policy recommendations for raising finance

**Higher investment rates are needed in the range seen in the Republic of Korea for Cambodia to progress towards its growth targets.** A number of policy areas can help Cambodia increase investment needed to finance the next phase of growth. These include promoting FDI into productive and export sectors; promoting higher domestic savings rates; improving financial inclusion through greater access to savings institutions; supporting digital access through digital technologies; lowering the costs of savings accounts; and supporting financial sector stability and development more broadly. Policy measures in each of these areas focus on improving capabilities, strengthening regulations, and investing in infrastructure.

### Promote FDI into productive and export sectors

**While FDI has supported capital accumulation in the past, Cambodia will need to promote inflows into productive and export-oriented sectors to achieve the maximum impact in the next phase.** Although attracting FDI at the levels needed to sustain future growth will become more difficult, FDI can nevertheless continue to play an important role in Cambodia's gross fixed capital formation going forward. As discussed in previous chapters, measures that improve the business environment and investment climate can reduce the cost of operating a business for firms and can also help attract more and better FDI into desired sectors. And doing so will also help Cambodia take advantage of its recently signed FTAs and increase FDI-led exports to these markets.

**In the short term, Cambodia could enforce property and unused land taxes to curb rising land and property speculation.** It is critical to limit speculative investments in land and property that create sharp increases in the price of real estate. This, in turn, increases the costs of operating a business, which discourages investors from undertaking new projects, or in the extreme case abandoning the existing ones. Enforcing taxes on property and land can prove effective, which could be considered by the Ministry of Economy and Finance.

### Promote higher domestic savings rates

**The experiences of the Republic of Korea and Malaysia show that higher domestic savings rates can support higher and sustained investment.** While income dynamics will be key to growing Cambodia's private savings rate, several policy measures could help boost domestic savings rates. Doing so would also provide households immediate relief and resilience to income shocks like those caused by Covid-19.

**Saving campaigns and reminders can serve as cost-effective measures to boost savings, both through formal and informal instruments.** This is a medium-term policy priority that could be led by the Ministry of Economy and Finance. For instance, a field experiment in Colombia shows that saving reminders had a persistent effect on the behavior of low-income youth.<sup>210</sup> Their account balances increased as a result, with no depletion seen in the post-campaign period.

**Efforts to improve financial literacy will help promote domestic savings.** Cambodia should provide financial literacy to its citizens through increased financial education, financial planning, and promoting savings mechanisms and products. The Ministry of Education, Youth, and Sports can play a vital role by incorporating financial literacy into the school curriculum. The literacy program, due to its nature, will need a longer time horizon.

### Improve access to savings institutions

**Improved access to savings institutions can support greater formal financial savings.** For rural populations, physical access to savings institutions remains largely limited to those who can regularly travel to urban areas to use formal MDIs, while others generally resort to informal savings mechanisms. Anecdotally it appears that even the province and district-level branches are largely in urban areas.

**In the short term, expanding and strengthening an agent-based model can improve access for rural populations, an initiative that could be led by the National Bank of Cambodia.** In the agent-based banking model, licensed institutions engage third parties to offer certain banking services on their behalf. These third-party agents are generally retail outlets and include pharmacies, supermarkets, convenience stores, lottery outlets, and post offices, among other channels. The recent pilot initiatives aiming to expand access to locations distant from branches via the agent-based banking model have delivered mixed results. However, a comprehensive framework to implement the agent-based model has not yet been introduced, nor has the National Bank of Cambodia developed the set of regulations that will guide the use of the model in the microfinance sector. Results of agent-based banking models can be improved by having the National Bank of Cambodia establish a clear and comprehensive framework and set of regulations for agent-based banking in the microfinance sector.

**Establishing rules to regulate informal finance can raise financial inclusion, thereby bolstering formal savings.** By instituting a clear and comprehensive framework in the short term that will monitor the agent-based banking model in the microfinance sector, the National Bank of Cambodia can lay a fertile ground for the practice to propagate. Similarly, implementing a framework in the short term to regulate the operations of Community savings groups to protect their members will lift households' confidence. Proposals to mandate the registration of savings groups beyond a certain threshold (having more than 50 members and more than US\$6,250 and US\$25,000 in group capital and loan portfolio) with the Ministry of Rural Development have already been put together in a draft law. However, the articles that will regulate such groups post-registration still need to be designed.

**Financial literacy can also spur the adoption of formal savings vehicles and financial inclusion.** Households are more likely to employ formal savings instruments if they fully comprehend the benefits of using formal finance. Development and dissemination of materials explaining the practical details of leasing, mobile banking, and using new technologies will help households gain familiarity with these instruments, which are novel for them. Furthermore, literacy efforts that are being undertaken by the National Bank of Cambodia, Association of Bankers Cambodia, and Cambodia Microfinance Association that target low-income and rural clients need to be supported and supplemented. This is a medium-term policy priority.

## Support digital access through digital technologies

**Digital technology can serve as a powerful tool for expanding financial access.** Such measures have been effective in driving savings in other countries. For instance, women-headed households in Kenya raised their savings by 20 percent after being given access to mobile money.<sup>211</sup> Moreover, Covid-19 has impressed the need of faster digital adoption. Development of the digital financial system can more broadly support Cambodia's economy (beyond savings) in a post-Covid-19 world. And Malaysia's earlier postal savings system shows how improved access can be successful at increasing savings with a system that attracted multitudes of small savers by giving them secure and convenient access.

### **In the short term, Cambodia can aim to develop a legal framework that will regulate DFS operations.**

Confidence in DFS is impacted by an inadequate consumer payment and protection framework. As such, hesitancy on the part of households endures and prevents them from embracing the technology. The framework should ensure that customers' funds in e-money meet protection standards. The framework needs to put in provisions that allow deposit-taking institutions to pursue digital savings partnerships with nonbank entities. Regulations can also permit retail agent networks to provide limited-purpose digital banking services. This is an agenda to be led by the National Bank of Cambodia.

### **In the medium term, sustained efforts are needed to develop the interoperability channels of DFS.**

Non-bank issuer-to-bank interoperability constitutes the backbone of digital savings partnerships and distribution strategies, but such infrastructure is currently lacking. Here, Cambodia, with the National Bank of Cambodia in the lead, should support the development of nonbank e-money issuer-to-bank interoperability.

## Address financial and administrative costs of savings accounts / products

**Easing financial and administrative costs will reduce the indirect costs of owning accounts and using other formal savings products and may prompt households to participate more.** Although requirements do not appear particularly burdensome, there is nevertheless an opportunity to make small, short-term adjustments that could be led by the National Bank of Cambodia.

## **Policy reform can reduce the documentary burden of opening an account.**

Allowing students to open their accounts using their school IDs will reduce the documentary burden on the younger population. Letting parents use their IDs to open accounts on behalf of their children till the latter obtain their IDs will have a similar effect. For the general population, the documentary handicap can be alleviated by extending validity to any photo-document issued by the local/national authority. These extensions need not be permanent and can serve as a stop-gap arrangement until national IDs become ubiquitous. Financial institutions can also make provisions for annual account reviews that use these interim relaxations. However, universal national ID coverage should be the ultimate goal in the medium term. The integration of digital identity authentication mechanisms into the national ID system can help expand the coverage and should be explored accordingly.

## Support financial sector stability

### **Domestic savings can increase with the stability of the financial sector.**

There have been no major systemic disruptions or institutional bankruptcies in the recent past to exacerbate distrust. The National Bank of Cambodia supervises and regulates all operating banks, MDIs, and MFIs. It has taken action to respond to a rapid credit expansion, high borrower indebtedness, and multiple loans in the past few years including with the interest rate cap policy in 2017. Nevertheless, further efforts are needed to continue strengthening financial sector stability. These will also make the system more robust to shocks and should be a key priority in building economic resilience in the aftermath of Covid-19. Moreover, ensuring macroeconomic stability can also promote savings. In addition to ensuring security of banks (and making them more convenient to small and rural savers), low inflation in Malaysia, Indonesia, and Thailand provided a foundation for high and rising savings rates.

### **Establishing a national deposit protection fund and enacting the related laws to regulate it will make the sector more stable.**

This is a short-term priority led jointly by the Ministry of Economy and Finance and the National Bank of Cambodia. Establishing a deposit protection fund comes under the crisis preparedness regime, which is currently being developed for the consideration of the National Financial Stability Committee. A feasibility study has been commissioned to recommend the organizational structure and modalities (including coverage, funding, fees, etc.) of an appropriate deposit protection fund for banks and MDIs. Legislative planning to regulate the deposit protection fund is also underway for consultations with policymakers.

**Similarly, efforts at strengthening the crisis preparedness regime for the whole financial sector are another short-term priority led by the Ministry of Economy and Finance and the National Bank of Cambodia.** Annual crisis simulation exercises are conducted irregularly and the last such joint exercise by the Ministry of Economy and Finance and the National Bank of Cambodia was in 2013. The joint simulation exercises need to be done more frequently, potentially annually. These steps can be undertaken in the next couple of years. Thailand, for example, imposed several regulations to enhance the solvency of financial institutions, which improved both the savings rate and the efficiency of resource allocation, and introduced the Government Saving Bank with a special focus on kids and students that guaranteed savings accounts.

**Other policies to support financial sector stability include enhancing the regulatory and supervisory framework, improving the financial reporting system, and developing good corporate governance practices.** These actions require a long-term horizon.

### **Support financial sector development more broadly**

**Addressing gaps in the regulatory environment can support financial sector development more broadly, allowing other options to grow domestic savings outside of banks and MDI/MFIs.** These include reforms in the bond and insurance markets, together with the expansion of Social Security policies.

**First, Cambodia should implement the legal framework for government bonds as planned.** This is a short-term priority led jointly by the Ministry of Economy and Finance and the National Bank of Cambodia. Both corporate and government bond activity is sluggish in the country. Implementing the legal framework guiding public bond issuance will likely catalyze the broader debt market. A reasonable strategy to ignite the activity will be to start with improving the market infrastructure surrounding the debt market. Plans are already underway to re-issue government

bonds in 2022 to boost the local bond markets and initiate the yield curve. Deepening the corporate bond market can follow the successful roll-out in the government sector. In addition to the legal framework, the Royal Government of Cambodia (RGC) should consider revising the institutional arrangement for debt management functions both regarding bond issuance and market operations including clearing and settlement processes. For a successful issuance, it is advisable to understand demand for government bonds in the market (like clientele / investor base, currency denomination, tenor, pricing, size, etc.) through a market survey conducted by either the Ministry of Economy and Finance or the National Bank of Cambodia.

**Second, it will be important to wrap up the Sub-decree on the micro-insurance industry.** This is a short-term priority led jointly by the Ministry of Economy and Finance and the National Bank of Cambodia. The Ministry of Economy and Finance is taking steps to promote insurance adoption in the country. These include issuing a basic framework for the licensing and regulation of micro-insurance. Doing so will bolster the regulatory and supervisory regime and will build confidence as policyholders feel more protected. Furthermore, there have been discussions regarding expanding the distribution channel, so the needs of lower-income households are better served. Insurance take-up can further be enhanced by broadening the range of insurance products and expanding these distribution channels.

**Third, the RGC should also aim to finalize the sub-regulation details of the new Social Security Law that are a prerequisite for its implementation.** The country needs to push through the next stages, starting with finalizing the sub-regulations of the pension program in the short term, which could be led by the Ministry of Labour and Vocational Training. A longer-term objective could be to set up a voluntary provident retirement fund that fosters regular savings of longer duration. The Malaysian government, for example, used compulsory pension plans to boost domestic savings. Offering tax incentives to participants can make the voluntary program attractive.

## Promote FDI and savings to finance the next phase of growth

Objective	Improving capabilities	Strengthening regulations	Investing in infrastructure
Promote FDI into productive and export sectors		Enforce property and unused land taxes to curb rising investment in land and property speculation [ST; MEF]	
Promote higher domestic savings rates	Jointly provide financial literacy, financial education, and financial planning to Cambodians through increased financial education; promote savings mechanisms and products by incorporating financial literacy education into the curriculum and textbooks of schools under the purview of the Ministry of Education, Youth, and Sports [MT; MOEYS]		Undertake a campaign to promote higher savings [MT; MEF & NBC]
Improving access to savings institutions	Improve understanding of the benefits of formal savings including: (i) developing financial literacy materials on leasing, mobile banking, and use of new technologies for access to finance; and (ii) supporting the efforts of the National Bank of Cambodia, Association of Bankers Cambodia, and Cambodia Microfinance Association for financial literacy to clients, particularly low-income clients and those in rural areas [MT; NBC]	Establish a regulatory framework for community savings groups to protect their users, including how these groups will be regulated once they are registered with the Ministry of Rural Development [ST; MRD & NBC]	Expand and strengthen agent-based banking models by having the National Bank of Cambodia establish a clear and comprehensive framework and set of regulations for agent-based banking in the microfinance sector [ST; NBC]
Support digital access through digital technologies		Develop legal and regulatory frameworks that: (i) ensure customer funds protection standards are robust for bank deposits and e-money accounts; and (ii) allow deposit-taking institutions to pursue digital savings partnerships with nonbank entities and conduct limited purpose banking services through retail agent networks [ST; NBC]	Support the development of nonbank e-money issuer-to-bank interoperability, which is the technological backbone for digital savings partnerships and distribution strategies [MT; NBC]

Objective	Improving capabilities	Strengthening regulations	Investing in infrastructure
<b>Address financial and administrative costs of savings accounts and products</b>		<p>Allow students to open an account with their own ID document or allow parents to open an account on behalf of their children; allow any photo-document issued by local / national authorities to be used for opening a retail deposit account, with annual review until the national ID is issued [ST; NBC]</p> <p>Expand national ID coverage so more people can meet financial account documentary requirements, which includes exploring the integration of digital identification authentication mechanisms into the national ID system [MT; NBC]</p>	
<b>Support financial sector stability</b>		<p>Establish a national, functioning deposit protection fund and enact the associated laws and regulations to regulate it [ST; MEF &amp; NBC]</p> <p>Strengthen the crisis preparedness regime for the whole financial sector with annual joint crisis simulation exercises [ST; MEF &amp; NBC]</p> <p>Enhance the regulatory and supervisory framework; improve the financing reporting system; develop good corporate governance practices [ST; MEF &amp; NBC]</p>	
<b>Support financial sector development more broadly</b>		<p>Implement the legal framework for government bonds as planned [ST; MEF &amp; NBC]</p> <p>Promulgate the Micro-insurance Sub-decree to strengthen the regulatory and supervisory regime, broaden insurance products, expand distribution channels, and protect policyholders [ST; MEF &amp; NBC]</p> <p>Finalize sub-regulations of the new Social Security Law that supports its implementation [ST; MLVT]</p>	<p>Consider setting up a voluntarily provident retirement fund for regular long-term savings with some attractive tax incentives [MT; MLVT]</p>

**Note:** ST=short term; MT=medium term. MEF=Ministry of Economy and Finance; MLVT=Ministry of Labour and Vocational Training; MOEYS=Ministry of Education, Youth, and Sports; MRD=Ministry of Rural Development; NBC=National Bank of Cambodia.

---

## Endnotes

- <sup>185</sup> World Bank (2018a).
- <sup>186</sup> Jeong (2017).
- <sup>187</sup> Similarly, developments that have nothing to do with Cambodia can also lead to temporary loss of specific exemptions. While not directly impacting FDI, such events destabilize the economy and may discourage FDI if managing the impending volatility becomes arduous. In early 2019, the EU re-introduced temporary import duties on rice from Cambodia and Myanmar. The decision was motivated based on a significant increase in Indica rice imports that caused economic damage to European producers.
- <sup>188</sup> IMF (2020c).
- <sup>189</sup> Samreth, Sánchez Martín, and Ly (2019).
- <sup>190</sup> Ahmed, Kim, and Suphaphiphat (2014).
- <sup>191</sup> Lane and Milesi-Ferretti (2011).
- <sup>192</sup> Benigno et al. (2020).
- <sup>193</sup> International Monetary Fund (2020a).
- <sup>194</sup> Deposits in the banking sector should not be used to proxy for savings. This is because only a fraction of deposits into individuals' or firms' accounts represent savings.
- <sup>195</sup> Complete documentation on the Long-Term Growth Model is available at [www.worldbank.org/LTGM/](http://www.worldbank.org/LTGM/).
- <sup>196</sup> Blundell and Bond (1998).
- <sup>197</sup> The deposit rate does not empirically explain the savings rate in Cambodia, consistent with global empirical evidence as well as the ambiguous theoretical prediction, based on offsetting substitution, income, and human-wealth effects (Grigoli, Herman, and Schmidt-Hebbel 2018). The nominal rate of return on KHR and US dollar deposits has been relatively stable at around 6 percent and 4.5 percent, respectively. Banks have cut into their interest margins in recent years by lowering the lending rate and maintaining the deposit rate. This suggests neither a lack of competition nor too much competition, but rather a fairly efficient market for deposits where pricing is being set broadly in line with reference (lending) rates.
- <sup>198</sup> The cross-country analysis of savings determinants looked at a range of variables in addition to the traditional controls in Grigoli, Herman, and Schmidt-Hebbel (2018) based on savings literature including: current account balance, capital account openness, inequality, unemployment rate, public health and education expenditure, government debt, trade openness, trade taxes, real interest rate, bank branches, bank concentration, bank deposits, life insurance, MFI credit, MFI deposit and loan accounts, MFI branches, among others. Following Grigoli, Herman, and Schmidt-Hebbel (2018) these were interacted with a dummy variable for Cambodia, indicating whether their impact on saving behavior differed for Cambodia than the global or regional average. Results were not significant except for those mentioned above.
- <sup>199</sup> Loayza, Schmidt-Hebbel, and Servén (2000) and Grigoli, Herman, and Schmidt-Hebbel (2018).
- <sup>200</sup> Ramey and Ramey (1995).
- <sup>201</sup> Yeyati (2006).
- <sup>202</sup> Krugman (1999), Organisation for Economic Co-operation and Development (2001), and Hausmann and Velasco (2005).
- <sup>203</sup> Dynamic panel-data analysis (box 3.3), which uses data from 111 countries, finds no evidence of a statistical negative relationship between dollarization and savings. While this finding is robust to several specifications, it should be treated with caution. Bringing dollarization under analysis leads to a significant loss of information (~2/3 relative to Grigoli, Herman, and Schmidt-Hebbel (2018)) due to data availability. Some variables that are significant in the original dataset lose their statistical power in the reduced sample.
- <sup>204</sup> Kansime et al. (2020).
- <sup>205</sup> See Kim (2001) for a comprehensive list.
- <sup>206</sup> Dupas et al. (2018).

207 Agarwal et al. (2017).

208 Deloitte (2020).

209 Mohan (2019).

210 Rodríguez and Saavedra (2019).

211 Suri and Jack (2016).

## References

- Acemoglu, A., S. Johnson, and J. Robinson (2004). "Institutions as the Fundamental Cause of Long-Run Growth." NBER Working Paper No. 10481, National Bureau of Economic Research, Cambridge, MA.
- Agarwal, S., S. Alok, P. Ghosh, S. Ghosh, T. Piskorski, and A. Seru (2017). "Banking the Unbanked: What do 255 million new bank accounts reveal about financial access?" Research Paper No. 17-12, Columba Business School, New York, NY.
- Ahmed, F., J. Y. Kim, and N. Suphaphiphat (2014). "What Can Go Wrong? Shifting vulnerabilities as Asia rebalances." In O. Unterobberdoerster (Ed.), *Cambodia: Entering a New Phase of Growth*, Washington, DC: International Monetary Fund.
- Arnold, J. M., B. Javorcik, M. Lipscomb, and A. Mattoo (2016). "Services Reform and Manufacturing Performance: Evidence from India." *The Economic Journal*, 126(590): 1-39.
- Arnold, J. M., A. Mattoo, and G. Narciso (2008). "Services Inputs and Firm Productivity in Sub-Saharan Africa: Evidence from Firm-level data." *Journal of African Economies*, 17(4): 578-99.
- ASEAN Secretariat and World Bank (2015). *ASEAN Services Integration Report*. Washington, DC: World Bank Group.
- Baldwin, R. E., and R. Forslid (2019). "Globotics and Development: When manufacturing is jobless and services are tradable." NBER Working Paper No. 26731, National Bureau of Economic Research, Cambridge, MA.
- BDlink (2017). "Taking Stock: A detailed review of agriculture challenges and opportunities in Cambodia." EuroCham Cambodia, Phnom Penh, Cambodia.
- Balino, T., A. Bennett, and E. Borensztein (1999). "Monetary Policy in Dollarized Economies." IMF Occasional Paper No. 171, International Monetary Fund, Washington, DC.
- Barro, R. (1991). "Economic Growth in a Cross-Section of Countries." *The Quarterly Journal of Economics*, 106(2): 407-43.
- Barro, R., and J.-W. Lee (2021). "A New Data Set of Educational Attainment in the World." Available at [https://barrolee.github.io/BarroLeeDataSet/OUP/OUP\\_proj\\_MF1564\\_v1.xls/](https://barrolee.github.io/BarroLeeDataSet/OUP/OUP_proj_MF1564_v1.xls/).
- Barseghyan, L. (2008). "Entry Costs and Cross-Country Differences in Productivity and Output." *Journal of Economic Growth*, 13(1): 145-67.
- Benigno, G., A. Foerster, C. Otrok, and A. Rebucci (2020). "Estimating Macroeconomic Models of Financial Crises: An endogenous regime-switching approach." NBER Working Paper No. W26935, National Bureau of Economic Research, Cambridge, MA.
- Blundell, R., and S. Bond (1998). "Initial Conditions and Moment Restrictions in Dynamic Panel Data Models." *Journal of Econometrics*, 87(1): 115-43.
- Bordey, F., P. Moya, J. Beltran, and D. Dawe (2016). "Competitiveness of Philippine Rice in Asia." Philippine Rice Research Institute, Los Baños, Philippines.
- Cadot, O., and M. Malouche (2012). *Non-Tariff Measures: A Fresh Look at Trade Policy's New Frontier*. Washington, DC: World Bank Group.
- Caselli, F. (2005). "Accounting for Cross-Country Income Differences." In P. Aghion and S. Durlaud (Eds.), *Handbook of Economic Growth Volume 1a*, Amsterdam: North Holland Publishing Company.
- Chang, R., L. Kaltani, and N. Loayza (2009). "Openness Can Be Good for Growth: The role of policy complementarities." *Journal of Development Economics*, 90(1): 33-49.
- Chenery, H. B. (1960). "Patterns of Industrial Growth." *American Economic Review*, 50(1): 624-54.
- Crane, B. (2016). "The Studio Drawing in World-Class Animators." The Phnom Penh Post, May 17, 2016, available at <https://www.phnompenhpost.com/post-weekend/studio-drawing-world-class-animators/>.
- Cusolito, A., and W. Maloney (2018). *Productivity Revisited: Shifting paradigms in analysis and policy*. Washington, DC: World Bank Group.
- Cusolito, A., R. Safadi, and D. Taglioni (2016). *Inclusive Global Value Chains: Policy options for small and medium enterprises and low-income countries*. Washington, DC: World Bank Group.

- Dall'Olio, A., M. Iooty, N. Kanehira, and F. Saliola (2013). "Productivity Growth in Europe." Policy Research Working Paper No. 6425, World Bank, Washington, DC.
- Deloitte (2020). "International Tax: Cambodia tax highlights 2020." Deloitte Touche Tohmatsu, London, United Kingdom.
- Diaz-Ros, L., and S. Jaffee (2013). "Raising Competitiveness via Sustainable Practices and Product Differentiation in Agricultural Value Chains: Lessons for Vietnam from public-private initiatives in other middle-income country experiences." World Bank, Washington, DC.
- Divanbeigi, R., and R. Ramalho (2015). "Business Regulations and Growth." Policy Research Working Paper No. 7299, World Bank, Washington, DC.
- Djankov, S., C. McLiesh, and R. M. Ramalho (2006). "Regulation and Growth." *Economic Letters*, 92(3): 395-401.
- Duggan, V., S. Rahardja, and G. Varela (2016). "Services Sector Reform and Manufacturing Productivity: Evidence from Indonesia." Policy Research Working Paper No. 6349, World Bank, Washington, DC.
- Dupas, P., D. Karlan, J. Robinson, and D. Ubfal (2018). "Banking the Unbanked? Evidence from three countries." *American Economic Journal: Applied Economics*, 10(2): 257-97.
- Dupas, P., and J. Robinson (2013). "Savings Constraints and Microenterprise Development: Evidence from a field experiment in Kenya." *American Economic Journal: Applied Economics*, 5(1): 163-92.
- Dutz, M., I. Kessides, S. O'Connell, and R. Willig (2011). "Competition and Innovation-driven Inclusive Growth." Policy Research Working Paper No. 5852, World Bank, Washington, DC.
- Easterly, W., and R. Levine (2001). "It's Not Factor Accumulation: Stylized factors and growth models." *The World Bank Economic Review*, 15(2): 177-219.
- Easterly, E., and R. Levine (2003). "Tropics, Germs, and Crops: How endowments influence economic developments." *Journal of Monetary Economics*, 50(1): 3-39.
- Echandi, R., J. Krajcovicova, and C. Z. Qiang (2015). "The Impact of Investment Policy in a Changing Global Economy: A review of the literature." Policy Research Working Paper No. 7437, World Bank, Washington, DC.
- Fernandes, A. M., and C. Paunov (2012). "Foreign Direct Investment in Services and Manufacturing Productivity: Evidence for Chile." *Journal of Development Economics*, 97(2): 305-21.
- Fontagné, L. (1999). "Foreign Direct Investment and International Trade: Complements or substitutes?" Working Paper No. 1999/03, Organisation for Economic Co-operation and Development, Paris.
- Frederick, S. (2018). "Apparel Skills Mapping and Functional Upgrading in Cambodia: Jobs diagnostic." World Bank, Washington, DC.
- Gootiz, B., and A. Mattoo (2015). "Regionalism in Services: A study of ASEAN." Policy Research Working Paper No. 7498, World Bank, Washington, DC.
- Grigoli, F., A. Herman, and K. Schmidt-Hebbel (2018). "Saving in the World." *World Development*, 104(1): 257-70.
- Hall, R. E., and C. I. Jones (1999). "Why do Some Countries Produce So Much More Output Per Worker than Others?" *The Quarterly Journal of Economics*, 114(1): 83-116.
- Hausmann, R., and A. Velasco (2005). "The Causes of Financial Crises: Moral failure versus market failure." In M. A. Centeno, H. James, and J. Londregan (Eds.), *The Political Economy of Recurrent Debt*, Princeton, NJ: Princeton University Press.
- Hidalgo, C. A., and R. Hausmann (2009). "The Building Blocks of Economic Complexity." *Proceedings of the National Academy of Sciences of the United States of America*, 106(26): 10570-5.
- Hoekman, B., and A. Mattoo (2008). *Services Trade and Growth*. Washington, DC: World Bank Group.
- Hoekman, B., and A. Mattoo (2011). "Services Trade Liberalization and Regulatory Reform: Re-invigorating international cooperation." World Bank, Washington, DC.
- Hoekman, B., and A. Mattoo (2013). "Liberalizing Trade in Services: Lessons from regional and WTO negotiations." *International Negotiation*, 18(1): 131-51.

- Hollweg, C. H., and S. Sáez (2019). Services for Trade Competitiveness: Country and regional assessments of services trade. Washington, DC: World Bank Group.
- Hsieh, C.-T., and P. J. Klenow (2009). "Misallocation and Manufacturing TFP in China and India." *Quarterly Journal of Economics*, 124(4): 1403-48.
- International Monetary Fund (2020a). "Cambodia: Public Investment Management Assessment." Washington, DC.
- International Monetary Fund (2020b). "EM Capital Flows Monitor April 1 2020." Washington, DC.
- International Monetary Fund (2020c). *World Economic Outlook 2020*. Washington, DC: International Monetary Fund.
- International Trade Centre (2004). "Challenges and Opportunities in Export Development of Creative Industries: ITC's future technical assistance for the product sector." Geneva.
- Javorcik, B. S. (2004). "Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In search of spillovers through backward linkages." *American Economic Review*, 94(3): 605-27.
- Javorcik, B. S., and Y. Li (2013). "Do the Biggest Aisles Serve a Brighter Future? Global retail chains and their implications for Romania." *Journal of International Economics*, 90(2): 348-63.
- Jeong, H. (2017). "Korea's Growth Experience and Long-term Growth Model." Policy Research Working Paper No. 8240, World Bank, Washington, DC.
- Kansiime, M. K., J. A. Tambo, I. Mugambi, M. Bundi, A. Kara, and C. Owuor (2020). "Covid-19 Implications on Household Income and Food Security in Kenya and Uganda: Findings from a rapid assessment." *World Development*, 137(1): 105-99.
- Kim, Y.-H. (2001). "The Asian Crisis, Private Sector Saving, and Policy Implications." *Journal of Asian Economics*, 12(3): 331-51.
- Kim, Y. E., and N. Loayza (2017). "Productivity and its Determinants: Innovation, education, efficiency, infrastructure, and institutions." World Bank, Washington, DC.
- Krugman, P. (1994). The Age of Diminished Expectations. Cambridge, MA: MIT Press.
- Krugman, P. (1999). "Balance Sheets, the Transfer Problem, and Financial Crises." Journal of International Tax and Public Finance, 6(1): 459-72.
- Lane, P. R., and G. M. Milesi-Ferretti (2011). "The Cross-country Incidence of the Global Crisis." *IMF Economic Review*, 59(1): 77-110.
- Lee, S., N. Vandy, and S. Peou (2017). "Understanding the Implications of Market Distortions on Aggregate Productivity and Competitiveness of Cambodia." In Policy Recommendations for Strengthening the Foundations of Sustainable Development in Cambodia, Sejong City, Republic of Korea: Ministry of Strategy and Finance.
- Lewis, W. A. (1954). "Economic Development with Unlimited Supplies of Labour." *The Manchester School*, 22(2): 139-91.
- Lewrick, U., L. Mohler, and R. Weder (2014). "When Firms and Industries Matter: Understanding the sources of productivity growth." BIS Working Paper No. 469, Bank for International Settlements, Basel, Switzerland.
- Loayza, N., K. Schmidt-Hebbel, and L. Servén (2000). "What Drives Private Saving Across the World?" *Review of Economics and Statistics*, 82(2): 165-81.
- Markusen, J. (2005). "Modeling the Offshoring of White-collar Services: From comparative advantage to the new theories of trade and FDI." NBER Working Paper No. 11872, National Bureau of Economic Research, Cambridge, MA.
- Mattoo, A., A. Subramanian, and R. Rathindran (1999). "Measuring Services Trade Liberalization and its Impact on Economic Growth: An illustration." World Bank, Washington, DC.
- Meitzner, L., M. Price, and C. Sobel (1996). *Amaranth to Zai Holes: Ideas for growing food under difficult conditions*. Sulphur Springs, TX: ECHO Inc.
- Ministry of Education, Youth, and Sports (2018). "Education in Cambodia: Findings from Cambodia's experience in PISA for Development." Royal Government of Cambodia, Phnom Penh, Cambodia.

- Mohan, R. (2019). "Moving India to a New Growth Trajectory: Need for a comprehensive big push." Research Paper No. 072019, Brookings India, New Delhi, India.
- Niu, Z., C. Liu, S. Gunessee, and C. Milner (2018). "Non-tariff and Overall Protection: Evidence across countries and over time." *Review of World Economics*, 154(2): 675-703.
- Organisation for Economic Co-operation and Development (2001). "Economic Survey of Turkey." Paris.
- Organisation for Economic Co-operation and Development (2017). "Interrelations between Public Policies, Migration, and Development in Cambodia." Paris.
- ProTrade Consult and International Economics (2015). "Strategic Options Paper for Export Development." Grenada National Export Strategy Review and Strategic Options for Export Development Project, Kingston, Jamaica.
- Ramey, G., and V. A. Ramey (1995). "Cross-country Evidence on the Link between Volatility and Growth." *American Economic Review*, 8(1), 1138-51.
- Rodrik, D., A. Subramanian, and F. Trebbi (2004). "Institutions Rule: The primacy of institutions over geography and integration in economic development." *Journal of Economic Growth*, 9(1): 131-65.
- Rodríguez, C., and J. E. Saavedra (2019). "The Persistent Effects of Youth Savings Reminders: Experimental evidence from text-message campaigns in Colombia." *Journal of Development Economics*, 139(1): 135-56.
- Sáez, S., and D. Taglioni (2016). "Nurturing the Competitiveness of Service Exports: Metrics and policy options." In P. Sauvé and M. Roy (Eds.), *Research Handbook on Trade in Services*, United Kingdom: Edward Elgar.
- Sáez, S., and M. Vaillant (2010). "The Negotiation and Management of Regulations in the Trade in Services." In Sáez, S. (Ed.), *Trade in Services Negotiations: A guide for developing countries*, Washington, DC: World Bank Group.
- Samreth, S., M. E. Sánchez Martín, and S. Ly (2019). "Dollarization Dilemma: Price stability at the cost of external competitiveness in Cambodia." World Bank, Washington, DC.
- Sauvé, P., and M. Roy (2016). *Research Handbook on Trade in Services*. United Kingdom: Edward Elgar.
- Shingal, A., M. Roy, and P. Sauvé (2018). "Do WTO+ Commitments in Services Trade Agreements Reflect a Quest for Optimal Regulatory Convergence? Evidence from Asia." *The World Economy*, 41(5): 1223-50.
- Simatupang, T. M., S. Rustiadi, and D. B. M. Situmorang (2012). "Enhancing the Competitiveness of the Creative Services Sectors in Indonesia." In T. S. Tullao and H. H. Lim (Eds.), *Developing ASEAN Economic Community (AEC) into A Global Services Hub*, Jakarta, Indonesia: Economic Research Institute for ASEAN and East Asia.
- Staritz, C., and S. Frederick (2014). "Sector Case Study: Apparel." In T. Farole and D. Winkler (Eds.), *Making Foreign Direct Investment Work for Sub-Saharan Africa: Local Spillovers and Competitiveness in Global Value Chains*, Washington, DC: World Bank Group.
- Suri, T., and W. Jack (2016). "The Long-Run Poverty and Gender Impacts of Mobile Money." *Science*, 354(6317): 1288-92.
- TechSci (2017). "Global Organic Food Market Forecast and Opportunities, 2012-22." TechSci Research, New York, NY.
- Tourism of Cambodia (2019). "Phnom Penh's Burgeoning Animation Start-up Scene Tackles Khmer Classics." March 6, 2019, available at <https://www.tourismcambodia.com/news/events/27436/phom-penh-s-burgeoning-animation-start-up-scene-tackles-khmer-classics.htm/>.
- United States Department of Agriculture (2019). "Organic Market Overview." March 16, 2019, available at <https://www.ers.usda.gov/topics/natural-resources-environment/organic-agriculture/organic-market-overview.aspx/>.
- Van der Marel, E. (2016) "Ricardo Does Services: Services sector regulation and comparative advantage in goods." In P. Sauvé and M. Roy (Eds.), *Research Handbook on Trade in Services*, United Kingdom: Edward Elgar.
- Van der Marel, E., and B. Shepherd (2013). "Services Trade, Regulation and Regional Integration: Evidence from sectoral data." *The World Economy*, 36(11): 1393-405.
- World Bank (2014). *Cambodia Services Trade: Performance and Regulatory Framework Assessment*. Washington, DC: World Bank Group.

- World Bank (2015). “Cambodian Agriculture in Transition: Opportunities and risks.” Washington, DC.
- World Bank (2017a). Cambodia Systematic Country Diagnostic: Sustaining strong growth for the benefit of all. Washington, DC: World Bank Group.
- World Bank (2017b). “Doing Business Reform Memorandum: Cambodia.” Washington, DC.
- World Bank (2017c). Doing Business 2017. Washington, DC: World Bank Group.
- World Bank (2018a). Cambodia Economic Update October 2018: Recent Economic Development and Outlook. Washington, DC: World Bank Group.
- World Bank (2018b). “Cambodia Investment Climate Assessment.” Washington, DC.
- World Bank (2018c). “Firm Level Productivity Estimates.” Washington, DC.
- World Bank (2019a). Cambodia Economic Diversification Study: Fostering diversification, value chain participation, and upgrading. Washington, DC: World Bank Group.
- World Bank (2019b). Cambodia’s Future Jobs: Linking to the economy of tomorrow. Washington, DC: World Bank Group.
- World Bank (2019c). World Development Report 2020: Trading for development in the age of global value chains. Washington, DC: World Bank Group.
- World Bank (2019d). Cambodia Economic Update November 2019: Recent economic updates and outlook. Washington, DC: World Bank Group.
- World Bank (2019e). Cambodia Public Expenditure Review: Improving the effectiveness of public finance. Washington, DC: World Bank Group.
- World Bank (2019f). Global Economic Prospects January 2019: Darkening skies. Washington, DC: World Bank Group.
- World Bank (2019g). Microfinance and Household Welfare: Cambodia policy note. Washington, DC: World Bank Group.
- World Bank (2019h). Benefitting from the Digital Economy: Cambodia policy note. Washington, DC: World Bank Group.
- World Bank (2019i). Entrepreneurial Cambodia: Cambodia policy note. Washington, DC: World Bank Group.
- World Bank (2020a). Cambodia Economic Update May 2020: Cambodia in the time of Covid-19. Washington, DC: World Bank Group.
- World Bank (2020b). East Asia Pacific Economic Update: From containment to recovery. Washington, DC: World Bank Group.
- World Bank (2020c). Enabling Ecotourism Development in Cambodia. Washington, DC: World Bank Group.
- World Bank (2020d). “Protecting People and Economies: Integrated policy responses to Covid-19.” Washington, DC.
- World Bank (2020e). “Human Capital Project: Year 2 progress report.” Washington, DC.
- World Bank (2020f). “Cambodia: Fiscal Incidence, Inequality, and Poverty.” Washington, DC.
- World Bank (2020g). Doing Business 2020. Washington, DC: World Bank Group.
- World Economic Forum (2019). Travel and Tourism Competitiveness Report 2019: Travel and tourism at a tipping point. Geneva: World Economic Forum.
- World Trade Organization (2019). World Trade Report 2019. Geneva: World Trade Organization.
- Yeyati, E. L. (2006). “Financial Dollarization: Evaluating the consequences.” *Economic Policy*, 21(45): 62-118.
- Zheng, Y., M. K. Muth, and J. Brophy (2013). “The Impact of Food Safety Third-Party Certifications on China’s Food Exports to the United States.” RTI International, Research Triangle, NC.
- Zion Market Research (2018). “Organic Food and Beverages Market: Global industry perspective, comprehensive analysis and forecast, 2017 - 2024.” New York, NY.

## Empirical approach and data for firm-level productivity analysis

### Dataset

We work with a global cross-section, based on the latest comprehensive dataset released by the World Bank Enterprise Survey in March 2020. This is a sample of pooled data for firms from 139 countries, surveyed between 2006 and 2019. It includes data from 842 firms from Cambodia, of which 472 firms were collected in 2013 and 370 firms in 2016. This broad sample allows us to examine constraints to performance in Cambodia in a broader comparative perspective.

### Outcome variables

To measure firm performance, we use five outcome indicators. The first two, (1) labor productivity and (2) total factor productivity (TFP), are measured in levels. As additional measures of firm performance, we use (3) the average annual growth rate in employment, (4) the average annual growth rate in sales, and (5) the average annual growth rate in labor-productivity levels. Below we briefly describe how each of these indicators is calculated.

(i) **Labor productivity:** for manufacturing firms, we measure labor productivity as value added (sales minus intermediate goods) per worker in levels, and calculate it as the ratio of value added to the total number of full-time permanent employees. Because data on the cost of intermediate goods are not available for firms in the services sector, for these firms we calculate labor productivity as the ratio of sales to full-time workers. The World Bank Enterprise Survey collects data on sales and intermediate goods in local currency units (LCUs), which are specific to the survey and year. For cross-country comparisons, these variables are first exchanged into US dollars using the official exchange rate (period average) from the World Bank World Development Indicators. The data are then deflated to 2009 US\$ using the gross domestic product (GDP) deflator for the United States from the relevant reference fiscal year.

(ii) **TFP:** TFP is computed as the Solow residuals from the estimation of a log-linear Cobb-Dougllass production function. Formally, equation (1) is estimated using Ordinary Least Squares and then TFP is computed following equation (2) for establishment  $i$  in sector  $j$  in year  $t$ .<sup>212</sup>

$$\ln Y_i = \alpha + \beta_L \ln L_i + \beta_M \ln M_i + \beta_K \ln K_i + e_{ijt} \quad (1)$$

$$TFP_i = \ln Y_i = \alpha + \beta_L \ln L_i + \beta_M \ln M_i + \beta_K \ln K_i + e_{ijt} \quad (2)$$

where:

$Y_{ijt}$  = total sales;

$L_{ijt}$  = total number of workers;

$M_{ijt}$  = material input is total annual cost of raw materials and intermediate goods used in production; and

$K_{ijt}$  = capital input is value of machinery, vehicles, and equipment.

(iii) **Labor-productivity growth:** due to data constraints, we calculate labor productivity as the ratio of sales to workers (all in US\$). We then calculate the average annual growth in sales per worker over a two-year period using the standard geometric formula:

$$labor\_prod\_growth_i = \left[ \exp \left( \frac{\ln \left( \frac{laborprod_n}{laborprod_0} \right)}{n} \right) - 1 \right] \times 100$$

where:

$laborprod_n$  = sales per worker in the last period;

$laborprod_0$  = sales per worker in the first period; and

$n = 2$ .

(iv) **Employment growth:** we apply the same geometric formula to calculate the average annual change in employment levels over a two-year period:

$$empl\_growth_i = \left[ \exp \left( \frac{\ln \left( \frac{p_n}{p_0} \right)}{n} \right) - 1 \right] \times 100$$

where:

$p_n$  = employment in the last period;

$p_0$  = employment in the first period; and

$n = 2$ .

(v) **Sales growth:** we apply the same geometric formula to calculate the average annual change in sales levels over a two-year period:

$$sales\_growth_i = \left[ \exp \left( \frac{\ln \left( \frac{p_n}{p_0} \right)}{n} \right) - 1 \right] \times 100$$

where:

$p_n$  = sales in the last period;

$p_0$  = sales in the first period; and

$n = 2$ .

## Independent variables

We include several variables that capture the objective constraints faced by firms in the different issue areas, namely: access to finance, backbone services and infrastructure, labor skills and regulations, and business environment and corruption. The full set of indicators is listed in table A.1.

**TABLE A.1:**  
Objective constraints faced by firms

Indicator	Operationalization
<b>Access to finance</b>	
Credit line	Dummy variable that is equal to 1 if the firm has obtained a line of credit or loan from a financial institution and 0 if not.
Checking account	Dummy variable that is equal to 1 if the firm has a checking or a savings account and 0 if not.
Bank finance investments	Proportion of the establishment's investments in fixed assets that was financed by banks (percent).
Collateral required	Dummy variable that is equal to 1 if the firm's loan required collateral and 0 if not.
Collateral value	Value of collateral required for a loan (percent of loan).
<b>Electricity and water</b>	
Power outages (number)	Number of power outages that the firm has experienced during the previous year.
Power outages (duration)	Average duration in days of power outages the firm has experienced over the previous year.
Power outages (time)	Average total time of power outages per month.
Electricity problems	Dummy variable that is equal to 1 if the firm has faced more than four power cuts per month in the previous fiscal year and 0 otherwise.
Electricity losses	Losses due to electrical outages (percent of annual sales).
Electrical connection	Number of days a firm had to wait to receive an electrical connection service.
Water shortages	Dummy variable that is equal to 1 if the firm has experienced insufficient water supply for production in the previous fiscal year and 0 otherwise.
Generator	Dummy variable that is equal to 1 if the firm owns a power generator and 0 otherwise.
Generator dependence	Proportion of electricity from a generator (percent).
<b>Transportation</b>	
Exports breakage	Products exported directly lost due to breakage or spoilage (percent).
<b>Business regulations</b>	
Government regulations	Percent of total senior management's time spent on dealing with requirements imposed by government regulations in a typical week of the year.
Import license time	Number of days it took the firm to obtain an import license.
Operating license time	Number of days it took the firm to obtain an operating license.
Construction permit time	Number of days it took the firm to obtain a construction permit.
Customs clearance imports	Average number of days for imported goods to clear customs in the last fiscal year.
Customs clearance exports	Average number of days for exported goods to clear customs in the last fiscal year.

Indicator	Operationalization
<b>Corruption</b>	
Bribe value	Value of gift expected to secure a government contract (percent of contract).
Operating license bribe	Dummy variable that is equal to 1 if the firm reported that an informal payment was requested when applying for an operating license and 0 otherwise.
Tax inspection bribe	Dummy variable that is equal to 1 if the firm reported that an informal payment was requested during tax inspections and 0 otherwise.
Import license bribe	Dummy variable that is equal to 1 if the firm reported that an informal payment was requested when applying for an import license and 0 otherwise.
Construction permit bribe	Dummy variable that is equal to 1 if the firm reported that an informal payment was requested when applying for a construction permit and 0 otherwise.
Bribery depth	Proportion of public transactions where a gift was requested (percent).
Bribery incidence	Dummy variable that is equal to 1 if the firm reported having received requests for informal payments or gifts in the previous fiscal year and 0 otherwise.
<b>Crime</b>	
Security paid	Dummy variable that is equal to 1 if the firm pays for private security and 0 otherwise.
Security costs	Proportion of annual sales spent on security (percent).
Theft loss	Proportion of products that were lost due to theft during the shipping process (percent).
Exports theft	Products exported directly lost due to theft (percent).
<b>Workforce education</b>	
Formal training	Dummy variable that is equal to 1 if the firm offers formal training and 0 otherwise.
Skilled	Proportion of full-time workers that are skilled (percent).
Temporary	Proportion of temporary workers among all employees (percent).
Manager experience	Number of years of the top manager's experience working in the firm's sector.

The World Bank Enterprise Surveys contain two types of questions aimed at probing respondents' **perceived** obstacles. First, firm representatives are asked to identify the top three obstacles that they face among a list of 15 different aspects of the business environment. Second, the survey asks them to rate how big a constraint each of these are to the current operations of the firm. Respondents must rate each of these potential constraints on a five-point scale, from "no obstacle" (0) to "very serious obstacle" (4). For each of these issues or constraints, two indicators are computed:

- **Issue\_top** = is a dummy variable that is equal to 1 if the firm identified this issue as the top or biggest obstacle faced by the establishment in the business environment.
- **Issue\_major** = is a dummy variable that is equal to 1 if the firm identified this issue as a major or severe constraint to its operations (rating of >2 in perceptions question).

Using these firm-level indicators of perceptions raises endogeneity concerns. That is, it is possible that poor performance affects firms' perceptions of the constraints that they face. Following Arnold, Mattoo, and Narciso (2008) we calculate peer averages based on clusters defined by industry and size, and exclude the observation from the establishment  $i$  of the different indicators of subjective constraints.<sup>213</sup> The resulting variables can be interpreted as the percentage of firms in each industry-size cluster that identify each constraint as a major/severe or as the top/biggest obstacle in the business environment.

- **Major/Top\_avg $i$**  = is the peer average for clusters defined by industry and size, excluding the firm's own observation. In other words, the variable measures the percentage of firms in the same industry-size cluster that identified the issue as a major/top obstacle. (The rationale for including the peer averages of the different indicators is to mitigate endogeneity of firm-level responses.)
- **Obstacle\_avg $i$**  = is the average score given to each obstacle (0= no obstacle; 4= very serious obstacle) by firms in a given industry-size cluster, excluding the firm's own score.

### Estimation strategy

Regression analysis is used to explore the links between both subjective and objective constraints and firm performance. The parameters in the linear regression model were estimated through ordinary least squares. Although the cross-sectional structure of the data does not allow us to control for firm-level fixed effects, it is still possible to control for country  $c$ , year  $t$ , and sector  $j$  fixed effects. A dummy variable equal to one if the establishment is operating in Cambodia is interacted with the subjective and objective constraints to identify if the constraint poses a bigger impact on the outcome variable for Cambodian firms than the global average. The main specification is:

$$y_{icjt} = \alpha_c + \gamma_j + \sigma_t + \beta \text{Constraint}_{icjt} + \emptyset KHM_{icjt} * \text{Constraint}_{icjt} + \pi z_{icjt} + \varepsilon_{icjt}$$

where:

$y_{icjt}$  = the outcome variable of firm  $i$  (labor productivity, TFP, employment growth, sales growth, labor-productivity growth);

$\text{Constraint}_{icjt}$  = the subjective or objective constraint;

$KHM_{icjt}$  = a dummy variable equal to 1 if the establishment is in Cambodia and 0 otherwise;

$z_{icjt}$  = a vector of firm-specific controls;

$\alpha_c$  = the country fixed effect;

$\gamma_j$  = the sector fixed effect; and

$\sigma_t$  = the year fixed effect.

---

## Endnotes

<sup>212</sup> Fixed effects are included for country, industry, and year of survey.

<sup>213</sup> The analysis was also performed for all variables (major and top obstacles) at the firm level.









Cambodia Country Office  
Exchange Square Building  
No. 19-20, Street 106  
Sangkat Wat Phnom, Khan Daun Penh  
Phnom Penh, Cambodia

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