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Government Spending on Health in Cambodia: A Narrative Summary

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Government Spending on Health in Cambodia: A Narrative Summary

This Narrative Summary on Public Expenditure for Health in Cambodia was written by Jewelwayne Salcedo Cain, Emiko Masako, and Pisith Phlong with support from the DRM collaborative facilitation team in the World Bank, comprising Aditi Nigam, Danielle Elena Bloom, Lauren Oliveira Hashiguchi, and Somil Nagpal.

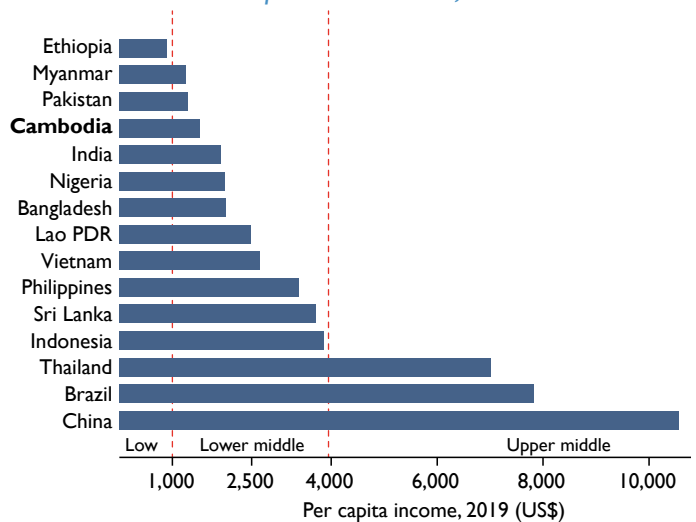
This brief narrative summary analyzes trends in government spending on health in Cambodia. It demonstrates how policymakers can summarize historical data to have a more informed within-country dialogue on issues related to domestic resource mobilization (DRM) for health. This analysis is meant to be illustrative, demonstrating how such information can be used to form the basis for setting the stage in assessing DRM options for health through better understanding of (a) where the country is and where it has come from in terms of broader health financing trends and (b) how these trends have interacted with the overall macro-fiscal context in the country.

BACKGROUND

With a population of 16 million, Cambodia is located at the southern part of the Indochinese peninsula and is in the World Bank's (WB's) East Asia and Pacific (EAP) region. The latest estimate of its per capita income was US\$1,490 in 2020, comparable to that of Myanmar and Pakistan (Figure 1). The country is currently classified as a lower middle income (LMI) country. As of 2018, about 13% of the country's population is estimated to be living below the national poverty line.¹

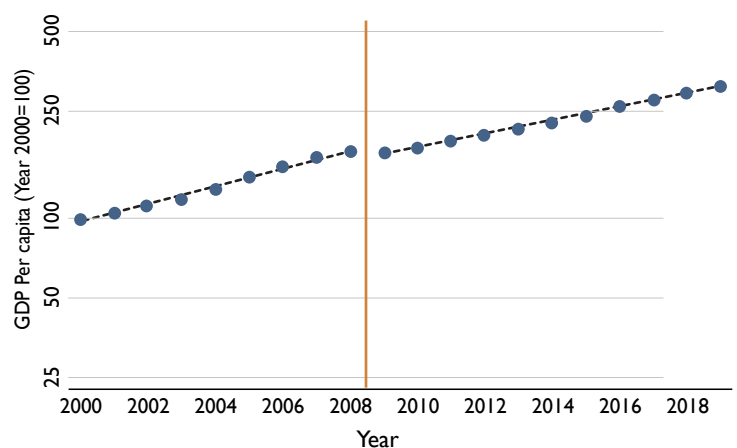
Cambodia experienced rapid economic growth in the last 16 years, one of the fastest in the East Asia and Pacific Region (Figure 2). The 'Pritchett Landscape' of Cambodia's per capita growth trajectory can be categorized as a 'hill' with growth rates in per capita Gross Domestic Product (GDP) exceeding 3% per year before and after a statistically-determined break² in trend in 2009.³ Annual economic growth rates averaged 7% in per capita terms over 2000-2008, but decelerated to 5% over 2009-2019. As a result, in cumulative per capita terms, the size of Cambodia's economy more

Figure 1. Per capita income (US\$), Cambodia and comparator countries, 2020



Source: The World Development Indicators.

Figure 2: Per capita GDP in Cambodia



Source: Authors' calculations using IMF World Economic Outlook (October 2021 edition).

¹ Asian Development Bank, <https://www.adb.org/countries/cambodia/poverty>

² While some countries have experienced consistently steady linear growth in per capita public spending on health, others show systematic variations in the growth rates over 2000-2017. These large shifts in trends can be captured statistically and a policy-relevant "break-point"—a year when a break in trend for per capita public spending on health—can be identified. Capturing this instability in the growth rates is important in understanding the growth dynamics of public spending for health.

³ Pritchett, L. 2000. "Understanding Patterns of Economic Growth: Searching for Hills among Plateaus, Mountains, and Plains." World Bank Economic Review, 14 (2): 221–250.

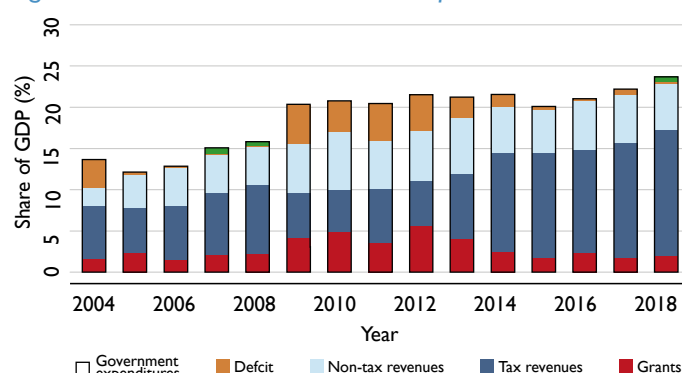
than tripled over the period 2000-2019. However, the COVID-19 pandemic continues to have a significant negative effect on Cambodia's economy. IMF projects GDP to decline in 2020 by 5.9% (decline is lower in per capita terms at 3.1%). The three sectors most affected by the COVID-19 pandemic are tourism, manufacturing exports, and construction, which contributed more than 70 percent of growth and nearly 40 percent of total paid employment in 2019.

General government expenditures as a share of GDP indicates the size of government spending relative to the economy (Figure 3). Cambodia's total government expenditure has remained in the 14-23% of GDP range over 2002-2018. At 23.0% of GDP, total government expenditures as a share of GDP in Cambodia are low relative to the region, driven largely by low total government revenues (24% of GDP) and low tax revenues (27% of GDP) (Table I). Cambodia's tax revenues are slightly above the 15% benchmark that has recently been highlighted in a study by the International Monetary Fund (IMF) as necessary for sustaining economic growth.⁴

HEALTH SYSTEM

Cambodia's health system has three levels: national/central, provincial, and district. Administrative functions and resources were delegated from the central to subnational level following decentralization reforms which began in 2000. In 2001, Cambodia initiated a process of decentralization, although local autonomy is still insufficiently articulated and practiced. The decentralization and deconcentration (D&D) reforms will have a profound impact on the way in which health services are financed, managed, and delivered. To provide the administrative basis for decentralization and deconcentration, the Ministry of Interior (MoI) adopted the organic law on Administrative Management of the Capital, Provinces, Municipalities, Districts, and Commune in 2008 which provided priority to decentralization of functions

Figure 3. Government Revenues and Expenditure in Cambodia



Source: IMF World Economic Outlook (October 2021 edition), IMF World Revenue Longitudinal Dataset.

Table I: Comparison of government expenditures, revenues, deficit, and surplus (as share of GDP)

Country	Government expenditures	Government revenues		Government deficit/surplus
		Total	Tax	
Cambodia	24	27	17	3
Bangladesh	15	10	8	-5
Brazil	37	31	21	-6
China	34	28	16	-6
Ethiopia	15	13	10	-3
India	27	20	17	-7
Indonesia	16	14	11	-2
Lao PDR	20	15	11	-4
Myanmar	20	16	7	-4
Nigeria	13	8	5	-5
Pakistan	22	13	13	-9
Philippines	22	20	16	-2
Sri Lanka	21	13	12	-8
Thailand	22	21	16	-1
Vietnam	23	20	15	-3
EAP	41	40	18	-1
LMIC	29	26	17	-3

Source: IMF World Economic Outlook (October 2021 edition), IMF World Revenue Longitudinal Dataset.

Note: Government tax data for Cambodia is for 2018.

that have a direct impact on poverty and livelihood, including service delivery in education, health, and the environment. After many years of work by the National Committee for Democratic Development on decentralization and deconcentration pilots, 21 functions of five key ministries, including MoH, were transferred to subnational administrations as of 2019. In December 2019, the D&D reform process was accelerated by the launch of Sub-decree 193 on "Decentralization of health management functions

⁴ Gaspar, V., L. Jaramillo, and P. Wingender. 2016. "Tax Capacity and Growth: Is there a Tipping Point?" IMF Working Paper WP/16/234, Washington, DC: International Monetary Fund.

and service delivery to capital/provincial”, co-signed by ministers of MoI, MoH, MEF, and the Ministry of Civil Service, management of provincial health departments, provincial and district hospitals, health centers and health posts, as well as financial and staff management in the health sector were transferred to the capital/provincial administration from December 2019 onward. Details are not yet clear and are being worked on at central and provincial level, but D&D will involve a shift in responsibility for implementation and management of service delivery to provincial authorities.

Cambodia is performing well on UHC service coverage indicators. The UHC Service Coverage Index (Sustainable Development Goal - SDG 3.8.1) increased from 55.3 in 2015 to 59.6 in 2017, slightly higher than the average of lower-middle-income countries at 58. The health system in Cambodia is facing the transition from a burden of disease (BoD) dominated by communicable, maternal, neonatal, and nutritional diseases to a BoD in which noncommunicable diseases (NCDs) are paramount.

Health services are largely provided through the

private system, where private health facilities comprise approximately 90 percent of all 14, 242 facilities.⁵ The private providers are the first point of contact for care for the urban population and provide mostly curative services. For the rural population, the public sector delivers the majority of promotive and preventive health services. In 2018, health centers constitute approximately 82% of the total public facilities (1,457) while less than 9 percent are hospitals and the remainder are health posts.⁶

The Health Equity Fund (HEF) is the largest social health protection scheme in Cambodia providing health coverage and financial protection to poor households against health costs. The HEF covers the poorest one-fifth of the population—corresponding to between 2.5 and 3.2 million people. Free access to about 2 million outpatient visits and about 100,000 hospital admissions per year are supported through HEF. The HEF benefit package includes medical and non-medical benefits (transportation costs for referral care, food allowances, and funeral support). In 2019, the National Social Security Fund (NSSF) provided health insurance coverage for about 1.3 million workers in the formal

Table 2: Comparison of Health Outcomes

Country	Population (millions)	Life expectancy	Fertility	Under-five mortality	Adult survival	Maternal mortality	Childhood stunting
Cambodia	16.7	70	2	27	73.1	160	29.9
Vietnam	97.3	75	2	20	79.5	43	22.3
Bangladesh	164.7	73	2	31	77.1	173	30.2
Brazil	212.6	76	2	14	79.5	60	6.1
China	1,402.1	77	2	8	86.4	29	4.7
Ethiopia	115.0	67	4	51	68.0	401	35.3
India	1,380.0	70	2	34	71.9	145	30.9
Indonesia	273.5	72	2	24	75.9	177	31.8
Lao PDR	7.3	68	3	46	70.5	185	30.2
Myanmar	54.4	67	2	45	68.4	250	25.2
Nigeria	206.1	55	5	117	49.0	917	35.3
Pakistan	220.9	67	3	67	71.0	140	36.7
Philippines	109.6	71	3	27	72.5	121	28.7
Sri Lanka	21.9	77	2	7	84.5	36	16.0
Thailand	69.8	77	2	9	81.3	37	12.3
EAP	2,105.0	71	3	26	74.7	97	21.9
LMIC	3,330.7	69	3	39	70.8	210	22.1

Source: World Development Indicators.

⁵ MoH, Health Achievement Report (HAR) 2018.

⁶ Health Centres cover 10,000 to 20,000 people and provide mainly preventive and basic curative services. Health posts are less formal and located in remote areas.

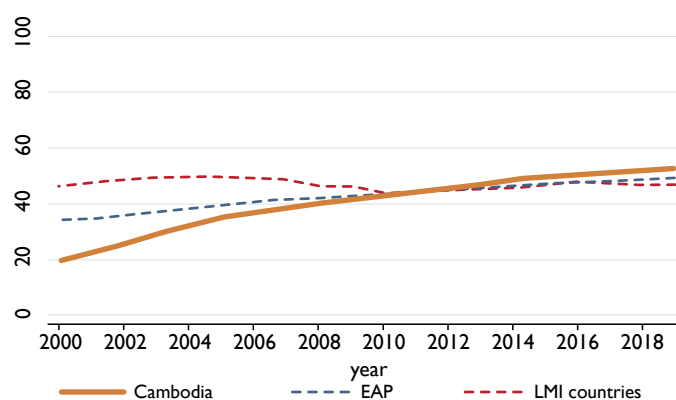
private sector (8.1 percent of the population) and 315,000 civil servants (2 percent of the population). An estimated 30 percent of the Cambodian population was covered either by NSSF or HEF in 2019, leaving more than two-thirds of citizens without any form of health insurance.

POPULATION HEALTH

Cambodia has made progress in terms of improvement in maternal and child health outcomes. With a life expectancy of 70 years and an adult survival rate of 73%, most population health outcomes in Cambodia are as expected for its income level (Table 2). However, by global standards, challenges remain with some lagging population health outcomes, particularly high levels of maternal mortality and childhood stunting. Geographic and income-related inequalities are relatively large.⁷ The progress in achieving health outcomes in Cambodia varies hugely by province, including child mortality and stunting rates which are 4-5 times higher in some provinces. There are also huge disparities by economic status and ethnicity. Cambodia scored 0.492 on the WB's human capital index (HCI) indicating that a child born there today would be expected to be only 49.2% as productive as he/she could have been, and GDP per worker could be double what it is, with complete education and full health.

Cambodia has also made steady progress on its UHC service coverage index over 2000-2019 recently (Figure 4). The country has already exceeded the averages for both EAP countries and LMI countries.⁸ With regard to financial protection, preliminary indications are that the proportion of households for whom OOP spending was 10 percent or higher of consumption has decreased in recent years, although more recent analysis of data is needed to confirm this.

Figure 4: UHC Service Coverage Index



Source: The Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2019: UHC Effective Coverage Index 1990-2019. Seattle, USA: Institute for Health Metrics and Evaluation, 2020.

PUBLIC FINANCING ON HEALTH

Low and erratic levels of government spending on health and correspondingly high reliance on OOP health expenditure and external assistance for health characterize health financing in Cambodia.⁹ Using data from WHO's Global Health Expenditure Database, the country's per capita spending on health is roughly US\$113 per person and about 7% of GDP (Table 3). While the share is about the regional country average and higher than the lower-middle income country average, per capita value is below these averages. Only 29% of this is publicly sourced (US\$33 per capita), while SHI contributions from enrollees currently account for only 7% of public expenditures on health. Out-of-pocket (OOP) spending stands at about 64% of health spending, which is extremely high compared to the regional and low-income country averages. External financing for health accounts for 7% of health spending, with a share of this going through the government (16% of public expenditure on health in 2016).

⁷ Masaki, E. et al. 2020. "Cambodia Health Financing System Assessment." Washington, DC: World Bank Group.

⁸ Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2019: UHC Effective Coverage Index 1990-2019. Seattle, USA: Institute for Health Metrics and Evaluation, 2020.

⁹ Masaki, E. op cit.

Table 3: Comparison of Health Spending Across Countries, 2019

Country	Health spending		Public spending on health				OOP share of health spending
	Per capita (US\$)	Share of GDP	Per capita (US\$)	Share domestic government	Share SHI	Share external	
Cambodia	113	7	33	77	7	16	64
Bangladesh	46	2	10	89	0	11	73
Brazil	853	10	349	98	1	0	25
China	535	5	300	50	50	-	35
Ethiopia	27	3	11	53	0	47	38
India	64	3	21	94	5	1	55
Indonesia	120	3	59	71	28	1	35
Lao PDR	68	3	38	64	2	34	42
Myanmar	60	5	11	84	5	11	76
Nigeria	71	3	13	74	11	15	71
Pakistan	39	3	14	90	3	7	54
Philippines	142	4	58	83	16	1	49
Sri Lanka	161	4	78	95	2	3	46
Thailand	296	4	212	91	9	-	9
Vietnam	181	5	80	21	77	1	43
EAP	260	7	191	70	19	19	24
LMIC	127	5	72	71	16	15	37

Source: WHO Global Health Expenditure Database (December 2021 edition).

DOMESTIC RESOURCE MOBILIZATION FOR HEALTH EFFORTS

The level of dependency for health spending from external sources is becoming increasingly critical, as donor funding is expected to decline in coming years. Furthermore, the general government revenue share of GDP is projected to decline in 2020 because of the COVID-19 pandemic which has a direct implication on budgetary health spending. To address the immediate impact of COVID-19 pandemic, the government encourages budget spending reductions by all line ministries and subnational administrations, and cost reductions by state-owned enterprises. In 2020, all ministries, except MoH, have been advised to cut their expenditure by 50 percent on the following line items: petroleum, IT and electronic tools, office equipment, uniforms, local and overseas travel and missions, meetings and conferences, domestic and international exhibitions, and hospitality; and 20 percent from current expenditure for any project implementation.

In addition, all subnational administrations (except provincial health departments) are subject to a 25 percent budget cut for expenditures on office supplies and equipment, IT equipment, petroleum, meetings and conferences, and local missions.¹⁰

As a measure for domestic resource mobilization for health, a Health Tax has been implemented in Cambodia, however, there is considerable scope for increasing the effective tax rate for harmful products and earmarking to mobilize more resources for health. Based on Notification 4227 issued on 22 March 2016 by MEF, excise taxes applied to tobacco and alcohol have increased by 5 percentage points: for cigarettes to 20 percent, all types of beer products to 30 percent, and wine to 35 percent.¹¹ As it is unclear what proportion of these excise taxes can be earmarked for health, a follow up analysis could be done to examine the potential to increase fiscal space for health.

¹⁰ Ministry of Economy and Finance. Circular 004, "Amendment on effectiveness enforcement to the national budget expenditures of the 2021 Budget Law", release date: May 4, 2021 and Circular 001: "Edition and enforcement of budget expenditure of the Budget Law 2020", release date: March 6, 2020

¹¹ Ministry of Economy and Finance. Circular 001: "Edition and enforcement of budget expenditure of the Budget Law 2020". Release date: March 6, 2020.

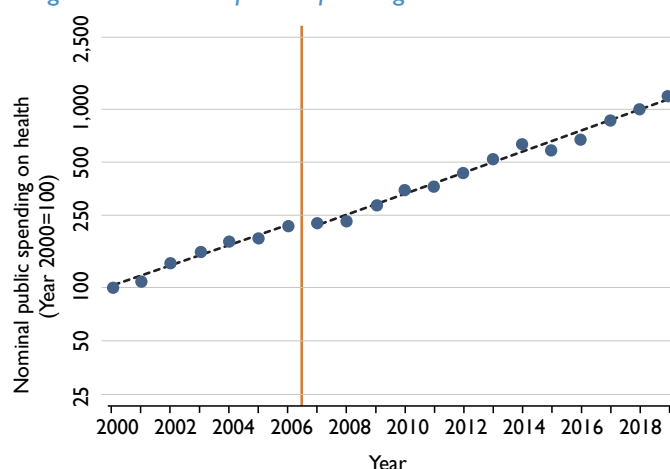
TRENDS IN GOVERNMENT SPENDING ON HEALTH

As per WHO's Global Health Expenditure Database, nominal government spending on health amounted to KHR 2,188 billion (~US\$539 million) in 2019, up from KHR 182 billion (~US\$47 million) in 2000: representing a 12-fold cumulative nominal increase over 2000-2019 and an average annual increase of 14.4 percent (Figure 5).

Cambodia has faced relatively high levels of inflation in recent decades. Over 2000-2019, the inflation rate was 3.5 percent per year, lower than the 6.7 percent average across all LMI countries over the same period (Figure 6). At 1.3 percent, population growth is also lower than the 1.7 average for all LMI countries. This means that to keep public spending on health in per capita constant terms, nominal increases in public spending on health would need to exceed at least $3.5\% + 1.3\% = 4.8\%$ per year to keep levels the same in per capita constant terms.

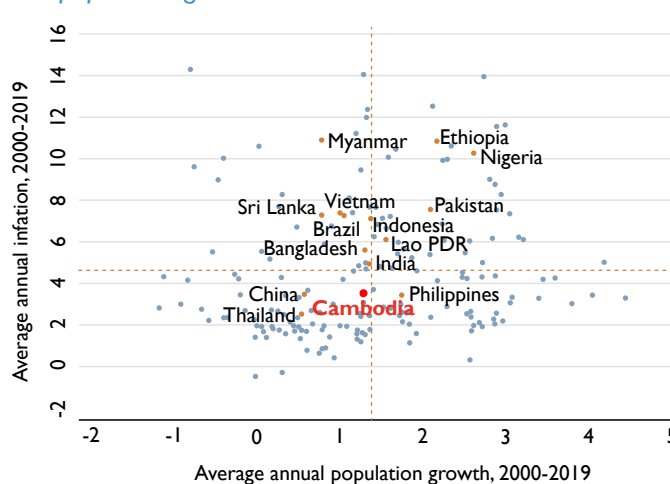
Adjusting for inflation and population growth shows that, in per capita constant terms, government spending on health in Cambodia has grown cumulatively more quadrupled since 2000: averaging an annual growth rate of 8.9 percent per year (Figure 7), more than the increase in the size of the economy over the same period by 2 percentage points (recall Figure 2). In 2019, per capita government spending on health amounted to KHR 133 thousand (~US\$33 per capita), up from only KHR 29 thousand (~US\$7 per capita) in 2000 (using 2019 prices). This means per capita public spending on health almost increased five-fold cumulatively between 2000-2019. Cambodia is considered a 'steep hill' country for its 'Pritchett Landscape' of per capita public spending on health as growth exceeded higher rates at 5 percent per year before and after its statistically determined breakpoint in 2008. Per capita government spending on health is the product of three variables: health's share of total government spending, total government spending share of GDP, and per capita GDP. Over 2000-2019, the 8.9% annual increase in per capita constant government spending on health was primarily due to

Figure 5: Nominal public spending on health in Cambodia



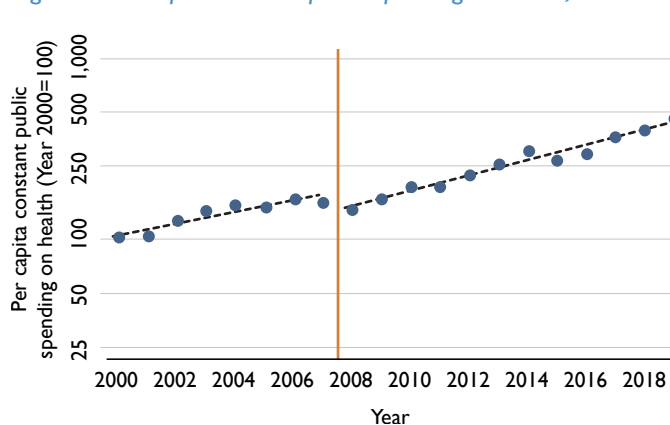
Source: Authors' calculations using data from WHO Global Health Expenditure Database (October 2021 edition).

Figure 6: Average annual inflation against average annual population growth in Cambodia and select countries



Source: IMF World Economic Outlook (October 2021 edition)
Note: Orange dashed lines indicate global averages.

Figure 7: Per capita constant public spending on health, Cambodia



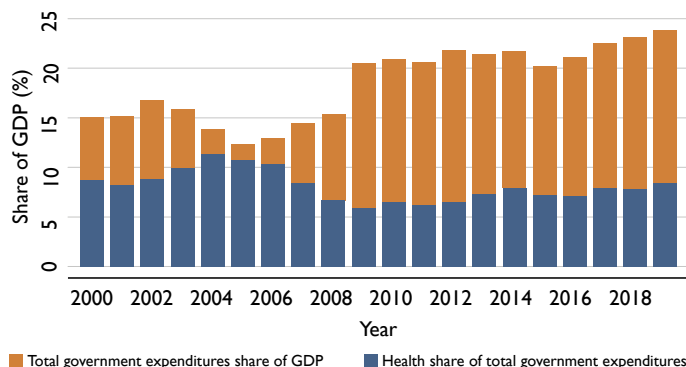
Source: Authors' calculations using data from WHO Global Health Expenditure (December 2021 edition).

economic growth (70 percent contribution) followed by higher general government expenditures as share of GDP (32 percent contribution); reprioritization of health’s share in government spending has on the other hand limited the growth of per capita constant government spending on health. A deprioritization has occurred: health’s share was 6.4 percent of the total government budget spending in 2019, slightly down from 8.6 percent in 2000.

BROADER TRENDS IN HEALTH FINANCING AND UHC

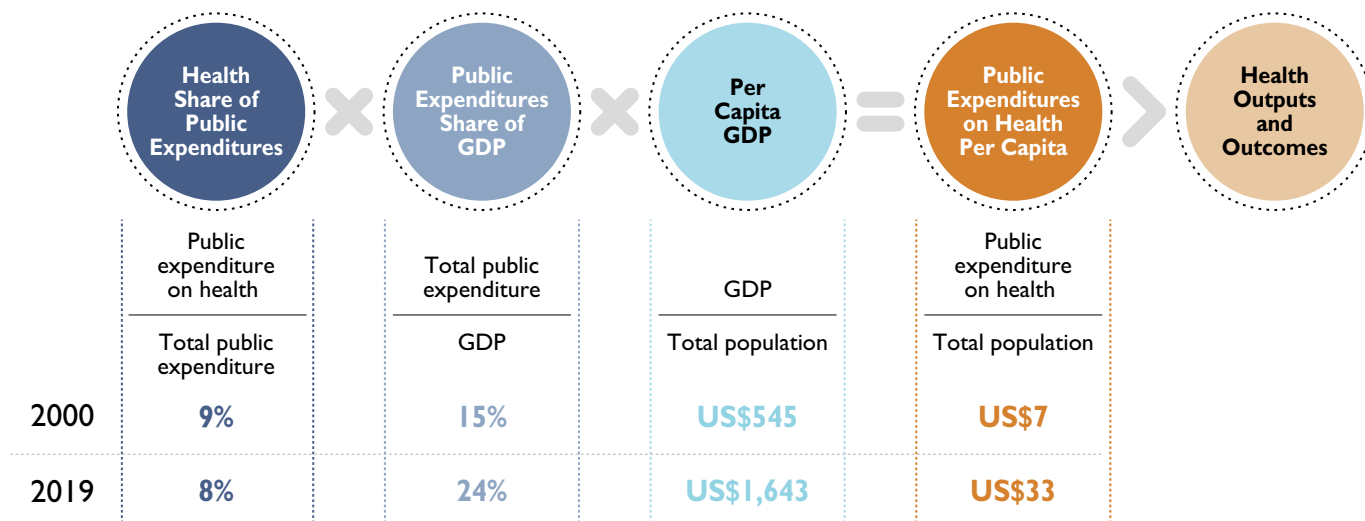
In 2019, Cambodia’s per capita GDP amounted to US\$1,643. Of this, 24 percent (~US\$391) was total government spending (representing spending across all sectors, including for health) and only 8 percent of total government spending represented health’s share (amounting to ~US\$33 per capita) (Figure 8). In 2000, Cambodia’s per capita GDP was US\$545 in constant 2019 prices with 15 percent representing total government spending (~US\$82 per capita) and of which 9 percent was the share of health (amounting to ~US\$7 per capita).

Figure 8: Total government expenditure as share of GDP compared to health share of total government expenditures, Cambodia, 2000-2017



Source: IMF World Economic Outlook (October 2021 edition), WHO Global Health Expenditure Database (December 2021 edition).

Figure 9: Calculation of Per Capita Public Expenditure on Health in Cambodia



“Source: Authors’ calculations using data from IMF World Economic Outlook (October 2021 edition) and WHO Global Health Expenditure Database (December 2021 edition).
Note: Product may differ due to rounding.”

Cambodia's 8 percent share of health in total government expenditure is less than the regional average and the average for LMI countries; education's share of total government expenditures is higher but less than the share going to military and national defense (Table 4).

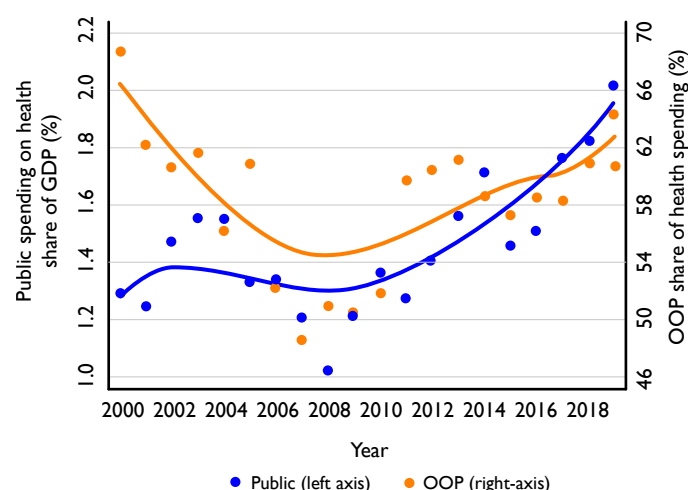
Table 4: Comparison by Country of Share of Total Government Expenditure

Country	Share of total government expenditure			
	Health	Education	Military	Debt Service
Cambodia	8	9	10	1
Bangladesh	3	12	10	13
Brazil	11	16	4	13
China	9	11	5	2
Ethiopia	9	24	4	3
India	3	13	9	16
Indonesia	9	17	5	11
Lao PDR	7	12	-	7
Myanmar	4	11	11	7
Nigeria	5	6	4	13
Pakistan	5	12	19	25
Philippines	8	14	4	7
Sri Lanka	9	11	10	29
Thailand	14	17	6	3
Vietnam	10	14	-	6
EAP	10	14	5	5
LMIC	9	15	6	9
Vietnam	10	15	8	7
EAP	10	15	6	5
LMI	12	15	7	8

Source: Authors' estimates using data from World Development Indicators, IMF World Economic Outlook (October 2021 edition), WHO Global Health Expenditure Database (December 2021 edition).

The pace of increase in per capita public spending on health (8.9 percent per year) has exceeded that in per capita OOP spending on health (7.0 percent per year) (Figure 10); as a result, the OOP share of health spending in more recent years has trended upwards slower than the growth in public share of health indicating progress is being made on Cambodia's 'health financing transition' (i.e., the empirical trend that is observed when countries grow and develop when there is a tendency to increase levels of health spending but also increase the share from public sources and decrease the share from external and OOP sources).¹²

Figure 10: Public spending on health as share of GDP versus OOP share of health spending, Cambodia, 2000-2017



Source: WHO Global Health Expenditure Database (December 2021 edition)

¹² Fan, V. Y., and W. D. Savedoff. 2014. "The Health Financing Transition: A Conceptual Framework and Empirical Evidence." *Social Science and Medicine* 105: 112–121.

GLOSSARY & METHODS¹

Catastrophic Health Expenditure (CHE): occurs when out-of-pocket health spending exceeds 10% or 25% of total household consumption or income).

Constant: Also referred to as ‘real’, refers to the value of a monetary variable with adjustments made to remove the impact of changes in prices of goods and services due to inflation. Constant series show the data for each year in the value of a particular base year. Thus, for example, data reported in constant 2017 prices show data for 2000 to 2017 in 2017 prices. Constant series are important as it is used to measure the true growth of a series (i.e., adjusting for the effects of inflation).

How to Convert a Time Series Variable from Nominal to Constant? Nominal time series data can be converted to constant time series data using a GDP deflator. Constant time series data is calculated by dividing nominal time series data by the GDP deflator (expressed in hundredths term):

$$\text{Constant time series} = \frac{\text{Nominal time series}}{\text{GDP deflator (in hundredths)}}$$

Debt Service Payments: Debt service is a type of government expenditure that covers the repayment of interest and principal on a debt or liability by the government for a particular period of time.

Domestic Resource Mobilization (DRM): the willingness and ability of countries to increase domestically-sourced public financing for health, ideally in an efficient, equitable, and sustainable manner.

Government Deficit/Surplus: The difference between total government revenue and expenditure is called government deficit (if expenditure is greater) or government surplus (if revenue is greater). This is an important fiscal account that measures the extent to which general government is lending financing resources (in the case of government surpluses) or borrowing financial resources from other sectors and nonresidents in order to finance government spending (in the case of government deficits).

Gross Domestic Product (GDP): is a monetary measure of the market value of all the final goods and services produced within a country’s borders in a specific time period, often annually.

Gross National Income (GNI): is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad.

¹ This glossary was adapted from “Glossary & Methods,” in the JLN DRM Collaborative. Ministry of Health & Family Welfare Budgetary Spending in Bangladesh. Domestic Resource Mobilization Collaborative. Joint Learning Network for Universal Health Coverage, 2020. Definitions derived from the present text were added. Other sources consulted were the Global Monitoring Report on Financial Protection in Health (2019), the World Health Organization and the International Bank for Reconstruction and Development, and the World Bank World Development Indicators (2019).

Health Financing Transition: An empirically observed phenomenon that shows that as countries grow and develop there is a rise in health spending but that there is also a change in the composition of health spending with a higher share coming from public and other compulsory prepaid sources and a lower share from external and OOP sources.²

How to Account for Changes in Per Capita Public Spending on Health Over Time? There are different ways to account for changes in per capita public spending on health.³ One way is to focus on uncovering the relative contributions from a sub-set of factors by exploiting a key macroeconomic identity that, in any given years t and $t+1$, the following must hold true:

$$P_t = H_t E_t Y_t$$

$$P_{t+1} = H_{t+1} E_{t+1} Y_{t+1}$$

where P is per capita public financing for health in constant local currency units (LCUs), H is health's share of public expenditure, E is the public expenditure share of GDP, and Y is real GDP per capita in LCUs. Taking the logarithmic difference in $t+1$ versus t (denoted by lowercase with 'hat') of public spending on health must mathematically equal the sum of the logarithmic growth rates in health's share of public expenditures, of aggregate public expenditures as share of GDP, and of GDP per capita:

$$\hat{p}_t = \hat{h}_t + \hat{e}_t + \hat{y}_t$$

In other terms, this implies that the growth rate of public financing for health (\hat{p}_t) over a given time period must be exactly accounted for by changes in GDP per capita (that is, by economic growth, \hat{y}_t), changes in aggregated public expenditures as share of GDP (\hat{e}_t), and by changes in health's share in aggregate public expenditure (\hat{h}_t)

The log-difference method of calculating growth rates is frequently used in economic growth theory and calculates rates that are a very close approximations to the simple growth rates. The advantage of using this method is that it allows a multiplicative decomposition of the growth rate of a variable into the growth rates of its components.

High Income Countries (HICs): Are currently defined by the World Bank as those countries that in 2018 had per capita income of US\$12,376 or higher.

Human Capital Index: A cross-country benchmarking exercise completed in 2018 by the World Bank Group Human Capital Project.⁴ The index measures the amount of human capital that the average child born in 2018 expects to achieve.

Inflation: An increase in the prices of goods and services over time (a decline in prices is referred to as 'deflation'). Inflation is typically measured in terms of how prices of a representative basket of goods and services changes over time (referred to as changes in the consumer price index) or changes in the prices

² Fan, V. Y., and W. D. Savedoff. 2014. "The Health Financing Transition: A Conceptual Framework and Empirical Evidence." *Social Science and Medicine* 105: 112–121.

³ Tandon, A., J.S. Cain, C. Kurowski, and I. Postolovska (2018). *Intertemporal Dynamics of Public Financing for Universal Health Coverage: Accounting for Fiscal Space Across Countries*. HNP Discussion Paper. Washington, D.C.: World Bank Group. Available: <http://documents.worldbank.org/curated/en/639541545281356938/Intertemporal-Dynamics-of-Public-Financing-for-Universal-Health-Coverage-Accountingfor-Fiscal-Space-Across-Countries>.

⁴ World Bank Group. 2018. *The Human Capital Project*. Washington DC: International Bank for Reconstruction and Development.

of actual goods and services consumed in an economy over time (based on changes in the GDP deflator). The GDP deflator is defined as the ratio of the GDP at market prices in current U.S. dollars to the GDP at market prices in constant (2000) U.S. dollars.⁵

Low Income Countries (LICs): Are currently defined as those countries that in 2018 had per capita income of US\$1,025 or less.

Lower Middle Income (LMI) Countries: Are currently defined by the World Bank as those countries that in 2018 had per capita income between US\$1,026 and US\$3,995.

Nominal: Also referred to as ‘current’, refers to the value of a monetary variable without any adjustments made for changes in prices of goods and services due to inflation.

Non-Tax Revenue: Revenue received by the general government from other revenue sources other than taxes. These include social contributions, grants, and other revenue such as property income, sales of goods and services, and fines, penalties, and forfeits.

Out-of-Pocket (OOP): Households’ out-of-pocket expenditure is a direct payment for health care goods and services from the household primary income or savings (no third-party payer is involved). The payment is made by the user at the time of the purchase of goods or use of services.

Pritchett Landscape: is a way of classifying trend patterns in growth rates of any variable inspired by and building upon Pritchett (2000).⁶ Statistically identifiable policy-relevant ‘break points’ are determined using Pritchett’s method as the year when a break in trend for a variable can be identified by estimating the equation below and finding the breakpoint year (t^*) that minimizes the sum of squared errors over all t :

$$Y_t = a_1 * I(t \leq t^*) + b_1 t * I_1(t \leq t^*) + a_2 * I(t > t^*) + b_2 t * I(t > t^*) + \varepsilon_t$$

where Y is any variable of interest such as per capita GDP or per capita public spending on health, $I()$ is an indicator function (1 if the argument holds; 0 otherwise), $t = [t_0, \dots, T]$ where t_0 is 2000, T is 2017, t^* is the breakpoint year that is chosen subject to the constraint that each segment of the trend covers a minimum of three years (that is, $t^* - t_0 \geq 3$ and $T - t^* \geq 3$) and a and b are the intercept and time-trend slope, respectively, where the suffix 1 or 2 represent the estimates before and after the estimated breakpoint. Once the breakpoint is determined, the landscape of growth patterns is classified as follows:

Pattern	Growth rate	
	Before break	After break
Steep Hill	≥ 5 percent	≥ 5 percent
Hill	≥ 3 percent	≥ 3 percent
Accelerator	0 percent \geq & < 3 percent	≥ 3 percent
Steep Valley	< 0 percent	≥ 5 percent
Plateau	≥ 3 percent	0 percent \geq & < 3 percent
Valley	< 0 percent	0 percent \geq & < 3 percent
Plain	0 percent \geq & < 3 percent	0 percent \geq & < 3 percent
Mountain	≥ 3 percent	< 0 percent
Cliff	0 percent \geq & < 3 percent	< 0 percent
Slippery Slope	< 0 percent	< 0 percent

⁵ World Bank Group Data Catalog. <https://datacatalog.worldbank.org/gdp-deflator-index-2000100-us-series>.

⁶ Pritchett, Lant. 2000. “Understanding patterns of economic growth: searching for hills among plateaus, mountains, and plains (English)”. The World Bank economic review. -- Vol. 14, no. 2 (May 2000), pp. 221-250.

Social Health Insurance (SHI): Social health insurance is a mandatory financing arrangement that ensures access to health care based on a compulsory payment of a non-risk-related contribution by or on behalf of the eligible person. Contributions are raised mainly through wage-related (and occasionally income-related) contributions that are shared between employers and employees. The social health insurance scheme is established by a specific public law, defining, among others, the eligibility, benefit package and rules for the contribution payment.

Tax Revenue: Revenue received by the general government from taxes. Taxes are compulsory, unrequited amounts receivable by government units from individuals, public enterprises, trade, royalties on natural resources and/or foreign aid.

Total Government Expenditure: Total expense and the net acquisition of nonfinancial assets by the government in order to fulfill their role of providing public goods and services and redistribution of income and wealth.

Total Government Revenue: Taxes, social contributions, grants receivable, and other revenue received by the government. Governments collect revenue in order to finance selected public goods and services that they provide to their citizens and to redistribute income and wealth by means of transfers.

Universal Health Coverage (UHC): As defined by the World Health Organization,⁷ means that all people and communities can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship.⁸

Universal Health Coverage (UHC) Service Coverage Index: Measures the average coverage of essential services that include reproductive, maternal, newborn and child health, infectious diseases, noncommunicable diseases and service capacity and access, among the general population (as well among the most disadvantaged population).

Upper Middle Income (UMI) Countries: Are currently defined by the World Bank as those countries that in 2018 had per capita income between US\$3,996 and US\$12,375.

⁷ World Health Organization 2019. "Universal Health Coverage" Accessed September 2020. Last updated January 2021.

⁸ World Health Organization 2021. WHO Universal Health Coverage data portal. Accessed September 2020. Last updated January 2021.

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