

*The World Bank*

# Fiscal Space for Health in Bangladesh

*Towards Universal Health Coverage*

May 2016



# Table of Contents

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Table of Contents.....	ii
Acknowledgements .....	iii
Abbreviations .....	iv
Executive Summary .....	v
<b>1. Introduction: Why does fiscal space for health matter?.....</b>	<b>1</b>
<i>A significant health system agenda will require additional resources .....</i>	<i>1</i>
<i>Low government spending and high OOP characterize health financing in Bangladesh.....</i>	<i>4</i>
<b>2. Macroeconomic conditions and fiscal space for health.....</b>	<b>8</b>
<i>Robust growth – but low tax revenues impede prospects for higher spending.....</i>	<i>8</i>
<i>Boosting tax revenue collection – including tobacco excises.....</i>	<i>11</i>
<b>3. Prioritizing health in the government budget .....</b>	<b>13</b>
<i>Overcoming the very low budget share allocated to health .....</i>	<i>13</i>
<b>4. Development assistance for health .....</b>	<b>15</b>
<i>A diminishing source of fiscal space.....</i>	<i>15</i>
<b>5. Introducing new sources of funding for health: Insurance options.....</b>	<b>17</b>
<i>The promise and pitfalls of introducing health insurance for fiscal space – International experience</i>	<i>18</i>
<i>Insurance options for the formal sector in Bangladesh.....</i>	<i>21</i>
<b>6. Options for generating efficiency gains in the public system .....</b>	<b>24</b>
<i>Room for efficiency gains by improving budget execution .....</i>	<i>25</i>
<i>Human resources: Modest spending but a lingering problem of absenteeism .....</i>	<i>26</i>
<i>Improving the procurement and maintenance of drugs and equipment .....</i>	<i>28</i>
<i>Hospitals – not a major source of inefficiency .....</i>	<i>30</i>
<i>Taking stock of efficiency.....</i>	<i>32</i>
<b>7. How much fiscal space? Illustrative scenarios for health spending .....</b>	<b>33</b>
<b>8. Way forward.....</b>	<b>36</b>
<b>9. References .....</b>	<b>37</b>

## Acknowledgements

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This report was prepared by Veronica Vargas (Senior Health Economist, World Bank), Tahmina Begum (Consultant, World Bank), Sayem Ahmed (Consultant, World Bank), and Owen Smith (Senior Economist, World Bank).

The team is deeply appreciative of the guidance received from Md. Ashadul Islam, Director General, Health Economics Unit, Ministry of Health and Family Welfare, Government of Bangladesh. The authors would also like to thank the World Bank peer reviewers Magnus Lindelow and Ajay Tandon for their comments, and Simon Davies for significant contributions to the report (including peer review). They would also like to extend their acknowledgments to Mukesh Chawla, Bushra Binte Alam, Nedim Jaganjac, Somil Nagpal, Tekabe Ayalew Belay, Patrick Mullen, Joy de Beyer, Rafael Cortez, Lin Shi, Shakil Ahmed, Uttam Sharma, Laurent Bossavie and Laura Agosta. Valuable information and feedback was also provided by Rodrigo Cubero and Stella Kaendera from the IMF.

## Abbreviations

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ALOS	Average length of stay
BEmOC	basic emergency obstetric care
BGMEA	Bangladesh Garments Manufacturers & Exporters Association
BNHA	Bangladesh National Health Accounts
CEmOC	comprehensive emergency obstetric care
CIDA	Canadian International Development Agency
DFID	UK Department for International Development
EC	European Commission
FY	fiscal year
GDP	gross domestic product
GFF	Global Financing Facility
GSP	Generalized Scheme of Preferences
HEU	Health Economics Unit
IMF	International Monetary Fund
KFW	Kreditanstalt für Wiederaufbau Germany
LICs/LMICs	Low-income countries/Lower-middle income countries
MCH	Maternal and child health
MOHFW	Ministry of Health and Family Welfare
NHA	National Health Accounts
NIPORT	National Institute of Population Research and Training
OECD	Organization for Economic Cooperation and Development
OOP	out-of-pocket
PER	Public Expenditure Review
PETS	Public Expenditure Tracking Surveys
PHC	primary health care
RMG	ready-made garment
Sida	Swedish International Development Agency
SWAp	Sector Wide Approach
Tk	Taka
UHC	Universal Health Coverage
UNFPA	United Nations Population Fund
VAT	value-added tax

## Executive Summary

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**A strong health financing system will be an important priority as Bangladesh seeks to meet the expectations of its population and embrace its future as a middle-income country.** In similar countries around the world, governments face a complex agenda to both maintain steady progress in health outcomes – in terms of familiar challenges such as maternal and child health as well as newly emerging chronic diseases characteristic of an older population – and to ensure that households are protected against the potentially high cost of medical care.

**The objective of this report is to present policymakers with a foundation for an informed discussion about government health spending and future health financing options in Bangladesh.** It analyzes alternative sources of additional health financing and their potential contribution to higher spending in the sector. The findings will be relevant to both the Ministry of Finance (MoF) and Ministry of Health and Family Welfare (MoHFW) and can inform a dialogue between the two Ministries as the government seeks a way forward.

**Fiscal space for health is a particularly important policy challenge for Bangladesh because it currently has one of the lowest levels of government health spending in the world.** At present it spends just 0.8% of GDP (or \$6.20 per capita) on health, or slightly over half the South Asia regional average of 1.3% of GDP, which is itself lower than the average of 1.6% of GDP among lower middle-income countries. Low government spending translates into inadequate service coverage for key interventions that would improve population health and a high reliance on out-of-pocket expenditures (OOP). These payments account for 63 percent of total health spending in Bangladesh, a higher share than regional or lower middle-income country (LMIC) averages. As a result, a large number of households fall into poverty each year due to medical costs. Without increases in the government health budget, improvements in service coverage are likely to stall and OOP will continue to rise in line with growing demand for health care services, thus making the attainment of the Sustainable Development Goal (SDG) of achieving universal health coverage (UHC) an ever more elusive objective.

**Fiscal space for health refers to the availability of budgetary room that would allow a government to increase health spending without jeopardizing the sustainability of its fiscal position.** An assessment of fiscal space typically entails an examination of whether and how a government could feasibly increase its expenditure in the short-to-medium term, and do so in a way that is consistent with macroeconomic fundamentals and without crowding out productive expenditure in other sectors. In general there are five potential sources of fiscal space: (1) economic growth which translates into more overall government revenues and, in turn, a larger health budget; (2) a reprioritization within the budget in favor of health, resulting in higher expenditures; (3) increased overseas development assistance (ODA) for health; (4) an increase in health-specific resources, such as earmarked taxation or insurance contributions; and (5) greater efficiency in the use of existing health budget resources such that additional resources become available for new spending.

**The key findings of the report with respect to each of the five sources of fiscal space are as follows:**

- *Economic growth* will be a critical long-term source of potential additional fiscal space for health. Bangladesh has enjoyed dynamic growth averaging about 6 percent per year over the past decade, and this strong performance is expected to continue over the next five years. However, it also has one of the lowest tax-to-GDP ratios in the world. Thus the government's capacity to translate this growth into higher public revenues and allocate the resources to various sectors including health is correspondingly limited. Going forward it will be essential to strengthen revenue collection in order to ensure that robust growth results in additional resources for all development priorities.
- *Reprioritization*: The government's allocation to MOHFW represented just 5 percent of the total government budget in 2013-15, after many years in the 6 to 7 percent range. Other South Asian and low-income countries typically allocate 8 to 10 percent of their budgets to the health sector. While Bangladesh has numerous other development priorities (and must manage its deficit prudently), a gradual transition of this ratio towards international benchmarks would be desirable. Over the short to medium-term, reprioritization represents a significantly larger potential source of fiscal space for Bangladesh than economic growth and improved tax collection alone.
- *Development assistance*: This is the least likely way to generate significant fiscal space. Some of the international donors providing development assistance are leaving the sector, and while some new initiatives are emerging, the most likely outcome is a steady decline of net assistance to the health sector over the medium term. At best, a flat trend might be maintained in the short-term.
- *New sources of health financing*: The 20-year Bangladesh Health Financing Strategy envisions contributions from the formal and informal employed sector to the Social Health Protection Fund (SHPF). The formal sector – for example, ready-made garment workers or civil servants – offer some potential for revenue mobilization, but also significant challenges with regard to designing, operationalizing and managing an insurance system. Meanwhile, international experience highlights the difficulty of collecting contributions from the informal sector, and Bangladesh is likely to encounter similar challenges. Short-term measures for fiscal space should not come at the expense of long-term coherence of the health financing system. Realistically, insurance contributions are more likely to generate fiscal space only over a medium to long-term horizon.
- *Efficiency gains*: Overall, Bangladesh's health system appears relatively efficient (good outcomes at low cost), and there is evidence that it is becoming more so in several respects. However, there are also inefficiencies, particularly related to budget execution, addressing HR absenteeism (especially among medical officers) and productivity, and ensuring that facilities are adequately supplied with drugs and equipment. But in view of the currently very low sectoral allocation, achieving greater efficiency does not represent a significant source of additional fiscal space.

**The report also presents illustrative scenarios to show the potential impact that these channels can have on fiscal space for health in Bangladesh going forward.** In summary, financing health in Bangladesh over the short to medium term will require a combination of existing and additional domestic resources that result from economic growth, improved tax collection, and most significantly a moderate re-prioritization of the budget in favor of the health sector. A longer-term agenda will relate to the possibility of generating additional resources through individual contributions starting with the formal employed sector, if that is the path chosen.

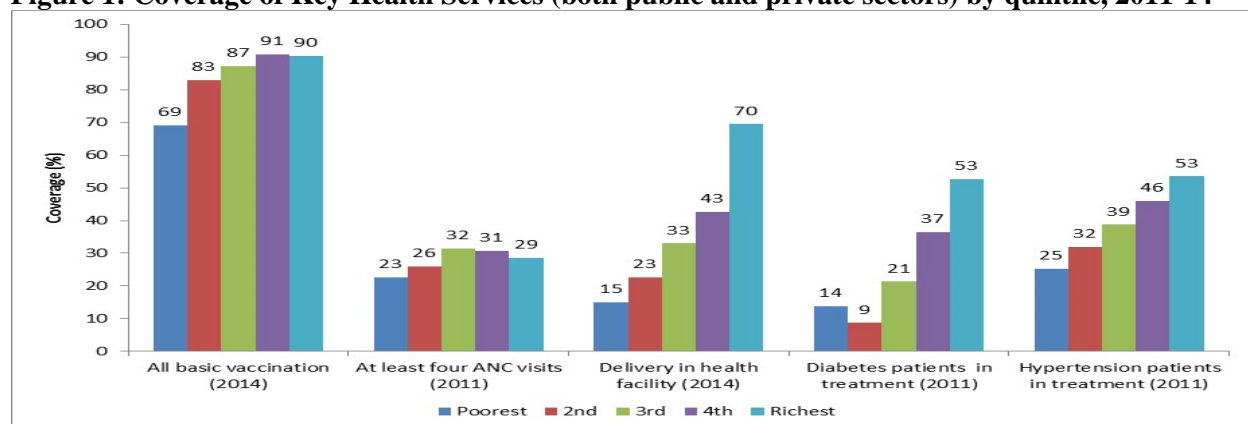
# 1. Introduction: Why does fiscal space for health matter?

## *A significant health system agenda will require additional resources*

Over the last few decades, Bangladesh has made remarkable progress on most health outcomes, especially maternal and child health. As a result, the country achieved Millennium Development Goal 4 (to reduce child mortality) and fell just short of achieving MDG 5 (to improve maternal health) by 2015. Since 1990, the maternal mortality ratio declined by 69 percent to 176 deaths per 100,000 live births in 2015. Over the same period, the under-five child mortality rate declined by 74 percent to an estimated 38 deaths per 1,000 live births in 2015. In the last decade, the country also made improvements in the nutritional status of children under age five. Since 2004, the level of stunting declined by 29 percent from 51 to 36 percent in 2014 (NIPORT 2015). These achievements are the result of successful programs for immunization, oral rehydration salt therapy, family planning and nutritional programs. In part they can also be attributed to non-health policies and interventions, such as an increase in female literacy, access to microcredit, access to safe drinking water, and rural infrastructure development (Chowdhury et al. 2013).

However, a significant agenda remains, due in part to continued low coverage of certain key health interventions, especially among the poor (Figure 1). For example, despite long-standing programs, the coverage of prenatal care and institutional births is very low. Only 23 percent of the poorest quintile and 29 percent of the richest quintile have at least four prenatal care visits, compared to 36 percent and 66 percent, respectively, for the same groups in low-income countries (LICs) (WHO and World Bank 2015). The SDG goals to reduce maternal mortality to 70 per 100,000 and under-five mortality to 25 per 1,000 remain some way off. Most UHC tracer indicators remain significantly below the proposed 80 percent target (Table 1). There are also significant inequalities in health outcomes. While 54 percent of children in the poorest quintile are stunted, the rate is less than half (26 percent) among children in the wealthiest quintile (NIPORT 2013a). These inequalities have remained persistent over the period from 1993–2011, with the exception of neonatal mortality, which experienced a reduction in inequality (Rama et al. 2015). Also, health outcomes for the poor in Dhaka are worse, in contrast to many other countries where health outcomes for the urban poor are better than the health outcomes for the rural poor.

**Figure 1: Coverage of Key Health Services (both public and private sectors) by quintile, 2011-14**



Source: NIPORT 2013a and 2015.

**Table 1: UHC tracer indicators in Bangladesh, latest available data**

	Family planning	Ante-Natal Care	Skilled birth attendance	Immunization (DPT3)	Tobacco non-use	Water	Sanitation	Anti-retrovirals	Tuberculosis
Bangladesh	61%	28%	44%	95%	80%	87%	61%	14%	93%

Source: World Bank 2016a

**Meanwhile Bangladesh is also undergoing a rapid shift in the burden of disease.** The overall share of the disease burden (as measured by disability-adjusted years of life lost or DALYs) contributed by maternal causes and communicable diseases declined from 63 to 36 percent from 1990 to 2013, while the share attributable to non-communicable diseases (NCDs) rose from 29 to 54 percent. These shifts are the result of a rapid demographic and epidemiological transition characterized by a growing adult population and the associated rise in NCDs, including injuries (El-Saharty 2013). Of the top 12 causes of death in 2013, six were NCDs such as ischemic heart disease, stroke, and diabetes (IHME 2015).

**In order to both increase the coverage of basic interventions while scaling up new NCD services, the health system will require significant additional funding going forward.** Bangladesh has made remarkable progress despite a small health budget, but this will be increasingly difficult to sustain, particularly since health interventions for NCDs tend to be more expensive (although not uniformly so) compared to maternal and child health services. Low government spending, as discussed below, is a major impediment to improving coverage of essential health services.

**A larger health budget will be necessary not just to improve health outcomes, but also to provide better financial protection to the population.** Out-of-pocket expenditures, which now account for 63 percent of total health spending, have shown an increasing trend in recent years. The result is a high incidence of both catastrophic (i.e., exceeding a certain threshold of total household spending) and impoverishing (i.e., pushing a household below the poverty line) health expenditures. High OOP also contributes to the low and unequal coverage profiles shown in Figure 1. Thus, more government financing for the health sector will be needed to reverse these trends. In brief, Bangladesh has been slow to embark on the “health financing transition” common in MICs whereby the reliance on OOP declines and it is replaced by tax-financed sources (i.e., general government revenues or social health insurance).

**Assessing fiscal space can shed light on the options for mobilizing additional resources for health.** Fiscal space refers to the availability of budgetary room that would allow a government to increase health spending without jeopardizing the sustainability of its fiscal position. An assessment of fiscal space typically entails an examination of whether and how a government could feasibly increase its expenditure in the short-to-medium term in a way that is consistent with macroeconomic fundamentals and without crowding out productive expenditure in other sectors.

**In general there are five potential sources of fiscal space.** These are as follows: (1) economic growth which translates into more overall government revenues and, in turn, a larger health budget; (2) a reprioritization within the budget in favor of health, resulting in higher expenditures; (3) increased development assistance for health; (4) an increase in health-specific resources, such as earmarked taxation or insurance contributions; and (5) greater efficiency in the use of existing health budget resources such that additional resources become available for new spending.



**Although the report will discuss these five sources of fiscal space largely as independent topics, there are clearly important linkages among them.** For example, a more efficient health system is also more likely to receive additional resources from the government budget. In contrast, a substantial amount of donor assistance for health may result in reduced allocations to health from the general budget.

**The objective of this report is to analyze these options for generating additional fiscal space in Bangladesh.** It is intended to provide policymakers with a foundation for an informed discussion about options for additional government health spending, including broader health financing options and their potential contribution to higher spending in the sector. It builds on the well-established existing literature for studying fiscal space for health (e.g., Tandon and Cashin 2009). Other recent country studies include India (Nagpal and Tandon, 2014), Nepal (World Bank 2011), and Indonesia (World Bank 2009).

**The need for fiscal space in Bangladesh is widely acknowledged, including for other sectors.** For example, the IMF recently noted that “mobilizing domestic revenue should be a foremost policy priority to create fiscal space for increasing public investment in critical infrastructure and strengthened social safety nets” and later on that “Bangladesh has one of the world’s lowest ratios of public spending to GDP in these areas” (IMF 2016).

**The report is structured as follows.** After this introductory section establishes the rationale for looking closely at fiscal space for health in Bangladesh, the next five sections analyze each of the five potential sources of fiscal space. Section 7 offers some illustrative scenarios of how much fiscal space can be generated from different sources. The final section points to the way forward.

#### **Box 1: Data sources**

**A wide range of data sources was used for this study.** The public and private expenditure analysis draws upon data and information from the World Bank Public Expenditure Review (PER) 2015, the latest Bangladesh National Health Accounts (NHA) 1997-2012 of the Ministry of Health and Family Welfare (2015), and the MOHFW Public Expenditure Review drafted in 2015. Macroeconomic indicator data have been drawn from World Bank and International Monetary Fund (IMF) reports, including the 2015 Article IV consultation as reported in February 2016. Data on mortality indicators have been drawn from the Maternal Mortality Survey and the Health and Morbidity Status Survey 2012. Health coverage estimates are based on the Bangladesh Demographic and Health Survey 2011–2012. Data on the utilization of hospital services are from the Annual Health Bulletin of the Director General of Health Services and the Household Income & Expenditure Survey 2010. The Bangladesh Health Facility Survey was used in the analysis of health facility readiness to provide services across geographic areas. Data provided in interviews with the managers of existing health insurance schemes were used to determine the value of contributions of the formal sector.

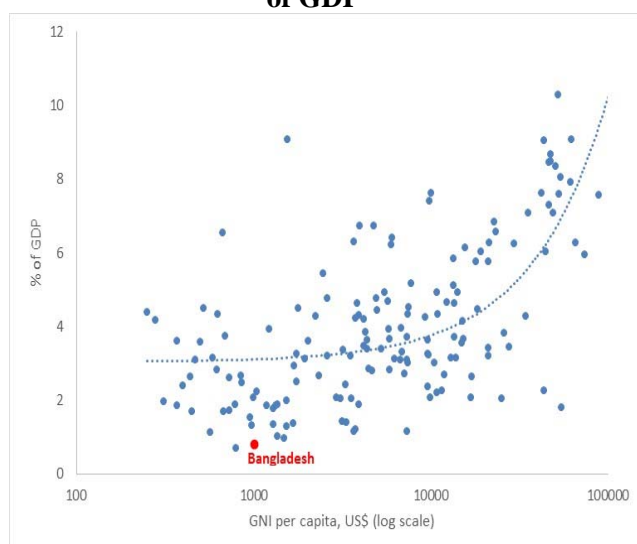
*Source:* Authors

## Low government spending and high OOP characterize health financing in Bangladesh

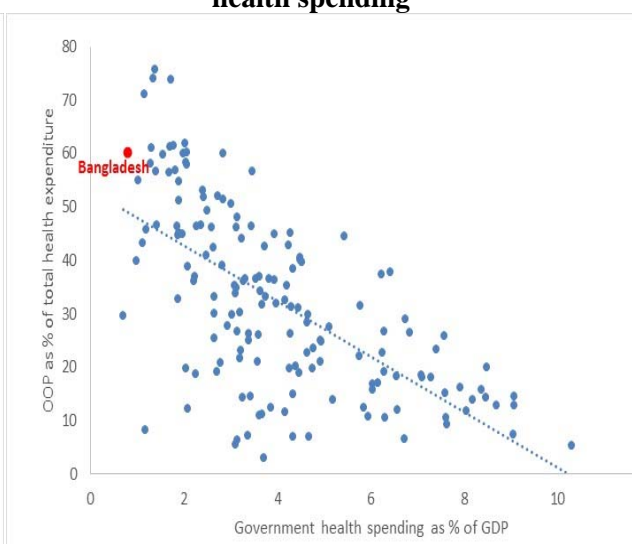
**Bangladesh's government health expenditure, measured as a share of GDP, is one of the lowest in the world.** In 2012, total (public and private) health spending was 3.5 percent of GDP, slightly lower than the average for South Asian countries (3.7 percent) and much lower than the average for low-income countries (5 percent). But government health expenditure is just 23 percent of total health expenditures, and has been stagnant at around 0.8-0.9 percent of GDP during the last decade. Thus, Bangladesh's government health expenditures are very low by global standards (Figure 2). In monetary terms, total health spending per capita in Bangladesh in 2012 was US\$27 (US\$68 purchasing power parity). Of this total, only about US\$6.20 represents government spending (including budget support from donors), US\$2.30 is contributed by international donors to NGOs, about US\$17.10 is paid out-of-pocket by households for health services, and US\$1.40 is voluntary payments (voluntary health insurance, NGOs, corporations). A further discussion of donor assistance can be found in Section 4.

**Due to low public expenditure on health, out-of-pocket (OOP) payments by households account for 63 percent of total health expenditure.** Globally, there is a strong negative correlation between the two indicators (Figure 3). In Bangladesh, OOP expenditure is three times higher than the 20 percent limit suggested by *World Health Report 2010* to ensure financial protection. It is also substantially higher than the target (30 to 40 percent) set by countries in the World Health Organization South East Region and Western Pacific Region (WHO 2010). Moreover, OOP has shown an increasing trend in recent years (Table 2). Most OOP spending finances the provision of care by private providers, with nearly 42 percentage points going to medicine retailers, 11 percentage points to ambulatory providers, and 10 percentage points to private hospitals and a diverse range of medical providers, including traditional birth attendants and unqualified medical practitioners. Of course low government health spending also poses a challenge to the achievement of better service coverage (as discussed earlier).

**Figure 2: Public Health Expenditures as Share of GDP**



**Figure 3: Reliance on OOP and Government health spending**



Source: World Bank 2016a

**Table 2: Key Health Financial Indicators in the Health System, Bangladesh, 2005–12**

	2005	2006	2007	2008	2009	2010	2011	2012
Total health expenditure per capita (nominal US\$)	\$14	\$14	\$16	\$18	\$21	\$24	\$25	\$27
Total health expenditures as % of GDP	3.1%	3.2%	3.3%	3.3%	3.3%	3.5%	3.6%	3.5%
Total public health expenditures as % of GDP	0.83%	0.95%	0.89%	0.84%	0.83%	0.90%	0.90%	0.82%
Public health expenditures as % of total health expenditures	26.8%	29.2%	27.2%	25.5%	25.0%	25.7%	24.7%	23.1%
Private health expenditures as % of total	73.2%	70.8%	72.8%	74.5%	75.0%	74.3%	75.3%	76.9%
Donor contributions to NGOs as % of total exp.	8.7%	7.3%	7.5%	7.4%	8.4%	8.0%	7.7%	8.4%
Out-of-pocket expenditure as % of total health expenditures	59.9%	58.7%	61.2%	60.3%	61.1%	61.0%	61.3%	63.3%
Private insurance as % of private health expenditures	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

*Sources:* Ministry of Health and Family Welfare 2015.

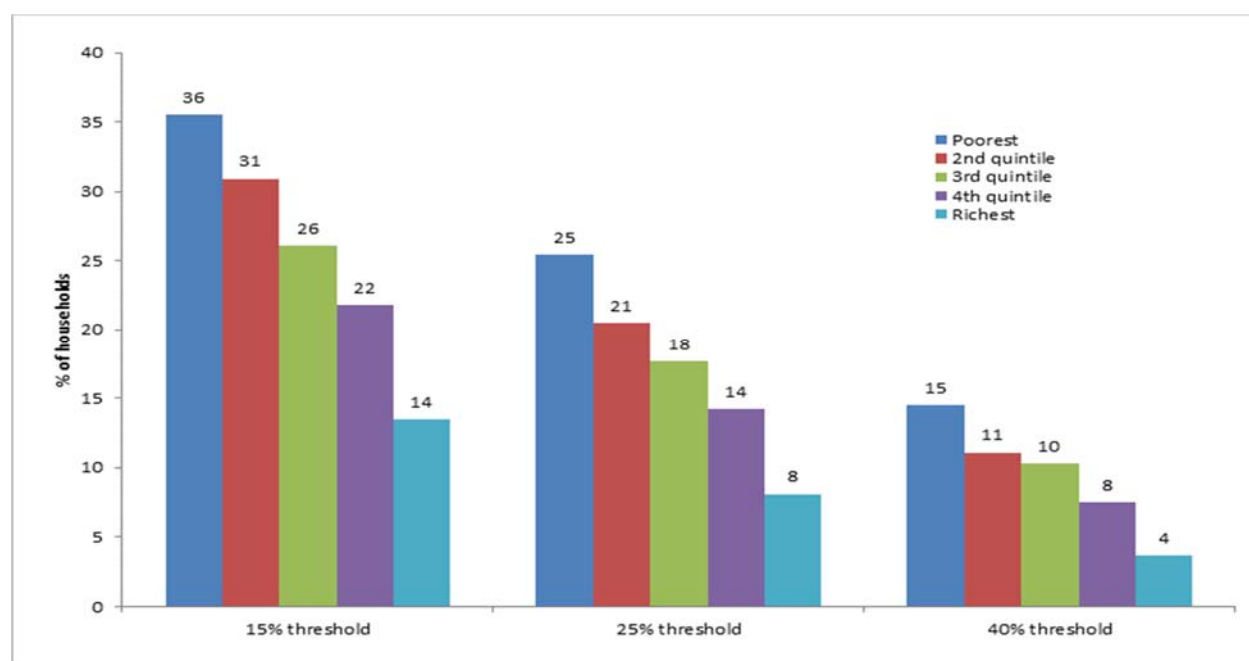
*Note:* Bangladesh National Health Accounts figures for public expenditure include expenditure of MOHFW and other ministries that incur expenditures on health. Donor assistance is included in public expenditure.

**OOP expenditure in Bangladesh imposes a disproportionately higher burden on the poor than the non-poor.** Since people do not know when they might fall sick and how much it will cost if they do, mechanisms for pooling and risk-sharing are important. Otherwise, OOP expenditures put people at risk of catastrophic and/or impoverishing health care expenditures. Figure 4 shows the incidence and intensity of household catastrophic health expenditures in Bangladesh at 15 percent, 25 percent, and 40 percent of total nonfood expenditure, by quintile. The poorest quintiles are the most affected by OOP health expenditures at all thresholds (Khan et al. forthcoming), although the rich spend more in absolute terms. High OOP also constrains the ability of the health financing system to fulfill the key function of redistribution from the better off to the poor.

**Cross-country benchmarking of health financing indicators shows that Bangladesh has the highest out-of-pocket expenditures in the region.** It stood at 63 percent in 2012, significantly higher than comparator countries (Table 3). Most countries are closer to 50 percent. Thus Bangladesh is falling behind in the so-called “health financing transition” that countries undergo as they become richer, since a declining reliance on OOP (along with higher total health spending and less reliance on external assistance) is a key feature of this transition.

**The financing of health services in Bangladesh is highly centralized, and the budget is allocated according to provider characteristics.** Public expenditures are allocated according to the number of facilities, number of staff per facility, and number of beds in the case of hospitals. There is no relationship to the size of the local population, their health care utilization or health status. This input-based financing approach can result in significant mismatches between resource allocation and population need. A brief overview of health service provision in Bangladesh is provided in Box 2.

**Figure 4 Proportion of Households with Catastrophic Health Expenditures by Quintile at different Thresholds of Nonfood Expenditure, 2010**



Source: Khan, Ahmed, and Evans, forthcoming.

**Table 3: Health Financing Indicators for Bangladesh and Selected Countries, 2012-14**

Country / Region	Total Health Expenditure, Per Capita (US\$)	Total Health Expenditure Percent of GDP	Government Health Expenditure as % of Total Health Expenditure	Government Health Expenditure as % of GDP	Out-of-Pocket Expenditure as % of Total Health Expenditure
Bangladesh	27	3.5	23.1	0.8	63
Bhutan	89	3.6	73	2.6	25
Cambodia	61	5.7	22	1.3	74
China	420	5.5	56	3.1	32
India	75	4.7	30	1.4	62
Nepal	40	5.8	40	2.3	48
Pakistan	36	2.6	35	0.9	56
Sri Lanka	127	3.5	56	2.0	42
Thailand	360	6.5	86	5.6	8
Vietnam	142	7.1	54	3.8	37
Low Income	37	5.7	39	2.2	40
Lower-Middle Income	89	4.5	36	1.6	56
South Asia region	67	4.4	31	1.4	61

Sources: MOHFW 2015; World Bank WDI 2016

## Box 2: Bangladesh's health system organization at a glance

The health care system in Bangladesh comprises a mix of public and private institutions. In the public sector, the Ministry of Health and Family Welfare (MOHFW) is the leading organization for policy formulation and planning, and one of the major health services providers. The private for-profit sector is run by commercial entrepreneurs and informal providers. It is expanding at a rapid pace in response to robust economic growth and the growing middle class. Private hospitals in particular are growing in number and represent 70 percent of total hospital expenditures. According to 2012 data, utilization rates for the private sector are two-and-a-half times those of the public sector, at 107 per 1,000 people compared 42 per 1,000 (BBS 2012). Meanwhile the public and private not-for-profit sectors have pursued a pro-poor strategy in service delivery. Although not explicitly coordinated, private NGOs have concentrated direct action on cost-effective interventions such as family planning, immunization, oral rehydration therapy, tuberculosis, and vitamin A supplementation. The table below summarizes key features of the public, private, and NGO sectors.

**Table: Organization of the Health System**

	Characteristics	Number of health workers	Facilities	Expenditure (% of total)
<b>Government</b>	<ul style="list-style-type: none"> <li>Highly centralized</li> <li>Responsible for policy and regulation</li> <li>Operates nationwide preventive and curative services</li> </ul>	~22,000 doctors. ~18,000 nurses. ~25,000 paramedics/ paraprofessionals. ~67,000 community health workers.	128 secondary and tertiary hospitals with 29,278 beds 484 Upazila hospitals (subdistrict level and below) with 17,686 beds 13,070 community clinics in operation	23
<b>Private sector formal</b>	<ul style="list-style-type: none"> <li>High-end secondary, tertiary care and diagnostic centers</li> <li>Loosely regulated</li> <li>Rapid growth</li> </ul>	~40,000 doctors. ~5,000 nurses.	~ 3,000 hospitals and diagnostic centers with 45,000 beds ~64,000 licensed pharmacies	
<b>Private sector informal</b>	<ul style="list-style-type: none"> <li>Village doctors, first contact especially for the poor</li> <li>Allopathic and alternative care (faith-healing, Ayurvedic, Unani, homoeopathy); largely unregulated</li> </ul>	~50,000 traditional medical practitioners. ~90,000 homoeopathic practitioners. >170,000 drug-shop attendants >185,000 village doctors.	~1,100-bed hospital for Ayurvedic and Unani ~70,000 unlicensed drug shops	67
<b>NGOs</b>	<ul style="list-style-type: none"> <li>Mostly primary care to the poor, independently or contracted by local government to provide urban primary care</li> </ul>	~5,000 paramedics. >105,000 community health workers.	~1,000 public health center clinics or delivery centers	10

Sources: Ahmed et al. 2012; MOHFW 2014.

## 2. Macroeconomic conditions and fiscal space for health

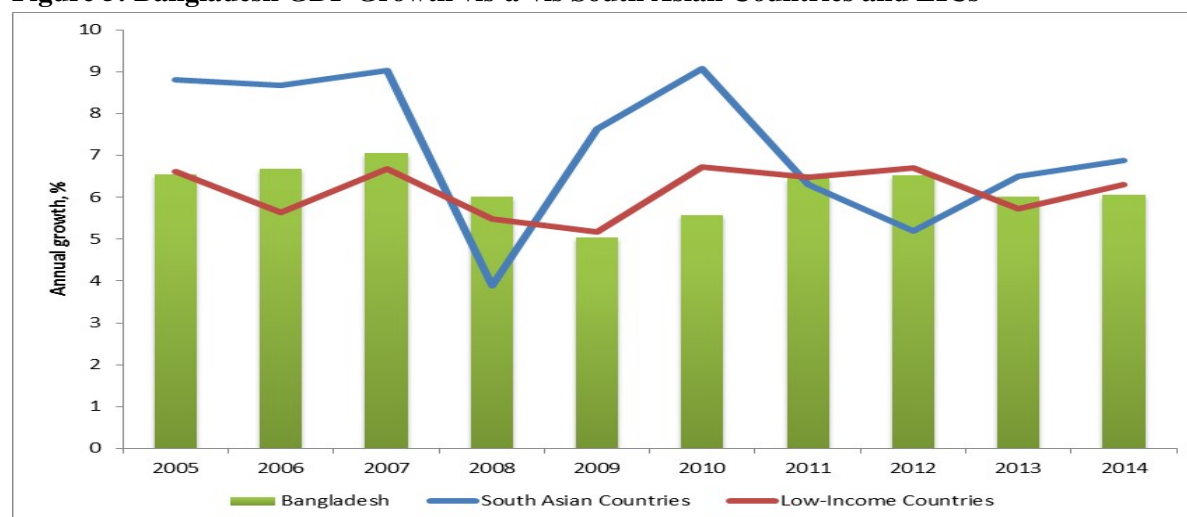
### *Robust growth – but low tax revenues impede prospects for higher spending*

**Economic growth is one of the most important long-term sources of additional fiscal space for health in all countries.** Globally there is a very strong correlation between income per capita and health spending per capita. For Bangladesh's long-term aspirations to achieve universal health coverage, rapid economic growth will be essential.

**Bangladesh has achieved robust growth in recent years and has recently been classified as a lower middle-income country (LMIC), with a GDP per capita of US\$1089 in 2014.** Economic growth has been strong, averaging 6.2 percent annually over the decade to 2014 (Figure 5). This is equal to the LIC average over the same period (and marginally higher than the LMIC average), but 1 percentage point slower than the South Asia average (World Bank 2014a). Poverty was halved between 2000 and 2010. The poverty headcount fell to about 31.5 percent and the extreme poverty rate fell to 17.6 percent in 2010 (Jolliffe and Shariff et al. 2013).

**The medium-term outlook foresees continued strong economic growth in the years ahead.** The IMF forecasts 7 percent real GDP growth through 2020. However, there are some risks to this outlook. The re-emergence of political turmoil as in 2014 would affect both supply and demand, slowing growth and decreasing tax collections and, thus, revenues and public expenditures. The unrest also prompted certain concessionary tax measures (IMF 2014a). In addition, continued weakness in the state banking sector, and global economic uncertainty (whether in the European Union, Bangladesh's largest export destination, or in the Middle East, host to a large number of Bangladesh citizens who send significant remittances back home) could all pose significant challenges to the expectation of a positive growth trajectory. More broadly, natural disasters and global climate change also represent potential risks.

**Figure 5: Bangladesh GDP Growth vis-à-vis South Asian Countries and LICs**



Source: World Bank 2014a.

**With regard to macroeconomic policies, Bangladesh has shown a commendable record in maintaining fiscal discipline.** Prudent fiscal policies have kept the fiscal deficit and debt indicators under control, despite pressures on scarce public resources due to periodic natural disasters and the volatility of global prices for food, fuel, and fertilizer (World Bank 2015b). The central government’s fiscal stance is sustainable at the current and projected levels of the fiscal deficit (Table 3).

**However, the opportunity to translate robust economic growth into higher spending is limited by very low government revenues.** In fact, government revenues as a share of GDP are the lowest in the world. This ratio was 10.9 percent in FY2014 compared to 17.5 percent for South Asian countries. Bangladesh also has one of the lowest tax-to-GDP ratios in the world. A cross-region benchmarking exercise showed that Bangladesh’s tax revenue efforts are the lowest among comparator countries in South and East Asia (figure 6), and far below the average of OECD countries. There was some progress during 2009-13, however this was followed by a partial reversal in 2014 (Table 4). This indicates that government steps to translate economic growth into revenues will require sustained effort (PER 2015).

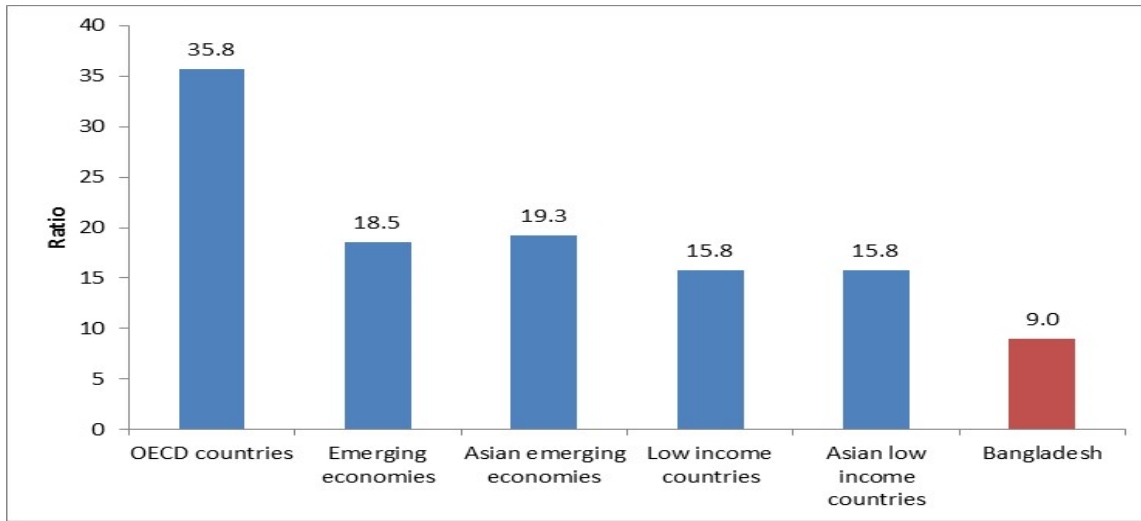
**Table 4: Fiscal Trends Compared with South Asia**

<b>Indicator (% GDP)</b>	<b>FY 06 (%)</b>	<b>FY 07 (%)</b>	<b>FY 08 (%)</b>	<b>FY 09 (%)</b>	<b>FY 10 (%)</b>	<b>FY 11 (%)</b>	<b>FY 12 (%)</b>	<b>FY 13 (%)</b>	<b>FY 14 (%)</b>	<b>FY 15 (%)</b>	<b>South Asia 2014 (%)</b>
General government revenue	9.6	9.3	9.8	9.5	10.0	10.4	11.2	11.2	10.9	9.9	17.5
General government expenditure	12.1	11.5	13.8	12.7	12.7	14.0	14.2	14.6	13.9	13.8	21.3
Overall budget deficit	-2.6	-2.2	-4.0	-3.2	-2.7	-3.6	-3.0	-3.4	-3.0	-3.9	-3.7
Primary deficit	-1.0	-0.6	-1.9	-1.0	-0.8	-1.9	-1.1	-1.4	-0.9	n.a.	-0.7
General government gross debt	42.3	41.9	40.6	39.5	36.6	35.3	33.8	34.7	33.9	34.0	62.1

*Source:* World Bank 2015b and IMF 2016.

**As a result, Bangladesh’s government expenditures are also very low compared with its South Asia peers and LICs.** Fiscal policy decisions on tax rates and tax collection determine total revenues, which then constrain public expenditures. The total public-expenditure-to-GDP ratio in Bangladesh during the last five years was 15.7 percent, compared with 20 percent in LICs and 21.3 in South Asia countries. Public expenditures as a share of GDP increased on average by 0.3 percentage points of GDP each year between FY2010 and FY2013, before sliding back in 2014-15 (World Bank 2014a, 2015).

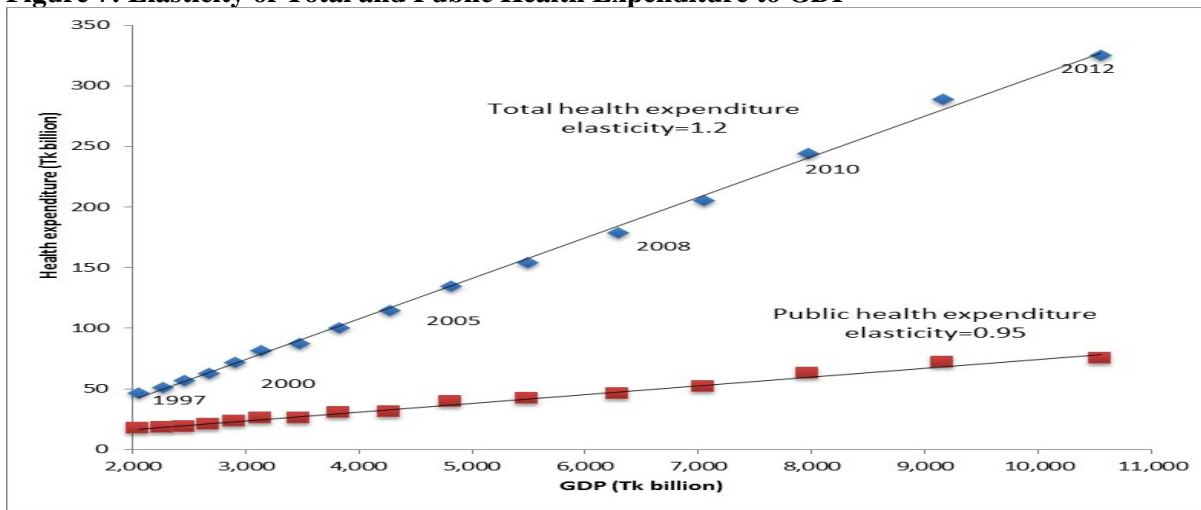
**Figure 6: Bangladesh Tax-Revenue-to-GDP Ratio vis-à-vis comparators**



Source: IMF 2014b.

**In recent years the responsiveness of public health expenditures to GDP growth has been low.** The responsiveness, or elasticity, of government health expenditure with respect to GDP gives an indication of whether favorable macroeconomic conditions are being translated into more public expenditure on health. The elasticity of government spending on health to GDP is estimated to be about 1.16 across all LICs (implying that a 1 percent rise in income, on average, leads to a 1.16 percent rise in government health spending, on average). In Bangladesh, expenditure data from 1997 to 2012 indicates an elasticity of public health spending to GDP has been estimated at 0.95 (Figure 7). If this trend continues, government health spending would fall further below its already very low share of GDP. Meanwhile the elasticity of total health expenditure, including out-of-pocket spending, is 1.2. The fact that total health expenditure is rising faster than GDP is common to many countries, but when coupled with a low elasticity of government spending, it implies a creeping trend towards higher out-of-pocket spending and inequality.

**Figure 7: Elasticity of Total and Public Health Expenditure to GDP**



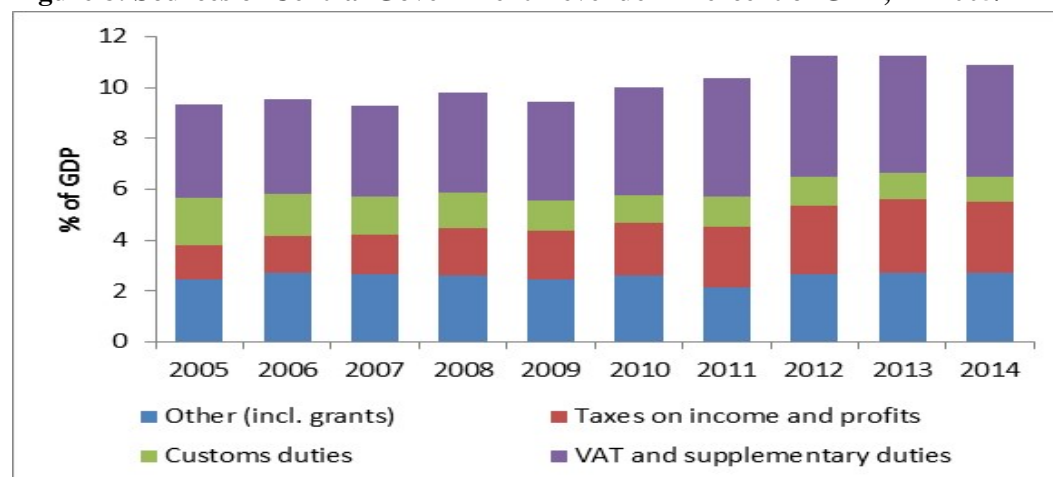
Source: Authors' estimates based on data from MOHFW (2015).



## Boosting tax revenue collection – including tobacco excises

**The main sources of government revenue are the value-added-tax (VAT) and the personal income tax.** There has been a slow shift in revenue composition, with a reduced dependency on trade-based taxes (e.g., customs duties) in favor of domestic taxation such as the VAT and the personal income tax. The share of import-based taxes of total tax revenue fell from 1.8 percent in FY2005 to 1.0 percent in FY2014 (Figure 8). In contrast, the share of domestic-based taxes increased from 5 percent in FY2010 to 7.1 percent in FY2014. Bangladesh’s revenue from the personal income tax is very low compared to other countries. Currently, just 1.2 percent of the population above the poverty line pay any taxes. Exemptions, avoidance, and evasion cost significant amounts of lost revenues (World Bank 2015b). Going forward, stronger domestic resource mobilization, particularly through the implementation of the new VAT, will be a key step for Bangladesh’s macroeconomic outlook (IMF 2016).

**Figure 8: Sources of Central Government Revenue in Percent of GDP, FY2005/14**



Source: IMF 2014.

**There have been recent efforts to boost tax revenue collections.** The National Board of Revenue developed a Tax Modernization Plan now under implementation. Efforts include increased automation of income taxes, implementation of an Automated System for Customs Data, and strengthening human resources at the National Board of Revenue. In addition, a new law to simplify the VAT regime is due to go into effect in July 2016. Registration for an online tax identification (ID) number has been robust. In 2014, over 1.1 million taxpayers had online IDs, and of these, 23 percent were new taxpayers. The IMF forecasts an increase of 1.5 percentage points in the tax-to-GDP ratio in the next five years (2015–19), mainly due to VAT, while the government’s 5-year plan aims for an increase of 6 or 7 percentage points.

**In brief, while economic growth tends to boost tax collection, Bangladesh has found it challenging to fulfill this potential.** As a result, tax revenues remain well below what is expected for Bangladesh’s level of development. Government revenue could increase if (a) the tax base was broadened by increasing the number of taxpayers; and (b) the efficiency of existing collection systems was increased. Among many potential options, one would be to replace the ad valorem taxes on cigarettes with a uniform specific tax. Box 3 has further details.

### Box 3: Tobacco taxation in Bangladesh

**Bangladesh's tax on tobacco is relatively high compared to other Asian countries.** The nominal percentage of the tax on the retail price is 76 percent, 61 percent of which is derived from an ad valorem excise tax and 15 percent from the VAT (WHO 2015). In 2011–12, the National Board of Revenue in Bangladesh collected about Tk 95 billion in taxes from the sale of cigarettes (table 6). This is a significant amount and corresponds to about 1 percent of GDP and about 10 percent of total tax revenues.

**Taxation of tobacco products in Bangladesh suffers from several key shortcomings.** Despite the seemingly impressive total tax revenues collected from tobacco, cigarette prices continue to be among the lowest among Asian comparator countries. The fact that the ad valorem taxes are charged as a percentage of the retail price increases the opportunities for tax evasion, since companies have greater opportunities to avoid higher taxes by manufacturing and selling lower-priced brands. In addition, the ad valorem tax is more challenging to administer due to the difficulties monitoring retail prices (WHO 2015). Given recent evidence, WHO recommends greater emphasis on uniform excise taxes, which will reduce the price gaps between higher- and lower-priced products. This change will help reduce substitution to lower-priced brands and thereby may also reduce overall tobacco utilization and increase the potential collection of tax revenues. In addition, taxation of bidis is also inadequate.

**Some countries earmark the revenues from tobacco taxation for the health sector, and Bangladesh has considered doing the same.** In contrast to general taxes, earmarked taxes establish a direct link between revenues from a specific tax and expenditures for a specific purpose. Earmarking of tobacco taxes can be done in many different ways. In the 2014-15 budget speech, it was proposed to impose a 1 percent 'health development surcharge' on all imported and domestically produced tobacco products, but this has yet to be implemented. This would be equivalent to about Tk 0.3 billion, or about 1.5 percent of the 2014 MOHFW budget. While earmarking tobacco revenues to the health sector has a certain appeal, especially for a Ministry of Health, it does not automatically result in more resources for health. For example, a Ministry of Finance could in principle reduce the health budget drawn from general tax revenues due to the availability of earmarked revenues, resulting in no (or less) net gain for health.

**Table: Adult Smoking Prevalence, Taxes and Prices: Cross Country Comparison**

Country	Adult Smoking Prevalence (2013)	Tax as Percentage of Retail Price	Price of a 20-Cigarette Pack of most Sold Brand (US\$ PPP)
Bangladesh	20	76	1.43
Indonesia	33	53	2.51
India	11	60	4.50
Nepal	18	28	3.02
Sri Lanka	11	74	9.24
Thailand	18	73	3.66

Source: WHO 2015.

**In brief, the macro-fiscal environment offers strong potential for greater fiscal space due to robust growth, but this is hindered by very low levels of revenue.** As a result, there is a low elasticity of public health expenditures to GDP. Moreover, it should be noted that with labor costs typically accounting for nearly half of government health spending, a significant share of economic growth is “automatically” consumed by HR in order to keep their remuneration levels on pace with the economy. Nevertheless, currently planned measures to improve the tax collection system should increase fiscal space for health in the medium term, as will economic growth. In the long-term both will be essential.

### 3. Prioritizing health in the government budget

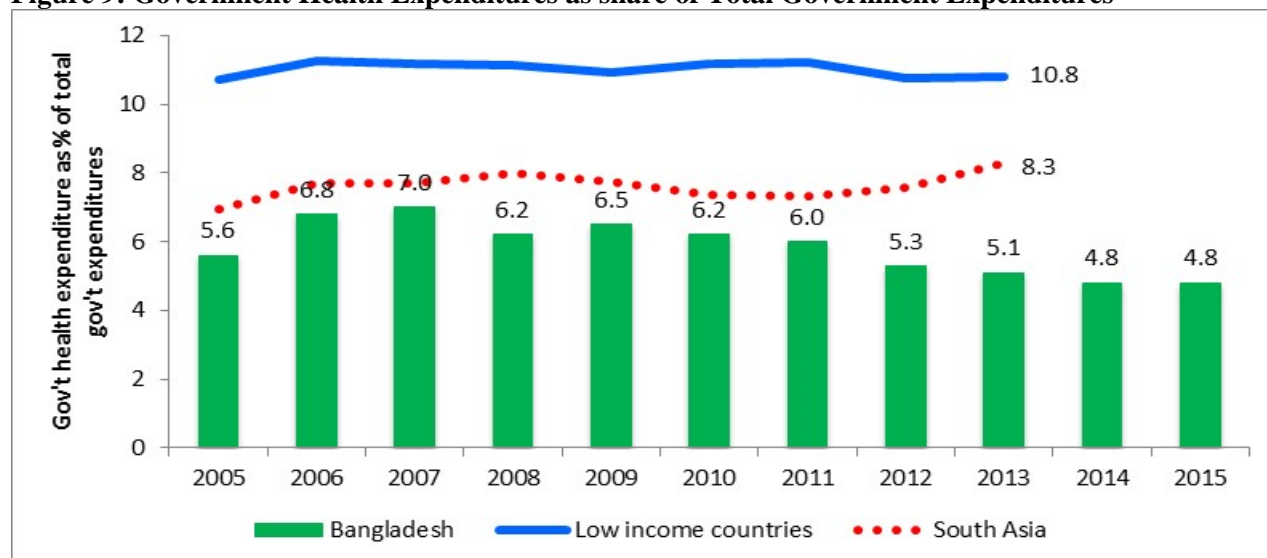
#### *Overcoming the very low budget share allocated to health*

The fiscal space for health generated by a growing economy and tax revenues can in principle be supplemented by reprioritizing sectoral allocations to increase the budget share allocated to health. In some countries the prioritization of health is not a concern, however a key message here is that the budget share for health in Bangladesh is currently very low, and thus addressing this pattern represents an important potential source of fiscal space.

The share of total government spending allocated to health typically increases with a country's income level. In developed countries this ratio is approximately 13 percent, but in LICs it is only about 8 percent (IMF 2010). There are several reasons for this. Rising incomes are associated with greater demand for health care, particularly once basic needs are met. Richer countries can also raise more tax resources as a share of GDP as the formal productive sector expands, including through income and payroll taxes. In addition, advanced countries tend to have older populations, with an accompanying burden of non-communicable diseases and thus a need for more expensive chronic care.

Contrary to the global trend, Bangladesh's government health spending as a share of total government expenditures has declined in recent years. As a result it is below its South Asian and lower-middle income peers. Figure 9 shows government health expenditure as a percentage of total government expenditure for Bangladesh compared to South Asian countries and LICs during 2005–13. Bangladesh spent just over 5 percent of its total budget on health in 2013, compared to 7 percent in 2007. By comparison, South Asian countries spend on average around 8.3 percent and LICs around 10.8 percent (HEU 2016; World Bank 2014a). Although the budget share allocated to health has declined, robust economic growth has ensured that the health budget has increased substantially in absolute terms. The health sector received an increase of about 80 percent in real terms between FY2006 and FY2014.

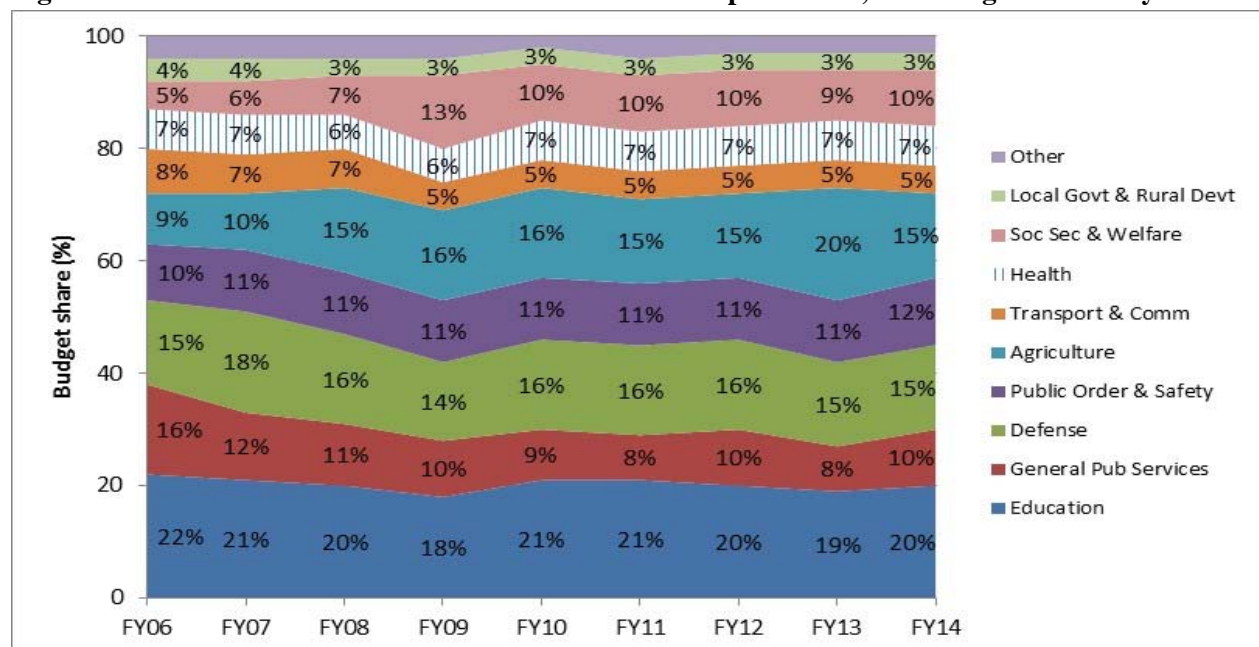
**Figure 9: Government Health Expenditures as share of Total Government Expenditures**



Sources: Health Economics Unit 2016; World Bank 2014a.

**Overall, government sectoral priorities have been fairly consistent over time, with a few exceptions.** Spending shares have changed marginally over the last decade, revealing mostly consistent priorities over time (Figure 10). Social welfare saw the fastest increase, more than tripling in real terms and increasing from 5 percent of noninterest recurrent expenditures in FY2006 to 10 percent in FY2014. Agriculture also increased significantly. However, growth in all social expenditures slowed considerably after FY2011. Education, agriculture, defense, and social welfare absorbed the largest share of noninterest recurrent expenditure in FY2014. While the average education budget allocation in LICs is about 15 percent of total government expenditures and the average health share is about 8 percent, or slightly more than half (Arze del Granado et al. 2010), in Bangladesh the health share allocation is just 35 percent of the education budget share.

**Figure 10: Government Sectoral Priorities: Recurrent Expenditures, excluding Interest Payments**



Source: World Bank 2015b.

Note: The data shown here exclude interest payments, hence the ratio appears different from the previous figure.

**Increasing the budget share allocated to health will be challenging, given the many other competing claims on Bangladesh’s relatively small government budget.** For example, it has been noted that the budget for maintenance of infrastructure has been declining in recent years (World Bank 2015b). In addition, a significant portion of the budget is used for debt servicing (interest payments). However, reallocations are possible, as evidenced by the recent trend of social welfare spending. Furthermore, some current spending could be cut back – for example, it has been noted that regressive energy subsidies could be further reduced (IMF 2016). What is clear is that the current health allocation is very low by global standards and, as discussed earlier, a key constraint to improving sectoral outcomes. Over the medium-term, a larger budget share for health will be an important source of expanded fiscal space. A gradual convergence towards the regional average (i.e., 8 percent) over a period of several years could be envisioned. This is explored further in Section 7.

## 4. Development assistance for health

### *A diminishing source of fiscal space*

**There has been long-standing support from donors for the health sector in Bangladesh.** About one-quarter of the public health budget is supported by official development assistance, including the World Bank. Much of the donor support over the years has been for the government’s health sector-wide program (SWAp), initiated in FY1998/99. Donor support for the SWAp has increased in absolute terms during the period but has remained stable as a proportion of the MOHFW budget (Table 5). The current SWAp *Health, Population and Nutrition Sector Development Program* (HSDP), is funded by seven development partners, pooling their resources—grants and the World Bank’s credit of US\$359 million—in a multi-donor trust fund.

**However, overall donor support to the health sector (not limited to the SWAp) has been steadily decreasing as a share of the MOHFW budget for many years.** This is shown in Figures 11 and 12. From a peak of over 40 percent of the budget in 2001, donor support had fallen to about half that share, just over 20 percent, by 2015.

**Table 5: Donor Contributions to the Sector-Wide Approach (SWAp) for Health: Actual Expenditures, FY1999/2016 (in current US\$)**

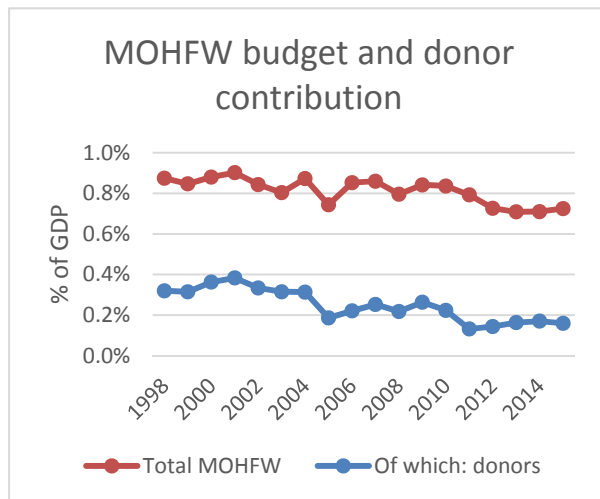
	Donors (current US\$ billion)		Average annual donor contribution (current US\$ billion)	As Percentage of MOHFW Annual Budget
	Pooled	Non-pooled		
FY1999/2003 <sup>a</sup>	0.47	n/a	0.09	23% <sup>d</sup>
FY2004/10 <sup>b</sup>	0.69	0.51	0.17	24% <sup>e</sup>
FY2011/16 <sup>c</sup>	1.11	0.27	0.23	23% <sup>f</sup>

*Source:* Authors based on World Bank 2005, 2012, Daniels and Kabir 2014.

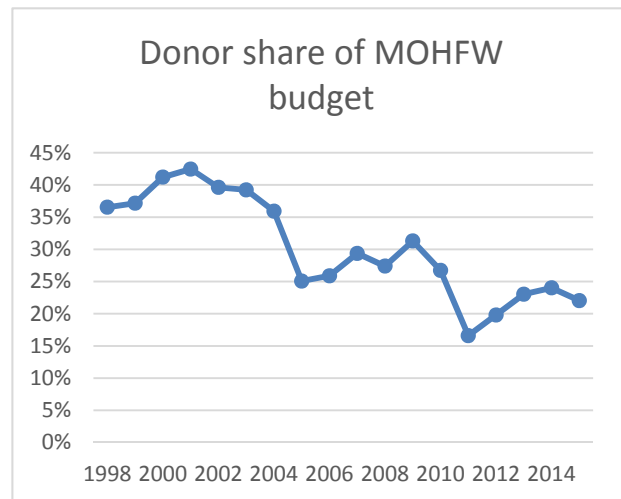
*Note:* a. Funds for the first SWAp, *Health and Population Program Project*, were pooled by IDA, DFID, the EC, the Netherlands, and SIDA, with CIDA, GTZ, and KfW parallel financing. b. The second SWAp, *Health, Nutrition and Population Sector Program*, was supported by CIDA, the Netherlands, the EC, KfW, SIDA, DFID, and UNFPA. c. The third SWAp, *Health, Population and Nutrition Sector Development Program*, was supported by funds pooled by seven development partners: Australia, CIDA, KfW, SIDA, DFID, the Netherlands, UNFPA, and USAID. d. Average annual budget assumed at US\$0.399 billion. e. Average annual budget assumed at US\$0.694 billion. f. Average annual budget assumed at US\$ 0.979 billion.

**Globally, there has been significant debate about the extent to which donor support for health is fungible.** This issue pertains to whether and by how much a recipient government’s health spending is reduced as a result of donor contributions to the health sector. While it is not possible to attach a precise estimate to this relationship, it is likely that government health spending in Bangladesh is lower than it would have been in the absence of donor support. But in the future the converse can also be true, and thus if and when the donor role is reduced, it can be more than offset by stronger government financing.

**Figure 11:**  
MOHFW budget and donor contribution



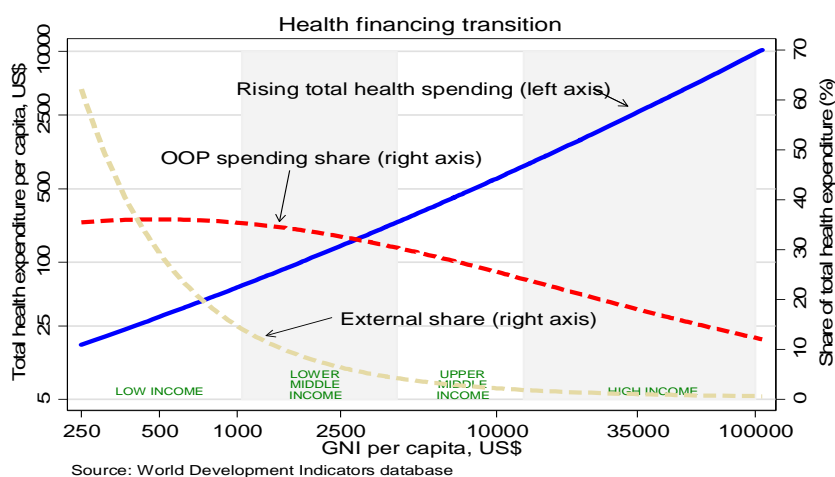
**Figure 12:**  
Donor share of MOHFW budget



Source: HEU 2016

**While official development assistance has provided fiscal space to the health sector for many years, and will remain important, a significant increase seems unlikely.** In general, donor support to the health sector will probably be reduced. This is both because some donors (e.g., the European Union, AusAID, KfW and the Netherlands) are leaving the sector, but also because as Bangladesh grows richer, it will be increasingly difficult for donor contributions to keep pace with government sources in relative terms. It should be acknowledged that there are new initiatives emerging such as the Global Financing Facility supporting women and children, and India has recently offered bilateral assistance for health. But overall the role of development assistance is likely to become more focused on leveraging the larger pot of government health spending, while targeting specific financial gaps. A declining share of external aid in total health spending is a natural part of the so-called “health financing transition” (Figure 13).

**Figure 13: Health financing transition in middle income countries**



## 5. Introducing new sources of funding for health: Insurance options

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**Among the most common proposals to arise in countries searching for additional fiscal space for health is to introduce a new tax source that is intended exclusively for financing health care.** The most obvious example is to launch an insurance program by which a certain segment of the population makes direct contributions (typically as a tax on earnings) to a fund that is exclusively for health spending. An alternative is to introduce an earmarked tax that mandates that a specific revenue stream (or some proportion thereof) is to be directed to the health sector. (The case of earmarking tobacco taxation for health in Bangladesh was discussed in Box 3 and is not explored further here). In fact, a payroll tax for collecting insurance revenues is essentially a special case of an earmarked tax. In both cases, these options represent a tempting alternative to the often difficult effort required to secure resources from general budget revenues in competition with other sectors. This section focuses on options for introducing insurance schemes for certain population groups in Bangladesh as a means to expand fiscal space for health spending.

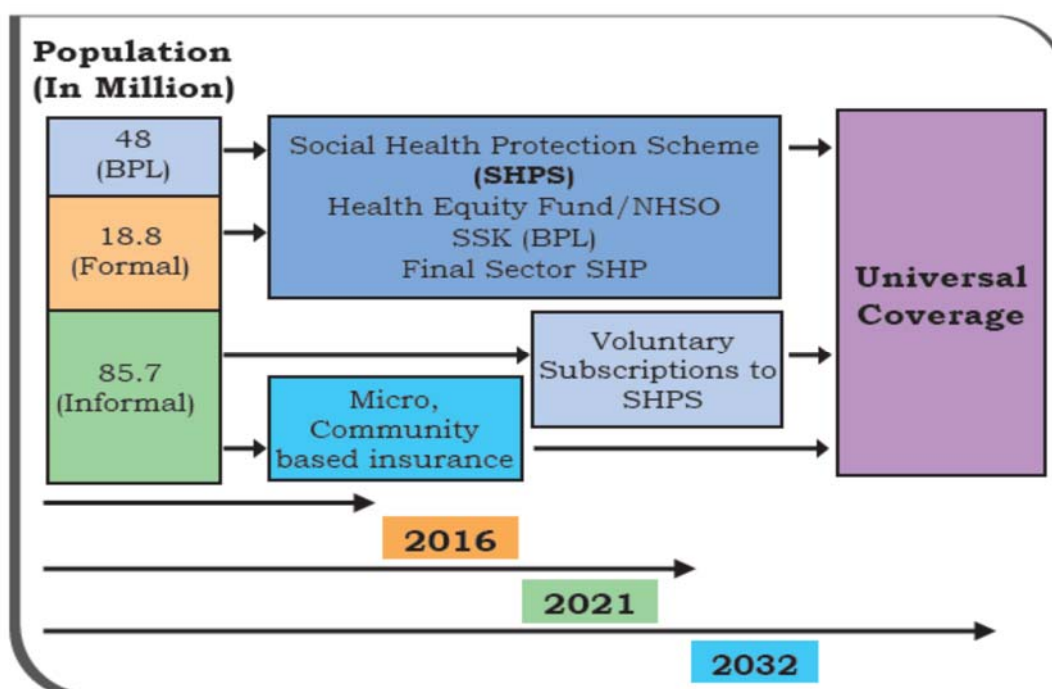
**Substantial planning has already been done to introduce insurance in Bangladesh, as reflected in the National Health Care Financing Strategy 2012-2032.** This document – incorporated into the new National Social Security Strategy – proposes a roadmap for achieving universal health coverage (Adams et al. 2013). Specifically it considers the formal sector (including civil servants and garment sector workers), the informal sector, and those below the poverty line. The main goal of the strategy is to create a common pool through a Social Health Protection Scheme (SHPS), starting with people below the poverty line (BPL) and the formal sector. For the BPL population (31 percent), subsidies from general government revenues will be provided; for the formal sector and their families (12 percent), contributions will be mandated, and they will gradually be incorporated. The large non-poor informal sector, which is estimated to comprise 56 percent of the population, would join the scheme voluntarily (see Figure 14).

**Implementation progress of the National Health Financing Strategy has been slow to date.** This is in part because the overarching institutional design outlined in the strategy has not been followed up by a consensus-based action plan laying the groundwork for medium-term implementation. However, several initiatives are under way that focus on two main groups—people below the poverty line and the employed formal sector. The MOHFW is launching a pilot health insurance program for BPL households in three sub-districts in 2016. In parallel, the MOHFW is in discussions with the Ministry of Civil Servants and the Ministry of Finance about initiating the SHPS with the affiliation and contributions of civil servants.

**Before assessing the prospects for generating fiscal space through insurance programs in depth, it may be helpful to briefly review the international experience.** This is done in the next section.



**Figure 14: Health Financing Strategy 2012–2032: Proposed Sequence of SHPS Implementation**



Source: HEU 2012

### *The promise and pitfalls of introducing health insurance for fiscal space – International experience*

**Social Health Insurance (SHI) is often viewed as a means to mobilize additional domestic resources for health.** Many countries that previously relied largely on general revenues and OOP payments to finance their health systems have introduced SHI. It represents the major source of revenue mobilization in many systems, in contrast to voluntary private health insurance and community insurance, which rarely account for more than a small proportion of total health expenditure. It should also be noted that although SHI is often regarded as a model whereby individual entitlements to health care derive exclusively from earnings-related contributions, in practice governments also draw on general tax revenues to pay subsidies into these systems in order to enhance their financial sustainability and cover additional populations (World Bank 2016). Thus, insurance contributions do not completely displace general budget resources. In fact, it is nearly always the case that covering the poor will require general government budget support. A recent study of 24 UHC programs around the world, all of which aimed to improve coverage among the poor, found that every one relied on general government taxes to finance services for the poor (World Bank 2015c).



**The notion that SHI can mobilize additional resources for health is not automatic.** In particular, Ministries of Finance may see the introduction of SHI as an opportunity to re-allocate a portion of the general government revenues previously allocated to health to other sectors. At least in some countries, the promise that SHI offers a larger revenue base than other sources of health financing has not been borne out by the evidence (Wagstaff 2010). The tax base for SHI is clearly smaller than that of the economy as a whole since it is limited largely to formal sector workers. If the aim is to cover the entire population through SHI contributions levied on this group or their employers, the contribution rate in settings with large informal sectors would need to be very high, or SHI funds would only be able to cover a relatively narrow benefit package. In addition, contribution evasion is widespread in many systems, with enrollees avoiding payment in part or in full (e.g., Colombia, Mexico, Philippines and Russia). This can create pressure to increase contribution rates and/or to obtain subsidies from general revenues to cover the deficit (World Bank 2016b).

**Large informal sectors in most low and middle income country labor markets have often proved to be a binding constraint for SHI expansion.** Historically, informality tended to decline with income and this was an enabling factor in the growth of contributory social health insurance in OECD countries in Europe and East Asia. In recent years, informality has proved more persistent. While SHI reforms have been relatively successful in many LMICs in enrolling the formal sector and the poor (the latter group with full subsidies), coverage expansion to the rest of the population has proved very difficult. For example, this has been true in Indonesia, the Philippines and Vietnam. There is also evidence that partial subsidies for premiums, even when combined with assistance in enrollment (such as information and reminders), are not very effective in increasing enrollment by the informal sector (World Bank 2016b).

**Beyond the issue of revenue mobilization, there are many other considerations pertinent to the adoption of insurance.** Briefly, SHI is also seen as a way to facilitate organizational changes to improve the quality and efficiency of health care services, both by separating purchasing from provision of health care services and by introducing new payment mechanisms. More broadly it is seen as a way to improve accountability, although whether it lives up to this promise will likely depend on a multitude of country-specific considerations. At the same time, an insurance system is quite demanding from an administrative viewpoint, requiring significant capacity on many fronts. These include managing large IT systems, contracting with providers, performance monitoring, investigating fraud and complaints, managing reserves, and other tasks. Thus, financial expediency (the quest for fiscal space) alone should not underpin the decision to adopt such a fundamental change in health system financing and organization.

**International experience also points to certain risks to equity associated with the launch of insurance programs.** As specific sub-populations are enrolled in separate insurance schemes, the result can be a fragmentation of risk pools and inequality in benefits received (for example, there may be differences in services covered, or members may gain access to high-quality private providers that the rest of the population does not enjoy). This can even undermine support for the public system (and the taxes which fund it) as beneficiaries “opt out” of government-provided services. A key message is that design issues in launching insurance programs are paramount, and the need for fiscal space should not come at the expense of ensuring a coherent, equitable, and efficient health financing policy framework. Some pros and cons of general tax-financing and insurance financing for health are summarized in Table 6.

**Table 6: Strengths and weaknesses of general tax and insurance financing of health systems**

	<b>Strengths</b>	<b>Weaknesses</b>
<b>General tax financing</b>	<ul style="list-style-type: none"> <li>• Pools risks for entire population; easy to extend coverage to all, including informal sector</li> <li>• Large scope for revenue mobilization, given broad revenue base of tax and non-tax sources; financial burden of health can be widely spread</li> <li>• Single centralized governance system has potential for administrative efficiency and cost control</li> </ul>	<ul style="list-style-type: none"> <li>• Potentially unstable funding due to nuances of annual budget process and sensitivity to political priorities</li> <li>• May disproportionately benefit rich due to weak link with population need</li> <li>• Potentially inefficient due to lack of incentives and ineffective public sector management</li> </ul>
<b>Insurance financing</b>	<ul style="list-style-type: none"> <li>• Additional revenue source: “benefit tax” and employer contributions</li> <li>• May facilitate organizational change (e.g., purchaser-provider split and new provider payment mechanisms)</li> <li>• Removes health financing from annual government appropriation process</li> <li>• Can enhance transparency and accountability, linking financing with clearly defined benefits</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult to mandate and collect contributions in countries with high level of informality and self-employed</li> <li>• Mandatory payroll contributions can increase labor costs, reduce competitiveness and encourage informality</li> <li>• Administratively challenging, especially in countries with weak institutional capacities and governance challenges</li> <li>• Can increase inequality if multiple risk pools are fragmented</li> </ul>

**It is sometimes believed that achieving UHC requires introducing an insurance program, but this is not necessarily the case.** Box 4 addresses this issue.

**Box 4: Is an insurance system required to achieve Universal Health Coverage (UHC)?**

For many people the term “universal health coverage” implies that the entire population of a country is “covered” by “insurance”. However, it is important to highlight the difference between two distinct concepts of coverage and insurance: as an *outcome* or as an *institutional arrangement*. Insurance can refer to the desirable *outcome* whereby individuals do not face substantial financial risk when they seek health care (i.e., they are insured against a bad outcome). This definition does not pre-judge what type of institutional arrangements for financing and delivering care are required to achieve the outcome. Indeed, with additional financing and improved governance, Bangladesh’s current system of general tax-funded health care and publicly-provided services is fully compatible with achieving this definition of insurance, as many other countries have done. An alternative interpretation of insurance is to see it as a particular *institutional arrangement* through which individuals (or the government on their behalf) contribute to a specific fund or agency which purchases health care for beneficiaries based on a defined benefit package.

Globally, there are many countries both with and without insurance institutions. Among advanced health systems, about half have adopted an insurance model (including France, Germany, and Japan), while half have not (including Australia, Canada, the UK, and much of Scandinavia). The latter group instead rely on general taxation to finance health care and all citizens or residents are covered, as is the case in Bangladesh at present. Within the region, countries such as India, Indonesia, and Thailand have (partly or fully) adopted insurance schemes, while Malaysia and Sri Lanka have not.

Thus, in brief, Bangladesh does not need to introduce insurance as an institution in order to achieve UHC. What it does require is a significantly improved supply of health care services and, of course, additional fiscal space for health – whether it is financed by general tax revenues or insurance.

## *Insurance options for the formal sector in Bangladesh*

**Both the global experience and Bangladesh's Health Financing Strategy 2012-2032 highlight the difficulty of collecting contributions from the poor and the informal sector.** For the poor or BPL population, the main proposed coverage mechanism is the *Shasthyo Shuroksha Karmasuchi* or SSK, for which pilots in three sub-districts are being launched in 2016. This is a non-contributory social health protection scheme to provide inpatient care. The SSK would be funded from general government revenues when scaled up, and therefore will represent a new demand for (not a supply of) fiscal space for health. For the informal sector, the Strategy recognizes the long-term challenge of covering this group, and envisions some reliance on community and micro-insurance schemes in the interim. While there is a segment of the informal sector (e.g., the well-off self-employed and small business owners) that could in principle make contributions to a coverage scheme, in practice it will be very difficult to make this a reality. The global experience outlined earlier confirms this skepticism.

**The generation of additional fiscal space via the introduction of an insurance scheme will therefore have to rely mainly on the formal sector.** The Health Financing Strategy envisions the formal sector contributing to the single pool of the SHPS. However, the specifics of implementation require further discussion, analysis, and consensus-building. Key issues include the institutional and legal design and organization of the SHPS and how the formal sector will eventually be incorporated. These details matter: insurance can be very low-cost or very high-cost depending on the generosity of the benefit package.

**A potential starting point for a formal sector coverage scheme is the ready-made garment (RMG) industry, the largest formal employer in Bangladesh.** In 2013, a total of 58.1 million people were employed in the country, of which only 7.6 million belonged to the formal sector (Bangladesh Bureau of Statistics 2015). The RMG industry directly employs about 4 million people (although not all are formal), 80 percent of whom are women. The value of its exports is equivalent to nearly 80 percent of total exports (World Bank 2015a). Thus the RMG sector could be one of the initial groups to be incorporated into the SHPS envisioned by the Health Financing Strategy.

**There are other reasons for the RMG sector to expand health coverage.** An emerging discussion revolves around the benefits to the industry of complying with labor standards and worker safety conditions to maintain its preferential access to the European Union market. Key considerations here include: (1) occupational hazard was the major risk of death for both males and females aged 15-20 in Bangladesh in 2013 (IHME 2015); (2) major catastrophes in the RMG industry in 2012 and 2013 (the Tazreen factory fire and the Rana Plaza building collapse, respectively) highlighted the need to improve labor standards and working conditions; and (3) the EU has developed a program with the aim of providing greater benefits to countries that ratify and implement international conventions on core human and labor rights, the environment, and good governance (European Commission 2012). Under these circumstances, the launch of a health insurance scheme for RMG workers may be seen as a positive development.

**Existing independent schemes can be used to make back-of-the-envelope calculations of resources that can be raised as part of a prepayment or insurance scheme.** A few NGOs and health service providers have implemented micro health insurance schemes within certain geographic areas and with restricted health plans, primarily for microcredit borrowers and without the involvement of formal insurance intermediaries. The preliminary calculations presented here are based on the ongoing pilot currently implemented and sponsored by the Bangladesh Garments Manufacturers & Exporters Association.<sup>1</sup> The Government of Bangladesh could mandate that employers must contribute to a basic package of preventive and curative health benefits for their workers, and the cost of the contribution (premium) could be US\$0.5 per month per worker, or US\$6 per year. Consider two scenarios, one in which 80 percent of the RMG workers benefit from such a scheme, and one in which 50 percent of the workers benefit. Under these assumptions, on an annual basis, in the first scenario, there would be US\$19.2 million in additional revenue in the health sector, and in the second scenario, on an annual basis, there would be US\$12 million in additional revenue in the health sector, or the equivalent of about 2 percent of the total public budget for FY 2014. Table 7 presents the benefits package and annual contributions of an RMG health insurance scheme. While it could serve as an important first step, these options do not represent significant new resources.

**Table 7: Key parameters for potential RMG sector insurance program**

<b>Beneficiaries</b>	<b>Benefits Package</b>	<b>Annual Premium</b>	<b>Additional Revenue</b>
80 percent of RMG workers Dependents, or family members of worker are excluded	Outpatient, inpatient, medicine, surgery up to Tk 15,000 (US\$190) per year	Tk 487 (US\$6.0)	US\$19.2 million
50 percent of RMG workers Dependents, or family members of worker are excluded	Outpatient, inpatient, medicine, surgery up to Tk 15,000 (US\$190) per year	Tk 487 (US\$6.0)	US\$12 million

*Source:* Communication from Bangladesh Diabetic Association

**Concerns are sometimes voiced that mandated benefits for workers (such as a health insurance scheme) can harm competitiveness, but the risks are small.** The magnitude of the likely impact on wages arising from a health scheme is likely to be too small to erode the significant competitive advantage that Bangladesh still enjoys vis-à-vis other countries (IMF 2013; Hussain and Rizwan 2014). Moreover, a large body of empirical evidence suggests that because employers can pass on the burden of health insurance premiums to employees through lower wages, the costs associated with mandatory health insurance do not make a sector or country less competitive.

<sup>1</sup> The pilot is sponsored by the Bangladesh Garments Manufacturers & Exporters Association, the Bangladesh Diabetic Association, the United Insurance Company, the Telemedicine Reference Centre Pvt. Ltd, and a group of factories under the New Asia Group, jointly with the Swiss Micro Insurance Consultancy Group. Seven garment factories have included all their workers from the two lowest salary groups in the pilot, totaling about 8,000 workers, of which nearly half are female. The Bangladesh Diabetic Association is providing the medical services.

**As noted, a key risk in launching insurance programs such as one for RMG workers is the creation of multiple, uncoordinated health pools.** Presently there are different benefit packages offered under SSK for the BPL population, the pilot program for RMG sector workers, and a proposed civil servant scheme. Around the world, merging separate insurance programs has proven to be a challenge. Many recent UHC reforms in Latin America have involved trying to unify programs and benefits for the rich and poor. In East Asia, Thailand has three separate insurance programs which have yet to be merged, despite concerns about the resulting inequalities in benefits received. Philippines and Vietnam, however, have ensured a single program for formal sector workers and the poor. The health financing strategy has a similar vision for Bangladesh, provided that implementation remains faithful to the original design.

**Beyond the RMG sector, there is a significant formal sector workforce that could also contribute to a health insurance program.** For example, civil servants are also candidates for such a scheme. Some preliminary work has explored the willingness to pay a health insurance premium by civil servants in Bangladesh, and it found significant interest, especially among employees at lower grade levels. Table 8 shows some rough calculations for what could be raised from the 7.6 million formal sector workforce, assuming a 3 percent contribution rate on the average wage of about Tk 15,000 per month (BBS 2016). The amounts are relatively modest, including in relation to the current government health budget, suggesting that health insurance programs are unlikely to offer the same scope for generating fiscal space for health in the near-term as increasing the government health budget. However, pilot programs will offer valuable learning opportunities if indeed this is the vision for health financing in Bangladesh over a longer-term horizon.

**Table 8: Potential revenue mobilization from formal sector workforce**

Assumed coverage rate	Revenues (Tk billions)	% of 2016 government health budget
10%	4.1	3.2
20%	8.2	6.4

*Source:* Author estimates

**In summary, from the fiscal space perspective, the introduction of insurance schemes offers some potential, but also raises significant implementation challenges.** The health financing strategy foresees contributions from the formal and the informal sector, in addition to general taxes. Preliminary estimates, based on conservative assumptions, are that potential revenues that might be generated from the formal sector would be relatively small in the short to medium-term. The poor and informal sector do not offer significant potential for a contributory approach to generating fiscal space.

## 6. Options for generating efficiency gains in the public system

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**The four potential sources of fiscal space discussed until now were about securing a larger budget for health, but this section looks instead at getting better value for money from the existing budget.** Since the ultimate objective is to improve outcomes, the focus should not only be getting more resources.

**Bangladesh has been a strong performer on the MDG agenda despite a low level of health spending, suggesting that overall it is achieving good value for money.** Other countries in the region, for example, have worse health outcomes despite higher health spending. Although simple cross-country comparisons do not provide conclusive evidence on health system efficiency – there are many factors affecting health that lie outside the sector – these patterns offer a useful starting point for further analysis.

**However, all health systems have scope for efficiency improvements, and a closer look at Bangladesh’s health spending patterns can shed light on potential areas for efficiency gains.** This section analyzes potential sources of inefficiency and considers options for generating efficiency gains in the public health system. The pursuit of efficiency is an important policy objective in most countries, and is often highlighted as a key issue by Ministries of Finance in response to requests for additional budget resources by Ministries of Health. This has also been the case in Bangladesh.

**In general terms, efficiency is about how well a health system translates a budget into physical inputs, then into outputs and finally outcomes.** Physical inputs may be measured as the number of doctors, nurses, or hospital beds. Outputs can be the number of outpatient visits, hospital admissions or discharges, surgeries, x-ray scans, and so on. Outcomes can include life expectancy, infant mortality, equity, or better financial protection. Inefficiency can occur at any link along this chain.

**This section analyzes efficiency of health spending in Bangladesh from several angles, including:**

- Budget execution – turning allocated funds into inputs
- Human resources – turning a budget into a staff mix (via staff numbers and salaries); and turning inputs into outputs (staff into services, including absenteeism)
- Drugs and equipment – ensuring inputs are available for service delivery
- Hospital efficiency – turning inputs into outputs (bed occupancy, admission rates, length of stay)

The final section assesses the efficiency of the health system in Bangladesh through the perspective of the WHO’s “top 10” list of common sources of inefficiency in health systems worldwide. Due to a lack of evidence, this section has little to say about turning outputs into outcomes (i.e., quality of care). A distinction is often drawn between technical efficiency, which is about attaining the most output from a given level of inputs, and allocative efficiency, which refers to whether resources are directed to the appropriate mix of inputs and health interventions (i.e., consistent with a society’s overall goals).

**A key message is that while some inefficiencies do exist, in view of the extremely low level of current government health expenditures, efficiency gains do not represent a major source of fiscal space.** Within a budget of only 0.8 percent of GDP (as noted, about half the LMIC average), there is limited scope to identify substantial savings that can be re-deployed elsewhere in the sector.

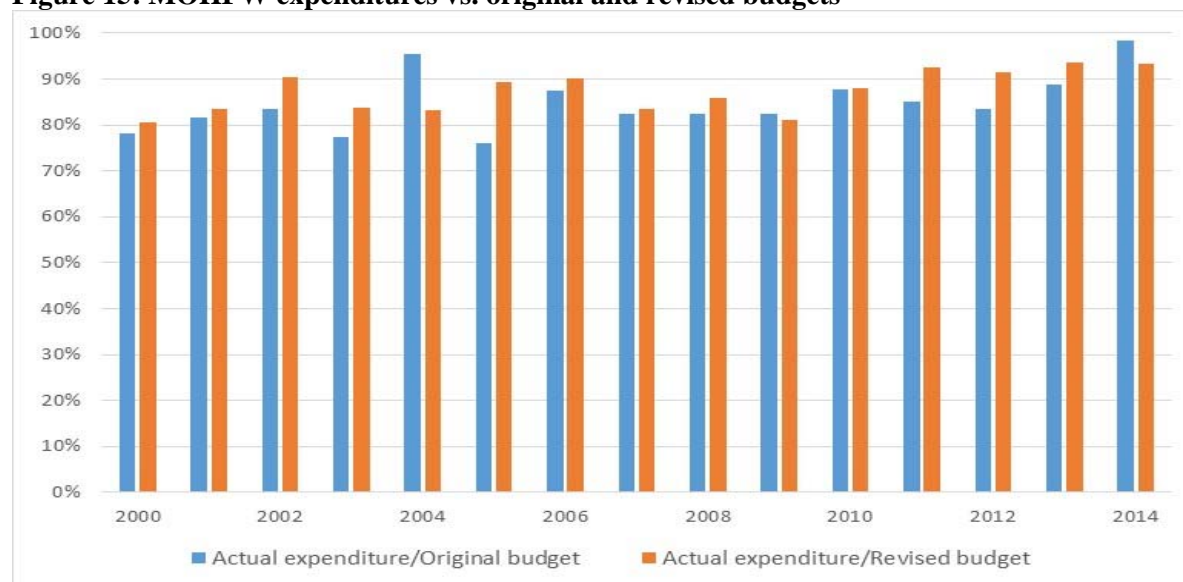
## Room for efficiency gains by improving budget execution

**A first step towards health system efficiency is to ensure robust mechanisms for budget formulation and execution.** Budget execution entails implementing payroll, procurement, cash management, in-year adjustments, internal controls, and other tasks during the course of a budget year. Careful monitoring is important for early identification of underspending. Stronger public financial management, including budget execution, was noted as an important source of fiscal space in Bangladesh by the IMF (IMF 2016).

**There is significant space to improve execution of the MOHFW budget.** A simple indicator of efficient budget execution is the ratio of actual expenditures to both the original and revised budgets (in Bangladesh, the original budget is revised, upwards or downwards, half way through the fiscal year). Significant differences between budget estimates, revised estimates, and actual expenditure reflect inefficiencies in budget planning and execution. For many years MOHFW has utilized less than 90 percent of its budget, although there has been some improvement more recently (Figure 15). This chronic under-spending means missed opportunities for MOHFW to achieve better results in the sector. An approximate (and simplistic) accounting of this problem would suggest that system performance could be improved by about 10 percent – not an insignificant amount – if budget execution could be strengthened such that it reaches close to 100 percent.

**Weak budget execution has been a problem for all spending categories.** Predictable recurrent items such as salaries, cleaning and training show year-to-year fluctuations in execution. In addition, the same line items show overspending in one year and under-spending in another year (HEU 2016).

**Figure 15: MOHFW expenditures vs. original and revised budgets**



Source: HEU 2016.

**A key reason for weak execution is that budget formulation is fragmented, with two separate units of MOHFW preparing two separate budgets.** The revenue budget is mainly the responsibility of the Financial Management and Audit Unit of the MOHFW, while the development budget is the responsibility of the Planning Wing of MOHFW. MOHFW finalizes its revenue budget after consultation

with and approval of the Ministry of Finance, while the Planning Commission is responsible for approving the development budget. Both budgets have recurrent and capital items, and some line items receive allocations from both budgets, suggesting scope for consolidation and coordination. Even the schedules for preparing the two budgets are different. MOHFW holds monthly review meetings to monitor the financial progress of the development budget, but not the revenue budget.

**More generally, the budget allocation process is not well-linked to the health needs of the population.**

The payment system is mainly a budgetary allocation to health facilities on a historical basis or according to the number of staff, beds, and salaries for individual providers. In addition, there are no adequate systems for tracking the use of public resources for the intended beneficiaries; there is financial monitoring, but little results-based monitoring is undertaken. While line-item, input-based budgets are quite common in low-income countries and help to control spending, they often fall short in ensuring responsiveness to population needs. Many middle-income countries move away from this approach in favor of new methods for provider payment. These may include capitation, case-based payment, pay-for-performance, or other approaches. Different types of provider payments have different effects on facility incentives and system-wide efficiency. These are complex reforms that do not guarantee greater efficiency (if not carefully implemented, the opposite could occur) but merit further discussion to inform Bangladesh's health financing environment going forward.

**In summary, significant efficiency gains can be achieved by improving budget execution.** A public financial management (PFM) reform agenda to strengthen budget planning, formulation, procurement, and other related areas would help to address this weakness.

### *Human resources: Modest spending but a lingering problem of absenteeism*

**Human resources typically represent the single largest cost in most health systems, and therefore have an important impact on overall efficiency.** Salaries usually account for about 40-60 percent of health spending in most countries. Total human resource expenditures reflect the number of staff and their remuneration levels, and both can affect efficiency.

**Expenditures on the health workforce in Bangladesh, including staff strength and remuneration, are not excessive.** Pay and allowances constitute about 42 percent of the total MOHFW budget, but with the recently approved Pay Commission (2015), this share can be expected to rise. The number of doctors in Bangladesh is relatively low at 0.3 per 1000 population, similar to Indonesia and Thailand but about half the rate of India and Pakistan (OECD 2014). The number of nurses is even lower, suggesting an opportunity for improving the input mix. Average salaries are also comparatively low. It has been noted that the entry-level salary for medical officers (about Tk 11,000 per month, plus about 50 percent extra for various allowances) is inadequate for a family of five, a common family size in Bangladesh (el-Saharty et al. 2015). Again the Pay Commission will have implications for this picture.

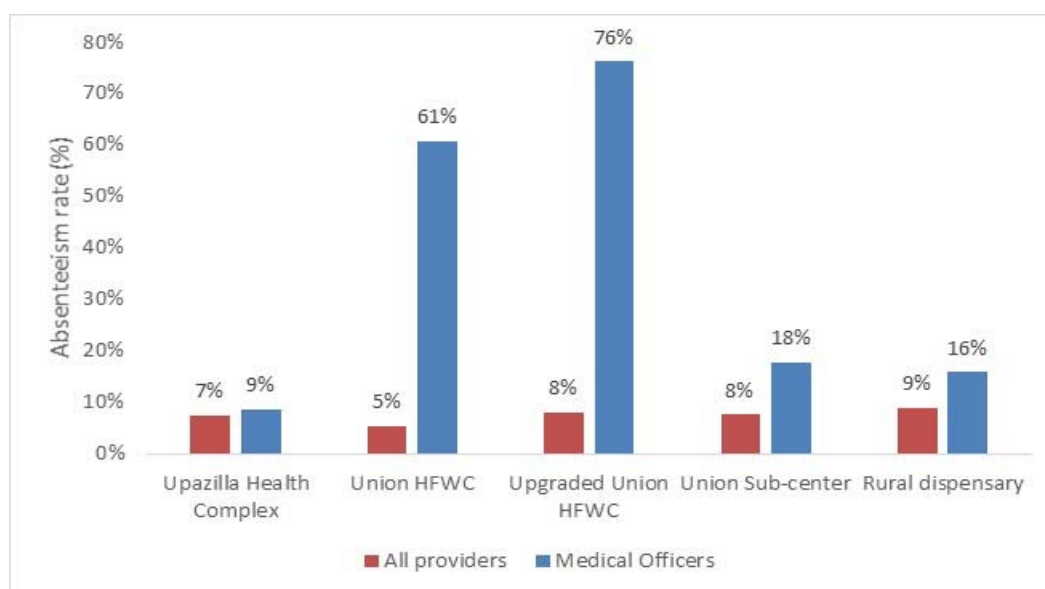
**Aside from spending levels, a basic indicator of HR efficiency is the absenteeism rate.** If health care workers are being paid but do not show up to work for the required hours, there is an obvious efficiency loss since outputs and outcomes could be enhanced within the current budget simply by ensuring better attendance rates and hence more service delivery. Other measures of health workforce attainment or performance (for example, the quality of care) do not matter if the providers are absent.



**The rate of health worker absenteeism in Bangladesh is variable by provider type and facility (Figure 16).** According to the 2012 Bangladesh Health Facility Survey, absenteeism among all providers was about 7 percent, and for medical officers it was 18 percent. Thus for health workers other than doctors, absenteeism is relatively low. Absenteeism of medical officers is much higher at lower-level facilities than at the upazila level. The level of absenteeism among medical officers is clearly significant, and thus it represents an important source of efficiency loss. Among the specialties with higher absenteeism rates were medical officers for maternal health and consultant anesthetists, both of which have an impact on the availability of comprehensive emergency obstetrics. On a more positive note, the evidence also suggests that absenteeism at the sub-district level declined by well over half between 2003 and 2011 (HEU 2016).

**Previous work has found that there is a strong association between absenteeism and the exercise of private practice** (Cortez et al. 2007). Physicians and their professional association have been able to secure employment in both public and private medical practices concurrently. This system of dual practice leads to absenteeism in public facilities (el-Saharty et al. 2015). Absenteeism of staff and health professionals has a direct influence on the availability of maternal health care, including for the poor.

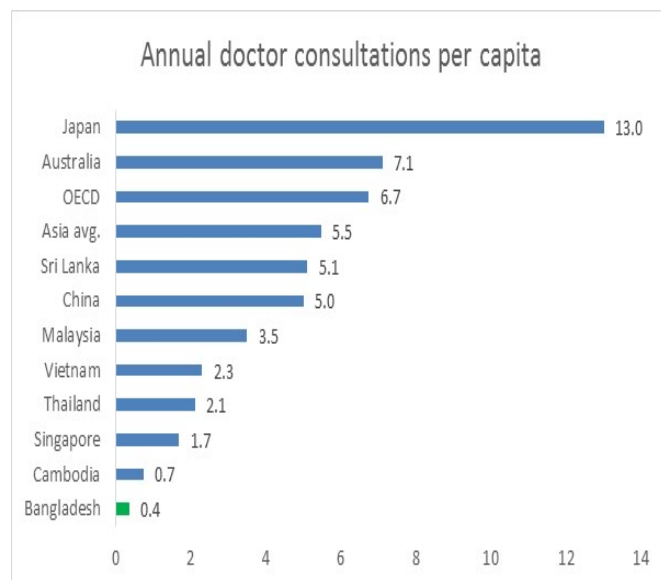
**Figure 16: Provider absenteeism (2011) – A persistent problem, especially among medical officers**



Source: ACPR 2012.

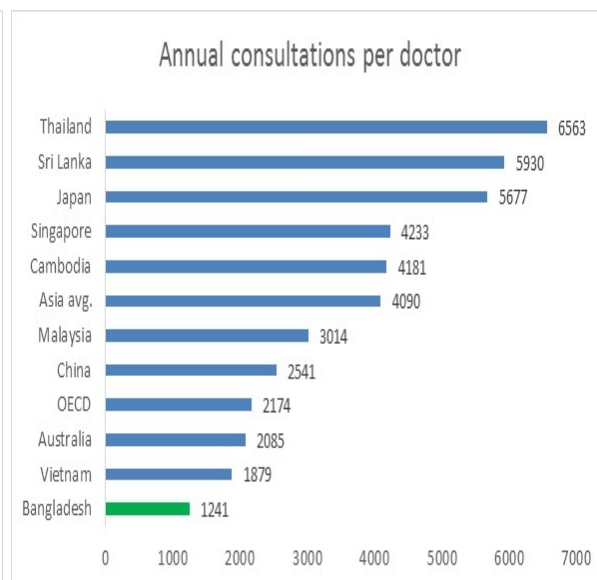
**Absenteeism is one likely reason for low consultation rates with doctors and low coverage rates of key interventions.** The average number of doctor consultations per capita in Bangladesh is the lowest in Asia, by a significant margin (Figure 17). Partly as a result, Bangladeshi doctors see fewer patients than their peers elsewhere in the region (only about 5 per day, assuming a 5-day work week) (Figure 18). It may also help explain the low coverage rates for key interventions, especially among the poor, as shown in the introduction. However, there are other likely explanations – including availability of drugs and equipment, as discussed in the next section. But improving HR productivity will be an important issue going forward.

**Figure 17: Bangladeshis do not see doctors often...**



Source: OECD 2014

**Figure 18: ...and patient flow is very low**



**In brief, the overall rate of health worker absenteeism is improving but still a source of inefficiency, especially in the case of medical officers.** Human resource issues involve a difficult political economy, but measures to strengthen accountability – whether through government mechanisms, civil society engagement, or both – may be required to address this challenge.

### *Improving the procurement and maintenance of drugs and equipment*

**The availability of key equipment and essential drugs in public health facilities can be interpreted as a proxy indicator of efficiency.** Health service delivery requires a combination of buildings, staff, equipment and drugs – and if some of these are not available when a patient seeks care, expenditures on the other categories may be effectively wasted. However, it is also possible that the absence of drugs and equipment reflects an inadequate budget, and not inefficiency per se.

**Survey evidence suggests that drug and equipment availability in Bangladesh often falls short.** The Health Facility Survey 2012 developed an index of availability of health inputs, and assigned scores ranging from 0 to 100. It aims to capture basic service availability or readiness, and is measured by verifying whether a core set of items is present and functioning in the health facility on the day of the assessment. It surveyed a wide range of facilities, including district hospitals, upazila health complexes, maternal and child welfare centers, union health and family welfare centers, and union sub-centers/rural dispensaries. The survey found that 65 percent of public health facilities had available equipment, 63 percent had available the 37 most essential drugs, and 57 percent the required laboratory equipment.

**There were specific gaps related to the provision of basic and comprehensive emergency obstetric care at sub-district hospitals.** This included significant variation across the seven geographic divisions of Bangladesh. Addressing these gaps could translate into better outcomes, as suggested by the correlation across facilities between readiness to provide BEmOC and CEmOC and both a high rate of institutional delivery and a low maternal mortality ratio (MMR).

**However, there is evidence of improvement in recent years.** The Bangladesh Medical Equipment Survey reported that between 2008 and 2012, the proportion of unutilized equipment dropped from 57 percent to 46 percent (HEU 2016). More broadly, non-salary recurrent costs – which are often squeezed due to political economy considerations – have increased significantly. They rose from 42 to 58 percent of the total MOHFW budget between 1997 and 2012, with even sharper increases at upazila health complexes (7 to 26 percent) and district hospitals (23 to 39 percent) (HEU 2016).

**The root causes of shortcomings in drug and equipment availability may be varied and thus no single policy solution may suffice.** Some causes may be procurement-related and thus linked with PFM and budget execution issues described above. Some may be due to corruption. In either case, public resources used more effectively by using expenditure tracking. To improve the procurement of drugs and maintenance of equipment, and prevent potential mismanagement, the Public Expenditure Tracking Surveys (PETS) methodology examines how the public budget flows from one level of government to the next, and ultimately to the intended beneficiaries. By identifying areas where the system for transferring funds (and goods) breaks down, and areas of mismanagement and fraud, expenditure tracking surveys can help ensure that government budgets are used effectively.

## Hospitals – not a major source of inefficiency

There is little evidence that Bangladesh has a significant problem with hospital inefficiency, a common source of wasteful spending in many countries. For example, Bangladesh has one of the lowest ratios of hospital beds per 1,000 population across Asia, and correspondingly one of the lowest rates of hospital discharges per 1,000 population in the region (OECD 2014). Thus, over-capacity and over-hospitalization do not appear to be significant problems. Moreover, MOHFW expenditures by provider type suggest that health spending is generally well-targeted to appropriate levels of care. About half of all spending is directed to lower level facilities (e.g., upazila and below) which provide care that is both more cost-effective care and accessible to the poor. Health expenditures are not disproportionately directed to tertiary (medical college) hospitals as in some countries (Table 9).

**Table 9: MOHFW spending by provider type, 2012**

Provider type	Share of MOHFW expenditures
Upazila and below	49%
District level hospitals	8%
Medical college hospitals	6%
Specialized hospitals	4%
Education, training, and research	5%
Public health program	8%
Administration	16%
Other	4%

Source: HEU 2016

At present, the scope for improving efficiency at the hospital level is limited. Common measures of hospital efficiency include the occupancy rate, where the higher the patient flow the better, and average length of stay, adjusted by severity of the disease, where shorter is better. In contrast to many countries, in Bangladesh the overall average length of stay is very short, at 2.8 days; the bed turnover rate is high at 133 percent; and the occupancy rate is close to full occupancy at 92 percent (Table 10). This indicates that hospitals lack the capacity to meet current demand by simply increasing patient flow rates. (See Box 5). Moreover there is evidence that unit costs (cost per admission) declined by 45 percent from 1997 to 2010.

**Table 10: Selected Hospital Indicators for Inpatient Care, 2015**

Hospital Type	Number	Bed Turnover Rate	Occupancy Rate	Average Length of Stay
General	16	158	104	3.4
District	46	180	125	3.0
Sub-district	403	127	88	2.8
Total	465	133	92	2.8

Source: MOHFW 2014.

In brief, headline indicators of hospital performance suggest little scope for efficiency gains, and instead additional investment will be required in order to improve outcomes. However, it is possible that more difficult-to-measure efficiency issues, such as quality of care, remain as key challenges for the hospital sector in Bangladesh.

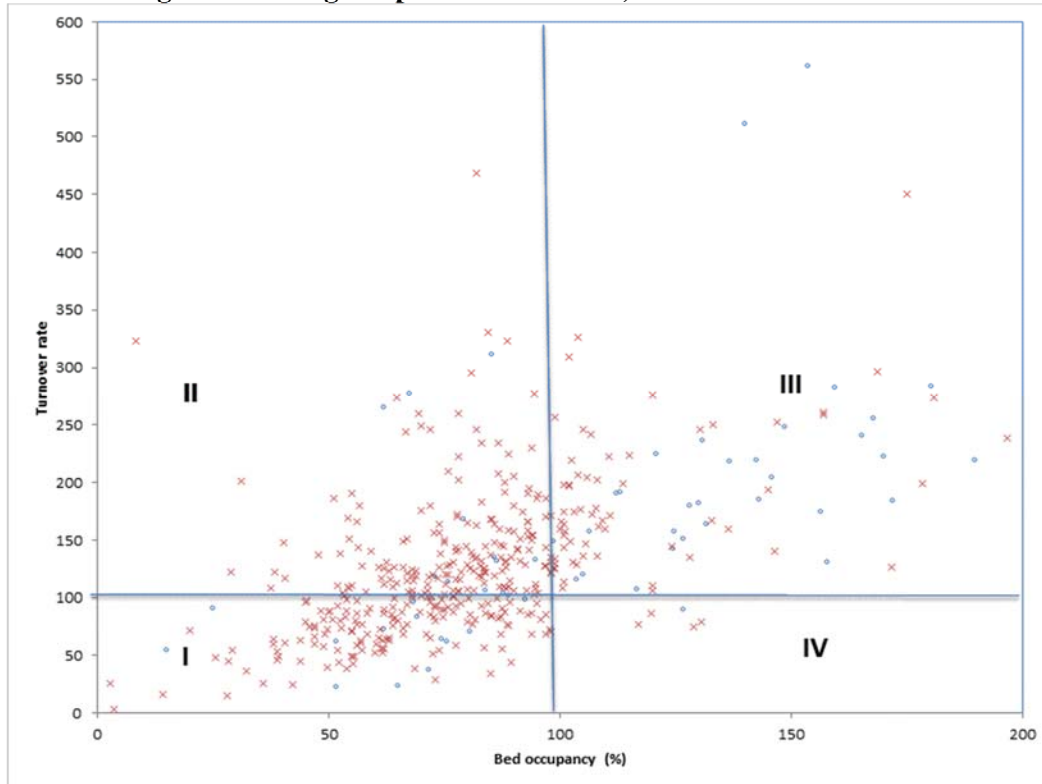
**Box 5: Measuring overall hospital efficiency—the Pabon Lasso model.**

The Pabon Lasso model is an approach for assessing hospital performance. It is a graphic model that determines the relative performance of hospitals using three indicators: bed occupancy rate (BOR), bed turnover (BTO), and average length of stay (ALS). Performance assessment is based on a chart divided into four parts by two crossing lines: a horizontal axis showing the mean for the BOR, and a vertical axis shows the BTO. Each hospital is assigned certain characteristics based on the quadrant where it is located.

The figure below shows a Pabon Lasso diagram for district-level hospitals (excluding teaching and specialized) and sub-district hospitals (Lasso 1986). In principle, hospitals with above-average bed occupancy and high turnover rate (quadrant III) are considered more efficient. Quadrant I, with low occupancy rates, indicates a surplus of hospital beds. There is evidence of efficiency improvement across hospitals during 1998–2011. Rannan-Eliya et al. (2012) compared two facility surveys showing a shift of sub-district hospitals upward and to the right. About half of sub-district hospitals, which are the first level of hospital for the rural population, increased their level of efficiency.

In the figure, about one-third of hospitals are clustered in quadrant III, which denotes greater efficiency. Only minor improvements in efficiency level can be attained in 50 percent of the mostly sub-district hospitals located in quadrant I since their average occupancy rate is close to full occupancy (92 percent). Finally, one-third of all hospitals have an occupancy rate greater than 100 percent, indicating that these hospitals are providing inpatient care to more patients than expected and beyond their budgetary means.

**Figure: Lasso Diagram Showing Hospital Performance, District and Sub-district Facilities, 2014**



Source: HEU 2016. Note: x = subdistrict hospitals; o = district hospitals.

## Taking stock of efficiency

**Overall the health system in Bangladesh appears to be relatively efficient and is becoming more so.**

It has achieved good outcomes despite a small budget. The prices of the most important inputs – human resources and pharmaceuticals – are low by international standards. Hospitals are not a source of over-spending or over-utilization. Absenteeism fell significantly between 2003 and 2011. The proportion of unutilized equipment has fallen. Non-salary recurrent spending has increased. And unit costs for both inpatient and outpatient care fell between 1997 and 2010. All this is good news.

**Most of the common sources of health system inefficiency identified by the WHO do not appear to be major problems in Bangladesh at present.** The World Health Report 2010 identified a “top 10” list of efficiency challenges worldwide, as shown in Table 11. While some are relevant to Bangladesh, many are less problematic than in other countries.

**Table 11: Ten major sources of inefficiency in health systems worldwide**

Efficiency challenge	Relevance to Bangladesh
Under-use of generics and higher-than-necessary prices for medicines	Drug prices in Bangladesh are low compared to other countries; both production and sales are mainly generics
Use of substandard and counterfeit medicines	Estimated to be about US\$100-150 million annually, but much of this is likely to be financed OOP, not by budget
Inappropriate and ineffective use of medicines	Overuse of medicines exists; but main burden falls on out-of-pocket spending, not government budget
Overuse or oversupply of equipment, investigations, and procedures	The current challenge is <i>under</i> -supply of equipment; outpatient use is low; overuse of investigations and procedures does not appear to be a major issue at present
Inappropriate or costly staff mix, unmotivated health workers	Over-staffing is not a problem; but health worker absenteeism is significant and more nurses are needed
Inappropriate hospital admissions and length of stay	Admission rates and average length of stay are low; hospital efficiency appears to be good
Inappropriate hospital size (low use of infrastructure)	Over-capacity is not a problem; bed occupancy rates are high
Medical errors and suboptimal quality	Unknown; poor quality of care is common in many LICs/MICs and probably significant in Bangladesh
Waste, corruption, and fraud	A significant challenge but difficult to measure, quantify
Inefficient mix of health interventions (e.g., between prevention and treatment, high vs. low-value)	Budget allocation by provider type is good (see main text)

Source: WHO 2010 (left column) and World Bank staff (right column)

**However, there are sources of inefficiency in the health system.** The main challenges appear to relate to budget execution and getting inputs – human resources, drugs and equipment – to the facilities where they should be deployed. Stronger PFM and procurement systems can help improve budget execution and facility readiness. Meanwhile, stronger accountability mechanisms for health care workers (especially medical officers), whether through a supply or demand-side approach, can help address absenteeism.

## 7. How much fiscal space? Illustrative scenarios for health spending

The previous sections have explored various issues related to five potential sources of fiscal space for health. But in concrete terms, how much could these channels yield in terms of additional resources? Here we turn to some illustrative scenarios for what each channel might mean for health spending in Bangladesh going forward. These are shown in the three panels of Figure 19.<sup>2</sup> (In all scenarios, the trend of ODA for health is assumed to be flat. As indicated earlier, this is an unlikely source of significant additional fiscal space for health in Bangladesh).

The baseline scenario takes as given the IMF's recently updated macro-fiscal projections, which forecast both robust economic growth and improved tax collection during 2016-2020 (Table 12). It further assumes that the share of the budget allocated to health would remain at its 2015 level of about 5 percent. However, economic growth averaging nearly 7 percent annually and a steady if gradual increase in revenue collection does not translate into a significant change in health spending as a share of GDP. This would still leave Bangladesh well behind comparator countries on this measure, as discussed earlier. It would, however, result in a nearly 50 percent increase in health spending in real taka terms by 2020.

Additional fiscal space can also be generated by improving budget execution rates, as shown in the next scenario. It is assumed here that stronger budget execution results in an additional 0.1 percent of GDP being spent on health, roughly equivalent to raising budget execution rates from their historical average (in the 85 to 90 percent range) up close to 100 percent. This scenario is assumed to be realized *on top of* the first scenario, essentially adding to the fiscal space created by growth and higher revenues. The additional 0.1 percent of GDP translates into a budget increase of about 12.5 percent in real taka terms by 2020. The scope to improve budget execution was highlighted in the section on efficiency of spending. As noted there, addressing other inefficiencies would not result in a larger health budget per se, but rather achieving better outcomes within the existing budget. Hence, other efficiency issues, such as HR absenteeism, are not reflected in the scenarios here, even though they represent important priorities.

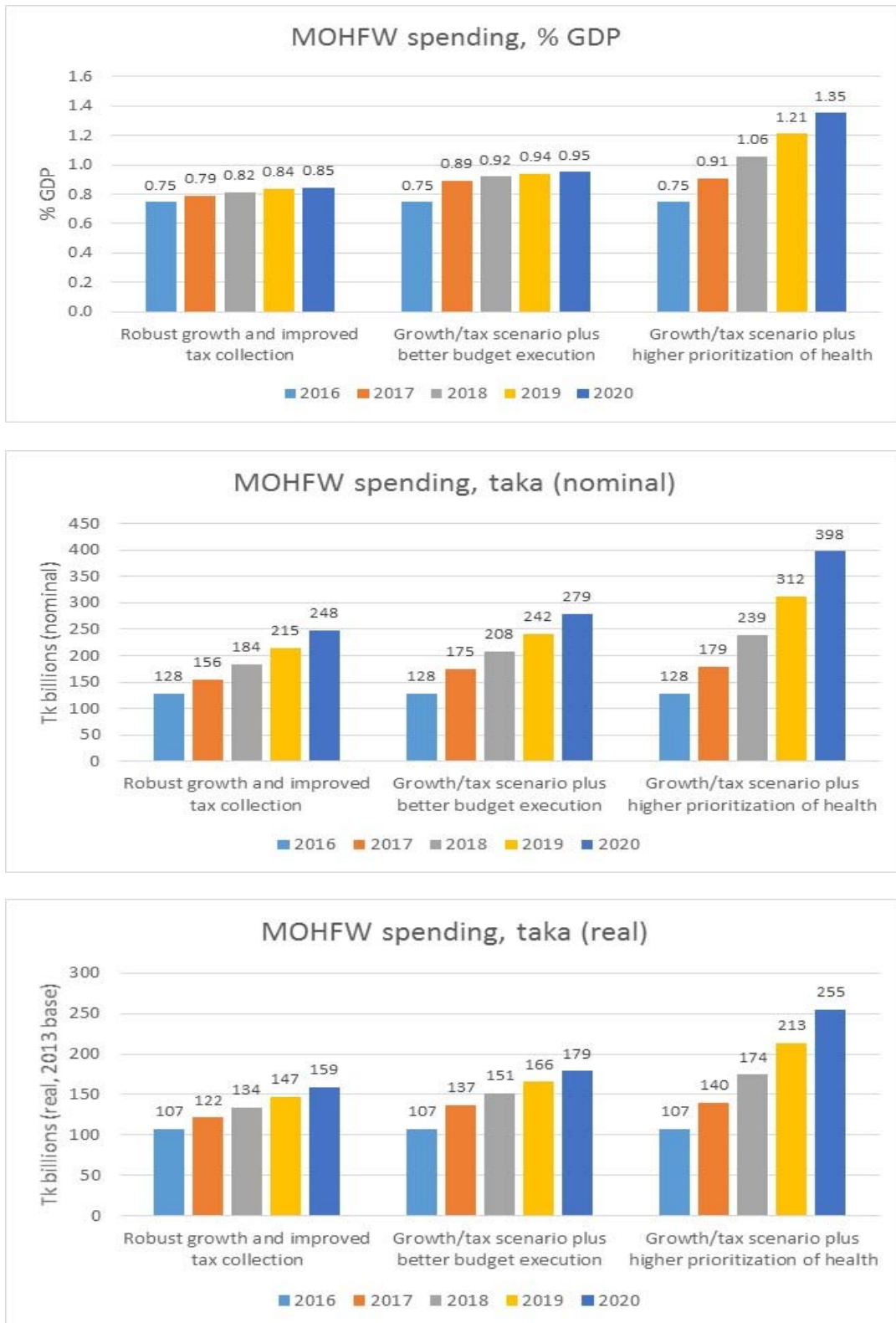
**Table 12: IMF macro-fiscal projections: Robust economic growth and improving revenue collection**

	2015	2016	2017	2018	2019	2020
Real GDP growth	6.5	6.3	6.8	7.0	7.0	7.0
Nominal GDP (Tk billions)	15,136	17,180	19,704	22,562	25,750	29,407
Total revenue & grants (% of GDP)	9.9	10.5	11.6	12.2	12.6	12.9
Total expenditure (% of GDP)	13.8	14.9	15.8	16.3	16.7	16.9

Source: IMF 2016

<sup>2</sup> The scenarios show MOHFW spending, not total government spending on health. Over the past 15 years MOHFW has accounted for over 90 percent of total health expenditures by government. The relatively insignificant spending by other Ministries, such as Defense, is ignored here.

**Figure 19: Fiscal space scenarios, 2016-2020**



Source: Author calculations and IMF 2016



**The third scenario assumes an increased prioritization of health within the government budget such that it reaches the South Asian average of 8 percent of total spending (from the current 5 percent) by 2020.** This is admittedly a rapid increase, and would require a corresponding decrease in other sectoral allocations which may be very challenging. But it is intended for illustrative purposes to show what being “average” on this key indicator would imply for health spending (recall that the South Asian average is itself well below the LIC average). As shown in the figure, the resulting increase in fiscal space for health is much larger than in the previous two scenarios (note that this scenario is calculated on top of the baseline, but excludes the higher budget execution rates illustrated in the second scenario). MOHFW spending would reach 1.35 percent of GDP by 2020, and real spending would increase nearly 2.5 times over 2016 by that year. Health spending would be 60 percent higher in real terms compared to the “growth and revenue only” scenario. In brief, a reprioritization of the budget in favor of health represents the largest source of potential fiscal space in Bangladesh over a medium-term horizon.

**Many other scenarios for how fiscal space might evolve are of course possible.** In particular, no scenario has been calculated showing the potential resources from launching a formal sector insurance program. Doing so would require much greater clarity on a number of issues, in particular the benefit package, coverage rates, efficiency of administering an employment tax, whether private sector providers would be empaneled (which could generate new fiscal responsibilities), and so on. Some rough calculations for the RMG sector and overall formal sector were included in the section on insurance options. But realistically this is a medium to long-term agenda on which much greater policy planning, analysis, and capacity-building will be required. In the short to medium-term, a new insurance scheme is unlikely to generate significant fiscal space for health.

## 8. Way forward

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### **Key policy steps suggested by the foregoing analysis include:**

***Maintain favorable environment for economic growth:*** Bangladesh has achieved a strong track record of economic growth in recent years, and over the long-term this will be a critical source of additional fiscal space for all development priorities, including health.

***Boost tax revenue collection including tobacco excises.*** Government revenue is too low. It could be increased if the tax base were broadened by increasing the number of taxpayers and the efficiency of the existing systems by automating tax collection, expanding online tax identification, and simplifying the tax regime. A greater emphasis on a uniform specific tobacco excise tax would also be advisable.

***Accord greater priority to the health sector in the government budget:*** Bangladesh has numerous development priorities and its budget must also help service its debts. However, the budget share allocated to MOHFW (5 percent) is very low by both regional and global standards, and over the medium-term this represents the largest source of potential fiscal space for health.

***Improve budget execution.*** For many years the MOHFW has not utilized some 10 to 15 percent of its (revised) budget allocation. Although this share has recently fallen, it represents perhaps the ‘lowest hanging fruit’ for making higher sectoral expenditures a reality. Until this issue is addressed, the MoF may rightly question whether the health sector has the absorptive capacity so spend additional resources.

***Strengthen governance and stewardship to address HR absenteeism and ensure drug and equipment availability at facility level:*** Although these measures do not entail securing greater resources for the health sector, they would help ensure greater efficiency of current spending and improve outcomes. Getting better value for money from the existing budget would also serve MOHFW well in making its case during discussions with MoF.

***Further the discussion of the Health Financing Strategy.*** The 20-year Health Financing Strategy makes the case for bringing additional sources of revenue into the health sector, including the formal and informal employed sector to become part of the Social Health Protection Scheme. Over the longer-term this may generate substantial resources for health, but in the short to medium-term a great deal of planning is required to make this approach operational and viable. Key issues include the cost, coverage and depth of the guaranteed health benefits package, the legal and institutional design of the SHPS, and the methodologies for allocating and purchasing the health benefits package. Advancing this discussion will help shed light on how best to expand the fiscal space for health in Bangladesh.

***Strengthen capacity to plan and implement sectoral strategy:*** As additional resources are allocated to the health sector, the need for strong sectoral planning and implementation capacity will become even more important. A larger health budget will also mean more human resources, medicines, commodities, procurement, contracting, planning, management, monitoring, and everything else. The time to start preparing for this eventuality is now.

## 9. References

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