

# Assesing Public Expenditure on Health From a Fiscal Space Perspective

Ajay Tandon and Cheryl Cashin

February 2010





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A FISCAL SPACE PERSPECTIVE**

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## Health, Nutrition and Population (HNP) Discussion Paper

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## Assessing Public Expenditure on Health From a Fiscal Space Perspective:

Ajay Tandon<sup>a</sup> and Cheryl Cashin<sup>b</sup>

<sup>a</sup> EASHH, World Bank, Washington DC., USA

<sup>b</sup> HDNHE Consultant, World Bank, Washington DC., USA

**Abstract:** This document delineates a simple conceptual framework for assessing fiscal space for health and provides an illustrative roadmap for guiding such assessments. The roadmap draws on lessons learned from analyses of seven fiscal space case studies conducted over the past two years in Cambodia, India, Indonesia, Rwanda, Tonga, Uganda, and Ukraine. The document also includes a summary of the fiscal space assessments from these seven case studies. Any 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 a country's macroeconomic fundamentals. Although fiscal space generally refers to overall government expenditure, for a variety of reasons there has been growing demand for a framework for analyzing fiscal space specifically for the health sector. This document outlines ways in which generalized fiscal space assessments could be adapted to take a more health-sector specific perspective: What is the impact of broader macroeconomic factors on government expenditures for health? Are there sector-specific considerations that might expand the set of possible options for generating fiscal space for health? Are there country-specific examples of innovative strategies that have been successful in increasing fiscal space for health?

**Keywords:** fiscal space, health expenditure, resources for health.

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**Correspondence Details:** Ajay Tandon, World Bank, 1818 H St. NW., Washington DC. 20433 USA, tel: 202-473-6338, Email: [atandon@worldbank.org](mailto:atandon@worldbank.org), website: [www.worldbank.org](http://www.worldbank.org)



## Table of Contents

<b>ACKNOWLEDGEMENTS .....</b>	<b>vii</b>
<b>PART I – INTRODUCTION AND BACKGROUND.....</b>	<b>8</b>
<i>DEFINING FISCAL SPACE FOR HEALTH.....</i>	<i>11</i>
<b>PART II - A ROADMAP FOR ASSESSING FISCAL SPACE FOR HEALTH.....</b>	<b>17</b>
<i>COMPONENT 1: IDENTIFYING THE NEED FOR ADDITIONAL FISCAL SPACE FOR HEALTH.....</i>	<i>17</i>
<i>COMPONENT 2: ASSESSING THE POTENTIAL FOR INCREASING FISCAL SPACE FROM THE FIVE PILLARS</i> .....	<i>23</i>
Conducive Macroeconomic Conditions .....	23
Re-Prioritization of Health .....	29
Increase in Health Sector-Specific Resources .....	31
Health Sector-Specific Grants and Foreign Aid .....	35
Increase in Efficiency of Health Expenditures .....	39
<i>COMPONENT 3: SUMMARY AND CONCLUSIONS .....</i>	<i>42</i>
<b>PART III - CASE SUMMARIES .....</b>	<b>44</b>
<i>CAMBODIA .....</i>	<i>44</i>
Background.....	44
Analysis of Fiscal Space using the Five Pillars.....	45
Conclusions and Recommendations .....	47
<i>INDIA .....</i>	<i>48</i>
Background.....	48
Analysis of Fiscal Space Using the Five Pillars .....	49
Conclusions and Recommendations .....	53
<i>INDONESIA .....</i>	<i>54</i>
Background.....	54
Analysis of Fiscal Space Using the Five Pillars .....	55
Conclusions and Recommendations .....	57
<i>RWANDA .....</i>	<i>58</i>
Background.....	58
Analysis of Fiscal Space Using the Five Pillars .....	59
Conclusions and Recommendations .....	61
<i>TONGA .....</i>	<i>62</i>
Background.....	62
Analysis of Fiscal Space Under the Five Pillars.....	62
Conclusions and Recommendations .....	65
<i>UGANDA .....</i>	<i>66</i>
Background.....	66

Analysis of Fiscal Space Under the Five Pillars.....	67
Conclusions and Recommendations .....	70
<i>UKRAINE</i> .....	70
Background.....	70
Analysis of Fiscal Space Under the Five Pillars.....	71
Conclusions and Recommendations .....	75
<b>ANNEX A SOME EXAMPLES OF FISCAL SPACE NEEDS-BASED ASSESSMENTS</b>	
<b><i>FROM THE LITERATURE</i> .....</b>	<b>76</b>



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## PART I – INTRODUCTION AND BACKGROUND

This document delineates a simple conceptual framework for assessing fiscal space for health and provides an illustrative roadmap for guiding such assessments. The roadmap draws on lessons learned from analyses of seven fiscal space case studies conducted over the past two years in Cambodia, India, Indonesia, Rwanda, Tonga, Uganda, and Ukraine. The document also includes a summary of the fiscal space assessments from these seven case studies.

In general terms, and in line with the literature, fiscal space can be defined as “the availability of budgetary room that allows a government to provide resources for a given desired purpose without any prejudice to the sustainability of a government’s financial position.”<sup>1</sup> Any 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 a country’s macroeconomic fundamentals.

Although fiscal space generally refers to overall government expenditure, for a variety of reasons there has been growing demand for a framework for analyzing fiscal space specifically for the health sector. This document outlines ways in which generalized fiscal space assessments could be adapted to take a more health-sector specific perspective: What is the impact of broader macroeconomic factors on government expenditures for health? Are there sector-specific considerations that might expand the set of possible options for generating fiscal space for health? Are there country-specific examples of innovative strategies that have been successful in increasing fiscal space for health?

One prominent reason why health sector-specific fiscal space assessments are needed is that lack of adequate and sustained levels of resources is often identified as the biggest constraint to achieving health outcomes, especially in low-income countries.<sup>2</sup> For example, an often cited report by WHO’s *Commission on Macroeconomics and Health* estimated that a minimum of US\$34 – or about US\$40 in 2007 prices – in per capita health expenditure would be needed in low-income countries to provide a basic package of essential health services.<sup>3</sup> A more recent update undertaken by the *Taskforce on Innovative Health Financing* places this number at US\$54 per capita.<sup>4</sup> Very few low-income countries spent even these minimal amounts on health in 2007 (Figure 1). The South Asia and sub-Saharan Africa regions together account for over 50% of the global disease burden – and 37% of the world’s population – but only 2% of global health spending.<sup>5</sup> In sub-Saharan Africa, few countries are close to the Abuja target of 15% of

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<sup>1</sup> Heller, P (2006), “The Prospect of Creating ‘Fiscal Space’ for the Health Sector,” *Health Policy and Planning*, 21(2): 75-79.

<sup>2</sup> Jamison, DT, JG Breman, A Measham, G Alleyne, M Claeson, DB Evans, P Jha, A Mills, P Musgrove (2006), *Priorities in Health*, Washington, World Bank.

<sup>3</sup> Sachs, J (2001), *Macroeconomics and Health: Investing in Health for Economic Development*, Geneva: Report of the Commission on Macroeconomics and Health.

<sup>4</sup> Taskforce on Innovative Health Financing for Health Systems (2009), *Working Group 1 Report: Constraints to Scaling Up and Costs*.

<sup>5</sup> WHO (2007), “Do Health Expenditures Meet Health Needs?” *WHO/NHA Policy Highlight No. 1*, Geneva: World Health Organization.

the government budget allocated to the health sector (Figure 1).<sup>6</sup> Low revenue-generating capacity, low prioritization of health, and other constraining factors often account for low levels of government spending on health in many low-income countries and, in many countries, government health spending benefits the rich more than the poor.<sup>7</sup> A large share of total health expenditure in low-income countries (over 75% on average) is from private sources, and almost all of this is out-of-pocket. This is especially problematic as it exposes vulnerable populations to the risk of impoverishment (or non-treatment) as a result of health shocks.

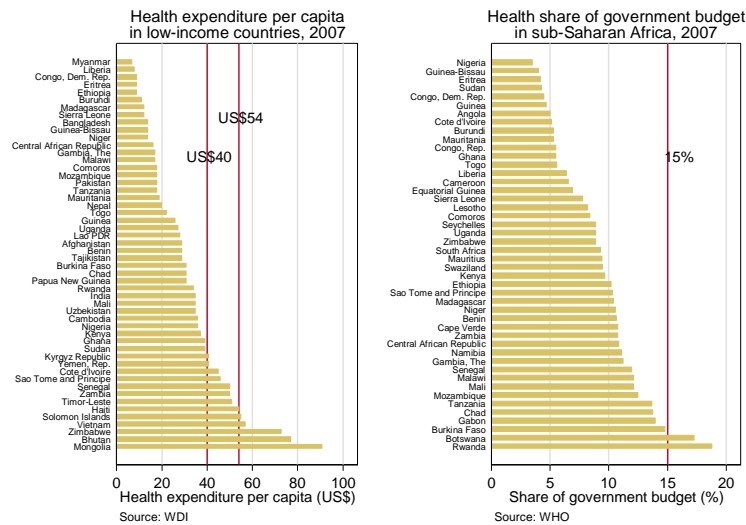


FIGURE 1. TOTAL HEALTH EXPENDITURE PER CAPITA IN LOW-INCOME COUNTRIES AND HEALTH'S SHARE OF THE GOVERNMENT BUDGET IN SUB-SAHARAN AFRICA, 2007

The analysis of fiscal space for health is not limited in scope to low-income countries. Health systems in both low- and middle-income countries often struggle with issues related to universal coverage, financial protection, quality, responsiveness, cost containment, and efficiency.<sup>8</sup> The government's share of overall health expenditure tends to rise with income, and middle-income countries typically have larger publically funded components in their health systems than do low-income countries.<sup>9</sup> Fiscal space analyses for health for middle-income countries (and increasingly in low-income countries) are often prompted by the need to raise additional public resources for expanding insurance coverage, for improving the efficiency of spending, and for ensuring the effective performance and sustainability of health systems, among others.

Fiscal space assessments for health have become even more relevant in light of the ongoing global economic crisis. The crisis – which began in late 2008 in the US – has now spread to

<sup>6</sup> In 2001 the African Union held a special summit on AIDS in the Nigerian capital Abuja. The resulting Abuja Declaration, among other commitments, called for African countries to spend 15% of their public budgets on health.

<sup>7</sup> Tandon, A (2007), "Measuring Government Inclusiveness: An Application to Health Policy," *Asian Development Review*, 24(1): 32-48.

<sup>8</sup> Ibid.

<sup>9</sup> ADB (2006), *Key Indicators 2006: Measuring Policy Effectiveness in Health and Education*, Manila: Asian Development Bank.

almost all countries of the world. Countries across the income spectrum have seen a slump in economic growth, with the richer countries being hit the hardest in terms of the impact on economic growth (Figure 2). Although the magnitude of the growth impact of the crisis is expected to be lower for low-income countries, concerns remain as to the extent to which countries will be able to protect spending in a core sector such as health. Competing demands for resources from fiscal stimulus and other spending needs may put increasing pressures on the fiscal space available for health.<sup>10</sup> A key question from a fiscal space perspective would be to be to assess how might fiscal space for health be impacted by the effects of and response to the ongoing global crisis?

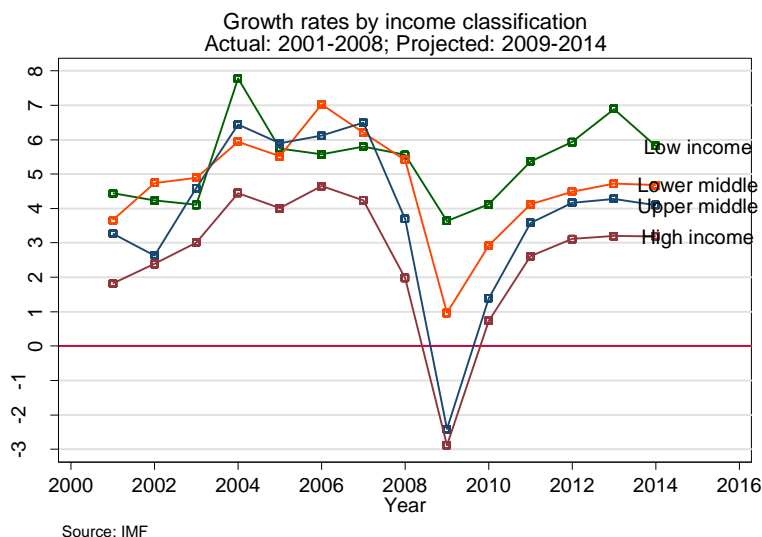


FIGURE 2. ECONOMIC GROWTH RATES BY INCOME CLASSIFICATION  
ACTUAL (2001-2008) AND PROJECTED (2009-2014)

The remainder of the document is organized as follows. The rest of this section elaborates on the definition of fiscal space and outlines a simple conceptual framework for assessing fiscal space for health. Section II provides a basic roadmap for applying the conceptual framework outlined in Section I to specific country context, highlighting examples from fiscal space assessments conducted over the past two years in seven diverse countries: Cambodia, India, Indonesia, Rwanda, Tonga, Uganda, and Ukraine. Section III presents summaries of the seven fiscal space case studies.

<sup>10</sup> Gottret, P, V Gupta, S Sparkes, A Tandon, V Moran, and P Berman (2009), "Protecting Pro-Poor Services During Financial Crises: Lessons from Experience," in Chernichovsky, D and K Hanson (eds.), *Innovations in Health Systems Finance in Developing and Transitional Economies*, Bingley: Emerald.

## DEFINING FISCAL SPACE FOR HEALTH

As mentioned above, fiscal space – as defined in the literature – is said to exist when a government has budgetary room to increase spending, and can do so without impairing fiscal solvency, i.e. the government’s present and future ability to cover its recurrent expenditures and service its debt.<sup>11</sup> It is important to note, however, that this generalized definition of fiscal space does not take into account what the additional budgetary room is intended to be spent on and, in particular, does not have a specific sectoral focus. Fiscal space defined thus is presumed to be needed for financing additional government expenditure for some “meritorious” purposes, e.g., for financing additional public infrastructure investments, for implementing fiscal stimulus programs in times of economic downturns, or some other such socially desirable objective.

In line with the general definition of fiscal space, fiscal space specifically for health refers to the ability of governments to increase spending for the sector without jeopardizing the government’s long-term solvency or crowding out expenditure in other sectors needed to achieve other development objectives [such as some of the other non-health Millennium Development Goals (MDGs)]. Fiscal space analysis is one tool to assess, monitor, or predict the sources and level of public resources available for the health sector.

The analytical and conceptual framework for assessing fiscal space for health can be used as part of sector-specific public expenditure reviews (PERs), Medium-Term Expenditure Frameworks (MTEFs), or as stand-alone assessments to inform policy dialogue with governments and other stakeholders (see Box 1). The primary question that we would like to answer in any fiscal space assessment for health is: **given well-defined needs, what are the prospects for increasing government spending for health in the short-to-medium term?**

### Box 1. MTEFs, PERs, and Fiscal Space Assessments

What is the relationship between medium-term expenditure frameworks (MTEFs), public expenditure reviews (PERs), and fiscal space assessments?

MTEF is a forward-looking, top-down assessment of the available government resource envelope in a country (or a sector) combined with bottom-up sectoral estimates of the costs of different policies that have been chosen.<sup>12</sup> MTEF is a budgetary planning tool to match projections of available resources with projections of resources needs, typically for three-to-five years into the future. MTEF is designed to provide the means to assess government allocations across sectors and to scale programs in accordance with a country’s fiscal capacity. MTEFs can be completed from the perspective of the government as a whole, or for specific sectors such as health. Some of the key questions that an MTEF is designed to address are: What are the country’s medium-term fiscal targets? And how should resources be allocated within the overall fiscal envelope? In addition to ensuring consistency between spending and fiscal targets, MTEFs accord a degree of budgetary predictability for each of the sectors and can therefore reduce some of the uncertainty surrounding planning and implementation of government programs.<sup>13</sup>

PERs, on the other hand, are more of a backward-looking evaluation of public spending, either across sectors or for a given sector. PERs typically evaluate the rationale for public spending and assess the effectiveness of government expenditure both from an efficiency (allocative and technical) and equity perspective.<sup>14</sup>

<sup>11</sup> Heller (2006).

<sup>12</sup> World Bank (1998), *Public Expenditure Management Handbook*, Washington, DC: World Bank.

<sup>13</sup> One example is Armenia. See World Bank (2005c), *Public Expenditure in the Health Sector*, Washington DC.

<sup>14</sup> World Bank (2009), *Preparing PERs for Human Development*, Washington, DC: World Bank.

Fiscal space analysis entails the use of a simple analytical and conceptual framework that can be utilized as an input to PER or MTEF exercises. For instance, one conclusion from a PER could be that the health sector is under-funded and that government spending would need to increase in order to make up for the shortfall. Fiscal space analysis can then be conducted as a means to assess the avenues by which government health spending could potentially increase. On the other hand, fiscal space analysis can be used to form the basis of an MTEF exercise. For instance, if a fiscal space assessment identifies the use of health-specific grants from the Global Alliance for Vaccines and Immunization (GAVI) as the most practical means for raising additional resources in the sector, the predicted level of grant funding would be taken into account in formulating the health sector resource envelope and program-specific allocations as part of the MTEF exercise.

The existing literature on fiscal space analysis ranges from estimates derived from simple back-of-the-envelope calculations to complex models incorporating macroeconomic linkages and interactions resulting from an increase in government health expenditure. One example of a simple, back-of-the-envelope “model” for assessing fiscal space available for health can be found in Williams and Hay (2005).<sup>15</sup> In their framework, possible upper bounds for fiscal space for health are derived from what is observed across countries. If one assumes that overall government expenditure in any economy is limited to 30-35% of GDP (an upper bound for most low income countries) – and if 15% of government budget is spent on health (also an upper bound derived from the data) – then it is highly unlikely that government health spending would ever exceed 4.5-5% of GDP.<sup>16</sup> Although such a calculation does not get into issues related to how additional spending for health would be realized, it does provide upper bounds for the magnitudes of increases that are feasible, especially in the short-to-medium term, if government health spending was at the maximal amounts observed across countries. This can be a starting point to complement costing studies that focus on resource needs.

If government health spending were to increase to 5% of GDP in the seven fiscal space case countries, this would imply government health expenditure per capita almost tripling in Cambodia and increasing five-fold in India (Table 1). On the other hand, given the already high shares of government health expenditure in GDP in Rwanda, Ukraine, and Tonga, the corresponding scope for increasing government health spending is much less in these countries. Other simple simulations of health spending per capita are variants of those reported in Table 1. Other optimistic combinations of assumptions often include the fiscal space implications of a doubling of the aid to GDP ratio, increases in economic growth rates above long-term trend rates, and increases in government revenues as a share of GDP.<sup>17</sup>

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<sup>15</sup> Williams, G and R Hay (2005), “Fiscal Space and Sustainability from the Perspective of the Health Sector,” *Background Paper on the High Level Forum on the Health MDGs*, Policy Practice, London, UK.

<sup>16</sup> Ibid.

<sup>17</sup> High-Level Forum. Fiscal Space and Sustainability from the Perspective of the Health Sector. Op. cit.

TABLE 1. FISCAL SPACE UPPER BOUNDS

Country	GDP per capita	Government health expenditure share of GDP	Government health expenditure per capita	New government health expenditure per capita
Cambodia	\$550	1.7%	\$10	\$28
India	\$950	0.9%	\$9	\$48
Indonesia	\$1,650	1.3%	\$24	\$83
Rwanda	\$320	4.9%	\$17	\$17
Tonga	\$2,480	3.6%	\$92	\$124
Uganda	\$370	1.7%	\$7	\$19
Ukraine	\$2,560	3.8%	\$116	\$128

\*If government health expenditure share of GDP increased to 5%.

Source: WDI & WHO; All numbers are in constant 2000 US\$.

Other analyses of fiscal space have utilized sophisticated dynamic computable general equilibrium models to examine the implications of scaled-up spending on the macroeconomy. A brief review of the literature can be found in Annex A.

### A Simple Conceptual Framework for Assessing Fiscal Space for Health

The above sub-section has outlined a working definition of fiscal space for health. Drawing on existing frameworks, this sub-section elaborates a simple conceptual framework for assessing fiscal space for health.

Conceptually, and building on Heller's (2006) framework, fiscal space for health can potentially be generated from a variety of sources which can broadly be grouped into the following five categories:<sup>18</sup>

- (i) **Conducive macroeconomic conditions** such as economic growth and increases in overall government revenue that, in turn, might lead to increases in government spending for health;
- (ii) A **re-prioritization** of health within the government budget;
- (iii) An increase in **health sector-specific resources**, e.g., through earmarked taxation;
- (iv) **Health sector-specific grants and foreign aid**; and
- (v) An increase in the **efficiency** of existing government health outlays.

The first three options (including the possible use of health-specific earmarked taxes) usually lie outside of the domain of the health sector and are linked to general macroeconomic policies and conditions, as well as to political economy and cross-sectoral trade-offs. Nevertheless, despite the fact that these areas are largely exogenous to the health sector, it remains important to analyze what the implications are for the health sector of changes in the general macroeconomic and political environment within which it operates. Areas (iv) and (v) are more in the direct domain of the health sector and merit particular attention, given that they provide the potential for resources that are sector-specific.<sup>19</sup>

<sup>18</sup>Heller, P (2006), "The Prospect of Creating 'Fiscal Space' for the Health Sector," *Health Policy and Planning*, 21(2): 75-79.

<sup>19</sup> Although, even for health-specific grants and foreign aid, final decisions are often made within Ministries of Finance and not Ministries of Health.

Fiscal space can be understood using the algebra of a government’s intertemporal budget constraint. The left-hand side of the following represents the uses of budgetary resources whereas the right-hand side reflects sources of budgetary resources:

$$G_t + r_t B_{t-1} = T_t + B_t + A_t + O_t,$$

where  $G_t$  is government non-interest expenditure in time  $t$ ;  $r_t B_t$  is non-discretionary debt interest payments;  $T_t$  is taxes, fees, and other government revenues, including those arising from seigniorage (inflationary finance);  $B_t$  is total government borrowing (domestic and foreign net of use of deposits);  $A_t$  is grants; and  $O_t$  is other sources of funds, such as sale of assets. In other terms, the right-hand side represents the aggregate sources of government revenue, and the left-hand side represents total spending.

Fiscal space for health depends not only on the overall government budget constraint, but also on the priority assigned to health. Government health spending,  $H_t$ , is a proportion  $k_t$  of the overall government budget, or:

$$H_t = k_t G_t.$$

Whether the priority for health ( $k_t$ ) is a constant or variable parameter is a key policy question. For example, if  $G$  increases as a result of increases in overall fiscal space, health spending would increase by a fixed proportion  $k$  if spending priorities remain unchanged. The focus from this perspective would be on analyzing increases in  $G$  and deriving the implications for  $H$ . A focus on re-prioritization, on the other hand, would imply finding ways to increase  $k$ .

Fiscal space can also be realized through efficiency gains. Assuming  $Y$  represents some measure of government health system outputs – e.g., effective coverage of key interventions – then getting the most  $Y$  out of given  $H$  is creating effective fiscal space. Interventions aimed at improving the technical and allocative efficiency of health spending by, for example, using cost-effectiveness criteria to inform resource allocations, reducing leakages in inter-fiscal transfers, or addressing absenteeism of health workers are examples of policies that could lead to increases in effective fiscal space through efficiency gains.

Fiscal space for health can be visualized using a spider plot. Figure 3 shows one scenario for fiscal space for health for a hypothetical country. There are five different axes, each representing a different means of increasing fiscal space for health, and the “spokes” represent the predicted increase along each axis in terms of percentage increases in real government health spending over any base year. The figure shows that, in our hypothetical example, a 1% increase in real government health spending can be expected to come from increases in overall government spending (e.g., as a result of economic growth), a 2% increase is expected from re-prioritization of health in the government budget, a 6% increase from external sources, a 3.5% increase from sector-specific sources such as introduction of mandatory insurance premiums or the like, and a 2.5% increase from efficiency improvements. A note of caution: specific quantitative assessments of the availability of fiscal space from the different pillars may not always be feasible to estimate.



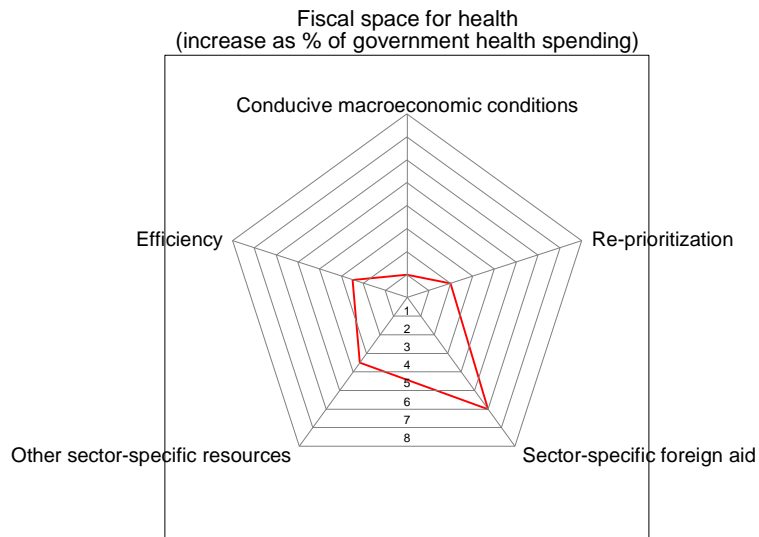


FIGURE 3. VISUALIZING FISCAL SPACE FOR HEALTH FOR A HYPOTHETICAL COUNTRY

It is important to note that expected changes in fiscal space can also be negative along one or more of the pillars depicted in Figure 3, and this is not captured in the above spider plot. It is possible, for instance in extreme circumstances, for net fiscal space to decrease in a country. This phenomenon was observed in many countries of the former Soviet Union which saw a collapse in both GDP and the share of the public budget allocated to health care following independence in the early 1990s (and before donors entered those countries on a significant scale).<sup>20</sup>

A further weakness of the above-mentioned fiscal space framework is that it can make it difficult to account for the fact that the different pillars are not entirely independent. Several of the pillars are likely to be correlated in either direction (i.e., either positively or negatively). For example, better macroeconomic conditions may allow the government to increase its share of the total budget allocated to health. On the other hand, better macroeconomic conditions may also lead to reduced donor support, with a lower net impact on government health expenditure than might have been anticipated at first. Similarly, a recession in the domestic economy may offset increases planned as part of a re-prioritization of health in the government budget. And any potential increases in fiscal space for the health sector can only be realized if the government chooses to allocate the additional resources to the health sector by maintaining or increasing the sector's share in the total. Even an increase in sector-specific resources will not effectively increase total net fiscal space if the increase is offset by reductions in the health budget or other government commitments to the sector. In Kazakhstan, for example, the government introduced a dedicated tax for health insurance in 1996 to increase fiscal space for health, but reductions in the government health budget more than offset the revenue increase from the dedicated tax, and there was an overall decline in fiscal space for health.<sup>21</sup> Furthermore, additional fiscal space is

<sup>20</sup> Kutzin, J. and Cashin, C. 2002. Health system funding. In McKee M, Healy J, and Falkingham J *Health Care in Central Asia*. Buckingham: Open University Press.

<sup>21</sup> Kutzin and Cashin (2002).

only effective if underlying inefficiencies that lead to leakage and waste of health sector resources are addressed, and the capacity to absorb additional resources is adequate.

An important caveat is that any fiscal space assessment for health analysis ought not presuppose that additional resources for health would become available or realizable and that the only choice is one of which of the pillars would be the most practical means to do so. It is entirely plausible that in some countries the government's resource envelope for health will remain limited in the short- to medium-term.

Despite some of the deficiencies outlined above, this simple conceptual framework for assessing fiscal space for health as summarized in Figure 3 is fair inclusive and can be a useful guide on the analysis of the different avenues by which fiscal space for health may or may not be actualized, given a clearly defined and articulated need for doing so.

## **PART II - A ROADMAP FOR ASSESSING FISCAL SPACE FOR HEALTH**

Section I provided a basic definition, some background, and a simple conceptual framework for assessing fiscal space for health. This section provides a more detailed suggestive guide/roadmap for assessing fiscal space for health using the conceptual framework outlined in Section I, highlighting examples and lessons learnt from seven case study countries: Cambodia, India, Indonesia, Rwanda, Tonga, Uganda, and Ukraine.

Despite variations dependent on country context, there are some common components that are key to any assessment of fiscal space for health. At the very minimum, any fiscal space assessment ought to include the following **three** components:

1. A discussion of the current factors that drive the need for increased fiscal space for health in the country;
2. A systematic analysis of the potential for generating additional fiscal space under each of the five pillars outlined in Section I, namely conducive macroeconomics, re-prioritization, external resources, sector-specific sources, and efficiency; and
3. A discussion of the most viable options for increasing fiscal space for health, and the issues or obstacles surrounding those options in the country over the short-to-medium term.

Each of these three major components of a fiscal space assessment is discussed in more detail below.

### **COMPONENT 1: IDENTIFYING THE NEED FOR ADDITIONAL FISCAL SPACE FOR HEALTH**

The first step in any fiscal space assessment must be a clear articulation of the need to increase government spending for health in the country over the short-to-medium term (say, over the next 3 to 5 years). The basic idea being that evidence would need to be presented as to why additional health expenditure might be needed and justifications – e.g., on efficiency or equity or other grounds – for why the additional health expenditure would need to be publicly financed.

There may be many reasons why government spending for health may need to increase. Some of these have already been mentioned in Section I. Other issues may be important as well: equity considerations might be important, for example, if high levels of out-of-pocket payments pose a barrier to the poor to access to care. Ensuring improved access to health care and financial protection considerations often require additional public financing. Improvements in the efficiency of current resource outlays may be necessary if, for example, structural inefficiencies in the system limit the effectiveness of or absorptive capacity for current expenditure levels. In other countries, high dependence on external assistance may raise concerns about diversifying sources of fiscal space.

The articulated need for additional fiscal space for health would hold greater credibility if it is backed by a careful costing of the required inputs. For provision of insurance coverage for the poor, this may entail resource projections based on actuarial analyses. For introduction of new

interventions or scaling-up of existing interventions, this may involve costing of additional resource inputs such as human resources and equipment. In this regard, toolkits such as the WB/UNICEF's Marginal Budgeting for Bottlenecks (MBBs) model or the WHO's Choosing Interventions that are Cost-Effective (CHOICE) may be useful.

In the case study analysis for **Cambodia**, for instance, although low levels of total (public and private) health spending were not regarded as a major obstacle to achieving the health-related MDGs, the majority of health spending in the country remains out-of-pocket and there is evidence that this poses a significant barrier for the poor to access essential services. Furthermore, public sector wages are low, which is one factor behind poor quality of care. Therefore, one motivation for additional fiscal space for health is the need to improve public sector services and provide better access and financial protection for the poor.<sup>22</sup>

In the case of **India**, a new central government initiative to increase public health spending created demands for additional fiscal space both at the central and state levels. India's central government – in part in recognition of historically low levels of spending for the sector – recently pledged to increase government health spending to 2-3% of GDP by 2012, up from previous levels of just under 1%.<sup>23</sup> One element of this pledge has been the introduction in 2005 of the National Rural Health Mission (NRHM), which entails a centrally-funded transfer of resources to states for an umbrella package of primary health-care interventions. The states are expected to contribute matching funds and eventually assume responsibility for financing and implementation of the program (see Box 2). In India's decentralized case, the issue of fiscal space relates to the ability of states to increase their allocations to health in order to complement increases in central funds. Given that more than two-thirds of government health spending in India is at the state level, any rise in central funds that is not accompanied by increases in state funds is unlikely to lead to a significant increase in total government health spending.<sup>24</sup> Therefore, fiscal space analysis for India focuses on the ability of states to complement increases in central government health spending.

#### **Box 2. India's National Rural Health Mission**

India launched a major flagship program, the National Rural Health Mission (NHRM), in 2005. NHRM is an umbrella program designed to improve access to effective health care for the poor and vulnerable population groups residing in rural areas of the country. The program is designed to cover the entire country but with a specific focus on 18 lagging states. NHRM – designed to be implemented over the course of seven years, from 2005 through to 2012 – is part of the central government's initiative to increase its health spending to 2-3% of GDP by 2012, up from about 1% of GDP.

NHRM includes several key components. These include the initiation of an Accredited Social Health Activist (ASHA) program, which is a voluntary female community health program aimed at improving immunization rates, institutionalized deliveries, reproductive health care, and nutrition, among others. NHRM also stipulates improvements in health infrastructure, human resources for health, and availability of drugs. One prominent aspect of NHRM is that it is a flexible, decentralized program designed to be implemented from the bottom-up depending on local needs and conditions.

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<sup>22</sup> Lane, C (2007), *Scaling Up for Better Health in Cambodia*. Geneva: World Health Organization.

<sup>23</sup> Berman, P and R Ahuja (2008), "Government Health Spending in India," *Economic & Political Weekly*, June 28: 209-216.

<sup>24</sup> Ibid.

From an interfiscal health financing perspective, and in a decentralized public health care system such as India's where the bulk (over three-quarters) of government health expenditure traditionally occurs at the state level, the implementation of NRHM incorporates several new key components. These include a channeling of NRHM funds through state-level societies and not via the state budget, a proposed change in the center-state health financing ratio from roughly 20:80 to at least 40:60 by 2012, a commitment by the center to increase its NRHM allocations by 30% per year for the first two years of the program and 40% per year thereafter until 2012, provisions for matching contributions by states amounting to at least 15% of center's NRHM allocations for each year over the period 2007-2012, although this is likely to be effectual only over the period 2008-2012, and an understanding that states would increase their health budgets by at least 10% per year in order to provide matching funds for NRHM.

Source: Hota, P (2006), "National Rural Health Mission," *Indian Journal of Pediatrics*, 73: 21-23.

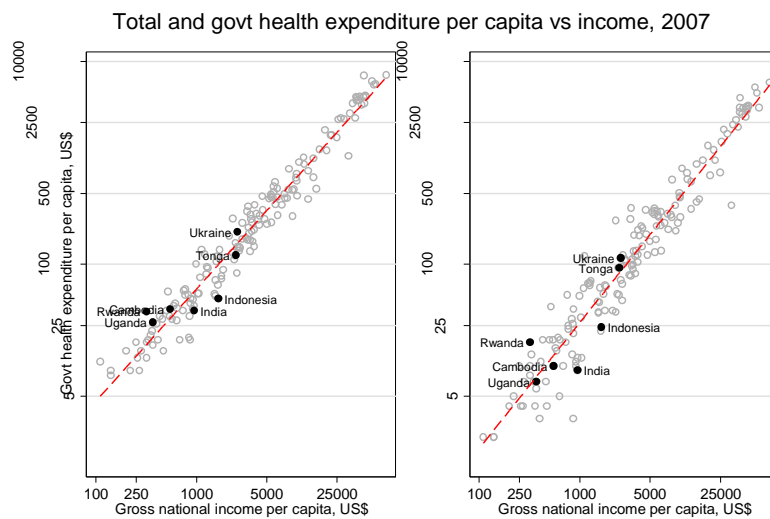
In the case of **Indonesia**, the justification for additional fiscal space for health stems from the implementation of a centrally-funded national scheme to provide health insurance coverage for the poor. This insurance program (*Jamkesmas*) currently targets 76.4 million poor and near-poor individuals (about one-third of Indonesia's population). The government plans to expand to universal coverage in the near future and the financing plans for this are still under debate. In 2006, allocations for the *Jamkesmas* program in Indonesia amounted to an estimated 22% of central government health spending. Resource requirements are expected to grow as penetration of *Jamkesmas* improves and utilization rates increases.<sup>25</sup> Preliminary estimates indicate that Indonesia's plans for expanding insurance coverage to the entire population are likely to require an additional expenditure of 1.6% of GDP by 2015 and 2.7% of GDP by 2020.<sup>26</sup> Hence, the motivating question in Indonesia was: Is there fiscal room to finance this expansion of coverage?

Both **Indonesia** and **India** have low levels of government (and total) health spending relative to their income levels (Figure 4). In addition, as discussed later, there are numerous other indicators that suggest that the health systems of both countries suffer from underlying inefficiencies. Hence, low levels of resources – both in terms of magnitudes as well as effectiveness – are a key fiscal space issue in both countries. This is less clear in the other case countries as all of them spend expected amounts on health relative to income (Figure 4). However, even for the same income level, the needs for government financing may be different so more analysis would be needed to assess the justification for additional fiscal space for health in the short-to-medium term.

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<sup>25</sup>Rokx C, G Schieber, P Harimurti, A Tandon, and A Somanathan (2009), *Health Financing in Indonesia: A Reform Road Map*, Washington, DC: The World Bank.

<sup>26</sup> These numbers are based on an analysis done by the Asian Development Bank (ADB) projecting the cost of reaching universal health insurance coverage in Indonesia. See ADB (2007), *Preparatory Studies on the National Social Security System in Indonesia*, Manila: Asian Development Bank.



Source: WDI & WHO

FIGURE 4. TOTAL AND GOVERNMENT HEALTH EXPENDITURE PER CAPITA VS INCOME, 2007

In **Rwanda**, robust growth, pro-poor development policies, and significant international donor support contributed to a near doubling of health expenditures between 2003 and 2006. A high level of dependence on external donor financing continues, however, with donor funding accounting for more than half of total health financing in 2007, and 80% of government health spending. Based on the estimated costs of service expansion, funding gaps for meeting health MDGs are likely to emerge when donor commitments decline after 2010 unless additional domestically-sourced fiscal space for health is generated. Does Rwanda have the fiscal capacity to move away from donor financing to domestic financing of health spending?

**Tonga** has one of the highest levels of government health spending in the East Asia and Pacific (EAP) region. Faced with rising expenditures, however, and concern about the sustainability of current revenue sources, the motivation of the fiscal space assessment in the country was to assess options for diversification and for sustaining the financing base for the health sector.

**Uganda** is an example of a country that has a health strategy in place with cost estimates to justify additional fiscal space for health to address its significant challenges. Costing of the strategy estimates that US\$28 per capita is needed to fully finance the country’s health strategy, but that only US\$7 per capita in government funds was currently available. Hence, in Uganda’s case, additional fiscal space is needed to cover this funding gap and fully implement the health sector strategy.

**Ukraine** is faced with a range of issues that demand an increase in fiscal space for health, including high out-of-pocket health expenditures, a double burden of infectious and non-communicable disease, and increasing demographic pressures due to an aging population. Ukraine is one of the few countries in the world that had a higher life expectancy in the 1960s than it has today. The grossly inefficient health system inherited from the Soviet Union, however, make the underlying rigidities and inefficiencies in the system an enormous constraint to effective fiscal space, severely limiting absorptive capacity for additional resources.

It is useful in this component of the fiscal space analysis to also summarize key factors in the country that could potentially affect the need or ability to create fiscal space for health. Some of the key suggested components of the analysis might include aspects of the socio-economic, political, demographic or other health-related environment that characterize the country such as population size, demographic trends, economic growth trends, government health spending trends, and the different sources of health financing. For example, if health expenditure per capita is lower than average for the country's income level, it may suggest the need for additional resources. On the other hand, it could also indicate that the health system is efficient. Other contextual factors need to be examined together with the level of health expenditures, including inequalities across socio-economic groups or regions, the performance of the health system, and attainment of improvements in health outcomes to determine whether additional fiscal space for health would be needed.

It is also important in this component of the analysis to summarize the country's level of attainment of health improvements in recent years (trends over time and relative to comparable countries in the same region and same income level). For example, analysis of key health outcomes such as infant, child, and maternal mortality rates (both on average as well as among the poor and other vulnerable population sub-groups), progress toward achieving MDGs, and burden of HIV/AIDS, other priority infectious and chronic diseases can help contextualize the need for additional fiscal space for health. A country's infant mortality rate, for instance, tends to decline on average as national incomes increase, and a country's income is in fact one of the strongest predictors of infant mortality.<sup>27</sup> Infant mortality is a key indicator for health outcomes in the country as a whole.<sup>28</sup> If a country's infant mortality is higher than expected given its income level, it may indicate that additional investment is needed in the health sector to improve overall health outcomes, although other non-health systems factors such as female literacy may explain the worse than expected performance of the country (Figure 5).

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<sup>27</sup> Schell C, M Reilly, H Rosling, S Peterson, and A Ekstrom (2007), "Socioeconomic determinants of infant mortality: a worldwide study of 152 low-, middle-, and high-income countries." *Scandinavian Journal of Public Health* 35(3): 288-297.

<sup>28</sup> Reidpath D and P Allotey (2003), "Infant mortality rate as an indicator of population health," *Journal of Epidemiology and Community Health* 57(5): 344-346.

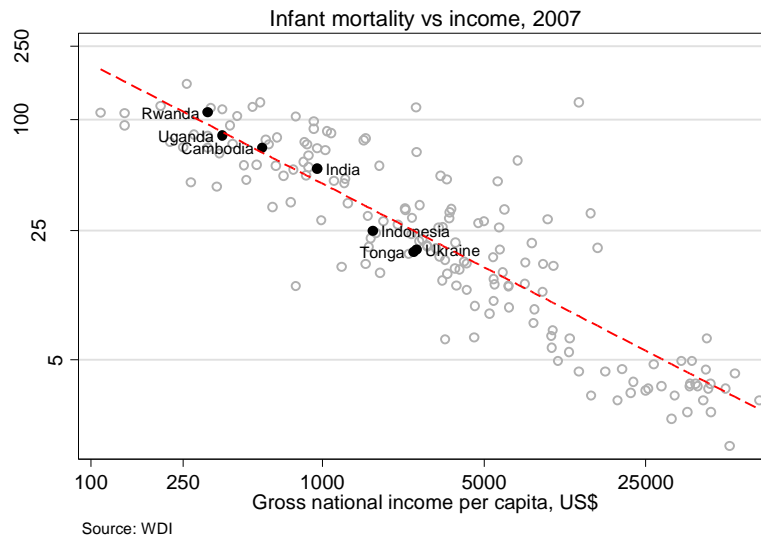


FIGURE 5. INFANT MORTALITY RATE VS. INCOME, 2007

It also would be useful in some cases to underscore the relative importance of public and private providers, the quality of health care services (public and private), coverage of priority services/programs, especially among the poor and other vulnerable population sub-groups, as well as the benefit-incidence of government expenditures on health. The role of the private sector in the health system in particular is a key contextual issue in fiscal space analysis. If private sector providers account for the majority of utilization, and public funds cannot be or are not channeled to private providers, increasing fiscal space for health may not solve problems of access. If out-of-pocket payments are a significant barrier to access to care, simply increasing fiscal space without strengthening risk pooling mechanisms is unlikely to improve financial risk protection. Fiscal space analysis should, therefore, address how an increase in public funding for the health sector will bridge the public and private sectors where private sector providers and private expenditures are significant.

Table 2 below summarizes some of the suggested analytics that would form the basis for the first component of any fiscal space assessments. The table lists some suggested indicators, data sources, and graphics that can be useful to motivate and contextualize the analysis.

TABLE 2. SUMMARY OF INDICATORS FOR FIRST STEP OF FISCAL SPACE FOR HEALTH ANALYSIS

COMPONENTS OF THE ANALYSIS	INDICATORS	POSSIBLE DATA SOURCES	GRAPHS
Key aspects of socioeconomic, political, demographic or health-related environment that characterize the country	<ul style="list-style-type: none"> <li>▪ Population size and demographic trends</li> <li>▪ Per capita GDP in constant \$US</li> <li>▪ Urbanization or geographic characteristics that affect the health sector</li> <li>▪ Recent crises or shocks</li> <li>▪ New government health initiatives</li> </ul>	<p>WDI/WHO</p> <p>WDI/WHO</p>	



COMPONENTS OF THE ANALYSIS	INDICATORS	POSSIBLE DATA SOURCES	GRAPHS
Health expenditure patterns	<ul style="list-style-type: none"> <li>▪ Total health spending per capita, absolute and as % of GDP</li> <li>▪ Government health spending, as % of the total and as % of GDP</li> <li>▪ % of total health spending from private sources</li> </ul>	<p>WDI/WHO</p> <p>WDI/WHO</p> <p>WDI/WHO</p>	Health expenditure per capita vs. GNI per capita and global/regional comparison
Key features of the health system	<ul style="list-style-type: none"> <li>▪ Private providers as % of total # of providers (and separately for primary care, specialists, hospitals)</li> <li>▪ % of total visits to private providers</li> <li>▪ Overall quality of health services (public and private) – a variety of indicators may be available</li> <li>▪ % of target population covered by priority services/programs</li> </ul>		
Attainment of health outcomes	<ul style="list-style-type: none"> <li>▪ Infant, child, and maternal mortality rates</li> <li>▪ Progress toward meeting MDGs</li> <li>▪ Burden of HIV/AIDS, other priority infectious diseases, and chronic diseases</li> <li>▪ Other key issues related to health outcomes</li> </ul>	WDI/WHO	Infant mortality rate vs. GNI per capita and global/regional comparison

## COMPONENT 2: ASSESSING THE POTENTIAL FOR INCREASING FISCAL SPACE FROM THE FIVE PILLARS

The next component of the fiscal space assessment would be a systematic assessment of the potential for increasing fiscal space for health from each of the five sources that were outlined in Section I, namely: **conducive macroeconomic conditions, re-prioritization of health, health-sector specific sources, foreign aid, and efficiency**. The components of this part of the analysis are described below, and suggested analytics and indicators are summarized in Table 3 at the end of this sub-section.

### Conducive Macroeconomic Conditions

Conducive macroeconomic conditions such as sustained economic growth, improvements in revenue generation, and low levels of fiscal deficits and debt can be important for fiscal space considerations for any sector, including health. High levels of economic growth, for instance, can lead to increases in fiscal space for health even if the government health spending share of GDP remains unchanged in a country. If GDP grows by 7% per year in real terms then this would also imply an increase in government health spending by 7% per year in real terms (assuming any

changes in health prices are not significantly different from changes in overall prices in the country over time), and even if the government health spending share of GDP remains the same.

A good starting point would be to look at how a given country fares with regard to its overall fiscal capacity as derived from standard macroeconomic indicators. For example, the World Bank's Poverty Reduction and Economic Management (PREM) group has recently developed a typology to assess the extent to which: (i) a country is vulnerable to economic crises; and (ii) the government's fiscal and institutional capacity to cope with the crises.<sup>29</sup> In the framework, vulnerability is assessed based on the impact of the crisis on economic growth as well as the country's poverty level. The fiscal capacity measure is an index based on a country's debt-to-GDP ratio, fiscal deficit, current account balance, international reserves, and reversible capital flows. Institutional capacity is measured using the World Bank's Country Policy and Institutional Assessments (CPIA) for budget and financial management.

Among our case study countries, the impact of the crisis in terms of economic growth impact is expected to be severe for **Ukraine** and **Cambodia** and to some extent for **Rwanda** (Figure 6). The other countries are expected to have smaller growth effects of the current crisis. Nevertheless, based on the PREM typology which also incorporates the extent of poverty and fiscal capacity in a country, **India** is classified as a country that has high exposure to the crisis, low fiscal capacity, and medium institutional capacity to cope with the current crisis; **Cambodia** is high exposure, medium fiscal space, and low institutional capacity; **Indonesia** and **Rwanda** are high exposure, medium fiscal space, and medium institutional capacity; **Uganda** and **Ukraine** are classified as having medium exposure, medium fiscal space, and medium institutional capacity.

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<sup>29</sup> Reference.

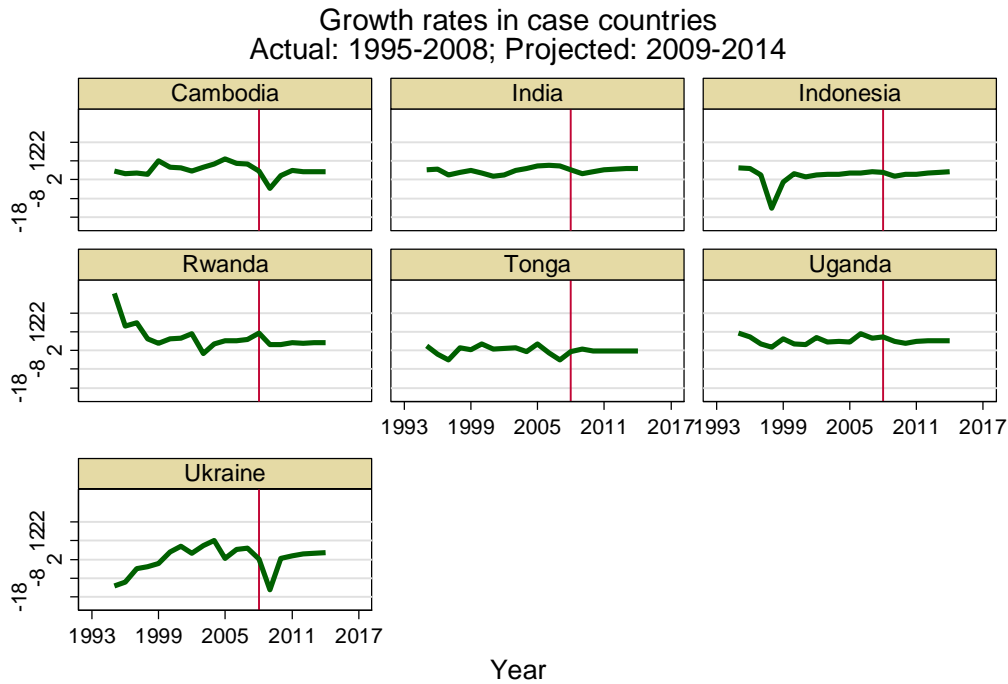


FIGURE 6. ECONOMIC GROWTH IN CASE STUDY COUNTRIES: ACTUAL (1995-2008) AND PROJECTED (2009-2014)

Knowledge of a country's economic growth prospects and its overall fiscal capacity are important background indicators for contextualizing government health expenditure trends. Total health expenditure as well as the government's share of total health expenditures generally increase with national income across countries. The responsiveness, or elasticity, of government health expenditure with respect to GDP gives an indication of whether favorable macroeconomic conditions can be expected to translate into more public expenditure on health. The elasticity of government spending to GDP is estimated to be about 1.16 across all low-income countries (implying that a 1% rise in income on average leads to a 1.16% rise in government health spending, on average). However, the overall fiscal health and discipline of a country can significantly affect the degree to which economic growth can be translated into increased resources for health. Although tax systems vary in effectiveness, rising national incomes and expenditures would normally expand tax revenues, and this in turn increase a country's capacity to increase public expenditures and take on and service debt. Countries with low levels of fiscal deficits and debt levels, according to recent trends and projected levels, however, are more able to increase spending levels for any purpose, including for health should they choose to do so. In cases where the fiscal health of the country is weak, the roots of the fiscal stress should be highlighted and the implications for increasing spending for health discussed. If fiscal stress is high because of high rates of public subsidies, the implications for fiscal space for health are different than if it is due to increasing productive investment. In addition, elasticities during periods of expansion can be different than those during periods of contractions.

**Cambodia** has experienced high economic growth rates, which it has sustained for nearly a decade. Real per capita income in the country more than doubled between 1997 and 2007

through a disciplined economic development approach combined with integration into the global economy. Cambodia is seeing a rapid shift of jobs from agriculture to manufacturing, a demographic transition, and migration from rural to urban areas. Economic growth in the country has translated into better public services and has led to significant reductions in poverty rates as well as improvements in health and education. Driven largely by this sustained economic growth, real per capita government health expenditures in the country increased from US\$13 to US\$31 over 1997-2007.<sup>30</sup> Cambodia's experience highlights the importance of economic growth in driving government health expenditure.

In **Tonga**, at least at first glance, government health expenditures appear to have been highly responsive to increases in GDP. The elasticity of government health spending to GDP in Tonga is very high, estimated at 1.84 based on data from 1994 to 2006.<sup>31</sup> Following this trend, government health spending could potentially rise from 3.7% of GDP in 2006 to 6.3% in 2013 if the responsiveness of government spending to GDP increases remains at current levels. However, the donor-financed share of health spending is also very high (ranging from 30-40% of total health spending over the past few years) and the responsiveness of government health spending to GDP is likely reflective of increasing reliance on donor financing. Economic growth is projected to stabilize at only 1.7% per year, and the economy is highly vulnerable to external economic shocks and natural disasters.

The importance of distinguishing the elasticity of domestically-financed government health spending to GDP versus donor-financed government spending is clearly evident from the analysis conducted for **Uganda**. Estimates from 2000-06 government spending data from the country indicated that the elasticity of government health expenditure with respect to GDP when donor funds were included was about 1.44 (Figure 7). However, if one looked at domestic-financed health spending (excluding external grants), the elasticity was only about 0.95 (Figure 7). Hence, the extent of fiscal space for health derived from economic growth projections in Uganda is likely to critically depend on the sustainability of global funding or the extent to which domestic resources can be mobilized to substitute global funds if the latter become unavailable.

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<sup>30</sup> Lane (2007).

<sup>31</sup> IMF (2008). Tonga: 2008 Article IV Consultation - Staff Report.

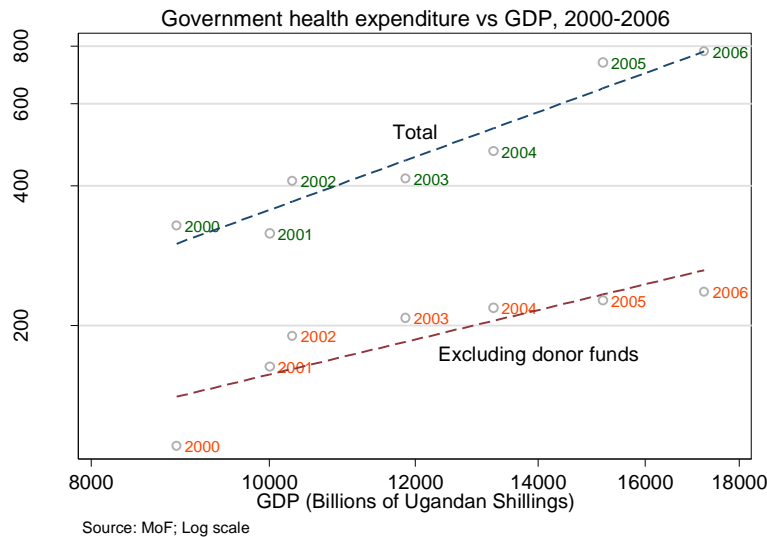


FIGURE 7. ELASTICITY OF GOVERNMENT HEALTH EXPENDITURE RE: GDP IN UGANDA, 2000-06

A key point of consideration in assessing fiscal space is that economic growth alone may not be enough for increasing public resources for health. In **India**, for example, government health spending has remained stagnant at about 1% of GDP between 1990 and 2006, despite rapid and sustained economic growth in the country over the same period. Using data from 1990-2007, the elasticity of overall (i.e., center and state) nominal government health spending to GDP in India was estimated to be only about 0.94 (Figure 8).<sup>32</sup> This is very low when compared with other countries, with the average elasticity estimated to be 1.16 for all low-income countries.<sup>33</sup> In addition, there is a marked difference between the elasticity of central health spending versus state health spending to GDP in the country: the former is much higher, to the order of 1.15 and close to the average for low-income countries, while the latter is only about 0.87 implying that state health spending has grown at a lower rate than GDP growth. This has largely been due to the poor fiscal situation of the states in the country, underscoring the importance of looking at additional fiscal factors – in addition to economic growth – as drivers of government health spending.

<sup>32</sup> An elasticity of 0.94 implies that a 1% increase in GDP is associated on average with a 0.94% increase in government health expenditure.

<sup>33</sup> This is based on data from 1995-2007.

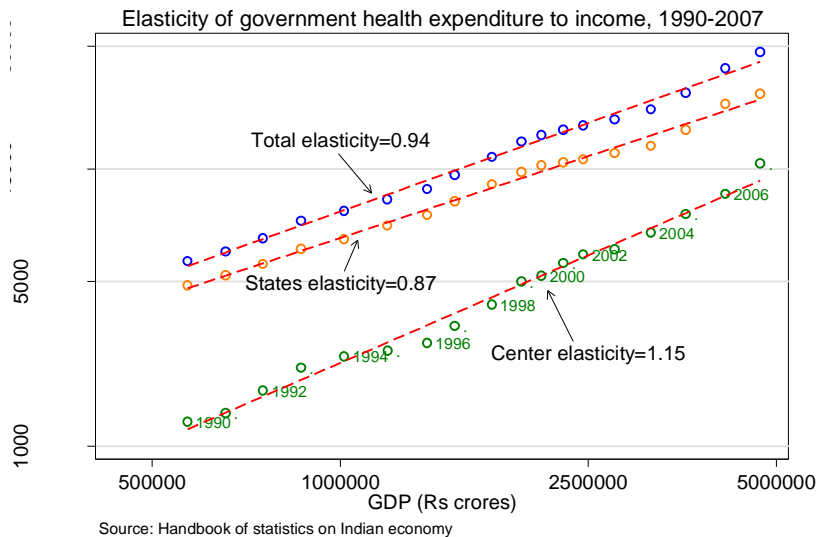


FIGURE 8. CENTRAL AND STATE HEALTH EXPENDITURE SHARE OF GDP, 1990-2007

Independent of economic growth considerations, government revenue could also increase if a country successfully expands its tax base, or levies new taxes, or increasing the efficiency of existing collection systems. However, as with economic growth, an increase in revenue on its own would not necessarily imply that additional fiscal space for health is created unless the government prioritizes the sector. Although the share of revenue in GDP tends to rise with income, the increases tend to be modest for low-income countries. In low-income countries the instances of large sustained revenue increases are relatively rare, particularly in the absence of substantive tax policy and administration reforms. In most cases, strong effort to raise the revenue to GDP ratio can be expected to amount to no more than half a percentage point of GDP per year.<sup>34</sup> Moreover, a revenue collapse, perhaps due to conflict, is rarely if ever quickly reversed. The *Commission for Macroeconomics and Health* estimated that low-income countries would be able to increase revenue to GDP ratios by only 2% of GDP between 2000 and 2015, in order to raise domestic health financing. The Millennium Project suggests revenues a 4% increase of the revenue to GDP ratio may be feasible.<sup>35</sup>

In **Indonesia**, for example, there is modest potential for improved revenue generation to translate into more fiscal space for health. At 19%, Indonesia's revenue as a share of GDP is lower than the average of 23% for its income level. A recent World Bank public expenditure review predicted that non-oil domestic tax revenues as a share of GDP would rise by about 0.4% per year over the medium term, but this may be offset by declines in oil and gas revenues.<sup>36</sup> A recent IMF country report suggested that an additional revenue yield of 1% of GDP annually could be realized if value-added tax exemptions were limited, property taxes were increased, and fringe benefits taxes were introduced. If these revenue gains were realized, and assuming the health

<sup>34</sup> Bevan, David. 2005. An Analytical Review of Aid Absorption: Recognizing and Avoiding Macroeconomic Hazards. Paper prepared for Seminar on Foreign Aid and Macroeconomic Management, Maputo. p. 13.

<sup>35</sup> Data reported in Gareth Williams, Fiscal Space and Sustainability from the Perspective of the Health Sector p. 47. Op cit.

<sup>36</sup> World Bank (2007), *Indonesia Public Expenditure Review*.

share of the budget remained at least 5%, this could potentially lead to additional fiscal space for health of 0.05% of GDP per year for the next several years.<sup>37</sup>

## Re-Prioritization of Health

A second source of fiscal space for health would be from re-prioritization of health within the overall budget of the government. There may be scope for raising health's share of overall government spending, particularly if the share of health in the government budget is lower than comparison countries in the same region with similar income levels. In general, there is a very wide variation in the extent to which health is prioritized by governments across countries, even among countries at similar income levels. Figure 9 shows that the share of health in the total government budget in low-income countries in 2007 ranged from just 1.1% in Pakistan to over 27.7% in Rwanda. Rwanda is the only sub-Saharan African country to have reached the target of 15% called for in the Abuja Declaration, but much of this government expenditure came from donor sources and was therefore earmarked for health.<sup>38</sup>

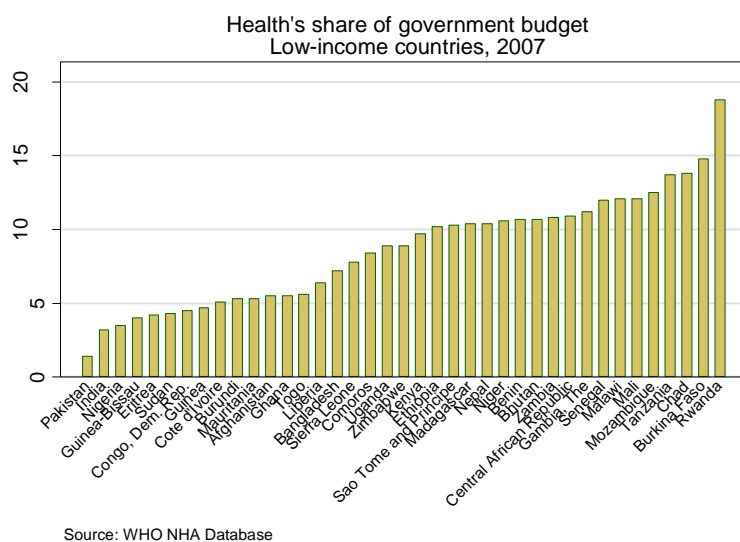


FIGURE 9. SHARE OF HEALTH IN THE GOVERNMENT BUDGET IN LOW-INCOME COUNTRIES, 2007

What explains the variation in prioritization of health in government budgets across countries? National income is a key factor: economic growth tends to be associated with not only a higher overall level of resources but also a higher *share* of public resources devoted to health. Figure 10 shows the average government health expenditure share of GDP for countries at different income levels in 2007. Whereas low-income countries spent a little over 2% of GDP on health, high-income countries devoted on average more than 5% of their GDP to the sector. There are several reasons why the government share of health spending tends to increase with income. Rising incomes are often associated with a greater demand for, and supply of, health care. Richer countries tend to have older populations with more non-communicable diseases and a greater

<sup>37</sup> IMF (2007), *Indonesia Country Report*, Washington, DC: International Monetary Fund.

<sup>38</sup> These numbers are WHO estimates and may not correspond exactly to numbers from country estimates.

need for chronic care, the relative price of health care rises with income driving up spending, and the revenue-collection capacities of governments increase with income, as do societal preferences for more public financing for health.<sup>39</sup> Empirical evidence suggests the importance of other factors such as the prevalence of corruption, ethno-linguistic fractionalization, and average education levels in the population as determinants of the extent to which health is or is not prioritized by governments.<sup>40</sup>

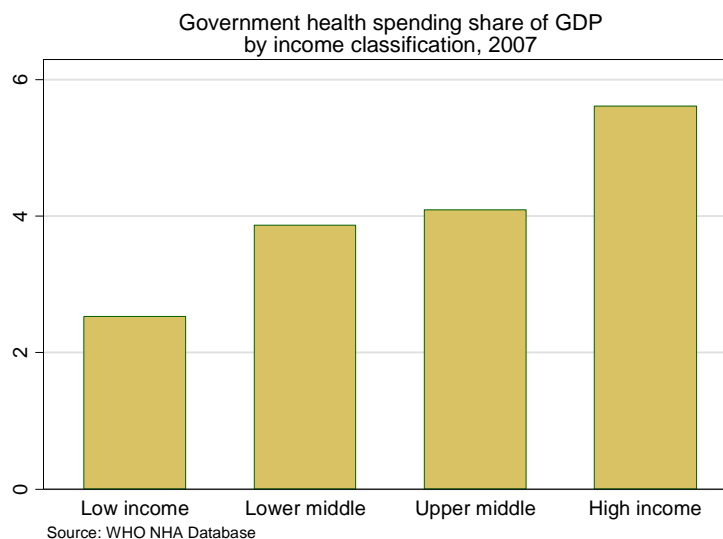


FIGURE 10. GOVERNMENT HEALTH SPENDING SHARE OF GDP IN LOW-INCOME COUNTRIES, 2007

The allocation of the budget is a highly politicized process, and countries have many other competing needs. The reallocation of a larger share of the budget to health is typically not an easily attained source of fiscal space in most countries. A fiscal space analysis may, however, be used as an advocacy tool to demonstrate the need and potential impact of increasing the share of public resources devoted to the health sector.

The importance of political economy consideration in triggering re-prioritization of health is very much in evidence if one looks at the case of **India**. The central government reprioritized health following a significant political change that occurred in the 2004 elections when the Congress party-led United Progressive Alliance (UPA) won over the incumbent Bharatiya Janata Party (BJP)-led National Democratic Alliance (NDA). The BJP-NDA alliance was widely expected to remain in power in the 2004 elections given its support for economic liberalization and India's continued rocketing economic growth during its tenure. There was a general perception among the Congress leadership at the time – even if not borne out by subsequent electoral analysis – that the party needed to have more of a focus on the rural poor in order to retain power. The resulting reprioritization of health as embodied by NRHM was just one in a series of social programs that have been launched since 2004 by the newly-elected central government.<sup>41</sup>

<sup>39</sup> ADB (2006), *Key Indicators: Measuring Policy Effectiveness in Health and Education*, Manila: Asian Development Bank.

<sup>40</sup> Ibid.

<sup>41</sup> The Congress party has won a decisive victory in the 2009 elections, with many attributing this to its emphasis on social programs.



**Indonesia** is an example of a country that could be a candidate for allocating a greater share of its overall government spending to health. The health budget share in Indonesia is currently less than 7%, and there appears to be significant opportunity for re-prioritization to generate additional fiscal space for health. Indonesia's allocations for health could rise if the country reduces spending on fuel and energy subsidies, for instance. In 2006, Indonesia reduced fuel subsidies and brought down debt levels, which created additional overall fiscal space that resulted in a 20% increase in total government expenditures.<sup>42</sup> Fuel subsidies continue to consume 15% of the total budget in the country, and tend to benefit wealthier population groups. Shifting a portion of these expenditures to the health sector could yield significant fiscal space for the sector.

Some low-income countries have followed through on commitments to increase the share of government spending going to health. In **Uganda**, for example, the health budget as a share of the government budget increased from 7% 1997-98 to 10% in 2002-03 (excluding donor contributions) and it has remained fairly constant at this level since then. The budget share for health is slightly higher than average for low-income countries, as well as for sub-Saharan African countries. The Government of **Cambodia** reached its commitment to allocate nearly 11% of the total recurrent budget to health in 2007.<sup>43</sup> This is expected to level off through at least 2011 according to the country's MTEF.

### **Increase in Health Sector-Specific Resources**

New health-specific resources, e.g., earmarked taxation or the introduction of mandatory health insurance, can be an additional source of fiscal space for the sector. These policy options might entail the use of specific user charges in public health facilities, taxes and/or premiums in order to increase the resource base for public spending on health. Earmarking can involve dedicating an entire tax to fund a particular program (e.g. dedicated payroll tax earmarked for social health insurance) or setting aside a fixed portion of a particular tax to fund the program (e.g. a fixed proportion of general tax revenues allocated to the health budget).

Earmarked taxes for the health sector funding are generally supported by political rather than economic arguments. If health spending is low or unstable, an earmarked tax may be seen as a way to insulate health spending from other competing publicly funded activities. From an economic perspective, earmarking is often viewed as an imposition of an unnecessary constraint on fiscal policy-making, one that reduces flexibility and allocative efficiency.<sup>44</sup> In addition, there are numerous examples of situations where earmarked funds have been diverted to other activities, especially in poor governance settings.<sup>45</sup> Also, it would be important to ensure that any new resources raised by earmarked taxes or similar such means be additional and not simply be offset by reductions from other domestic sources (such as from general taxation, for instance).

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<sup>42</sup> World Bank (2007), *Indonesia Public Expenditure Review*.

<sup>43</sup> Lane (2007).

<sup>44</sup> Savedoff W (200). Tax-based financing for health systems: options and experiences. Geneva: World Health Organization.

<sup>45</sup> Prakongsai, P, W Patcharanarumol, and V Tangcharoensathien (2008), "Can Earmarking Mobilize and Sustain Resources to the Health Sector?" *Bulletin of the World Health Organization*, 86(11): 898-901.

Increasing taxes specifically on goods that adversely affect health, most notably tobacco and alcohol (also known as “sin taxes”), can generate revenue that can be earmarked for the health sector and that can be justified by the externalities associated with those consumption goods. The consumption of alcohol and tobacco generates costs for society beyond those to the individual consuming the products. Taxation to reduce consumption is therefore considered to be beneficial not only from a public health perspective, but also from an economic perspective. Even if they are not earmarked for health, higher taxes can discourage consumption and reduce illness and accidents (in the case of alcohol), and possibly reduce demand for health services, which benefits all of society. Australia, the US, and Korea, are other examples of countries that have successfully implemented earmarked taxes on tobacco and used the revenues for public health purposes.

In addition to the economic arguments against earmarked taxation in general, earmarked “sin taxes” may not be desirable because they can be regressive in countries where consumption of the taxed good is concentrated among the poor. In India, for example, while only 38.6% of males in the highest income quartile use tobacco, 74% of males in the lowest income group consume tobacco products. A more detailed benefit-incidence analysis would be needed, however, to determine whether earmarking the revenues for health would disproportionately benefit the poor and somewhat offset the regressive tax. Furthermore, earmarking these taxes for health can have a potentially adverse effect on general tax revenue when a major share of excise duties comes from tobacco and alcohol. Increasing tax rates also may lead to increased smuggling and the consumption of products of lower, even potentially dangerous, quality. Some have argued, however, that better enforcement and harmonization of taxation levels across borders rather than lowering tax rates can reduce incentives for smuggling.<sup>46</sup>

Whether taxes on alcohol and tobacco can and should be increased and/or earmarked for health in a country is highly dependent on many economic and political conditions that will determine: whether increasing taxes will raise total tax revenue and by how much (related to the elasticity of demand); whether there will be impacts on employment; and whether earmarking the tax revenue for the health sector is politically feasible.<sup>47,48</sup> To assess the potential for generating fiscal space through “sin taxes” earmarked for health, the current tax rates on alcohol and tobacco should be examined and compared with those of other comparable countries. If tax rates are low, this may indicate an opportunity to increase the taxes. Estimates of the price elasticity of demand for alcohol and tobacco, if available, can be used to estimate potential changes in revenue with a tax increase. The current policies in the country related to alcohol and tobacco use also should be examined to determine whether “sin tax” increases may be politically feasible. Countries with aggressive anti-smoking or alcohol control policies, for example, may be more willing to raise these taxes and earmark them for public health purposes. If the country has not historically signed international declarations on tobacco control, as is the case in **Indonesia** for example, this

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<sup>46</sup> World Bank, *Curbing the Epidemic: Governments and the Economics of Tobacco Control*, Washington, DC, 1999, available at <http://www1.worldbank.org/tobacco/reports.htm>.

<sup>v</sup> US General Accounting Office (GAO), ‘Terrorist Financing: US Agencies

<sup>47</sup> Chantornvong, S., Collin, J., Dodgson, R., Lee, K., McCargo, D., Seddon, D., Vaughn, P., and Woelk, G. 2007. Political economy of tobacco control in low-income and middle-income countries: lessons from Thailand and Zimbabwe. Global Analysis Project Team. *Bulletin of the World Health Organization* 78(7): 913-919.

<sup>48</sup> Hu, T and Mao, Z. 2002. Economics analysis of tobacco and options for tobacco control: China case study. HPN Discussion Paper, Economics of Tobacco Control Paper No. 3. Washington, D.C.: The World Bank.

may indicate a political unwillingness to increase or earmark taxes on public health grounds. If tobacco production is important for the economy of the country, as in China for example, it is less likely that public health arguments will take priority over economic concerns. Furthermore, the distribution of tobacco and alcohol rates across income groups is important to determine whether increasing taxes would be regressive, with a disproportionate burden falling on the poor.

Ghana, Nepal, Thailand, and Zimbabwe are examples of countries that have successfully used earmarked taxation to create fiscal space for health.<sup>49,50</sup> In Ghana, the national health insurance program is funded in part by a 2.5% VAT earmarked for this purpose. In Nepal, a tax on cigarettes is earmarked for cancer control. The Thai Health Promotion Foundation is funded directly through a 2% earmarked tax on tobacco and alcohol.<sup>51</sup> In Zimbabwe, a 3% levy on personal income and corporate taxes are used to help fund AIDS-related interventions.

The introduction of social health insurance (SHI) is another possible health sector-specific source of fiscal space. SHI can be a means of capturing and pooling private out-of-pocket health spending and utilizing those resources for public financing of health care and improving financial risk protection. Social insurance involves the mandatory collection of contributions from designated segments of the population, typically through payroll taxes, and the pooling of these contributions in independent funds to pay for services on behalf of the insured.

Assessing the feasibility of introducing a system of SHI in a country is a highly complex endeavor and is likely to require an in-depth assessment that is beyond the scope of fiscal space analysis. For the purposes of a fiscal space for health analysis, the basic pre-conditions for SHI should be assessed to determine whether it is justified to include this option in further policy dialogue. Although there are many factors that influence whether SHI will be successful in a country, from a fiscal perspective, the characteristics of a country's economy that appear to be the most important factors for SHI include: the share of formal sector employment, the level of wages and salaries, the poverty rate, and the average family size/dependency ratio.<sup>52</sup> In addition, for SHI to be successful, there must be a mechanism to bring the population excluded from the formal sector labor force into a risk pool that can eventually be linked to a national SHI system (e.g. community-based insurance schemes).<sup>53</sup> A discussion of these issues should be included in an assessment of the potential for SHI generating fiscal space for health in a country. Other issues include the capacity of the country to enforce compliance with the tax/premium, managerial capacity to administer the system, the organization of the provider network and feasibility of contracting, and others.

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<sup>49</sup> Prakongsai P, Patcharanarumol W, and Tangcharoensathien V (2008). Can earmarking mobilize and sustain resources to the health sector? *Bulletin of the World Health Organization* 86(11): 898-901.

<sup>50</sup> World Bank (2008). Pacific Health Financing Note. EASHD. World Bank.

<sup>51</sup> WHO and SEARO (2006). Regional Strategy for Health Promotion Follow-Up of the Sixth Global Conference on Health Promotion: Health Promotion and Dedicated Taxes. New Delhi, World Health Organisation, South East Asian Regional Office.

<sup>52</sup> Hsiao, W. and Shaw, R. 2007. Social health insurance in developing nations. WBI Development Studies. Washington, D.C.: TheWorld Bank.

<sup>53</sup> Obermann, K., Jowett, M., Alcantara, M., Banzon, E., and Bodart, c. 2006. Social health insurance in a developing country: the case of the Philippines. *Social Science and Medicine* 62(12): 3177-3185.

Although SHI has been most effective in high- and middle- income countries, several low-income countries also have had some success (Box 3). While it is feasible to introduce health insurance for formal sector workers, however, several barriers exist to scaling up health insurance to the entire population in low-income countries.<sup>54</sup> Most countries in Europe, Latin America and Asia began by insuring formal sector workers. The availability of employment and earnings records means this segment of the population easy to reach and to collect premiums. Once the formal sector is covered, most countries faced significant challenges in extending insurance to informal sector workers, the elderly, the poor and the unemployed, a group classified broadly as the informal sector in this report. Individuals in the informal sector are typically not affiliated with an organisation through which to enrol and collect premiums. They are also poorer, and less able to afford the premiums.<sup>55</sup> Therefore the share of the population engaged in formal sector employment tends to be one of the most important factors that determines whether SHI may be a feasible source of fiscal space for health in a country.

### **Box 3. National Health Insurance Scheme in Ghana**

In 2003, Ghana passed its National Health Insurance Act with an aim to eventually provide universal coverage for all Ghanaians. The plan is to cover 30-40% of the population by 2010 and 50-60% by 2015-2020. The insurance system includes several district mutual health schemes, private mutual schemes, and commercial schemes providing a basic benefits package defined by the government.

Ghana has a National Health Insurance Fund, the purpose of which is to subsidize the cost of care for covering the poor as well as to finance health service delivery improvements. The Fund is financed by a 2.5% levy on all goods and service (both those produced in Ghana as well as imports), a 2.5% wage-related premium on those in the formal sector, as well as general tax-funded budgetary transfers. The 2.5% levy on goods and services and wages provides 77% of the financing for the Insurance Fund.

Unlike the use of earmarked taxes on consumption of products such as cigarettes and alcohol, Ghana's VAT levy is rather unique, at least among low-income countries, in its use of a broad-based earmarked VAT on the consumption of goods and services as a means for creating fiscal space for health care coverage. Concerns remain, however, regarding the financial sustainability of the insurance program – which will also depend in part on the enrollment of premium-paying informal sector workers – as well as regarding the progressivity of the tax in raising revenues for health.

Sources: Sulzbach, S, B Garshong, and G Owusu-Banahene (2005), "Evaluating the Effects of the National Health Insurance Act in Ghana: Baseline Report," Bethesda: Partners for Health Reform Plus Project, Abt Associates, Inc.; McIntyre, D (2007), *Learning from Experience: Health Care Financing in Low- and Middle-Income Countries*, Geneva: Global Forum for Health Research; Ramachandra, S and WC Hsiao (2007), "Ghana: Initiating Social Health Insurance," in Hsiao, WC and RP Shaw (eds.), *Social Health Insurance for Developing Nations*, Washington, DC: World Bank.

In **Indonesia**, for example, there is strong government commitment for expanding health insurance coverage to the entire population. The high level of informal employment in Indonesia, however, poses a serious challenge to the implementation of an SHI-based expansion. Less than one-third of employment currently is in the formal sector, and this has not increased even in the face of robust economic growth.<sup>56</sup> The two other public health insurance schemes in Indonesia

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<sup>54</sup> Hsiao, W. C. (2008). "Scaling up health insurance coverage in South, East and Pacific Asia."

<sup>55</sup> Somanathan (2007).

<sup>56</sup> Sugiyarto, G, M Oey-Gardiner, and N Triaswati (2006), "Labor Markets in Indonesia: Key Challenges and Policy Issues," in J Felipe and R Hasan (eds), *Labor Markets in Asia: Issues and Perspectives*, London: Palgrave Macmillan for the Asian Development Bank.

that are funded by a payroll contribution (*Jamsostek* for formal sector workers in firms with 10 or more employees) and fixed premiums (*Askes* for civil servants) currently only cover about 2% and 6% of the population, respectively.<sup>57</sup>

The Government of **Tonga** recently proposed a health insurance scheme for formal sector workers in response to fiscal constraints in the public sector. A new payroll tax shared equally between employers and employees is being discussed. Under this scenario, the revenue generated by the payroll tax is expected to increase resources for the Ministry of Health by 19%. The revenues generated and the amount made available to the health sector are likely to be much less, however, if administrative costs and potential evasion are taken into account. Furthermore, although Tonga is a middle-income country, it is anticipated to face similar barriers to scaling up health insurance beyond formal sector workers as those that have been observed in Asia. With only 12% of the population registered as formally employed, extending SHI to other population groups poses a significant challenge in Tonga.

### Health Sector-Specific Grants and Foreign Aid

External assistance for health has been an important source of fiscal space in many low-income countries. Development assistance for health has been increasing both in absolute terms and as a share of total health expenditure in many low-income countries. The introduction of many new private and non-governmental donors, such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, the Bill and Melinda Gates Foundation, and GAVI, have contributed to the dramatic increase in aid flows for health. External assistance accounted for over 11% of total health spending in low-income countries in 2006, up from 4.2% in 1995 (Table 3). The increases have been most dramatic in sub-Saharan African countries. The large increases in donor assistance for health over the period were driven, in part, by the momentum around the signing in 2000 of the Millennium Declaration with all 189 member states of the UN adopting the Millennium Development Goals. The MDGs is a set of time-bound quantitative targets which include attainment of improvements in maternal and child health outcomes in developing countries.<sup>58,59</sup> Mobilization efforts for control of the HIV/AIDS epidemic in Africa also have driven increases in donor funding in recent years.<sup>60</sup>

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<sup>57</sup> Rokx et al. (2009).

<sup>58</sup> Hecht, R and R Shah (2006), "Recent Trends and Innovations in Development Assistance in Health," in Jamison, DT, JG Bremen, AR Measham, G Alleyne, M Claeson, DB Evans, P Jha, A Mills, and P Musgrove (eds), *Disease Control Priorities in Developing Countries: 2<sup>nd</sup> Edition*, Washington, DC: Oxford University Press.

<sup>59</sup> Shiffman, J (2006), "Donor Funding Priorities for Communicable Disease Control in the Developing World," *Health Policy and Planning*, 21(6): 411-420.

<sup>60</sup> Hecht and Shah (2006).

TABLE 3. EXTERNAL RESOURCES SHARE IN TOTAL HEALTH SPENDING, 1995-2006

Classification	1995	2000	2006
Low-income	4.2%	6.8%	11.3%
Sub-Saharan African	8.1%	16.3%	27.6%
Non sub-Saharan African	2.7%	3.3%	4.8%

Source: WHO NHA database

Note: Numbers are population weighted

Higher levels of aid-dependence are not without costs to the countries, however, and foreign assistance for health often brings its own set of problems and inefficiencies. The literature on the macroeconomic impact of scaled up aid flows concludes there are risks for inflation and international competitiveness depending on how and when aid is spent, and the macroeconomic policy reaction. Volatile, short-term aid inflows are considered even more of a macroeconomic risk than long-term increases.<sup>61</sup> Volatility and unpredictability of aid flows increase the risk of establishing services that cannot be sustained if aid flows are drastically reduced or discontinued, and temporary changes in relative prices may have long-term effects such as driving some private suppliers from the market.

A key issue around foreign aid as a source of fiscal space for health is whether it is in fact additional, or if it displaces or offsets domestic health sector resources. There is some evidence of fungibility with regard to the recent increase in development assistance for health.<sup>62</sup> A study of sources of health funding for 144 countries between 1995 and 2006 showed that a 1% increase in donor funding was associated with a 0.14% decrease in government spending on health among low-income countries, independent of changes in per capita GDP.<sup>63</sup> The study also found that higher donor shares in total health funding were associated with a higher degree of aid fungibility.

The composition of assistance and the mechanisms for disbursing funds also have significant consequences for how effectively aid is translated into fiscal space for health. There has been a trend for donor assistance in health to be provided off-budget, so donors can have more control over how resource are used and sometimes as a means to bypass government spending ceilings.<sup>64</sup> Increases in commitments from the U.S. programs such as PEPFAR, which are off-budget, have contributed to this trend (see Box 4). For example, a study by Foster (2005) examined 14 countries with Poverty Reduction Strategy Papers and found that about 50% of donor funds in those countries were either not recorded in the balance of payments or were provided as off-budget support.<sup>65</sup> Off-budget donor aid flows make it more difficult for Ministries of Health to ensure that funding flows to programs that are prioritized in national health plans.<sup>66</sup>

<sup>61</sup> Cavagnero, E., Lane, C., Evans, D., and Carrin, G. (2008). Development assistance for health: should policy-makers worry about its macroeconomic impact? *Bulletin of the World Health Organization* 86: 864-870.

<sup>62</sup> World Bank aid fungibility document.

<sup>63</sup> Farag, M., Nandakumar, A., Wallack, S., Gaumer, G., and Hodgkin, D. (2009). Does funding from donors displace government spending for health in developing countries? *Health Affairs* 28(4): 1045-1055.

<sup>64</sup> England, R (2009), "The Dangers of Disease Specific Aid Programmes," *BMJ*, 335: 565.

<sup>65</sup> Foster, M (2004), "MDG-Oriented Sector and Poverty Reduction Strategies: Lessons and Experiences in Health," High-Level Forum on the Health MDGs, Abuja, Nigeria.

<sup>66</sup> World Bank aid fungibility document

#### Box 4. Trends Towards Off-Budget Development Assistance for Health in Uganda

Development assistance for health (DAH) has been steadily increasing in Uganda in recent years. In nominal terms, total DAH in Uganda has shown a rapid increase since about 2003 (Figure 11) reaching almost US\$ 460 in 2006. The increase is driven by off-budget DAH.<sup>67</sup> This is likely to be reflective of inflows of donor support from the US Government (PEPFAR and PMI) which are largely off-budget. While on-budget DAH trends have remained fairly stable in Uganda except for a spike in 2005, off-budget spending on health as a percentage of total off-budget spending increased from 9% in FY 2005/06 to 12% in FY 2006/07 and is projected at 14% in the current FY 2007/08.

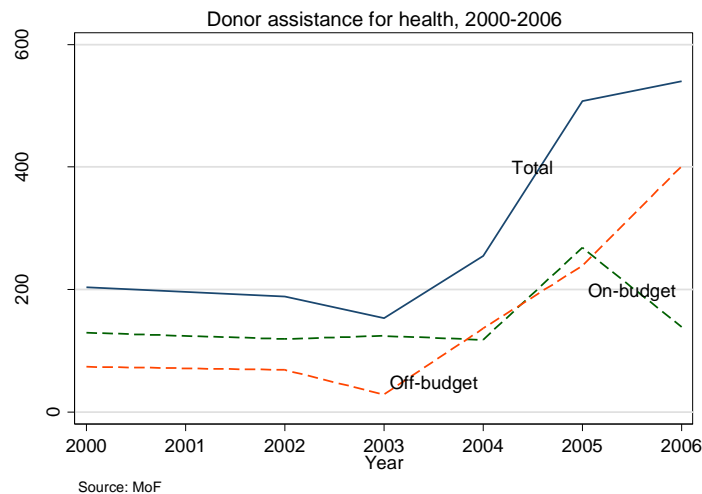


FIGURE 11. OFFICIAL DEVELOPMENT ASSISTANCE FOR HEALTH TO UGANDA, 2000-2006

Along with the trend toward off-budget donor assistance, a much higher share of aid is now earmarked for specific disease programs, such as HIV/AIDS, which has left much less available for health system strengthening. This trend creates a further disconnect between earmarked aid flows and the burden of disease and health sector priorities in recipient countries.<sup>68</sup> Furthermore, aid that is earmarked for donor-driven priorities may actually reduce effective fiscal space for health if governments cut health budgets in response to increasing aid.

The International Health Partnership and related initiatives (IHP+) is a recent attempt among donor organizations and country partners to better harmonize donor commitments and improve the effectiveness of international aid for health. IHP+ aims to achieve higher levels of health aid effectiveness by mobilizing donor organizations around a single country-led national health strategy, with donor-funded activities guided by the principles of the Paris Declaration on Aid Effectiveness and the Accra Agenda for Action.<sup>69</sup> Recommendations of the IHP+ *Taskforce on Innovative Financing for Health Systems* focus on, for example, making commitments from development partners more predictable, better matching the timing of funding with country

<sup>67</sup> On-budget DAH is defined as support that is channeled through the central government and off-budget DAH as external support channeled directly to other government agencies like parastatals or to local governments, and to NGOs that support significant components of government projects.

<sup>68</sup> World Bank aid fungibility document.

<sup>69</sup> IHP+ web site: <http://www.internationalhealthpartnership.net/en/home> accessed August 2009.

needs, longer-term commitments, streamlined channeling of funds, using funds to fill critical gaps in costed national health plans, and establishing mutual accountability.<sup>70</sup>

Even in countries that are not traditional donor-dependent, such as **Indonesia**, external resources can often be used to cushion any negative impacts that might occur resulting from economic downturns. This was very much evident from the situation in Indonesia wherein donor dependence for health increased during the crisis period from 1997-2000 (Figure 12). This option may not be available during the ongoing crisis given that both donor and recipient countries are feeling the brunt of the downturn.

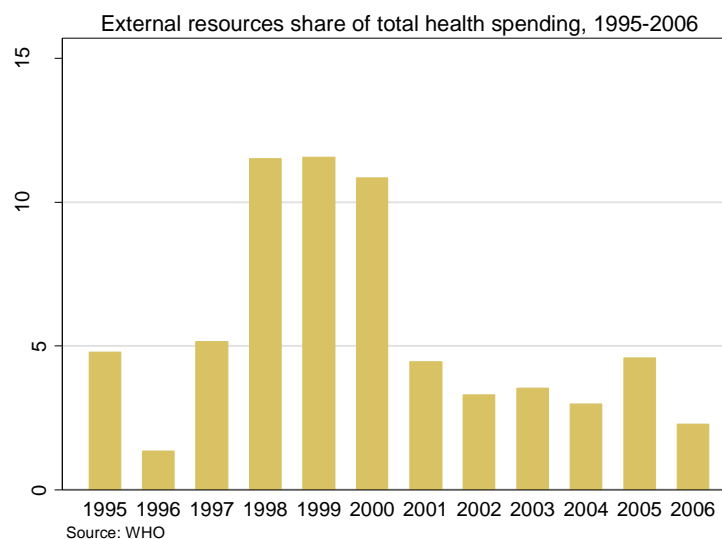


FIGURE 12. EXTERNAL SHARE IN HEALTH SPENDING IN INDONESIA, 1995-2006

In spite of these limitations, health sector-specific donor grants will remain a necessary source of fiscal space for health in most low-income countries for the near-to-medium term. To potential for donor assistance to increase effective fiscal space for health, may be assessed as follows, trends in the levels and volatility of donor assistance should be assessed, as well as the potential for expanding and absorbing additional donor resources. The share of international health assistance in total government health spending, as well as trends in aid flows and future commitments give an indication of the potential for donor assistance to contribute to additional fiscal space for health. To assess the potential for these additional resources to be effectively absorbed, the compatibility of aid flows with country priorities should be examined, including the share of external funding that is earmarked for disease-specific programs and the share that is provided as direct budget support.

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<sup>70</sup> International Health Partnership (2009). Raising and channeling funds. Taskforce on Innovative Financing for Health Systems, Working Group 2 Report. Paris, May 29, 2009.



## Increase in Efficiency of Health Expenditures

One way of defining the efficiency of government health expenditures is that it is an assessment of the degree to which maximal levels of health system outputs are obtained for a given level of resource inputs. Technical efficiency is achieved when maximum output (e.g., number of immunizations) is achieved for a given level of inputs. Allocative efficiency refers to the choice of an appropriate mix of inputs to achieve the outputs that are needed.<sup>71</sup> For example, a health system is efficient that uses inputs such as staff, buildings, and supplies to achieve the maximum number and best mix of primary, secondary, and tertiary care services to address conditions that contribute most to a country's burden of disease. If health expenditures do not achieve maximum outputs, then effective fiscal space could be generated by addressing sources of inefficiency.

Fiscal space analysis should identify the major sources of inefficiency in the health system of the country that could be addressed to increase effective fiscal space. Commonly recommended areas to improve the efficiency of health spending include: (i) improved geographic targeting using resource allocation formulas that reduce spending gaps across regions and the typical bias of spending toward urban areas; (ii) changing the allocation of spending across care levels; (iii) targeting specific programs that yield high returns to spending, such as TB directly observed treatment short course (DOTS) and integrated management of infant and childhood illness (IMCI); and (iv) aligning government health expenditures to identified health needs and strategic plans. Other common sources of inefficiency include rigid public finance systems that have inadequate flexible funds and impede reallocation of funds to areas of highest need; imbalances in input use, particularly excessive expenditures on wages; corruption; low capacity to utilize existing funds; weak management capacity of decentralized units; and leakages from the system, including absenteeism among public sector workers. Given the current financial crisis, improvements in efficiency (and equity) of existing outlays can sometimes itself be a trigger for additional budgetary allocations to the health sector by Ministries of Finance.

The public health system in **Ukraine**, for example, suffers from numerous rigidities that are common in post-Soviet health systems. Despite reforms, local governments still operate within the stringent fiscal framework that impedes the ability of local governments to reallocate funds to deliver public services efficiently. For example, staffing levels and other resources are not based on local needs but on norms related to the existing excessive network of health facilities. Such norms and inflexible budget allocations translate into high recurrent spending for wages, leaving few resources for capital investments and quality-enhancing expenditures. The budget process is also partially responsible for the excessive bed capacity and costly high average length of hospital stay, 15 days compared to the EU average of 9 days. World Bank estimates suggest that just reducing the number of hospital beds (and with them physicians and nurses) to EU levels would generate additional fiscal space equivalent to 0.34% of GDP per year.

Following decentralization in **Indonesia** in 2001, almost half of all health expenditures are now made at the district level. The majority of district-level spending is non-discretionary, mostly funding salaries, increasingly crowding out expenditures on medicines, supplies, and other

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<sup>71</sup> Unto Häkkinen & Isabelle Joumard, 2007. "[Cross-country Analysis of Efficiency in OECD Health Care Sectors: Options for Research](#)," [OECD Economics Department Working Papers](#) 554.

operational expenditures. The flow of funds to the sub-national level also is highly fragmented and inefficient, with, for example, some payments made through insurance organizations and others directly to public health care providers.<sup>72</sup> Furthermore, many poor districts now receive much higher levels of funding for health, but they have been unable to spend these funds due to limited absorptive capacity. Some estimates put overall unspent reserves held by local governments at 3.1% of GDP.<sup>73</sup> Inefficiency is also widespread at the service delivery level. For example, a study based on unannounced visits to primary health care facilities found a 40% absenteeism rate among health-facility staff.<sup>74</sup>

Table 4 below summarizes some of the suggested analytics that could form the basis for the second component of any fiscal space assessments. The table lists some suggested indicators, data sources, and graphics that can be useful to motivate and contextualize the analysis.

TABLE 4. SUMMARY OF INDICATORS FOR COMPONENT 2 OF FISCAL SPACE FOR HEALTH ANALYSIS

COMPONENTS OF THE ANALYSIS	INDICATORS	POSSIBLE DATA SOURCES	GRAPHS
Conducive macroeconomic conditions	Projected GDP growth rates	IMF	Real per capita GDP growth rate – previous 5 years and 3-year projections
	Government revenue as % of GDP	IMF; PER	
	New taxes, reductions in exemptions, or other tax reforms	IMF; PER	
	Strength of public institutions engaged in tax collection		
	Recent or potential shocks	IMF; PER	
	Elasticity of health expenditure with respect to GDP	IMF	
	Trends in government health expenditure as % of GDP	Various PER; NHA	
Re-prioritization of health	Health budget as % of total government budget	WHO; PER;	Health as % of government budget – previous 5 years and 3-year projections
	Real per capita health budget	MTEF	
	Growth rate of per capita health budget		
	Description of significant or existing competing budget priorities		
Increase in health sector-specific resources	<i>Earmarked Taxes</i>		
	Current tax rate on alcohol and tobacco	Various	
	Differences in tobacco and alcohol consumption rates across income groups	Various	
	Country policies affecting alcohol and tobacco taxes (e.g. signing international declarations on alcohol and tobacco)	Various	

<sup>72</sup> Rokx et al. (2009).

<sup>73</sup> WB (2007), *Indonesia Health Public Expenditure Review*, Jakarta: World Bank.

<sup>74</sup> Chaudhury, N, J Hammer, M Kremer, K Muralidharan, and FH Rogers (2006), “Missing in Action: Teacher and Health Worker Absence in Developing Countries,” *Journal of Economic Perspectives*, 20(1): 91-116.

COMPONENTS OF THE ANALYSIS	INDICATORS	POSSIBLE DATA SOURCES	GRAPHS
	control)		
	<i>Mandatory health insurance</i>		
	% of labor force in formal sector		
	Coverage of existing risk-pooling schemes for non-formal sector	Various	
		Various	
Health sector-specific grants and foreign aid	International health assistance as % of total and government health spending	NHA; Various	
	Trends in aid flows and future commitments	Various	
	Compatibility of aid programs with country needs/priorities	Various	
	% of external funding earmarked for disease-specific programs	Various	
	% of health aid as direct budget support	Various	
Increase in efficiency of health expenditures	Variation in per capita funding across geographic areas (urban vs. Rural)	PER	
	% of government health expenditures allocated to primary and secondary care	NHA; PER	
	% of funding allocated according to a strategic plan for the health sector or according to distribution of burden of disease	MTEF; Various	
	Effective coverage of key interventions		
	Basis of the health sector budget (e.g. Input-based line items, programs, population-based allocation etc.) and whether it promotes efficient resource allocation	Various	
	% of health sector budget that is non-discretionary	PER; MTEF; Various	
	Rigidities that make it difficult to reallocate health sector funds to where they are needed	PER; Various	
		PER; Various	
	% of government health funding that reaches services delivery	PER; Various	
	Rate of health worker absenteeism	Surveys	
	Degree of corruption	International assessments	

### COMPONENT 3: SUMMARY AND CONCLUSIONS

The analysis in Component 2 should identify the areas where the country has the greatest potential for increasing fiscal space for health. A summary table (Table 5 gives an example for Cambodia) can give a visual overview of where the country has limited, moderate, or good prospects for increasing fiscal space for health. The designation of the potential in each pillar of limited, moderate or good is somewhat subject but should be supported by the available data. If the trends in the pillar appear positive without major risks or obstacles, then the prospects can be considered good. In Indonesia, for example, projected GDP growth rates are over 6%, and the elasticity of government health expenditure to GDP is high (1.15), which would indicate relative good prospects for increased fiscal space for health from conducive macroeconomic conditions.

TABLE 5. FISCAL SPACE AT A GLANCE: CAMBODIA

Fiscal Space Source	Key Information	Prospects for Fiscal Space
Macroeconomic conditions	GDP growth rates reduced from 8 to 4.8% due to global economic crisis Revenues as % of GDP projected to remain at 12% but not likely to translate into fiscal space for health	Moderate
Re-prioritization of health in the government budget	The government reached its commitment to allocate 11% of the budget to health, and it is expected to remain at this level through 2011	Limited
Health sector-specific resources	SHI is being discussed but is a longer term plan No discussions of earmarked taxes	Limited
Health sector-specific grants and foreign aid	ODA for health is 22% of total health spending and has been on an upward trend	Moderate
Efficiency gains	Inefficiencies in the public finance system prevent resources from being allocated to programs in the health strategy and reaching service providers.	Good

If the trends in the pillar appear positive, but there are significant risks or obstacles, then the prospects can be considered moderate. In Cambodia, for example, economic growth was projected to approach 5%, but the projections were adjusted downward due to the global economic crisis. The prospects for increased fiscal space for health from conducive macroeconomic conditions are therefore considered to be only moderate because of the continued risk of the effects of the crisis. If the trends or projections for the pillar are stagnant or negative, or if the risk or obstacles are prohibitive, then the prospects can be considered limited. In India, for example, poor macroeconomic conditions in the states make prospects for increased fiscal space for health derived from conducive macroeconomic conditions only limited.

Component 3 could also discuss how the government may pursue the different sources of fiscal space in the most effective way and what issues will need to be addressed. In Cambodia, for example, if trends in donor funding continue, external resources are likely to be the most promising route to expand fiscal space for health. For this to be effective, however, efforts must continue to better harmonize donor funding and align it with the Ministry of Health's strategic

plan. Indonesia has the advantage over many countries of a positive prognosis for economic growth in the near future. Given Indonesia's low government revenues as a share of GDP and small share of health in the government budget, however, measures to increase government revenues and better prioritize budget expenditures are needed to ensure that economic growth translates into significant increased fiscal space for health.

In addition, it is important to note that there may be limits to the pace at which additional resources can be absorbed by the existing health system, or "absorptive capacity." While fiscal space addresses financial barriers to expanding publicly financed services, the rate of return on increases in spending may decline rapidly due to institutional barriers, human resource constraints, or limits to the physical capacity to expand infrastructure. Fiscal space analysis should identify these constraints in the country and steps toward health system strengthening that are being taken, or should be taken, to address them.

In India, for example, one key aspect of NRHM's performance has been its slow implementation. Increased central funding for health under NRHM, without building necessary capacities especially at the district level and below, is the likely reasons for NRHM's slow uptake so far. From a narrower program perspective, such issues in absorptive capacity have more to do with immediate factors around the demand and supply of service delivery. On the supply side, the constraints relate to inadequate infrastructure, limited technical, administrative and managerial capacities to plan and execute a program, and issues of incentives and accountabilities. On the demand side, lack of education, limited information, and socio-cultural factors pose constraints.

In almost every country there are serious inefficiencies in the health systems, as well as the public finance systems, that both reduce effective fiscal space and limit absorptive capacity for new resources. These inefficiencies often are exacerbated in low-income countries where governance, accountability mechanisms, and institutional capacity tend to be weaker. The consequences of inefficiency also are more acute in severely resource-constrained settings. The conclusions and recommendations of fiscal space analysis should include a discussion about measures that should be taken to reduce the rigidities and inefficiencies in the system to allow additional resources to be used more effectively for greater impact. In Rwanda, for example, the fiscal space analysis led to the recommendation that efficiency be improved by better aligning both government budget allocations and donor funds more closely with projected resource needs in the Health Sector Strategic Plan. In the highly decentralized context of Indonesia, fiscal space analysis identified the national health insurance system as a potential mechanism for streamlining the flow of health sector funds, reducing constraints on allocation of funds at the sub-national level, and more closely linking inter-fiscal transfers to health need and to the attainment of health outputs or outcomes.

## PART III - CASE SUMMARIES

The previous two sections outlined and elaborated on a simple conceptual framework for assessing fiscal space for health and provided some details and examples on how such an assessment might be conducted. This section summarizes the seven country case studies which provided some of the examples and lessons learnt that were referred to in the previous sections.

### CAMBODIA

#### Background

Cambodia is a low-income country in Southeast Asia with a population of over 14 million people.<sup>75</sup> By 1999, after years of conflict, the country was left impoverished and its social services were devastated. More than 80% of the population lives in rural areas engaged in subsistence agriculture.<sup>76</sup> Per capita gross domestic product (GDP) was just under US\$650 in 2007.<sup>77</sup> In recent years, however, Cambodia has seen high rates of economic growth, which have been sustained for nearly a decade. Although it remains at a low level, per capita income has more than doubled over the period through a disciplined economic development approach with integration into the global economy, a shift of jobs from agriculture to manufacturing, a demographic transition, and migration from rural to urban areas.<sup>78</sup> Economic growth has translated into more jobs and better public services, leading to a significant reduction in poverty, as well as improvements in health and education.

At US\$36 per capita, Cambodia's total health expenditure as a share of gross national income (GNI) is about average for its income level. Government per capita health expenditures is US\$10, which also is about average for the country's income level (Figure 13). At 11%, health spending makes up a relatively large share of the government budget. The public health sector suffers from low wages, shortages of key personnel, and poor service quality. In fact most individuals choose the private sector for treatment, with only one in five visits occurring in the public sector.

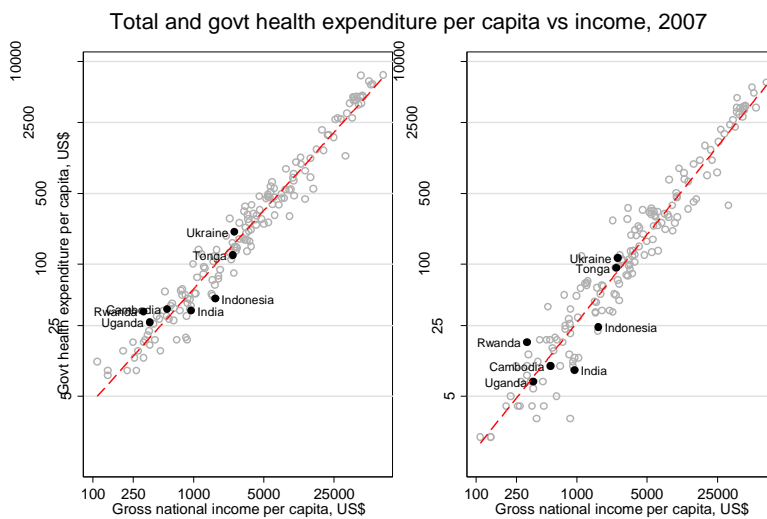
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<sup>75</sup> This case summary is based on Lane, C (2007), *Scaling Up for Better Health in Cambodia*, Geneva: World Health Organization.

<sup>76</sup> Annear, P (2009), "Cambodia: Developing a Strategy for Social Health Protection," in UNESCAP (2009), *Promoting Sustainable Strategies to Improve Access to Health Care in the Asia and Pacific Region*, Bangkok: United Nations Economic Commission for the Asia-Pacific Region.

<sup>77</sup> IMF (2008), *Cambodia: Staff report for the 2008 Article IV Consultation*, Washington, DC: International Monetary Fund.

<sup>78</sup> World Bank (2009), *Sustaining Rapid Economic Growth in a Challenging Environment: Cambodia Country Economic Memorandum*, Poverty Reduction and Economic Management Sector Unit, East Asia and Pacific Region.



Source: WDI & WHO

FIGURE 13. TOTAL AND GOVERNMENT HEALTH EXPENDITURE PER CAPITA VS INCOME, 2007

The health status of Cambodians has been improving steadily as a result of rising incomes, lower health costs, and higher total spending on health. The country is poised to meet or exceed the health-related MDGs, including reducing the infant and child mortality rate, lowering the fertility rate, improving antenatal care, and reducing the prevalence of HIV/AIDS. Nonetheless, key health indicators remain worse than in neighboring countries. Furthermore, financial barriers related to private out-of-pocket payment for services continue to prevent a large segment of the population from accessing essential care. Although total health expenditure is not considered to be the main barrier to achieving the MDGs in Cambodia, additional fiscal space for health is needed to improve public sector services and provide better access and financial protection for the poor.<sup>79</sup>

### Analysis of Fiscal Space using the Five Pillars

Conducive Macroeconomic Conditions: Cambodia's economic growth has been sustained at high levels for a decade, averaging 8% per year between 1998 and 2007. While increases in GDP have generally led to increases in government health spending in Cambodia, the absolute level remains low at only about US\$10 per capita in 2007.<sup>80</sup> The lack of export diversification and reliance on foreign investment for growth, however, has made the country particularly vulnerable to the global economic crisis. Current projections have real GDP growth rates falling to 4.8% in 2009.<sup>81</sup>

Revenues as a share of GDP in Cambodia have continued to rise, reaching about 12% in 2007, due to a strong domestic economy, improved tax and customs administration, and a reduction in ad hoc tariff exemptions.<sup>82</sup> Despite the global economic crisis, revenues are projected to grow

<sup>79</sup> Lane, C (2007). *Scaling Up for Better Health in Cambodia*. Geneva: World Health Organization.

<sup>80</sup> WDI (2009).

<sup>81</sup> IMF (2008).

<sup>82</sup> IMF (2008).

modestly over the next several years. Improved revenue generation capacity could therefore expand fiscal space for health, and it is a mechanism explicitly stated in the Ministry of Health's strategic plan. Increased revenues will only translate into fiscal space for health if the sector receives greater priority in the government budget, however; this is beyond the control of the health sector and does not appear to be likely in the near term (see below).<sup>83</sup> With modest projections for economic growth and low baseline levels of government health spending, the contribution of macroeconomic growth to creating additional fiscal space for health will most likely be moderate in the near term.

Re-prioritization of Health: The Cambodian government reached its commitment to allocate nearly 11% of the total recurrent budget to health in 2007.<sup>84</sup> This is expected to level off through at least to 2011 according to the country's medium-term expenditure framework (MTEF), so re-prioritization of health in the budget is not likely to be a significant source of fiscal space over the near term.

Health Sector-Specific Resources: Taxes on tobacco or alcohol products earmarked for health could be considered as a potential source of fiscal space for health in Cambodia but are not being discussed at this time. One additional source of health sector-specific resources that is being considered in Cambodia is a contributory social insurance scheme. The scheme initially is planned to cover only employees in the formal sector, but eventually is intended to evolve into universal coverage by building on District-Based Health Equity Funds (HEF) and existing community-based insurance schemes. This is a long-term plan, however, and it is too soon to predict to what extent this approach will succeed in bringing a larger share of current private spending into the public pool and generate additional fiscal space.

Cambodia introduced official, regulated user fees for public health services which have generated additional revenue for public providers. HEF has emerged as a mechanism to provide protection for the poor from high expenditures related to user fees. Given the already high rate of private expenditure for health in Cambodia, increasing fees further appears not to be a viable source of significant additional space if equity and access to services by the poor is to be preserved.

Grants and Foreign Aid: Official Development Assistance (ODA) for health in Cambodia has made up a significant share of total health spending at 22% and has been on an upward trend.<sup>85</sup> External funding has been fragmented, however, and typically tied to disease-specific priorities of donors rather than the Ministry of Health's Strategic Plan. Cambodia is taking steps to better harmonize and align donor support with the strategic plan – and is a signatory of IHP+ – which may help improve the effectiveness of fiscal space for health from donor funds.

Efficiency: Cambodia has developed a series of strategic plans for the health sector that have been in place for nearly a decade. These strategic plans provide a roadmap for more efficiently using public resources and targeting them to improve health outcomes and financial protection for the poor. There are a number of inefficiencies in the public system, however, that prevent

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<sup>83</sup> Ministry of Health of Cambodia. (2007), *Strategic Framework for Health Financing: 2008-2015*, Bureau of Health Economics and Financing, Department of Planning and Health Information, Phnom Penh, Cambodia.

<sup>84</sup> Lane (2007).

<sup>85</sup> Lane (2007).



resources from being allocated flexibly to the programs in the health strategy and often from reaching service providers. Adequate systems for tracking the use of public resources for health do not exist, and health facilities do not have information about their budgets and are not accountable for how they are used.<sup>86</sup> The lack of facility-level budgeting often leads to in-kind payments to facilities with fuel and materials, with drugs being distributed by the central medical stores. It appears that significant effective fiscal space could be generated by modernizing public finance systems, better planning and tracking financial resource allocations, and more closely aligning funding with the programs in the health sector strategy.

Table 6 summarizes the prospects for creating of fiscal space for health using each of the five pillars in Cambodia.

TABLE 6. FISCAL SPACE FOR HEALTH AT A GLANCE: CAMBODIA

Fiscal Space Source	Key Information	Prospects for Fiscal Space
Macroeconomic conditions	GDP growth rates reduced from 8% to 4.8% due to global economic crisis; Revenues as percent of GDP projected to remain at 12% but not likely to translate into fiscal space for health	Moderate
Re-prioritization of health in the government budget	The government reached its commitment to allocate 11% of the budget to health, and it is expected to remain at this level through 2011	Limited
Health sector-specific resources	SHI is being discussed but is a longer term plan; No discussions of earmarked taxes	Limited
Health sector-specific grants and foreign aid	ODA for health is 22% of total health spending and has been on an upward trend	Moderate
Efficiency gains	Inefficiencies in the public finance system prevent resources from being allocated to programs in the health strategy and reaching service providers.	Good

## Conclusions and Recommendations

With recent increases in levels of public spending, rising donor funding, and high levels of out-of-pocket spending, Cambodia has per capita resources available for health that are at a level that is expected for its income. Growth of public sector funding is expected to slow, however, due to the global economic crisis and leveling off of health as a share of the total government budget. If trends in donor funding continue, Cambodia can look to external resources to some extent to expand fiscal space for health, but efforts should continue to better harmonize donor funding and align it with the Ministry of Health's strategic plan.

There is a significant opportunity for Cambodia to make better use of the existing public resources in the system through public finance reforms that improve transparency and accountability in the budget process. If successful, the current public finance reform program

<sup>86</sup> Lane (2007).

will better link district-level planning with budget formation, integrate the investment plan with recurrent budgets, and reduce in-kind transfers. Continued progress on budgeting and financial accountability also may make it possible to move toward integrating a portion of donor financing into the public budget. These steps could create significant effective fiscal space for health in Cambodia by bringing public resources into closer alignment with the needs and priorities for improving the quality and accessibility of services that the Ministry of Health has outlined in its strategic plan.

Finally, if Cambodia moves forward with integrating a social insurance scheme with health equity funds, it may be possible to provide health insurance coverage for a large segment of the population. A significant portion of private out-of-pocket health spending could be brought under the public health funding umbrella and not only increase fiscal space for health, but also help provide better access to necessary services and financial protection for poor populations.

## INDIA

### Background

India is a large and diverse country in South Asia. With a population of 1.1 billion, it is the world's second most populous country after China. India is made up of 28 states and 7 Union Territories. There is a high degree of decentralization, which has created complex fiscal and administrative relationships between different levels of government. India is a low-income country with a per capita GDP of US\$1,016 in 2008.<sup>87</sup> It has experienced rapid economic growth in recent years, reaching a peak of 9.8% in 2006. Despite years of strong economic growth, however, government spending on health has remained fairly static, averaging only about 1% of GDP per year over the period 1990-2006.

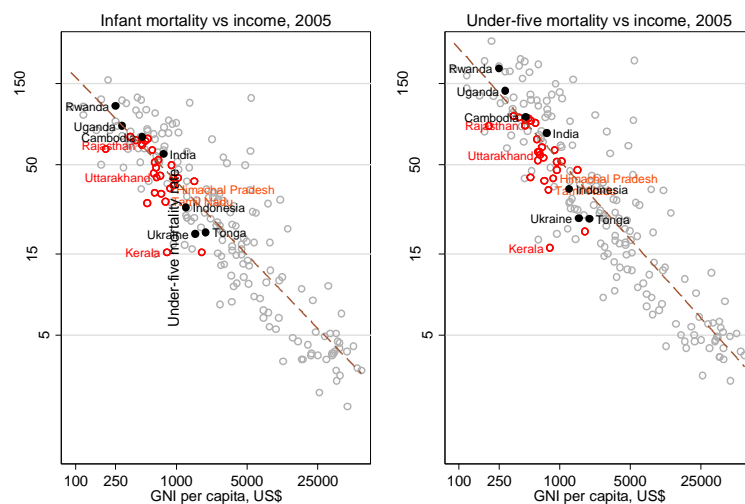
Both total and government health spending are below the average for India's income level (Figure 13). Furthermore, government health spending as a share of total health spending (25.4%) and of the government budget (3.2%) is well below the average for low-income and South Asian comparator countries. There is a high level of private spending, most of which is directly out-of-pocket. Within India there is large variation in total health spending per capita, which may be attributed to the high share of government health spending at the state level (85%) and significant variation in per capita income across states.

Although India has made steady progress over the past few decades, its attainment of health outcomes is somewhat lower than expected for its income level (Figure 14).<sup>88</sup> However, there is tremendous variability if one looks across states in India (highlighted in red in Figure 14). Some states such as Kerala and Tamil Nadu are stellar performers relative to their income levels. Others, such as Rajasthan, are average performers when corrected for their income level.

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<sup>87</sup> IMF (2009).

<sup>88</sup> The data are for 2005 as this is the latest year for which state-level data were available for India.



Note: Indian states highlighted

FIGURE 14. INFANT AND CHILD MORTALITY RATES VS. INCOME, 2005

The central government of India pledged in 2004 to increase public spending on health to 2-3% of GDP by 2012, up from about 1% of GDP. As part of this commitment, the government introduced the National Rural Health Mission (NRHM) in 2005, which aims to increase financing for basic health care services in rural areas with a special focus on 18 lagging states.<sup>89</sup> The growth of government health funding is based on shared responsibility, with increased central level allocations and matching contributions from the states of at least 15% of the center’s contribution each year. Overall, the implementation of NRHM is planned to change the center-state health financing ratio from roughly 20:80 to at least 40:60 by 2012. Estimates indicate that states would have to increase health spending on average by between 25-43% per year to achieve the target share of 2-3% of health expenditure in GDP.

In this case example, the prospects are examined for generating sufficient fiscal space for health using the state of Rajasthan in India as an illustrative example.

### Analysis of Fiscal Space Using the Five Pillars

Conducive Macroeconomic Conditions: Prior to the onset of the current economic crisis, India’s macroeconomic prospects, at least vis-à-vis economic growth, were strong. The prognosis for the future now is a bit more uncertain, and a slow-down in growth is evident in the country with growth rates projected to be below 6% in 2009 (Figure 15). The macroeconomic situation across states is variable. The state of Rajasthan is poorer than the national average, and after narrowing the income gap with the rest of the country in the 1990s, has been growing less rapidly at only 2.1% in recent years. Rajasthan was expected to have strong economic growth, with nominal growth rates of 14% and 12% per year, respectively, through 2012. These projections were made prior to the global economic crisis, however, and it is not clear as yet what the impact of the crisis will be on state-level growth rates.

<sup>89</sup> MoH&FW (2005), *National Rural Health Mission 2005-2012*, New Delhi: Ministry of Health & Family Welfare.

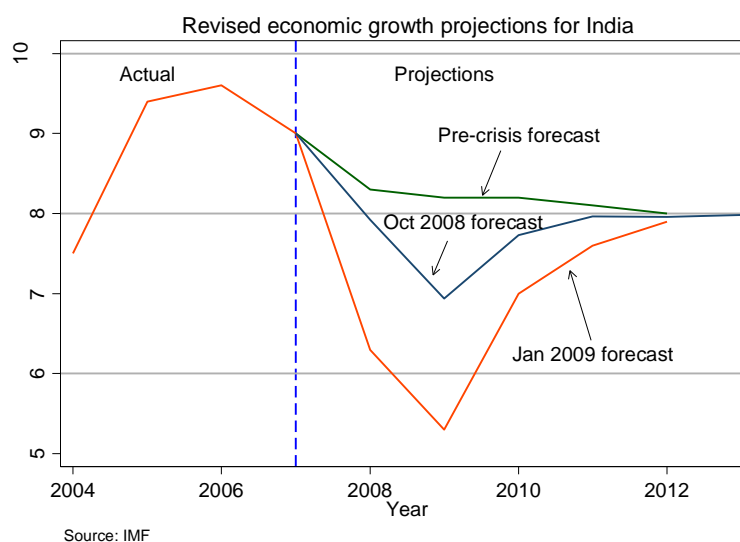


FIGURE 15. REVISED ECONOMIC GROWTH PROJECTIONS FOR INDIA

In India government health spending has historically not been very responsive to economic growth, and this is even more pronounced at the state level. The estimated elasticity of overall (center and state) nominal government health spending to GDP was only about 0.94 between 1990 and 2007. This is low compared to the average elasticity across all low-income countries of 1.14. When disaggregated by state and central government health spending, however, central level spending was much more responsive to GDP growth. The elasticity of central health spending is 1.15, whereas the elasticity of state spending is only 0.87. Again, there is variability across the states. With an elasticity of only 0.83, state health spending is far less responsive to economic growth in Rajasthan than in other states in India (such as Uttarakhand, with an elasticity of nominal health spending to GSDP is estimated to be 1.74).<sup>90</sup> The disparities in responsiveness between the center and the states may be partially due to fungibility of central transfers to states. The modest prospects for growth given the global economic crisis coupled with a low propensity in India's states to raise health spending with increasing GDP may limit the scope for additional fiscal space at the state level for health arising from the macroeconomic situation.

Along with robust economic growth, India has almost doubled the combined central and state tax revenue share of GDP from about 10% in 1970 to almost 20% in 2007.<sup>91</sup> The slowdown in growth resulting from the global economic crisis, however, is likely to dampen growth in revenues and overall fiscal space. Additional fiscal pressures are expected from the commitment to keeping deficit levels low, implementation of a public-sector wage hike, and increased spending on stimulus packages. Therefore improved revenue generation is not likely to be a significant source of additional fiscal space for health in the near-to-medium term.

<sup>90</sup> State Finances, RBI Bulletins.

<sup>91</sup> Ministry of Finance (2008), *Indian Public Finance Statistics 2007-2008*, New Delhi: Department of Economic Affairs.

Re-prioritization of Health: Health as a share of the government budget exceeds 5% in only a few states in India. In Rajasthan, health as a share of the state budget is only about 4.1%. It is unlikely, however, that Rajasthan would be able to increase the share of its budget on health given that a large proportion of the state government's expenditure is non-discretionary: an estimated 95% of Rajasthan's total revenues are consumed by expenditure on wages and salaries, interest payments, and pensions.<sup>92</sup>

Health Sector-Specific Resources: There are several possible options that could be considered for increasing health sector-specific resources for fiscal space for health at the state level in India. These include earmarked taxes, and user charges.

There is no earmarking of general taxation for health in India (but there is a tax earmarked for education). As several other countries have done, India could consider a tax on alcohol or tobacco products earmarked for health. It is not clear how feasible this would be for India, however, as prices for tobacco and alcohol already are higher in India than in most neighboring countries. Furthermore, such a tax is likely to be regressive. While only 38.6% of males in the highest income quartile use tobacco, 74% of males in the lowest income group consume tobacco products.<sup>93</sup> The burden of higher taxes on tobacco products would therefore fall disproportionately on the poorer groups, but a more detailed benefit-incidence analysis would be needed to determine whether earmarking the revenues for health would disproportionately benefit the poor and somewhat offset the regressive tax.

Several states, including Rajasthan, have introduced user charges at public health facilities to generate additional public resources for health (with exemptions for the poor). With new insurance schemes for the poor being introduced, facilities also receive additional revenues for provision of care to the poor. At the facility level revenue from user charges can be significant, but as a share of the health budget it is still very small. Nonetheless, the potential for generating fiscal space through user fees is considerable. One study found that 46.5% of public spending is on hospitals, and of this around 36% of spending benefits the top income quintile, and only 8.1% benefiting the bottom quintile.<sup>94</sup> Thus, cost recovery from the top quintile of the population alone could generate significant resources for the government. However, user charges come with their own danger – if not implemented with appropriate exemptions in place – of creating financial barriers to utilization.

Grants and Foreign aid: Transfers from the central government are a potential source of fiscal space for India's states. General purpose transfers from the center to the states can be a source of fiscal space, but only to the extent that the states themselves choose to prioritize health over other sectors. Earmarked health-specific transfers, in addition to NRHM funds, have been implemented in the past and could be a source of additional fiscal space for health in states

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<sup>92</sup> Rao, MG, M Choudhury, and M Anand (2005), "Resource Devolution from the Centre to the States: Enhancing the Revenue Capacity of States for Implementation of Essential Health Interventions," in National Commission of Macroeconomics and Health (2005), *Financing and Delivery of Health Care Services in India*, Ministry of Health & Family Welfare, New Delhi, India.

<sup>93</sup> National Family Health Survey III (2009).

<sup>94</sup> NCAER (2002), "Who Benefits from Public Health Spending in India: Results of A Benefit Incidence Analysis for India," NCAER, New Delhi, India.

where government health spending is low. For example, health-specific transfers were implemented as part of the Twelfth Finance Commission (2005-2010) in an attempt to equalize per capita health spending across the states. These transfers followed a formulaic approach, however, with allocations disconnected from the government's health spending objectives. For example, although Rajasthan has been identified as a priority state under NRHM, the state did not receive earmarked grants-in-aid for health under the auspices of the Twelfth Finance Commission

International donor assistance does not appear to be a practical option for generating additional fiscal space for health in India. Although there are some examples of relatively low levels of external support driving changes in system efficiency,<sup>95</sup> the country's size makes the magnitude of assistance required for any substantive impact prohibitively large, especially at the central government level, but also in some of the larger states such as Rajasthan.

Other issues include weak absorptive capacity and the danger that priorities get skewed toward donor preferences. WHO estimates indicate that India's dependence on external assistance for health has been quite low relative to comparable countries. In 2006, only about 0.7% of total health spending in India was externally sourced. The average for all low-income countries was 24.5%, and for the South Asia region it was 13.0%. At the state level, donor assistance now is allocated to states according to the terms and conditions given by the donors, so states may consider donor assistance for health as a potential source of fiscal space. However, this would be a minor additional source of resources.

Efficiency: There are many opportunities to improve the efficiency of government health expenditures in India to increase effective fiscal space for health. The massive variation in attainment of health outcomes across states is itself indicative that there is room for improvement. In the context of NRHM, more than 40% of funds have been allocated to the "flexible pool" that is tied to state project implementation plans. The remaining 60% is tied to more than 15 specific health programs. It has been suggested that the efficiency of NRHM could be increased if it focused on a smaller number of interventions that are important for the health and financial protection of the poor and that can be scaled up effectively.<sup>96</sup> Furthermore, there is little evidence to date that NRHM-related increases in resources have translated into improved health outputs or outcomes.<sup>97</sup> With more than 70% of state health budgets on average being consumed by salaries, this has tended to come at the expense of medicines, equipment, and other direct inputs into patient care. At the same time, one study showed that absenteeism in public sector primary health centers ranged from 40 to 50%, indicating significant inefficiency in wage expenditures. Other issues of leakage and corruption also reduce the effective use of health sector resources.<sup>98</sup>

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<sup>95</sup> The coordination of limited donor funding through a sector-wide approach (SWAp) contributed to the success of the Reproductive and Child Health Program, which became an integral part of the NRHM. World Health Organization (2006). Country Cooperation Strategy 2006-2011.

<sup>96</sup> Deoalikar A, Jamison D, Jha P, and Laxminarayan R. (2008). Financing health improvements in India. *Health Affairs* 27(4): 978-990.

<sup>97</sup> National Commission of Macroeconomics and Health (2005), *Financing and Delivery of Health Care Services in India*, Ministry of Health & Family Welfare, New Delhi, India.

<sup>98</sup> Kumar, S. (2003). Health care is among the most corrupt services in India. *BMJ* 326: 10.

Table 7 summarizes the prospects for creating of fiscal space for health using each of the five pillars in the state of Rajasthan in India.

TABLE 7. FISCAL SPACE AT A GLANCE: STATE OF RAJASTHAN, INDIA

Fiscal Space Source	Key Information	Prospects for Fiscal Space
Macroeconomic conditions	2.1% GSDP growth rate Elasticity of state health spending to GSDP=0.83 Global financial crisis reducing revenues Pressure to keep deficit low	Limited
Re-prioritization of health in the government budget	4.1% share of health in state budget Large share of state budget non-discretionary	Limited
Health sector-specific resources	Inter-fiscal transfers (other than NRHM) have been de-linked from health spending priorities Prices on alcohol and tobacco products are already high, and consumption is concentrated among the poor. As much as 92% of the labor force is informal, and 42% of the population lives on a \$1 a day or less, which would not provide a sufficient base for a contributory health insurance system. User charges from the top quintile of the population alone could generate significant resources	Limited to Moderate
Health sector-specific grants and foreign aid	The size of the country makes the magnitude of aid required for impact impractical. Weak absorptive capacity	Limited
Efficiency gains	60% of NRHM funds tied to 15 different fragmented programs 70% of state health budgets are consumed by salaries and non-discretionary Absenteeism in public sector primary health centers 40-50%	Good

## Conclusions and Recommendations

Given the nature of the center-state split in responsibility for health spending, with states being responsible for the bulk of expenditure in India, the proposed increase in government funding for health to 2-3% of GDP is unlikely to be realized by 2012. Achieving this goal would require increases in state health spending levels of implausibly high magnitudes. There are no obvious sources of additional fiscal space at the state level at this time that would be near sufficient for closing the funding gap. Furthermore, state-level absorptive capacity constraints and the potential substitution of state funds by central funds may further reduce actual effective increases in health spending at by the center level. Increased central funding for health under NRHM without building necessary capacity at the local level is considered to be a factor in its low uptake so far. Finally, one of the main problems with the proposed increase in fiscal space for health in India has been the explicit lack of focus on attainment of health outputs and

outcomes.<sup>99</sup> An increase in financial inputs arguably was a necessary first step in the Indian context of historically low levels of public financing for health. Now, however, the increase in funding needs to be better targeted to those interventions that are most important for improving health and financial protection and supported by a greater focus on improvements in the delivery of quality health services to bring about better health outputs and outcomes in the country.

## INDONESIA

### Background

Indonesia is an archipelago in the East Asia and Pacific (EAP) Region consisting of 17,000 islands with a population of 225.6 million people.<sup>100</sup> It is a lower-middle-income country, with a per capita gross national income of \$1,650 in 2007.<sup>101</sup> Indonesia has undergone tremendous political and economic reforms in recent years, and it has emerged with greater stability, stronger economic performance, and a clear commitment to strengthening pro-poor social services, including health.

Health spending in Indonesia has increased in recent years but remains low for its income level and relative to even its poorer regional peers (Figure 13). Total health expenditure per capita was US\$46 in 2007, or about 2.5% of GDP.<sup>102</sup> Slightly over half of health spending came from public sources, but only 6.7% of the government budget was allocated to health.<sup>103</sup> Health care provision is dominated by the public sector, and widespread inefficiency, poor service quality, and low rates of utilization continue to characterize health service delivery in Indonesia. On the other hand, the health financing system appears to be progressive, with the poor spending a smaller share of their household income on health than the wealthy. The system also provides relatively good financial risk protection, with low rates of catastrophic health expenditures.

Despite low levels of health spending and deficient service delivery, Indonesia has made impressive health gains over the past several decades. Life expectancy at birth has increased from just over 41 years in 1960 to over 70 years in 2007. The infant mortality rate dropped from 128 to 24.8 per 1,000 live births over the same time period. Indonesia's infant mortality rate is better than average for its income level (Figure 5). However, other health indicators such as maternal mortality are some of the worst in the region. As with India's case, the national average for health indicators mask wide variations in the country related to income and geography.<sup>104</sup> Indonesia also faces increasing epidemiological and demographic pressures, with an aging population and a growing burden of non-communicable diseases combined with emerging communicable diseases, such as HIV/AIDS and avian influenza.

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<sup>99</sup> A similar point is made in Berman and Ahuja (2008). See Berman, P and R Ahuja (2008), "Government Health Spending in India," *Economic and Political Weekly*, 43(26&27): 209-216.

<sup>100</sup> World Bank (2009), *Giving More Weight to Health: Assessing Fiscal Space for Health in Indonesia*, Jakarta: Indonesia.

<sup>101</sup> World Development Indicators (2009).

<sup>102</sup> WHO Health for All Database.

<sup>103</sup> WHO Health for All Database.

<sup>104</sup> World Bank (2007), *Indonesia Health Public Expenditure Review*, Jakarta: World Bank Indonesia Country Office.



In 2004, the Government of Indonesia made a commitment to initiate a process to provide health insurance coverage for the entire population. A major first step was taken when the government expanded an insurance scheme for the poor and near-poor (*Jamkesmas*). Under this scheme, publically-financed coverage is provided for a target population of over 76 million Indonesians.<sup>105</sup> Over half the population that is not eligible for *Jamkesmas* still lacks health insurance coverage, and a number of design and targeting issues have led to *Jamkesmas* expenditures that are much higher than expected, with budgets tripling since the start of the program.<sup>106</sup> Given the high costs associated with *Jamkesmas*, as well as Indonesia's current health situation and future demographic and epidemiological projections, the government will almost certainly need to increase fiscal space for health, or improve the effectiveness of current spending, to attain further improvements in health and expand insurance coverage.

### **Analysis of Fiscal Space Using the Five Pillars**

Conducive Macroeconomics: Indonesia's medium-term economic growth prospects are strong, and historical data show that government health expenditures has responded slightly more than proportionally to increases in GDP. Indonesia's growth rate was 6.3% in 2007 and is projected to remain at or above 6% through 2012.<sup>107,108</sup> Based on analysis of trends over the period of 1996-2005, the estimated elasticity of government spending with respect to GDP in Indonesia is about 1.15. If the elasticity remains at that level and projected economic growth rates are achieved, government health spending could potentially double relative to 2006 levels by 2012, creating a significant source of additional fiscal space for health.

At 19%, Indonesia's revenue as a share of GDP is lower than the average of 23% for its income level. A recent IMF country report suggested that an additional revenue yield of 1% of GDP annually could be realized if value-added tax exemptions were limited, property taxes were increased, and fringe benefits taxes were introduced. If these revenue gains were realized, and assuming the health share of the budget remained at least 5%, this could potentially lead to additional fiscal space for health of 0.05% of GDP per year for the next several years.<sup>109</sup>

Re-Prioritization of Health: Indonesia spends less than 7% of its government budget on health, and there appears to be significant opportunity for re-prioritization to generate additional fiscal space for health. High fuel and energy subsidies are prominent in budgetary allocations. In 2006, Indonesia reduced fuel subsidies and brought down debt levels, which created additional overall fiscal space that resulted in a 20% increase in total government expenditures.<sup>110</sup> Additional fiscal space for health could be generated by further reducing fuel subsidies, which continue to consume about 15% of the total budget and tend to benefit wealthier population groups.

Health Sector-Specific Resources: High levels of informal employment in Indonesia pose a serious challenge to expanding coverage based on contributions. Less than one-third of

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<sup>105</sup> Statistics Indonesia et al. (2008).

<sup>106</sup> Rokx et al. (2009).

<sup>107</sup> World Bank (2008), *Indonesia: Economic and Social Update*, Jakarta.

<sup>108</sup> IMF (2007), *Indonesia: 2007 Article IV Consultation*, Washington, DC.

<sup>109</sup> IMF (2007), *Indonesia Country Report*, Washington, DC: International Monetary Fund.

<sup>110</sup> World Bank (2007), *Indonesia Public Expenditure Review*.

employment currently is in the formal sector, and this has not increased even in the face of robust economic growth.<sup>111</sup> The two other public health insurance schemes in Indonesia that are funded by a payroll contribution (*Jamsostek* for formal sector workers in firms with 10 or more employees) and fixed premiums (*Askes* for civil servants) currently only cover about 2% and 6% of the population, respectively, which has remained relatively constant over the past several decades.<sup>112</sup> One possible source of health sector-specific resources to increase fiscal space that is being considered is a tax on tobacco products earmarked for health, particularly given that taxes on cigarettes in Indonesia are currently among the lowest in the region. One policy option under consideration is to allow local governments to increase taxes of tobacco to finance coverage of non-poor informal sector workers. However, it is not clear whether local governments would have the capacity to raise and administer such an earmarked tax. This option is still under consideration.

Grants and Foreign Aid: Grants from international organizations such as the Global Fund for Aids, Tuberculosis, and Malaria (GFATM) and the Global Alliance for Vaccines and Immunization (GAVI), are another potential health sector-specific source of fiscal space. The share of international donor funding of the health sector in Indonesia has been steadily falling, however, and is currently less than 2% of total health expenditures.<sup>113</sup> In light of this, and given Indonesia's lower-middle income status, donor funds are unlikely to be an option for significantly increasing fiscal space for space.

Efficiency: There appear to be several key areas where efficiency gains could be significant in Indonesia. For example, following decentralization in 2001, almost half of all health expenditures are now made at the district level.<sup>114</sup> The majority of district-level spending is non-discretionary, however, mostly funding salaries, which have increasingly crowded out expenditures on medicines, supplies, and other operational expenditures. The flow of funds to the sub-national level also is highly fragmented and inefficient, with, for example, some payments made through insurance organizations and others directly to public health care providers.<sup>115</sup> In addition, many poor districts now receive much higher levels of funding for health, but they have been unable to spend these funds due to limited absorptive capacity. Some estimates put overall unspent reserves held by local governments at 3.1% of GDP.<sup>116</sup> Streamlining the flow of funds to the sub-national level, freeing up resource allocation constraints so funding can better match needs, and improving absorptive capacity at the local level may create significant effective fiscal space for health in Indonesia.

Given the high share of expenditures on staff salaries, additional fiscal space also could be generated by addressing issues such as absenteeism among public health workers in Indonesia. A study based on unannounced visits to primary health care facilities found a 40% absenteeism

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<sup>111</sup> Sugiyarto, G, M Oey-Gardiner, and N Triaswati (2006), "Labor Markets in Indonesia: Key Challenges and Policy Issues," in J Felipe and R Hasan (eds), *Labor Markets in Asia: Issues and Perspectives*, London: Palgrave Macmillan for the Asian Development Bank.

<sup>112</sup> Rokx et al. (2009).

<sup>113</sup> World Bank (2009). World Development Indicators.

<sup>114</sup> WB (2007), *Indonesia Health Public Expenditure Review*.

<sup>115</sup> Rokx et al. (2009).

<sup>116</sup> WB (2007), *Indonesia Health Public Expenditure Review*, Jakarta: World Bank.

rate.<sup>117</sup> Better systems of governance and incentives, which may be implemented in the context of purchasing under the mandatory health insurance system, could help ensure that health expenditures translate effectively into human resource inputs in the health system in Indonesia.

Table 8 summarizes the prospects for creating of fiscal space for health using each of the five pillars in Indonesia.

TABLE 8. FISCAL SPACE AT A GLANCE: INDONESIA

Fiscal Space Source	Key Information	Prospects for Fiscal Space
Macroeconomic conditions	Projected GDP growth rates over 6% Elasticity of government health expenditure to GDP=1.15 If value-added tax exemptions were limited, property taxes increased, and fringe benefits taxes introduced, additional 0.05% of fiscal space could be generated	Good
Re-prioritization of health in the government budget	Less than 7% of government budget allocated to health Potential to reduce energy subsidies and increase budget share for health	Moderate
Health sector-specific resources	Earmarked payroll tax is being considered to expand public health insurance coverage but less than 1/3 of the labor force is in the formal sector	Limited
Health sector-specific grants and foreign aid	External assistance is less than 2% of total health expenditure	Limited
Efficiency gains	The majority of district-level spending is non-discretionary Funds flows are fragmented Low absorptive capacity at local level with 3% of funds unspent	Good

## Conclusions and Recommendations

The Government of Indonesia has made an ambitious commitment to provide universal health insurance coverage to the population. With the current low rates of public health expenditure, as well as the poor performance on several key health indicators and expected epidemiological and demographic pressures, the government will need to increase fiscal space for health to fulfill its promise.

Indonesia has the advantage over many countries of a relatively positive prognosis for economic growth in the near future. Given Indonesia's low government revenues as a share of GDP and small share of health in the government budget, however, measures to increase government revenues and better prioritize budget expenditures are needed to ensure that economic growth translates into significant increased fiscal space for health. Additional mechanisms for increasing fiscal space to fund universal public health insurance coverage will almost certainly be necessary. An earmarked payroll tax or fixed premiums could be considered, but the high level

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<sup>117</sup> Chaudhury, N, J Hammer, M Kremer, K Muralidharan, and FH Rogers (2006), "Missing in Action: Teacher and Health Worker Absence in Developing Countries," *Journal of Economic Perspectives*, 20(1): 91-116.

of informal employment is a significant obstacle. Some combination of contributory mechanisms and increased government budget funding may be the most feasible approach.

Under any scenario, the efficiency of public health expenditures should be improved, both to create additional effective fiscal space and to increase the absorptive capacity for new resources. The high level of decentralization in the health system has created a high degree of fragmentation and inefficiency. Effective fiscal space in a highly decentralized context such as Indonesia may be increased by streamlining the funds flow, freeing up the constraints on allocation of funds at the sub-national level, and linking inter-fiscal transfers more closely to health need and to the attainment of health outputs or outcomes. These steps may be achieved as a national health insurance system is consolidated and the purchasing function can be strengthened.

Finally, generating better information for analysis is a key step for Indonesia to make accurate estimates of the fiscal space needed to achieve universal coverage and to develop the most appropriate approaches. Critical data such as national health accounts updates, claims data from existing insurance programs, and cost and coverage information are needed to make accurate actuarial projects and to identify where key sources of inefficiency need to be addressed.

## RWANDA

### Background

Rwanda is a small land-locked country in central Africa with a population of 9.7 million.<sup>118</sup> The country has made remarkable progress since the 1994 genocide and civil war, with peace and political stability re-established and democratic institutions and processes in place. Poverty and social indicators also have improved, since macroeconomic stability largely has been achieved. Real GDP increased by over 10% per year during 1996-2000, as the economy recovered from a low base. This has been followed by a period of stabilization, with average real GDP growth settling at 6.5% per year.<sup>119</sup>

Through robust growth, pro-poor development policies, and significant international donor support, Rwanda has been able to rapidly expand financing for health, particularly since 2003. In real terms, health expenditure nearly doubled from US\$14 to \$26 between 2003 and 2006.<sup>120</sup> Total and government health expenditure per capita are high relative to Rwanda's income level. Total health expenditure was 10.6% of GDP in 2007, and government health expenditure was 5.3%. A high level of dependence on external donor financing continues, however, with donor funding accounting for more than half of total health financing in 2007 and 80% of government health spending. Community-based health insurance schemes ("mutuelles"), which are supported by government subsidies, have become a significant mechanism for providing access to care and

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<sup>118</sup> Lane C, Gottret P, and Sparkes S. (2008). *Rwanda: Fiscal Space for Health and the MDGs Revisited*. Washington, DC: World Bank.

<sup>119</sup>World Bank Country Web Site (2009). Rwanda Country Brief. <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/RWANDAEXTN/0,,menuPK:368714~pagePK:141132~piPK:141107~theSitePK:368651,00.html>

<sup>120</sup> Rwanda National Health Accounts 2003 and 2006.

financial risk protection for the population. It is estimated that 38% of households are covered by the schemes.<sup>121</sup>

Rwanda's commitment to improving the health situation has led to recent dramatic improvements in key health indicators, although baseline levels were extremely poor. Recent data suggest that MDGs for child and maternal mortality are likely to be met or exceeded if recent rates of progress are maintained. HIV prevalence also has fallen, and more recently there has been a large drop in the number of recorded hospital admissions for malaria, which is the largest single cause of mortality. The infant mortality rate in 2007 was about average for Rwanda's income level at 109 per 1,000 live births (Figure 5).

The recent progress in Rwanda in improving health outcomes is impressive, but the high level of dependence on external assistance raises the question of the sustainability of fiscal space for health. Large increases in donor support for health appear to be adequate to cover continued service scale-up through 2010, but based on costing of service expansion, funding gaps for meeting health MDGs are likely to emerge after that unless additional fiscal space for health is generated.

### **Analysis of Fiscal Space Using the Five Pillars**

Conducive Macroeconomics: Rwanda has been experiencing robust economic growth, and real GDP is projected to continue to increase by 6.5% per year on average through to 2012.<sup>122</sup> This estimate is lower than earlier projections of 8.1% per year prior to the global economic crises.<sup>123</sup> Nonetheless, the projections for economic growth remain relatively optimistic, as Rwanda's insulated financial markets have shielded the country from some of the impact of the global crisis. Health spending in Rwanda has responded strongly in recent years to economic growth, and it can be expected that some additional fiscal space will be created as GDP grows steadily over the medium term.

Fiscal performance has improved in Rwanda, with revenue collection reaching 13% of GDP in 2006, and it is expected to remain at that level over the medium term.<sup>124,125</sup> Opportunities for raising additional revenue have been suggested, however, such as increasing the yield of property taxes and eliminating exemptions, which could potentially amount to up to 2% of GDP in additional revenue.<sup>126</sup> The IMF has provided multiple recommendations for improving tax administration for the Rwanda Revenue Authority and the Customs Administration, including

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<sup>121</sup> International Monetary Fund (IMF). (2008). *Rwanda: Poverty Reduction Strategy Paper*. IMF Country Report No. 08/90.

<sup>122</sup> Ministry of Finance and Economic Planning (MOFEP) of Rwanda. (2009). *Budget Framework Paper 2009/10-2011/12*. Kigali: April 2009.

<sup>123</sup> IMF (2008).

<sup>124</sup> IMF (2008).

<sup>125</sup> MOFEP (2009).

<sup>126</sup> Deloitte. (2007). *Areas of Interest for Broadening the Tax Base in Rwanda*. Report prepared for Ministry of Finance and Economic Planning, October 2007.

tackling tax fraud and improved risk assessments, which over time could help improve tax collection rates.<sup>127</sup>

Re-Prioritization of Health: Government spending on health currently makes up 9.7% of the total government budget, and it is projected to decline to 9.0% by 2012.<sup>128</sup> Even in the Poverty Reduction Strategy Paper, no further prioritization of health in the overall public budget is envisioned, so it is unlikely that this will be a source of additional fiscal space for health in Rwanda over the medium term.

Grants and Foreign Aid: Health sector-specific international donor assistance has been the driving force behind Rwanda's rapid increase in fiscal space for health since 2003. An assessment of commitments for future aid conducted in 2008, however, indicated that no further nominal increase in aid for health is expected.<sup>129</sup> The stalling of international donor assistance would place total aid and government health financing on downward trend in real per capita terms and result in an overall decline in fiscal space for health. This reality underlines the vulnerability of Rwanda's health sector to changes in aid policies and priorities.

Efficiency: Although the Government of Rwanda has taken steps to improve the efficiency of health service delivery, additional improvements can potentially be achieved. For example, there is a misalignment between how budget resources are allocated and the cost estimates for priority programs in the Ministry of Health's Health Sector Strategic Plan.<sup>130</sup> The financing gaps are significantly larger for health system support services, such as subsidizing access to health services and institutional strengthening (35% of need), than health care delivery (17%). The largest proportionate financing gaps are for increasing geographical access, improving financial access, and improving the quality of human resources.

There also appears to be a mismatch between donor funding allocations and national priorities. For example, donor spending is disproportionately targeted at HIV/AIDS in comparison to both government and private spending.<sup>131</sup> This does not necessarily imply overspending on HIV by donors, but it does demonstrate that donor priorities may not match those of the public and private sectors in Rwanda. If available resources, both domestic and international donor-funded, were better aligned to the needs and priorities outlined in Rwanda's Health Sector Strategic Plan, it is possible that better health outcomes could be achieved within available resources, resulting in an increase of effective fiscal space.

Table 9 summarizes the prospects for creating of fiscal space for health using each of the five pillars in Rwanda.

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<sup>127</sup> IMF. (2007). Summary of the IMF Fiscal Affairs Department Mission the Rwanda Revenue Authority. "Next steps in RRA modernization" October 2007.

<sup>128</sup> MOFEP (2009).

<sup>129</sup> Lane C, Gottret P, and Sparkes S. (2008). *Rwanda: Fiscal Space for Health and the MDGs Revisited*. Washington, D.C.: The World Bank.

<sup>130</sup> Lane et al. (2008).

<sup>131</sup> Lane et al. (2008).

TABLE 9. FISCAL SPACE AT A GLANCE: RWANDA

Fiscal Space Source	Key Information	Prospects for Fiscal Space
Macroeconomic conditions	Projected growth rates of 6% annually through 2012 Government health spending has responded strongly to increases in GDP, but mostly donor-driven Measures to improve tax administration and reduce exemptions would be needed to improve revenue generation capacity	Moderate
Re-prioritization of health in the government budget	The share of health in the budget is expected to decline from 9.7 to 9% by 2012	Limited
Health sector-specific resources	No plans for SHI or earmarked taxes on alcohol and tobacco	Limited
Health sector-specific grants and foreign aid	Current high level of donor-dependence and no increases in future commitments	Limited
Efficiency gains	Misalignment between budget allocations and MOH cost estimates for priority programs	Moderate

## Conclusions and Recommendations

Over the past several years, there has been a dramatic increase in the fiscal space for health in Rwanda. If these increases were to be sustained, they could be sufficient to cover the estimated costs of scaling up health services to meet the health MDGs. This expansion of fiscal space for health has been largely donor-driven, however, and it is likely to slow over the period to 2009-2015, as the major donors slow the growth in aid for health in Rwanda. In addition, only modest increases in government funding can be expected from projected economic growth, as increasing the share of the public budget allocated to health is not envisioned in the near future. The case of Rwanda highlights the risks associated with a long-term high level of dependence on external flows of aid, which have a relatively short-term horizon for future commitments. The high level of aid dependence and the uncertainty over future commitments poses a fiscal risk for the continuity of health services that could not be covered by domestic financing alone.

With financing gaps for scaling up health services potentially opening up before 2015, efficiency gains will be needed to sustain the rate of improvement of health status and achieve the health MDGs in Rwanda. Better outcomes may be achieved with the current level of expenditures if budget allocations more closely match projected resource needs in the Health Sector Strategic Plan. Part of the current health sector inefficiency also results from a considerable mismatch between the government's health priorities and the allocation of external financing. Mechanisms for better aid coordination between the government and development partners have been agreed to, such as a sector-wide approach to support the Health Sector Strategic Plan, which could lower transaction costs and better align aid to country health priorities. In addition, better resource planning could be achieved with more stable and predictable aid funding flows. This would require more flexible aid instruments that extend the period of aid commitments and allow them to be matched to the structure, time horizon, and priorities of Rwanda's health sector development plans.



## TONGA

### Background

Tonga is a South Pacific island nation made up of 171 islands, 45 of which are inhabited.<sup>132</sup> It has a population of 120,000 and is a middle-income country with a GDP per capita of US\$5,189. Tonga stands out as having some of the highest levels of health spending in the East Asia and Pacific (EAP) region, both total and from government sources. Tonga spent US\$186 per capita on health in 2007, with 40.2% coming from government sources and 34.4% from foreign assistance. The majority of countries in the EAP region allocate less than 10% of the government budget for health, compared to 11.7% in Tonga.<sup>133</sup>

Current health financing arrangements in Tonga, which mainly rely on general revenues, provide high levels of coverage and financial protection by middle-income country standards. An extensive network of health facilities and limited out-of-pocket payments have ensured high levels of access to services. Health outcomes in Tonga are thus among the best in the EAP region and on par with middle-income country status. Life expectancy at birth is 73 years, and the infant mortality rate is 20 per thousand live births, which is better than average for its income level (Figure 5). Tonga has met many of the MDGs.

Despite this good performance, several factors may put a strain on health financing in the near future. Demand for health care, particularly for more complex curative care services, is growing rapidly due to the combined effects of population aging and the rising burden of non-communicable diseases (NCDs). Faced with rising expenditures and concerned about the sustainability of current revenue sources, the government is seeking a more diversified and sustainable financing base for the health sector.

### Analysis of Fiscal Space Under the Five Pillars

Conducive Macroeconomics: Medium-term economic forecasts for Tonga indicate that annual GDP growth is likely to stabilize despite recent shocks, although at the relatively low level of 1.75% annually. High costs of labor and energy, limited export diversification and the lack of long-term investment to improve productivity and efficiency are factors impeding higher levels of economic growth. In addition, Tonga is typical of Pacific Island economies that are highly vulnerable to external economic shocks and natural disasters. Furthermore, remittances from abroad, which are vulnerable to global economic conditions, accounted for 35% of GDP in 2007.<sup>134</sup>

Recent tax reform and improvements in tax compliance could potentially improve revenue generation capacity in Tonga. Revenue reform was initiated in 2002 to end Tonga's heavy reliance on taxes on international trade as a main source of government revenue. To compensate

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<sup>132</sup> This case summary is based on Somanathan, A, R Hafez, and B Shengelia (2009), *Health Financing Options for Tonga*, East Asia Human Development Department, World Bank, Washington, DC.

<sup>133</sup> World Health Organization, Health for All database

<sup>134</sup> Ratha, D., S. Mohapatra, et al. (2008). "Outlook for remittance flows 2008-2010: growth expected to moderate significantly, but flows to remain resilient." Migration and Development Brief 8.



for the loss of income from import duties, a 15% consumption tax was introduced in 2005, making domestic taxes the most significant source of tax revenue. This increases Tonga's vulnerability to its dependence on remittances, however, which drive domestic consumption.

Tax collection also has been made more efficient and compliance improved, with tax revenues estimated to have increased by 15% in 2007/08 as a result. Revenues are expected to stabilize at around 32% of GDP, which compares favorably to the middle-income country average of 25%. The need to ensure fiscal prudence, however, means that improved revenue generation capability may not necessarily be translated into increased public spending.

Government health expenditures in Tonga have increased more than proportionally to GDP over time, with the elasticity of government health spending to GDP estimated to be 1.84 based on trend data from 1994 to 2006, this relationship is likely to be spurious given the country's high dependence on external sources.<sup>135</sup>

Re-prioritization of Health: The Government of Tonga allocated 12% of the budget for health on average during 1994-2007, and generally accords high priority to health. Moreover, the health sector was largely exempted from the staff cuts as part of the redundancy program in 2006-2007 in order to protect the capacity of the sector to deliver essential services. The government did, however, introduce legislation to charge user fees and implement a voluntary health insurance scheme.<sup>136</sup>

Increasing the health sector's share of the total budget may not be feasible in the short to medium term, given the large share already allocated to health. The Ministry of Finance indicated that, while budgetary allocations for the social sectors (education and health) are likely to be protected over the short to medium term, it is unlikely their relative shares will be increased.<sup>137</sup>

Health Sector-Specific Resources: Scope may exist for increasing taxes on tobacco in Tonga, and potentially earmarking cigarette tax revenues for health. Tonga has acceded to a World Health Organization treaty on tobacco control, which obliges the Ministry of Health to introduce measures to reduce the prevalence of smoking, which currently stands at 39%. At present, cigarettes are subject to a consumption tax of 15% on the price of cigarettes, as well as an additional excise tax, but the tobacco rate in Tonga is one of the lowest in the region. It is not clear, however, whether an earmarked tax on tobacco products is politically feasible in Tonga, or whether it would increase health sector resources.

The Government of Tonga recently proposed a social health insurance (SHI) scheme for formal sector workers in response to fiscal constraints in the public sector. A new payroll tax of 1 or 5%, shared equally between employers and employees is being discussed, and it is estimated that the payroll tax could raise an additional TOP 1 million or TOP 5 million in additional revenues for the health sector. Under this scenario, the revenue generated by the payroll tax would increase

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<sup>135</sup> IMF (2008). Tonga: 2008 Article IV Consultation - Staff Report.

<sup>136</sup> Fakahau (2008). Analysis of social health insurance for the Kingdom of Tonga. Report submitted to the World Bank.

<sup>137</sup> Somanathan, A. (2008). Author's discussion with Ministry of Finance.

funding for the Ministry of Health by 19%. The revenues generated and the amount made available to the health sector are likely to be much less, however, if administrative costs and potential evasion are taken into account. In addition, Tonga would face similar barriers to scaling up health insurance beyond formal sector workers as those that have been observed in Eastern Europe, Latin America, and Asia. Extending insurance to informal sector workers, the elderly, the poor and the unemployed is difficult, because they are typically not affiliated with an organization through which to enroll and collect premiums, and a source of subsidy is needed to pay premiums for those unable to afford to pay. Currently, only 12% of the population is registered as formally employed.

Grants and Foreign Aid: During 2003-2006, external funds accounted for 33% of all health spending in Tonga, though nearly half of this was for the Vaiola Hospital reconstruction project. The share of ODA financing for health is high in Tonga given its middle-income country status and generally good health indicators. Nonetheless, AusAID has recently committed itself to contribution Aus\$ 20 million to the health sector in Tonga for the next 10 years, so foreign aid will continue to be a source of fiscal space for health.

Efficiency: There appears to be significant scope for increasing fiscal space for health in Tonga by increasing the efficiency of resource allocation. At present, there is little data with which to assess efficiency through unit costs and routine service indicators such as occupancy rates and average lengths of stay at public facilities. Nonetheless, some resource allocation and service use patterns suggest room for efficiency gains. In particular, expenditure allocations to public health and preventive services are low, accounting for less than 5% of total government expenditure, and about 6% of donor health expenditures. The low expenditure levels for primary health care are accompanied by low utilization. While hospital admission rates are very high in Tonga, outpatient contact rates are very low.

With the growing burden of chronic diseases, there is a need to refocus expenditures toward management of chronic conditions in primary care. Currently, NCDs are typically diagnosed quite late and require more expensive, acute medical care. Many of the diseases that contribute to the disease burden in Tonga, such as diabetes and rheumatic fever can be diagnosed and controlled at the primary care level. For many such conditions, hospitalization should only be required in extreme cases. In addition, the bulk of non-communicable disease spending (60.5%) is for pharmaceuticals.

Table 10 summarizes the prospects for creating of fiscal space for health using each of the five pillars in Tonga.

TABLE 10. FISCAL SPACE AT A GLANCE: TONGA

Fiscal Space Source	Key Information	Prospects for Fiscal Space
Macroeconomic conditions	Projected GDP growth 1.75% annually Economy vulnerable to shocks and remittances from abroad 15% consumption tax added in 2005 Recent tax collection improvements High responsiveness of government expenditure on health to increases in GDP (elasticity=1.84%)	Good
Re-prioritization of health in the government budget	Health as a share of total government budget already relatively high at 12% on average since 1994	Limited
Health sector-specific resources	Low tax rate on tobacco products but no expressed interest in earmarked tax Proposals for SHI focus on a small segment of the population (12%) that is formally employed	Limited
Health sector-specific grants and foreign aid	Over 30% of total health funding from external sources; future commitments high but unlikely to continue indefinitely	Moderate
Efficiency gains	Expenditure public health and preventive services less than 5% of total in spite of high burden of chronic diseases	Good

## Conclusions and Recommendations

The combination of modest but stable projected economic growth, high elasticity of government health spending with respect to GDP, recently improved efficiency of revenue collection, and high priority of health in the government budget make general revenues the most viable source of fiscal space for health in Tonga in the medium term. There are several factors that could undermine the sustainability of general revenue financing, however. First, lower than expected economic growth could slow down growth in health expenditures. Second, the flow of tax revenues may be undermined by the fact that they rely largely on domestic consumption driven by remittances. Worsening economic conditions, particularly in the United States and Australia, where much of the remittance revenues are sourced from are likely to reduce consumption spending and, thus, indirect tax collection. Third, even if revenue growth were to increase, it is unlikely that the health sector would be favored with any significant inter-sectoral allocations, given that it already accounts for a large share of government spending.

Other sources of fiscal space provide even less certain potential for increasing government resources for health. Although there is a commitment for significant assistance for health from the Australian aid agency over the next 10 years, Tonga already receives a high level of aid for a middle-income country, which is unlikely to continue indefinitely. Furthermore, an earmarked payroll tax for social health insurance faces many barriers to effectively increasing resources, and other sector-specific sources, such as an earmarked tax on tobacco products, have not been raised by policymakers and have not been adequately assessed for feasibility.

Given the potential vulnerability of the general revenue stream to external factors, Tonga should protect fiscal resources for health against the risk of poor macroeconomic performance and take steps to improve the efficiency of current allocations. Even if the macroeconomic environment is favorable, improved efficiency increases the absorptive capacity for additional resources for health and ensures they are put to the best use.

There are currently significant opportunities to improve efficiency in the health care system of Tonga by shifting resources to primary care and strengthening the management of chronic diseases to reduce expensive hospitalizations. This will not only increase fiscal space for health through efficiency gains, but also will likely lead to better health outcomes for the population of Tonga.

## UGANDA

### Background

Uganda is a landlocked country in East Africa with a population of nearly 31 million people in 2006.<sup>138</sup> It is a low-income country with a per capita GNI of US\$370 in 2007, 139 but nonetheless, Uganda is considered to have experienced one of the most impressive economic turnarounds in Africa, with high levels of economic growth sustained for 20 years.<sup>140</sup> As part of its development strategy, the government has maintained prudent fiscal management and carefully targeted public expenditures to strategic objectives, which have included health activities. Consequently, government health expenditure has been maintained at about 2.4% of GDP over the last 10 years, even while recent spending pressures have led to reductions in resources available for other key service delivery sectors.

Total and government health spending per capita is about average for its income level (Figure 13). The government contributes only about 30% of total health spending, with about 28.5% funded by external sources, and 37.9% out-of-pocket.<sup>141</sup>

The government of Uganda has operated under a decentralized framework since 1997, with political, administrative, and fiscal responsibilities transferred to local governments at the district level.<sup>142</sup> There are 80 districts, 23 of which were created in the last two years. Ownership of public health facilities (health centers and general hospitals) also was transferred to local governments. Healthcare utilization is, however, dominated by the private sector, with an estimated 59% of individuals who needed care seeking services from a private clinic, pharmacy or drug shop. In terms of the overall number of health facilities, excluding clinics, the public sector dominates, with 76% of all hospitals and health centers managed by the government managed as opposed to 24% that were privately or NGO managed.<sup>143</sup>

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<sup>138</sup> Reference.

<sup>139</sup> World Bank. (2009). World Development Indicators.

<sup>140</sup> International Monetary Fund (IMF). (2009). Uganda: 2008 Article IV Consultation and Fourth Review Under the Policy Support Instrument – Staff Report. IMF Country Report No. 09/79 March 2009.

<sup>141</sup> World Bank. (2009). Fiscal space for health in Uganda. Kampala: May 20, 2009.

<sup>142</sup> The Republic of Uganda, The Local Government Act (Kampala: 1977).

<sup>143</sup> UBOS and Macro International, *Uganda Service Provision Assessment Survey 2007*, (Kampala: 2008).

In spite of the government's commitment to maintaining health as a priority, health indicators are improving slowly in Uganda. Life expectancy was only about 51 years in 2006, similar to the average for sub-Saharan African countries. Uganda's under-five and infant mortality rates have been declining since the 1970s, although at a slow pace. Uganda's under-five mortality rate was 130.4, and its infant mortality rate was 81.7 per 1,000 live births in 2007, which are about average for its income level (Figure 5).<sup>144</sup> Uganda has, however, one of the highest rates of maternal mortality in the world, with recent estimates of 435 per 100,000 live births.<sup>145</sup>

The HIV/AIDS burden also remains significant in Uganda. Although Uganda has come a long way from the 18% prevalence rate of the early 1990s, current estimates indicate that there are over 100,000 new HIV infections each year, and approximately 6.4% (1.1 million) of adults are infected.<sup>146</sup>

Uganda has a health strategy in place to address these significant health challenges. Costing of the strategy estimates that US\$28 per capita is needed to fully finance it, but only US\$7 per capita in government funding is available.<sup>147</sup> There is a need to increase fiscal space for health if Uganda is to adequately fund priority programs and make significant improvements in health status. Moreover, Uganda faces a major challenge in sustaining the financing for new expensive health interventions, including antiretroviral drugs, pentavalent vaccines, and second- and third-line malaria treatments. Other drivers of the need for increasing fiscal space for health include a young and rapidly growing population, and the government's commitment to updating the health service delivery norms and infrastructure.

### **Analysis of Fiscal Space Under the Five Pillars**

**Conducive Macroeconomics:** After several years of high growth and strong macroeconomic performance, the global financial crisis is having an impact on Uganda's economy. Nonetheless, growth is projected to remain relatively strong. Annual GDP growth is expected to slow to 5-6% annually, down from 9.5% over the past three years.<sup>148</sup> Historically, government expenditures for health have responded slightly less than proportionally to GDP growth in Uganda, with an elasticity of 0.95 (excluding donor funds). If the elasticity with respect to GDP does not change significantly, Uganda can expect to see only moderate increases in per capita government health spending given its positive economic growth forecasts.

Although Uganda's tax collection has lagged behind other countries of sub-Saharan Africa, efforts have been increased to improve the tax administration. As a result, revenue was 12.9% of GDP in 2008-09 and is expected to increase to 14.9% by 2012-13. Therefore, a moderate increase in fiscal space for health could be made available through improved revenue generation capacity.

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<sup>144</sup> World Bank. (2009). World Development Indicators.

<sup>145</sup> Uganda Bureau of Statistics (UBOS) and Macro International, *Uganda Demographic and Health Survey 2006* (Calverton, MD: UBOS and Macro International, Inc., 2007).

<sup>146</sup> Uganda AIDS Commission, *National HIV/AIDS Strategic Plan 2007/8-2011/12*, (Kampala: 2007).

<sup>147</sup> Costing of the Health Sector Strategic Plan.

<sup>148</sup> International Monetary Fund. (2009). "IMF Executive Board Completes Fifth Review Under the Policy Support Instrument for Uganda." Press Release No. 09/198. June 4, 2009.

Re-prioritization of Health: Excluding donor contributions, the health budget as a share of the government budget increased from 7% in 1997-98 to 10% in 2002-03, and it has remained fairly constant this level. The budget share is slightly higher than average for low-income countries, as well as for sub-Saharan African countries. Given other government commitments, such as increasing spending on primary education, the prospect for increasing fiscal space for health by increasing its share in the government budget appears to be very limited in the near term.

Health Sector-Specific Resources: There have been discussions about phasing-in SHI in Uganda, with initial plans to cover only formal sector worker with an 8% payroll contribution shared between employees and employers. Estimates suggest, however, that only 300,000 government employees and 100,000 private sector employees constitute the formal sector in Uganda.<sup>149</sup> Focusing on this small portion of the labor force has been criticized as benefiting a minority of wealthier individuals, a concern which has delayed the introduction of the SHI scheme. Furthermore, the 8% contribution rate was estimated from a 2001 feasibility study, which is likely to be outdated.<sup>150,151</sup> The ability of SHI to capture private resources for fiscal space depends on the extent to which employees in the private informal sector are enrolled in SHI. There are currently no proposals being discussed in Uganda to address this issue.

Grants and Foreign Aid: External funding is a prominent source of health expenditure in Uganda, and at nearly 30%, makes up a much higher share of total health spending than the average for sub-Saharan Africa and other low-income countries.<sup>152</sup> On-budget external support, which is channeled through the central government, has been relatively constant in recent years, but off-budget flows have been increasing steadily. The increase is largely a reflection of an inflow of donor support from the US government (for the PEPFAR and PMI programs).

Uganda should considerably improve capacity to program and absorb external funds in order to benefit from the global health initiatives and increase effective fiscal space for health. Both the Global Fund for the Fight Against AIDS, Tuberculosis, and Malaria (GFATM) and the Global Alliance for Vaccine Initiative (GAVI) at different times have suspended support to Uganda because of management concerns. Although GAVI funding has normalized, GFATM support has not. Because Uganda already derives a large portion of its health financing from external sources, and absorptive capacity constraints continue to be severe, additional external funding does not appear to be a viable source of fiscal space for health in the near term.

Efficiency: There are a number of inefficiencies in the way that current resources for health in Uganda are allocated and used that if addressed could free up additional effective fiscal space. The main inefficiency is the inflexibility in how both budget funding and donor resources are used, with the vast majority devoted to wages or earmarked for disease-specific programs. For instance, over 85% of the health budget is in the form of earmarked funding. In addition to existing earmarks for wage and primary health care conditional grants, external funding from the global health initiatives are also earmarked for specific disease programs. In the previous two

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<sup>149</sup> New Vision, "Insurers Wary of National Health Scheme," (Kampala: October 24, 2007)

<sup>150</sup> New Vision, "Health Insurance Scheme to be Revised" (Kampala: September 5, 2007)

<sup>151</sup> P. Berman and W.C. Hsiao, P. Belli, W. Bazeyo, S. Kasana, and S. Atuhurra, "A Feasibility Analysis of Social Health Insurance in Uganda," (Cambridge: Harvard School of Public Health, 2001)

<sup>152</sup> The World Health Organization, Statistical Information (Geneva: WHO, 2008).

financial years, all new government funding was already earmarked for specific activities. For example, in FY 2008-9, an additional UgShs 60 billion was earmarked for antiretroviral and artemisinin combination-based drugs. The earmarks perpetuate budgetary distortions and limit the flexibility needed by health managers to allocate health resources.

Other sources of inefficiencies in the health sector include leakages in the primary health care conditional grants, with an estimated 15% of funds never reaching the health care facilities, weak procurement practices, waste in the pharmaceutical sector, and other evidence of financial mismanagement, with an estimated 5% of funds going toward unjustified expenditures.<sup>153</sup> Absenteeism among public sector health workers and author fraudulent personnel practices are also significant sources of inefficiency and under-use of available resources. Absenteeism rates as high as 37% have been found in various studies in Uganda,<sup>154</sup> and the recent payroll clean-up exercise of 2005-06 found that 1.5% of health workers were ghost workers.<sup>155</sup> Overall, it was estimated that in FY 2005-06, approximately 13% of government health sector spending was lost due to waste.<sup>156</sup>

Table 11 summarizes the fiscal space assessment for Uganda.

TABLE 11. FISCAL SPACE AT A GLANCE: UGANDA

Fiscal Space Source	Key Information	Prospects for Fiscal Space
Macroeconomic conditions	Strong historical growth. Projected growth rates of 5-6% annually. Elasticity of government health spending with respect to GDP=0.95 Revenues as % of GDP projected to increase from 12.9 in 2008/09 to 14.9% by 2012/13.	Moderate
Re-prioritization of health in the government budget	Health as a share of total government budget has remained at about 10 since 2002-03	Limited
Health sector-specific resources	Proposals for SHI focus on a small segment of the population that is formally employed and not based on actuarially sound contribution rate.	Limited
Health sector-specific grants and foreign aid	Nearly 30% of total health funding comes from external sources, and Uganda could not effectively absorb much more.	Limited
Efficiency gains	An estimated 13% of government health spending was lost to waste in 2005-06	Good

<sup>153</sup> World Bank (2009).

<sup>154</sup> Chaudhury N. et al. Missing in Action: Teacher and Health Worker Absence in Developing Countries; Journal of Economic Perspectives, Volume 20 (2006), Pages 91 - 116.

<sup>155</sup> Based on the number of workers deleted from the payroll in July 2007. This number is lower than workers deleted in October 2006 because it was discovered that some workers deleted in October were not really ghosts; they were later reinstated on the payroll.

<sup>156</sup> World Bank (2009).

## Conclusions and Recommendations

Given its sustained strong economic performance, and moderate predicted impact from the global economic crisis, macroeconomic performance appears to be the most viable source of additional fiscal space for health in the near to medium term, although only modest increases can be expected. Continued efforts to improve revenue collection may also provide a small amount of additional fiscal space.

By far the most pressing need in Uganda is to address the rigidities and inefficiencies in both budget financing and external donor funding that both reduce effective fiscal space within current resource levels, and limit absorptive capacity for additional resources. There is growing recognition of the need to strengthen the link between health expenditures and health programs and sector outputs. The budget structure is being reformed, and sector budget framework papers are expected to include policy priorities, required actions, and indicators to measure sector performance. The rigidities linked to excessive earmarking and the significant leakages in the system should also be addressed with better human resources and financial management systems, transparent procurement processes, and monitoring and accountability measures.

Improving the effectiveness of external donor funding is also an important source of effective fiscal space for health, particularly given the dominance of ODA in total health funding. The Uganda health sector-wide approach (SWAp) is one example of a successful mechanism for improving the effectiveness of donor funding. The SWAp catalyzed reform in the sector, especially early in the Health Sector Strategic Plan. The majority of partners shifted to providing sector budget support, which created the opportunity to increase budgetary allocations to priority programs, and some indicators related to health outputs have improved significantly, such as the tuberculosis cure rate increasing from 50% to 70.5%.<sup>157</sup> New aid modalities may also be explored to increase the predictability of aid flows and allow them to be better aligned with the priorities of the government's health sector development strategy.

## UKRAINE

### Background

Ukraine is an Eastern European country that gained independence from the Soviet Union in 1991. It has a population of 46 million and is a unitary state with 24 oblasts (provinces). Ukraine is a lower middle-income country, with a GDP per capita of US\$3,210. Although poverty rates declined significantly over the past decade, inequality is high and increasing, and the population remains vulnerable to the consequences of the current global economic crisis.

The Ukrainian national health system is financed by general revenues from the budget, and health care is mainly provided through the public sector. There is a constitutional guarantee that basic health care in public facilities is free of charge. Although Ukraine's health system has evolved from the centrally planned Soviet model to a more decentralized system with greater responsibility delegated to lower level governments, health financing remains tightly controlled

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<sup>157</sup> World Bank (2009).



by the MoH. Total health expenditure per capita was US\$208 in 2007 (Figure 13). Government spending accounted for 55% of the total. While total health expenditure is on par with other lower middle income countries, government expenditure in Ukraine is much lower, with health accounting for less than 10% of the total government budget.

In 2007, 44% of total health spending was out-of-pocket, both formal and informal, which is high relative to comparable countries in the ECA region. Drugs constitute the largest share of out-of-pocket spending, with households financing nearly 100% of total drug costs in 2004. These high out-of-pocket expenditures have led to one of the highest rates of household catastrophic health expenditure in the region. There is a need for increased fiscal space to provide greater financial risk protection, particularly for the poorest two income quintiles who are hit the hardest.

Continuing poor health outcomes and a double burden of infectious and non-communicable diseases, as well as increasing demographic pressures, also indicate a need for increasing fiscal space in Ukraine. Ukraine's population will have shrunk by a fifth by 2025, drastically increasing the dependency ratio for the working population.

The rise of non-communicable diseases and the inability of the Soviet-style health system to adapt to changing realities have taken a toll on health status. Ukraine is one of the few countries in the world that had a higher life expectancy in the 1960s (69.5 years) than it has today (68 years). Females have a higher life expectancy than men by nearly ten years. The predominant cause of mortality is cardiovascular disease, which accounts for more than 50% of deaths each year. High levels of alcohol consumption, smoking and obesity are the main contributors to the burden of cardiovascular disease. Ukraine also faces high rates of infectious diseases, particularly tuberculosis, and has a higher infant mortality rate than the average for the Europe and Central Asia (ECA) region, with 19.7 infant deaths per thousand live births.

### **Analysis of Fiscal Space Under the Five Pillars**

Conducive Macroeconomics: The current global economic crisis has had a severe effect on Ukraine's macroeconomic performance. One of the first emerging markets to be hit by the crisis, Ukraine's markets are reeling under simultaneous terms of trade and external financing shocks. Growth has been driven mainly by exports, with 40% of export revenues coming from steel production, and since the economic crisis began steel prices have fallen more than 50%. Projections from various sources have revised predicted growth rates downward and the recession is expected to be very deep with GDP declining by 14% in 2009 (Figure 16). Although the government has reacted quickly to the crisis, poor governance in Ukraine may limit the effectiveness of the measures taken by the government and the international community to minimize the threat posed by the crisis.

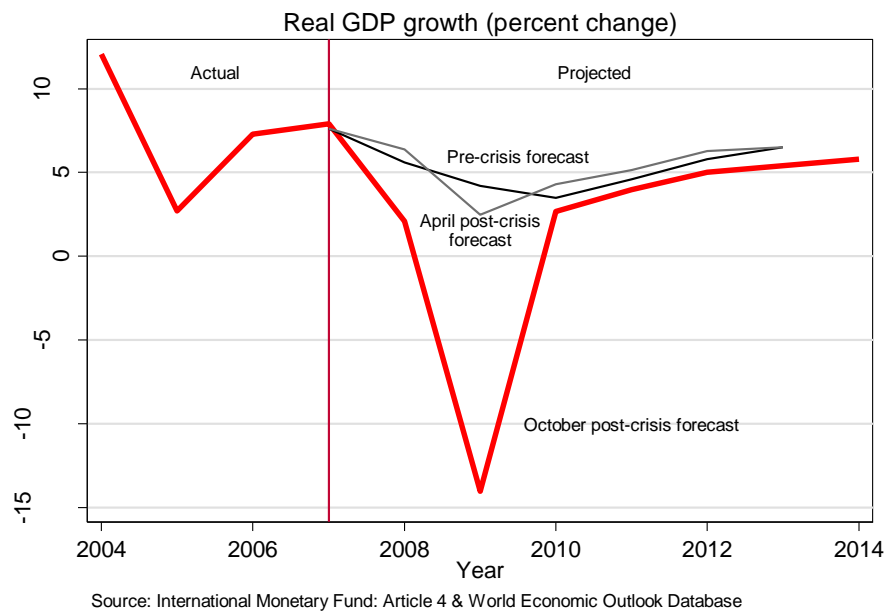


FIGURE 16. GROWTH PROJECTIONS FOR UKRAINE, 2004-2014

Government health expenditures were projected to drop even before the global economic crisis, and it is expected that new GDP growth estimates will lead to a proportional further reduction in health spending. Ukraine's revenues as a share of GDP are already above average for its income level, but this is likely to change with the new economic reality. Because Ukraine's principal revenue comes from steel production, there is a clear indication that government revenues will fall significantly over the medium term. The collapse of the steel market already has been an important factor in declining government revenues and the overall stagnation of public sector investment in Ukraine. Ukraine potentially could raise additional revenues through improved efficiency of the tax system, changing the tax structure, and strengthening the current tax administration at the local level. Several recommendations and reforms have already been offered in the 2008 World Bank report to create greater predictability and fairness in the local revenue stream, but it is unclear whether this would significantly add to fiscal space available for health. Ukraine's bleak medium-term economic growth outlook and accompanying falling government health expenditures makes it unlikely that economic growth will be instrumental in generating sufficient fiscal space for health.

Re-Prioritization of Health: Ukraine currently allocates less than 10% of its overall budget to health, which is lower than average for lower-middle-income countries, as well as for its neighboring countries. Fiscal space for health could be generated if Ukraine reprioritized health spending away from other sectors. This may be unrealistic, however, given the severe fiscal constraints created by the economic crisis. Ukraine also could explore the option of re-prioritization of expenditure within health. A large share of government health expenditure currently goes to wages rather than capital expenditures. Fiscal space may be created through re-prioritization toward more productive investments and quality-enhancing expenditures, but these reallocations are currently limited by the stringent rules governing inter-fiscal transfers.

Sector-Specific Resources: Taxes on alcohol and cigarettes could be increased and earmarked for the health budget to increase fiscal space. Ukraine remains home to some of the world's least expensive alcohol and cigarettes, potentially leaving room to increase prices and raise revenues. Smuggling, however, remains a source of concern. Even if raising taxes is not considered feasible, Ukraine could still generate some additional fiscal space by earmarking tax revenue earned from the sale of alcohol and tobacco towards health. This may, however, increase rigidities in inter-fiscal allocations, which are already substantial in Ukraine. Furthermore, earmarking may not generate extra fiscal space if the government reduces health spending from other sources.

Another potential mechanism for generating fiscal space for health is to introduce a payroll tax-funded social health insurance scheme. The objective would be for the public sector to capture and pool the high out-of-pocket payments for health in Ukraine. Ukraine's large informal economy (estimated to be 40-60% of GDP), however, would be an obstacle to ensuring universal participation in the scheme and compliance with the payment of premiums. The success of a social health insurance scheme in expanding fiscal space also would be limited by the inefficiency of Ukraine's health system. A 2008 World Bank report suggests that a social health insurance scheme would increase the tax burden on the economy and place restrictions on local revenue streams without addressing the fundamental distortions in the health system.

Grants and Foreign Aid: Grants from international organizations such as the Global Fund for Aids, Tuberculosis, and Malaria (GFATM) and the Global Alliance for Vaccines and Immunization (GAVI) could be another source of fiscal space for health in Ukraine. Previous experience has shown, however, that increased aid typically has led to a decrease in health spending by the government. In addition, the lack of flexibility in the structure of local government budget allocations and budgetary norms imposed by the central government make it difficult for international aid to be absorbed effectively. For these reasons, it is unlikely that international donor assistance can be a significant source for additional fiscal space in Ukraine.

Efficiency: In general, expanding fiscal space for health in Ukraine is unlikely to result in improved health outcomes until inefficiencies in the management, financing, and delivery of health care are removed. The public health system in Ukraine suffers from numerous rigidities that are common in post-Soviet health systems. The structure and financing of the system are normative-based rather than needs-based. Despite reforms, local governments still operate within the stringent intergovernmental fiscal framework that impedes the ability of local governments to deliver public services efficiently. For example, staffing levels and other resources are not based on local needs, but on norms related to the existing excessive network of health facilities. Such norms and inflexible budget allocations translate into high recurrent spending, particularly for wages, leaving few resources for capital investments and quality-enhancing expenditures. The budget process also is partially responsible for the costly high average length of hospital stay, 15 days compared to the EU average of 9 days. World Bank estimates suggest that just by reducing the number of hospital beds (and with them physicians and nurses) to EU levels would generate additional fiscal space equivalent to 0.34% of GDP per year. Further savings could be captured by removing constraints on the firing of personnel and by removing the constitutional restrictions on hospital closures.

Addressing other sources of inefficiency in health care service delivery and removing supply side constraints in the health system could expand fiscal space even further. For example, the health workforce in Ukraine is dominated by specialists rather than primary care physicians, who make up less than 25% of all active doctors. Furthermore, since no clear distinction is drawn between primary and secondary care, patients can, and typically do, seek specialty care directly without a formal referral.

Reducing corruption presents another opportunity for Ukraine to expand the fiscal space for health by reducing unproductive spending and improving tax revenue collection. In 2008, Ukraine scored 2.5 on the Corruption Perception Index, indicating a high level of corruption, with only Belarus and the Russian Federation showing higher levels in Eastern Europe. A World Bank report suggests that Ukraine has one of the worst profiles regarding informal and unofficial payments for health care in the Eastern European region. Such payments, which in many cases amount to bribes, are a deterrent to health care utilization, especially for the poor. Membership in European Healthcare Fraud and Corruption Network (EHFCN), which has the objective of reducing fraud and corruption in healthcare throughout Europe, may be one approach to begin to effectively address this issue and capture informal payments for increasing total fiscal space.

Table 12 summarizes the prospects for creating of fiscal space for health using each of the five pillars in Ukraine.

TABLE 12. FISCAL SPACE AT A GLANCE: UKRAINE

Fiscal Space Source	Key Information	Prospects for Fiscal Space
Macroeconomic conditions	Ukraine severely affected by global economic crisis Projected GDP growth rate of 3% annually, and possibly negative growth rates Collapse of steel market will reduce revenues	Limited
Re-prioritization of health in the government budget	Fiscal constraints make re-prioritization unlikely	Limited
Health sector-specific resources	Low prices on alcohol and tobacco, but earmarking taxes would increase already substantial fiscal rigidities SHI would face obstacles, as 40-60% of GDP is estimated to be in the informal economy	Limited
Health sector-specific grants and foreign aid	Donor assistance has been partially offset by reductions in the government health budget	Limited
Efficiency gains	Stringent intergovernmental fiscal framework Norms-based budgets lead to excessive health infrastructure Reducing number of hospital beds to EU levels could generate an estimated 0.34% of GDP in additional fiscal space for health	Good

## Conclusions and Recommendations

The bleak economic outlook in Ukraine combined with a relatively low, and possibly declining, priority for health in the government budget will most likely severely limit the potential for additional fiscal space for health. Other potential sources of additional resources for fiscal space, including introduction of a social health insurance scheme, international donor assistance, or earmarking tax revenue from the sale of alcohol and tobacco all face almost certain obstacles. In addition, all of these potential sources of fiscal space are unlikely to be effective given the currently highly distorted, inefficient, and constrained health financing and service delivery system.

The main priority for increasing fiscal space in Ukraine, therefore, is to address the underlying rigidities and inefficiencies, as well as corruption, which constrain current fiscal space and severely limit absorptive capacity for additional resources. Significant fiscal space potentially could be generated by reducing the excess hospital capacity and reorienting the system more toward a primary health care. A primary care system that has the capability and flexibility to respond to the changing health care needs is essential for improving health outcomes in Ukraine, particularly better management of chronic diseases such as cardiovascular disease. Furthermore, steps should be taken to harness the high levels of private expenditures, particularly those that are made informally, to increase fiscal space, use the resources more effectively, and provide greater protection for households from catastrophic health expenditures.

## ANNEX A

### SOME EXAMPLES OF FISCAL SPACE NEEDS-BASED ASSESSMENTS FROM THE LITERATURE

A prominent needs-based assessment for health can be found as far back as the 1993 *World Development Report*. This early costing of globally scaling up a package of public health services and essential clinical health services was undertaken by the World Bank to begin to quantify the resource commitment that would be needed to achieve global public health goals.<sup>158</sup> Total costs for scaling up the package of services were estimated to be US\$35 billion per year (1990 prices). The report found that government spending on health in low-income countries would need to more than double to US\$12 per capita, representing a four-fold increase in public health spending and a doubling of spending on essential clinical services. By contrast, in middle-income countries, the package could, in principle, be financed by a reallocation of resources away from low cost-effectiveness discretionary services toward public health programs and essential clinical care.

The costing approach was expanded by the WHO *Commission on Macroeconomics and Health*.<sup>159</sup> Cost estimates were made for scaling up coverage of 49 priority health interventions in 83 low-income countries. To meet these costs, per capita health spending was estimated to rise from US\$21 (in 2002) to US\$34 (by 2015) in low-income countries. Annual additional financing needs were estimated at US\$46 billion (2002 prices), with over 70% of the need in low-income countries. The Commission also assumed that health worker wages would need to double in order to attract and retain sufficient health workers.

The UN Millennium Project developed global and country case studies for the costs of achieving MDGs, including for health.<sup>160</sup> The costs of attaining health MDGs were estimated to be larger than those of any other individual sector, and 95% of the identified global needs was determined to be for low-income countries. For example, in Ghana 27% of estimated 2015 MDG investment needs were for health and these amounted to US\$34 per capita by 2015 (in 2003 prices). Both globally and in most low-income countries, the source of financing was assumed to be predominantly development assistance. In Ghana, 56% of 2015 MDG investment needs were assumed to be ODA financed, 31% government financed, with the balance coming from households.

Identification of resource gaps and advocacy for additional development assistance also operates at the sub-sector level. One example is the assessment in 2007 of financial resource needed for universal HIV prevention, treatment, care, and support which identified needs to be in the range

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<sup>158</sup> See: World Bank. 1993. *World Development Report, Investing in Health*.

<sup>159</sup> World Health Organization. 2001. *Macroeconomics and Health: Investing in Health for Economic Development*. Report of the Commission on Macroeconomics and Health.

<sup>160</sup> Country specific costing for achieving the MDGs in five countries are presented in Sachs J, J McArthur, G. Schmidt-Traub, C. Bahadur, M. Faye and M. Kruk. 2004. Millennium Development Goals Needs Assessments, country case studies of Bangladesh, Cambodia, Ghana, Tanzania and Uganda. UN Millennium Project. Global costs and benefits of achieving MDG goals are presented in: Millennium Project. 2005. *Investing in Development: A Practical Plan to Achieve the Millennium Development Goals*.

of US\$49-54 billion by 2015, compared to US\$10 billion provided in 2007 (mostly from international aid).<sup>161</sup>

These approaches to estimating the resource needs to scale up basic health services and interventions have increasingly been matched in recent years by attempts to estimate the availability of potential resources, especially from government sources.

With regard to health, the Marquette for MDG Simulation (MAMS) model for example allows for the determination of under-five and maternal mortality based on the availability of public and private services, household consumption per capita, public infrastructure, and water and sanitation services coverage.<sup>162</sup> In the model, provision of additional MDG-related services require inputs of labor and capital, which then become unavailable to rest of the economy. For instance, if additional spending is financed from domestic taxes, this would reduce household consumption; if financed from domestic borrowing, private investment may be crowded-out; and if financed externally, then demand for labor and capital could drive up wages and rents and lead to foreign exchange appreciations.<sup>163</sup> These interactions enable the model to derive the broader macroeconomic implications of increased health expenditure, and to assess the effects of prioritizing or sequencing health, education and infrastructure spending.<sup>164</sup>

Model-based projections of the cost and macroeconomic impact of attaining MDGs for Ghana also used MAMS.<sup>165</sup> MAMS results suggest that the infrastructure requirements for MDG achievement in water, sanitation and education can be financed, if GDP growth accelerates by ½ per cent per year above baseline projections, and additional annual financing of 3½% GDP is raised through taxation and/or aid. Moreover, capacity to manage the infrastructure expansion exists. The model indicates, however, that achieving health MDGs will add very substantially to the infrastructure costs (an additional annual 10% of GDP in spending needs), creating unrealistically large increases in aid financing and investment spending. The study concludes that greater efforts are needed to raise domestic resources, raise public sector efficiency, and catalyze private sector participation.

A study of scaling up public health spending in Ghana to achieve health MDGs identified the need for per capita health expenditure to rise from US\$12 in 2002 to US\$40 by 2015.<sup>166</sup> The expenditure needs were calculated from the costs of expanding coverage of key interventions –

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<sup>161</sup> UNAIDS. 2007. Financial Resources Required to Achieve Universal Access to HIV Prevention, Treatment, Care and Support.

<sup>162</sup> Vos, R, K Inoue, and MV Sanchez (2007), "Constraints to Achieving the MDGs through Domestic Resource Mobilization," UNDP Working Paper, New York: UNDP.

<sup>163</sup> Lofgren, H and C Diaz-Bonilla (2005), "Economywide Simulations of Ethiopian MDG Strategies," World Bank Working Paper, Washington: World Bank.

<sup>164</sup> Nonetheless, such models need to be used with care: many of the relationships are not well understood, and the model relies on ad hoc specifications or cross country data that may not accurately represent country specific circumstances.

<sup>165</sup> Bussolo, Maurizio and Denis Medvedev. 2007. Accelerated Growth and MDG Achievement: A General Equilibrium Analysis of Fiscal Policy Alternatives. Available at: [http://www.uni-kiel.de/ifw/konfer/pegnet07/bussolo\\_medvedev.pdf](http://www.uni-kiel.de/ifw/konfer/pegnet07/bussolo_medvedev.pdf) accessed October 11, 2007.

<sup>166</sup> Government of Ghana, National Development Planning Commission. 2005. Scaling Up Health Investments for Better Health, Economic Growth, and Accelerated Poverty Reduction. Report of Ghana Macroeconomics and Health Initiative.

one half of incremental costs are for HIV/AIDS, malaria prevention and control, and perinatal conditions. A detailed financing plan showed the resources gap rising from US\$4 to US\$24 per head over the period to 2015 (equivalent to a shortfall of US\$80 million in 2002 rising to US\$607 million by 2015).

In an application to Ethiopia, a needs-based approach was based on detailed sector costs and the macroeconomic impact modeled again using MAMS (see Box 5). Financing gaps were closed by assuming a tripling of the aid/GNP ratio through 2015 (a six-fold per capita increase), with the balance coming from higher revenue yields. Box 2 discusses the results, including for the health sector, which hinge on large step changes to the rate of economic growth, the revenue yield and aid receipts disbursed and spent. Significantly, in addition to the challenging increases of fiscal space required, the analysis was not able to assess whether there existed government capacity to select high return infrastructure projects that are necessary to raise growth and contain inflation or the ability of sub-national governments to deliver large increases in social spending.

#### **Box 5. Fiscal Space: Ethiopia MDG Scenario**

Achieving MDGs in health, education, water supply and related infrastructure in Ethiopia was estimated to cost US\$58 billion over 2005-15, equivalent to 440% of 2005/06 GDP. Health sector costs amounted to nearly 82% of 2005/06 GDP. The fiscal strategy frontloads infrastructure spending through 2010, with recurrent spending on a more gradual upward path through 2015.

To increase primary health care coverage from 62 to 85% of the population, health sector investments were projected to need to rise 8-fold to 3.3% of GDP through 2015, while recurrent spending needing to rise from 0.8 to 3.3% of GDP over the same period.

To create the fiscal space necessary for the MDG scenario and reduce aid dependence by 2015, it was assumed that:

- Annual GDP growth accelerated from a historic average of 4.1% to 6.9% due to productivity-increasing infrastructure investments.
- Grant aid quadrupled upfront to finance the investment surge (to 18.6% of GDP) and peaked at 25% of GDP in 2010.
- Revenues rose by nearly 5% of GDP by 2015, to levels that are high by sub-Saharan African standards (23% of GDP).
- Some expenditure reallocation took place, notably from the defense sector.

It remains highly questionable whether such quantum shifts are achievable. The fiscal effort required for increasing revenue is immense; the institutional foundations for scaling up spending are unconfirmed; while reducing the priority of military spending may be politically infeasible.

Source: Mattina, T (2006), "Money Isn't Everything: The Challenge of Scaling Up Aid to Achieve the Millennium Development Goals in Ethiopia," *IMF Working Paper No WP/06/192*, Washington, DC: International Monetary Fund.

Another example from the existing literature come from India where the National Commission on Macroeconomics and Health estimated that public health spending would need to increase from 0.9% of GDP to a minimum of 3.1% of GDP, and that total health-related spending would need to increase from 3.6% to 9.7% of GDP to achieve the MDGs and other national health



targets.<sup>167</sup> The study is notable for the inclusion of estimates of private financing of health care and the spending needs in complementary sectors that impact health care (roads, water and sanitation, primary schooling and nutrition). The Commission estimated the potential contribution of several sources of fiscal space within India's existing federal system including: state level reallocation of spending (would provide 15% of total incremental financing needed), additional revenue generation (of which 25% was assumed to be directed to health), and federal transfers. This would still leave a residual financing gap of 20%. The study concluded that a quantum leap in health spending would be required, and the main challenge was to achieve national political support for this objective.

A study of fiscal space for strengthening social protection in West and Central Africa used simulations of three different social protection policies (a universal child benefit and a means-tested targeted child benefit, and a universal old age pension) to estimate fiscal space that was needed to finance social protection schemes. The simulations show that between 0.9 and 6.4% of GDP of additional fiscal space would be needed in five case study countries. In Mali and Senegal, even the lower cost option which was estimated to require 2.5% of GDP in Senegal and 3.2% in Mali, was found to be unrealistic because that would amount to over three-quarters of total public health spending in Senegal and the total health sector budget in Mali. In Ghana, fiscal space that could be made available by conducive macroeconomic conditions was likely to be constrained by rapid overall growth of the public sector and a large share of non-discretionary expenditures. In Congo and Equatorial Guinea, the fiscal space analysis showed that conducive macroeconomic conditions could generate sufficient resources to fund social protection, but other obstacles were identified. In Congo, the government has historically accorded very low priority to social sector spending, and in Equatorial Guinea, the organizational capacity to administer social protection programs was inadequate.<sup>168</sup>

Fiscal space simulations are generally more encouraging for middle-income countries. As noted above, studies found that middle income countries have higher starting point levels of health spending, which narrows the size of the financing gap that needs to be covered. Higher health spending also provides more scope for creating substantial fiscal space internally by reallocating resources and efficiency gains and, in general, they have stronger institutions that can drive a change in health spending priorities. Also, middle income countries have higher revenue levels giving more room for maneuver to reallocate resources in favor of health. In Colombia, for example, reforms introducing mandatory health insurance in 1993 served to increase the level of resources for health through higher government spending, higher payroll taxes, and increasing the number of insurance contributors. At the same time equity in health care improved and cost effectiveness rose by allowing purchasing from both public and private providers (Box 6).

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<sup>167</sup> See; Ministry of Health and Social Welfare. 2005. Report of the National Commission on Macroeconomics and Health. Available at:

<http://www.who.int/macrohealth/action/Report%20of%20the%20National%20Commission.pdf>

<sup>168</sup> *Fiscal Space for Strengthened Social Protection: West and central Africa*. UNICEF Regional office for West and Central Africa, February 2009.

**Box 6. Colombia: Creating Fiscal Space Through Compulsory Health Insurance**

From 1993, health reforms introduced a mandatory national health insurance scheme and a national health fund integrating previously fragmented financing sources. The reformed system provides mandatory universal health insurance through two regimes. A comprehensive package of services is provided under the contributory regime for formal employed and self-employed workers financed through a payroll tax and paid to an insurer of choice. A more limited package of care is provided in the subsidized regime which is financed partially by the payroll tax contributors plus central and local government revenues.

In the decade since the reforms public spending on health (including social insurance contributions) rose from 3.0 to 6.5% of GDP. Over the same period out of pocket spending fell from 3.3 to 1.2% of GDP bringing the composition of financing sources close to that of OECD countries. The reform was redistributive from top to bottom quintiles of households. The insured population increased from 23 to 63% of the population.

Source: Maria-Luisa Escobar et al. 2007. Ten years of Health System Reform: Health Care Financing Lessons from Colombia (Unpublished manuscript, forthcoming *The Lancet*).

Given current trends, Costa Rica is likely to meet MDGs for extreme poverty, sanitation and drinking water coverage, but shortfalls are likely for primary school enrolment, and child and maternal mortality.<sup>169</sup> However, additional annual costs to close the gaps are estimated to be only 1.1% of GDP. Using the MAMS model the macroeconomic impact of raising spending is assessed across three different financing routes: foreign borrowing, domestic borrowing, and tax financing. The macroeconomic impact is relatively benign (for GDP growth, export growth and the real exchange rate), except in the case of domestic financing, where government borrowing crowds out private sector investment with knock on effects on growth and competitiveness.

In Ecuador, the situation is a little more challenging, with additional costs for MDG achievement amounting to 1.3% of GDP per year, most of which represents the costs of reducing child and mother mortality.<sup>170</sup> As in the Costa Rica case, the model simulations show that tax financing of the increase has the lowest adverse macroeconomic impact.

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<sup>169</sup> Vos, Rob, Marco V. Sanchez and Keiji Inoue. 2007. Constraints to achieving the MDGs through domestic resource mobilization. DESA Working Paper No. 36, United National Department of Economic and Social Affairs.

<sup>170</sup> Vos, Rob et al. 2007. op. cit.





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1818 H Street, NW  
Washington, DC USA 20433  
Telephone: 202 473 1000  
Facsimile: 202 477 6391  
Internet: [www.worldbank.org](http://www.worldbank.org)  
E-mail: [feedback@worldbank.org](mailto:feedback@worldbank.org)