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DOMESTIC INNOVATIVE FINANCING FOR HEALTH: LEARNING FROM COUNTRY EXPERIENCE



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The Health Finance and Governance Project

USAID's Health Finance and Governance (HFG) project will help to improve health in developing countries by expanding people's access to health care. Led by Abt Associates, the project team will work with partner countries to increase their domestic resources for health, manage those precious resources more effectively, and make wise purchasing decisions. As a result, this five-year, \$209 million global project will increase the use of both primary and priority health services, including HIV/AIDS, tuberculosis, malaria, and reproductive health services. Designed to fundamentally strengthen health systems, HFG will support countries as they navigate the economic transitions needed to achieve universal health care.

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ACRONYMS

AFT	African Development Fund
ATE	Association of Tanzania Employers
CHC	Community Health Centers
CSR	Corporate Social Responsibility
DIB	Development Impact Bond
DIF	Domestic Innovative Financing
EPAP	<i>Etablissement pour la Prévention</i>
ETB	Ethiopian Birr
F4D	Financing for Development
GDP	Gross Domestic Product
GIZ	<i>Deutsche Gesellschaft für Internationale Zusammenarbeit</i>
GNI	Gross National Income
HFG	USAID Global Health Financing and Governance Project
HIPC	Heavily Indebted Poor Countries
IDA	International Development Association
IIF	Innovative International Financing
IMF	International Monetary Fund
LIC	Low-Income Country
LMIC	Lower Middle-Income Country
MDRI	Multilateral Debt Relief Initiative
MMPB	Mozambique Malaria Performance Bond
MOHFW	Ministry of Health and Family Welfare
MRS	Medicare Relief Societies
MW	Megawatt
NAC	National AIDS Council
NATF	National AIDS Trust Fund
NGO	Nongovernmental Organization
NHIF	National Health Insurance Fund
NHIL	National Health Insurance Levy

NHIS	National Health Insurance Scheme
ODA	Official Development Assistance
OECD	Organization for Economic Co-operation and Development
PHC	Primary Health Centers
PPM	Public-Private Mix
PPP	Purchasing Power Parity
RRU	Revenue Retention and Utilization
SEC	United States Security and Exchange Commission
SIB	Social Impact Bond
SIDA	Swedish International Development Agency
UHC	Universal Health Coverage
UMIC	Upper Middle-Income Country
UNDP	United Nations Development Programme
USD	United States Dollar
VAT	Value-added Tax
WHO	World Health Organization
ZIMRA	Zimbabwe Revenue Authority

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EXECUTIVE SUMMARY

Advances in health care are continually increasing the potential of national health systems to improve the health outcomes of their citizens. Yet while these advances – in provider training and expertise, in pharmaceuticals, in technology, and in other aspects of health care – can surmount medical challenges to extend life and improve its quality, they also can be costly, and no country has an unlimited budget for the health sector. Financial constraints are not only an obstacle to the overall level of care but also can increase disparity in access to care, a key challenge that has sparked a national- and global-level demand for equity in access to quality essential and priority health services for everyone, regardless of income, ethnicity, or gender.

While all countries face budgetary constraints for health, low- and middle-income countries in particular have fewer resources to allocate to health. Moreover, despite progress toward the Millennium Development Goals for 2015, many of these countries still face numerous challenges in ensuring that every child has a fair chance at a healthy and productive life, and that every mother can safely deliver a child without fear of an entirely preventable death. In many parts of the world, HIV remains a significant public health crisis with significant resource needs. A reported 2.1 million new global infections in 2013 (UNAIDS 2014) underscores the need to strengthen prevention efforts, and to ensure patients reach long-term antiretroviral therapy. Importantly, as countries succeed in helping people to know their status and to link to ongoing care, additional financing will be needed to ensure the health system can support lifelong HIV management.

Many resource-limited countries have also begun the process of transitioning away from donor-funded health programs. They need to ensure that any gap in financing does not end up coming from households paying out-of-pocket in a way that increases inequities in health access and pushes more people into poverty. Clearly, there is a need for low- and middle-income countries to increase the flow of equitable and sustainable domestic financing for health.

There are options available to low- and middle-income countries for overcoming resource constraints for health programs by increasing fiscal space and leveraging private sector resources in a targeted and sustainable way. Fiscal space refers to “additional budgetary resources [for health] without any prejudice to the sustainability of its financial position” (Heller 2006). Governments can increase fiscal space in health by raising new revenue from domestic sources, improving efficiency of current spending (thus saving money for other purposes or increasing output per unit of input), increasing available government resources (for health and overall) through economic growth, and increasing government prioritization of adequately financing health. Importantly, recognizing the strengths, capacities, and resources of the private sector, and understanding how to leverage them in mutually beneficial ways, is also a critical step in achieving many of the above-mentioned fiscal space expansions. By including private sector partners in health service and resource planning, governments may find it possible to make efficiency reforms previously unthinkable, or to discover ways of generating more equitable and sustainable financing for the health system. Despite efforts to decrease reliance on foreign donor support, external partners/donors also will remain an important source of funds to increase fiscal space for health for many low- and middle-income countries, even as domestic options begin to take shape.

This report focuses on a sub-set of these options – those termed “domestic innovative financing” (DIF). For this report, “domestic” options originate from domestic sources, or are managed entirely by national entities. Some options that may still rely on donors are also considered if they facilitate

allocation of domestic funds to health. “Innovative” options are those that are new for a country and generate additional resources for the health sector. Some options may be new to one country but not to another; for example, one country may have levied “sin” taxes on alcohol, tobacco, and sugar for decades, but another country may only now be considering their introduction, or changing their design based on international experience and design innovations. Finally, “financing” options in this report are limited to those that generate revenue. While these options may also result in efficiency gains or can be linked to improved management or purchasing systems within the health system, this report is primarily interested in the option’s role in raising domestic funding.

This focus is not meant to indicate a prioritization of revenue generation over efficiency gains or improved use of funds in supplying or purchasing services. To the contrary, generating additional revenue is meaningless unless those funds are appropriately targeted and used wisely. Efforts to fill financing gaps sustainably cannot focus solely on options to generate new revenue, but indeed will also necessarily consider ways to improve governance and transparency, manage funds efficiently and with reference to evidence, and purchase services through effective and proven mechanisms.

This report assesses country experience with DIF options, both successes and failures, in order to increase global wisdom on selecting and implementing them in low- and middle-income countries. For each experience, the report emphasizes certain aspects that answer fundamental questions about revenue generation for health, or that were critical in determining the success or failure of the option. This approach is broken down into sections that group related topics and questions, namely:

- **DIF Option Definition and Context:** the what, why, who, and how of the option, including contextual issues – economic, political, demographic, etc. – relevant for understanding its selection and implementation.
- **Effectiveness and Sustainability:** answers questions about the amount the DIF option has raised, as well as its potential for raising additional funds in the future.
- **Efficiency and Governance:** considers the level of transparency and efficiency in the administrative structures responsible for collecting the revenue as well as the cost associated with implementing, and enforcing, the option.
- **Progressivity:** answers questions about who bears the burden of supplying the additional revenue pooled and allocated to health, with particular attention to the burden on the poor.
- **Macroeconomic Impact:** discusses the effect of the DIF option on aspects of the economy that fall outside the health sector – for example, employment and competitiveness when industries bear the burden of a new option – and the extent to which the option distorts economic behavior or, in some cases, corrects existing distortions.

These criteria allow the report to explore the trade-offs associated with the options presented. For example, options that raise significant revenue for health might also increase the financial burden of payment on poorer and already vulnerable segments of the population. Revenue generated from businesses could limit opportunities for them to effectively compete and also limit concurrent national development efforts. Options with little negative impact on the economy or limited risk to the poor or other vulnerable citizens might only generate marginal increased revenue for health.

Most innovative financing options for health assessed in this report fall into four broad categories: i) taxes on income and profits; ii) taxes on goods and services; iii) options for increasing private sector contributions to the financing of health service delivery; and iii) debt instruments. The first two categories are types of taxes. While income taxes themselves are used globally, innovative varieties include mandatory corporate social responsibility, which functions like a tax but also is intended to encourage foreign and domestic companies to contribute to the protection and development of the

societies in which they operate. Like all corporate income taxes, it may have a negative impact on the competitiveness of the industries required to make these contributions, with potential national-level efficiency loss. Another type of tax is the value-added tax (VAT); in Ghana, the increase in VAT was innovative in its linkage with Ghana's national health insurance reforms. And it is effective: revenue from this tax accounts for approximately 60 percent of Ghana's national health insurance funding. While taxes on goods and services can be regressive, Ghana exempted certain goods, and a study has shown the tax to be mildly progressive.

No government can or should be expected to provide all health system needs – increasing private sector contributions to the financing and delivery of health services is also essential to a sustainable and efficient health system. Private stakeholders, both within and external to the health sector, possess significant financial, human, and logistic resources that could help meet national health and development objectives. To leverage these resources, governments can play a catalytic role, directly investing in private sector projects with the aim of earning revenue from its growth. For example, the government of the Lao PDR with support from external partners invested in construction of a dam and power plant, returns from which are estimated to contribute US\$1.9 billion for poverty reduction efforts, including health interventions, over 25 years (Asian Development Bank Independent Evaluation Department 2010). Of course, the overall equity of this project depends in large part on the transparency and management of the revenue and how well Laos can compensate the villagers who were displaced by construction of the dam and power plant, or who were otherwise affected by the loss of productive farmland and river that provided their livelihoods. Governments can also indirectly contribute to resource generation by providing an enabling environment for public and private actors to use market approaches – for example, by allowing public health facilities to retain some portion of user fee revenue collected for discretionary operating costs, as in Ethiopia – or by incentivizing private corporate entities to invest in workplace wellness programs as part of their own business strategy. This has been successful in Tanzania, where a tool for cost-benefit analysis prompted a global agri-business located there to finance the provision of health information and services, including HIV care, hygiene, malaria, and occupational health, to their workforce and extended community.

Like taxes, debt instruments such as loans and bonds are widely used throughout most countries in the developing world, but there are new innovative varieties of bonds that can be used to specifically increase resources for health. One option discussed, a “buy down” occurs when a third party promises to pay back some or all of the interest or principal, or both, to the lender on behalf of the borrower (Results for Development 2013). Buy downs have been used effectively by the partners in the Global Polio Eradication Initiative with the governments of Nigeria and Pakistan to raise significant resources to combat polio. As with other debt instruments discussed, buy downs can free government funds previously used for repayment, and thus markedly increase discretionary funds for governments to use in their national budgets or direct toward specific needs such as the financing of health projects. As another example, diaspora bonds have been used to leverage wealthy diaspora committed to homeland development. However, diaspora bonds can be difficult to design and implement and some countries have had less success than others in using them to generate significant resources.

By explaining theoretical issues and documenting country experiences with DIF options for revenue generation, this report is primarily intended for public and private health professionals in low- and middle-income countries including ministry of health planners, insurance scheme managers, and other stakeholders of health system reform who are involved in designing and implementing health programs and in developing health sector strategy for the short and long term. Understanding the potential, as well as the constraints, of these options is important in empowering ministries of health and other stewards of the health sector to plan sustainably, equitably, and in a ways that align with overall development objectives. The health system is part of the political economy of a country, and therefore health professionals cannot afford to silo their thinking when engaged in strategic planning. They must be

able to consider health-specific and economy-wide implications of the policies they advocate, and use that knowledge to build stronger arguments for investing in the health sector. This need is reflected in the interest ministries of health in developing countries have shown in establishing technical groups to develop resource mobilization strategies, for health overall or for priority services such as HIV and AIDS. These groups need to understand what new revenue options are possible and the true constraints on government and private sector action in health. They need to appreciate the trade-offs involved in implementing them, and assess their appropriateness alongside other ways of saving or increasing resources. This understanding can help improve dialogue with other parts of government and development partners, and improve overall thinking about strategic allocation of scarce resources to advance national health and development objectives.



I. INTRODUCTION

I.1 Problem and Solution

For most countries, improving health outcomes by providing better access to high-quality and affordable health care services for the entire population may require increasing financial resources for the health sector. Governments in low- and middle-income countries face the significant challenge of satisfying public demand for comprehensive health care goods and services while seeking to meet other national development priorities. Some of these governments have long relied on official development assistance (ODA) from bilateral and multilateral sources to finance their health systems. Recently, with slow economic growth in the developed world and changing donor priorities, some countries face a flattening in such contributions, at a level that is insufficient to meet the needs for their growing populations. At the same time, levels of household out-of-pocket payments to providers at the point of service, a regressive form of health financing, remain high throughout the developing world; without careful planning, these payments could rise further and expose citizens to unaffordable or catastrophic health costs. For these reasons, both country governments and donors are exploring domestic innovative financing (DIF) options to fulfill increasing health financing needs in a sustainable and equitable way.

Until recently, international donors and partners have worked to introduce international innovative financing (IIF) options to supplement traditional ODA for health and other social sectors such as education. Examples of IIF options include vaccine bonds backed by long-term pledges from donors to fund immunization programs (International Finance Facility for Immunization through the GAVI Alliance) and debt forgiveness linked to an increase in funding earmarked to specific sectors or programs (e.g., the Heavily Indebted Poor Countries (HIPC) initiative by the World Bank and International Monetary Fund (IMF)). To some extent, these IIF options have been successful in financing interventions for general health, HIV and AIDS, malaria, and tuberculosis.

Increasingly, low- and middle-income countries are adapting these international schemes in their search for new locally sourced and managed financing options that can expand access to affordable care over the long term. Just as IIF options are supplementing traditional ODA, DIF options are looking to augment a country's contributions to its own health care system. DIF options include various taxes and bonds as well as those involving engagement with the private sector.

That said, mobilizing new revenue is not enough to ensure real increases in the amount of resources available for health programs. New revenue streams might be used for other pressing development objectives including education, climate change adaptation, communications, infrastructure (e.g., telecommunications or roads), and military preparedness. Therefore, governments and private sector stakeholders must also prioritize the allocation of at least some portion of new revenue to health.

This paper considers DIF options that policymakers should consider to increase funding for health, with the understanding that actually allocating the newly generated revenue to health is equally important to determining the effectiveness of these options in strengthening the health system and health outcomes.



1.2 Health First: A Pathway to Macroeconomic Growth

The literature has long documented strong correlations between a country's per capita income and its aggregate measures of health, such as life expectancy and child mortality. But what is the direction of causality? Does improved health result in economic growth, or does economic growth result in better health? Evidence indicates that health and economic growth are both essential, with the one facilitating and benefiting from improvement in the other.

Of particular interest for this paper is the evidence demonstrating that improved health outcomes can foster economic growth, likely due to increased productivity in human capital that health gains have allowed. For example, Weil (2006) estimates the relationship between health and labor productivity using a population's adult survival rate and finds that workers in a low-mortality country are 68 percent more productive than workers in a higher-mortality country, and that about 17 percent of the variation in output per worker across countries can be attributed to differentials in health status. This compares with physical capital, which is estimated to account for 18 percent of the variation, and education, 21 percent. More recently, the Lancet Commission on Investing in Health (Jamison et al. 2013) estimates that up to 24 percent of economic growth in low- and middle-income countries is due to better health outcomes. It concludes that investing in health yields a nine- to 20-fold return on investment.

In short, evidence suggests that investments to improve health outcomes will not hinder the economy, but rather foster its growth. Measures to reduce the burden of disease, to ensure healthy childhoods, and to increase life expectancy will contribute to stronger and richer economies (Alsan et al. 2004).

1.3 Government's Role in Financing Health

Health financing is a powerful lever for governments to ensure that all citizens have access to needed health goods and services at affordable prices and in particular that the poor have access regardless of their ability to pay. As will be discussed in Section 2, health financing has three distinct functions: generation of revenue, pooling of resources, and purchasing of health services. The government's performance along all three health financing functions affects the viability and effectiveness of the DIF options presented in this report.

As discussed in detail, using DIF options to raise government revenue for health involves making trade-offs. DIF options can correct market failures or create distortions that reduce economic efficiency and productivity. For example, a new tax on consumption (e.g. sales tax) can raise prices which could decrease a company's sales volume and force them to lay off employees. Similarly, taxing income can create the perverse incentive for people to work less, again reducing productivity. On the other hand, reducing disease increases workers' productivity (Fleisher et al. 2013). Governments need to assess the potential for a DIF option to distort the economy and weigh that against the expected benefit of improved health. The government's role in health financing is to mobilize and spend resources in a way that balances the health and economic trade-offs. How effectively and efficiently the government spends revenues on health affects the assessment of the trade-offs and the political support for a DIF option. Spending new resources in ways that do not improve health, reduce poverty, or increase growth will not be worth the distortion they cause. The government's role in health financing is part of governance as it represents the "social contract" between government and citizen, and ideally citizens demand accountability from their government (Granger 2013; IMF 2011).

1.4 The Role of Private Financiers in Domestic Innovative Financing

While few would argue that governments have a responsibility to protect the health and welfare of their citizens, there is increasing recognition that the public sector cannot and perhaps should not bear this responsibility alone. Private stakeholders - both within and external to the health sector - possess significant financial, human, and logistic capacity that could contribute to meeting national health and development objectives.

The private health sector writ large includes all non-state actors, encompassing the breadth of corporations and employers, not-for-profit, faith-based, and commercial for-profit entities that could be leveraged to increase private sector financing and delivery of health services. A significant amount of literature has focused on the critical contributions private health care providers, including for-profit, not-for-profit, and faith-based entities, can make towards national health service delivery objectives (WHO Global Health Workforce Alliance 2011; Cuellar et al. 2013).

This paper focuses on another set of private health stakeholders: non-state actors who participate in the health system as sources of finance or managers of health funds. These private financiers include individual and corporate investors as well as companies that manage workforces or create avenues for catalytic public investment. They are relevant in the discussion of DIF, as they can collaborate with public planners and other actors to generate new revenue for health.

As governments look to create strengthened health systems of the future, they seek to leverage the financial and physical capacities of these private financiers. However, as with financing through public actors, engagement with private financiers has its own trade-offs. Critics have warned, for example, that increasing private sector involvement and corporate engagement in the health sector can exacerbate existing health inequities (particularly among the poor), which results in privatization of health services by another name. Efforts to protect vulnerable health consumers and to improve equity of private health sector access are therefore important considerations when pursuing an enhanced role for the private sector in health.

1.5 Report Objectives and Organization

Engaging in policy discussion on revenue generation for health requires awareness of existing and innovative options and their potential for generating additional revenue, an understanding of the trade-offs involved in enacting them, and a sense of the political landscape that may shape their design and implementation. This discussion also requires appreciating the potential for and limits of government action in raising more revenue, given the government's fiscal health, the macroeconomic landscape of the country, and opportunities to collaborate with the private sector.

Given the important role of government general revenue in financing health systems, even in countries with social insurance schemes, the task of resource generation for health has been shared by the ministry of health and several other government agencies and politicians, such as ministry of finance and legislators. This report is intended to inform and support all these key stakeholders as they think through policy options for increasing available raising revenue, as well as for increasing efficiency and using savings in productive ways that do not transfer the burden of health care costs to patients seeking access to the health system.

The report is not just intended for those who hold an explicit responsibility for health revenue generation: understanding the pros and cons of these traditional and innovative revenue generating options for health is critical for all health professionals, public and private, who play a role in shaping

health system reforms. For example, reforms that set public health priorities and define access guarantees in a benefits package require careful determination of resource needs and sources of finance to ensure that the government's commitments link to explicit financial flows. Even in countries without defined benefits packages, public sector health planners must monitor the intended increase in financial access to priority services, such as maternal and child health and HIV and AIDS.

The rest of this report comprises three chapters: Chapter 2 provides an accessible discussion of the main types of tax and non-taxation revenue-generating options available to governments and private sector stakeholders, and presents criteria for assessing them. Chapter 3 pulls from extensive literature to provide short assessments of DIF options, highlighting those relevant for low- and middle-income countries. Chapter 4 provides brief conclusions. Annex A presents a table summarizing the pros and cons of options for generating resources for health, traditional and innovative, domestic and foreign, and public and private. Annex B provides context to public health officials thinking through these DIF options and whether or not to advocate for them. Annex C summarizes the major existing innovative financing frameworks in the literature.

Finally, it should be pointed out that the report fills a gap in the current literature. While a wealth of materials and expertise on health financing exists, it does not always identify "domestic innovative financing" by name - the term "innovative financing" is more frequently used to refer to international options. Nor are the materials packaged in a way that makes them accessible. While many low- and middle-income countries have had experiences with DIF, both successes and failures, they have not been documented and disseminated widely.

2. FRAMEWORK FOR DOMESTIC INNOVATIVE FINANCING FOR HEALTH

This chapter presents a framework for DIF options for health. It begins by placing DIF within the context of a country's health system and defining this paper's definition of DIF options. Following, it presents the assessment approach with which the report analyzes country experiences selecting and implementing DIF options and articulates the trade offs involved with each one. Finally, the chapter lists and defines the categories of DIF options discussed in the report.

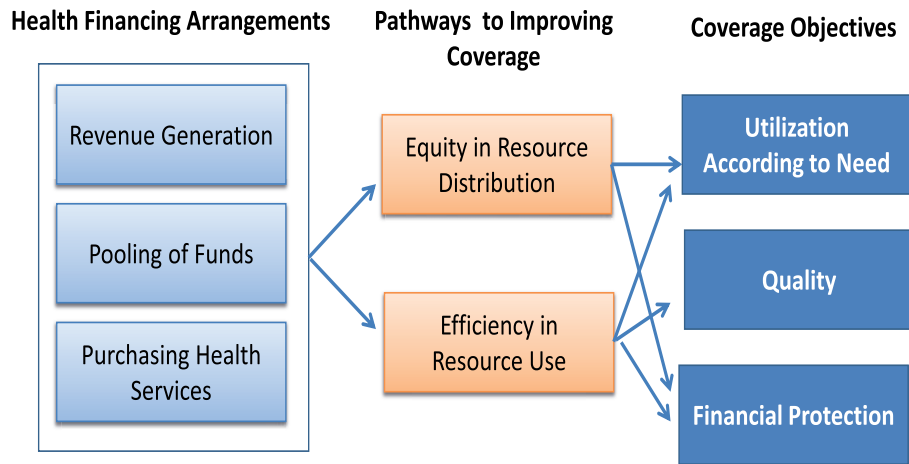
2.1 Domestic Innovative Financing within the Health System

As the WHO discusses in the World Health Report 2000, *Health Systems: Improving Performance*, the objectives of a national health system are to improve health status and responsiveness for all members of the population equally, and to improve "fairness" in the distribution of financial burden. Health financing, traditional or innovative, moves a health system toward these goals by generating sufficient funds to ensure society's access to individual medical and public health care services in an equitable way (WHO 2000).

The World Health Report 2000 also defines three essential health financing functions: i) generation of revenue, ii) pooling of resources, and iii) purchasing of health services. These functions are intricately connected and in some countries difficult to isolate from each other. Generating revenue is the process by which resources for health are gathered from various sources, such as households' tax contributions, premium payments, voluntary contributions, or user fees; donors providing resources to government agencies or nongovernmental organizations (NGOs); and private enterprises that contribute to health insurance schemes. Institutions receiving these revenues – government agencies, NGOs, and insurance schemes, for example – then pool the funds or otherwise manage them before purchasing services from service providers. Purchasing refers to how financing is allocated to providers, whether based on budget allocation, services provided, or other. Households often play many roles in health financing: they may provide resources to the health system through health insurance premiums or taxation contributions, or manage those resources themselves and make their own purchasing decisions, as in when they pay directly for services out-of-pocket at the point of service.

The concept of Universal Health Coverage (UHC) helps articulate the linkages between these health financing functions and the intermediate and final objectives of the health system. Kutzin (2013) has presented these connections (Figure 1). Health financing arrangements in a country will necessarily perform the three financing functions, defined above, with the objectives of improving equity in resource distribution and efficiency in resource use. If executed well, the financing functions can lead to improved access to quality services, with utilization according to need as opposed to ability to pay.

Figure 1. Analytical Framework Connecting to Performance of Health Financing



Source: Adapted from Kutzin (2013)

2.2 Definition of Domestic Innovative Financing

Innovative financing for health is one component of the revenue generation function of a health system. Revenue generation focuses on actions that increase revenue for the health system and not on actions that improve how that revenue is managed. Of course, many innovations can make resource management more efficient, with savings generated then allocated in more productive ways. These efficiency reforms are essential to a well-functioning health system and should be pursued at every opportunity. However, discussion of these technical and allocative efficiencies are beyond the scope of this report. Resource mobilization strategies do look at the technical and political aspects of raising revenue.

DIF options for health are a set of financing solutions and instruments that aim to increase revenue and that possess the following characteristics:

- **Domestic:** The options generate new revenue from national sources and are managed by entities within the country.¹ These entities can be public agencies such as ministries of health or national insurance agencies, or non-state actors who participate in the health system as sources of finance or managers of health funds – for example, individual and corporate investors and companies that manage workforces or create avenues for catalytic public investment.
- **Innovative:** The financing solutions or design changes are introduced to generate new funding. It should be noted that what is innovative in one country might be a longstanding practice in another country.
- **Health:** The new funding has a health objective – that is, it goes to any activity “whose primary purpose is to promote, restore or maintain health” (WHO 2000). However, the funding may not always, or not in full, be allocated to the health system.

This working definition of DIF may differ from usage elsewhere, but it is similar to definitions used by organizations such as the United Nations Development Programme (UNDP) (Hurley 2012), World Bank

¹ With few exceptions, the funding involve external sources, but is managed locally (e.g., diaspora bonds and remittance levies) and other options require donor support to implement (e.g., Debt2Health).

(Girishankar 2009), and Organization for Economic Cooperation and Development (OECD) (Sandor et al. 2009). In these documents, innovative financing refers to original methods that go beyond traditional public and private sector approaches to collect revenue and spend resources. The World Bank (Girishankar 2009) expands on this by citing innovative financing mechanisms for development as “those that depart from traditional approaches to mobilizing development finance – that is, through budget outlays from established sovereign donors or bonds issued by multilateral and national development banks exclusively to achieve funding objectives.” The frameworks accompanying these definitions are presented in Annex A.

2.3 Assessment Approach and Criteria

As discussed, to the extent possible, the report relies on experiences that local and national governments as well as nongovernmental actors in the developing world have had designing and implementing DIF options as the basis for analysis. The report narrates these experiences, emphasizing certain aspects that answer fundamental questions about revenue generation for health, or that were critical in determining the success or failure of the option. This approach is broken down into sections that group related topics and questions. These sections, detailed below, are: DIF option definition and context, effectiveness and sustainability, administrative efficiency and governance, progressivity, and macroeconomic impact.² Discussion in these sections can facilitate the articulation and balancing of trade-offs inherent in utilizing any DIF option.

DIF Option Definition and Context: Understanding the country context where a DIF option was used is essential to a comprehensive assessment. Thus, each example presented begins by defining the DIF option, including design features that may be specific to that country. These examples also explain the rationale for undertaking the DIF option and relevant economic and political factors that affected the way it was designed, implemented, and in some cases cancelled.

This section also briefly presents how revenue raised was spent, as evaluating any DIF option requires an understanding of the spending measures they enable (IMF 2011). Even if a DIF option is effective, it may not be used to support health programs; or a DIF option might be regressive, but be used to support improvements in access and financial protection for the poor. In both cases, the final assessment is ultimately colored by the way generate revenue was used.

Effectiveness and Sustainability: This section answers the following questions: how much revenue does the DIF option generate? How much of this revenue is additional to the health sector (if it replaces other resources, it will not increase resources for health)? Is this amount of additional revenue significant for the health sector? Over what time period, and with what consistency, can stakeholders depend on the DIF option to continue producing the same amount of additional revenue? (this report considers “short term” to be 1–5 years, and “long term” 5–20 years).

Governance and Efficiency: This section considers the governance and efficiency of the DIF option in raising revenue, answering questions such as: Are the administrative structures responsible for collecting revenue through this DIF option simple and clear, or complex and burdensome? Are these structures transparent and easy to explain? What costs are associated with raising new, additional revenue through the DIF option? Even some effective DIF options may place a heavy administrative burden on actors tasked with implementing it, particularly in low- and middle-income settings. Finally, does revenue collection administration have institutional barriers to corruption?

² Criteria for this paper were developed upon review of Gottret and Schieber (2006) and Lievens et al. (2012).

Progressivity: Progressivity concerns questions about who bears the relative burden of supplying the additional revenue pooled and allocated to health, with particular attention to the relative burden on the poor and rich. “Burden” is most simply understood as the amount spent on a tax or other form of DIF option payment as a percentage of household income or wealth. A flat, or “proportional” DIF option places equal burden on poor and rich households, while a “progressive” DIF option places smallest burden on the poor and a “regressive” DIF option places the smallest burden on the rich. To what extent is a DIF option progressive? Also, to what extent do households of the same socio-economic group similarly burdened?

Macroeconomic Impact: Macroeconomic impact refers to a discussion on the effect of the DIF option on aspects of the economy that fall outside the health sector. For example, how does the burden placed on various economic entities through the DIF option affect employment, or the competitiveness of businesses in local and foreign markets? To what extent does this impact run counter to other commonly held national development strategies for low- and middle-income countries, for example, to diversify industry or build up export markets? This discussion on macroeconomic impact is also about social welfare loss, the unfortunate fact that the revenue gained by raising revenue through DIF options, especially taxes, may be less than the income that would have been generated without an intervention. To what extent do DIF options result in this loss?

The evaluation of country experiences with DIF options was conducted solely through secondary sources. While expansive, the sources reviewed did not always allow for comprehensive coverage of all assessment sections for each DIF option discussed. In some cases, one or more of these sections are not included. To make up for this limitation, we include some introductory discussion for each of the four main categories of DIF option presented in this report (see next section), as well as DIF option examples that are not country specific but provide a global view on the option.

2.4 Types of Domestic Innovative Financing

This paper organizes DIF options into four broad categories: income taxes, taxes on goods and services, debt instruments, and options that increase private sector contributions to health care financing. A fifth category, labelled “other DIF,” compiles a range of other options relevant for developing countries that do not fit neatly into the first four categories. This latter category also includes some IIF options relevant to developing countries pursuing reforms for financial sustainability. This section provides definitions of these categories of financing. The following two chapters (3 and 4) summarize and detail the innovative varieties.

The first two categories of DIF options are types of taxes. Taxes are mandatory contributions that are gathered by the government and treated as government revenue. General taxes support the primary functions of government – like those mentioned earlier in this chapter and many, many others. Other taxes may be earmarked or hypothecated, that is, designated for a particular purpose, for example, to fund a health scheme or HIV/AIDS program. For more discussion on these taxes and their assessment, see Annex A.

I. Taxes on Income and Profits

This category includes taxes on both individual and corporate income. Individual income tax is a charge imposed by the government on an individual’s annual gains from activities like work, business pursuits, and investments, from earnings on properties, and from other sources (Economics and Private Sector – Professional Evidence and Applied Knowledge Services (EPS-PEAKS) 2013). Similarly, corporate income taxes are taxes on the net income or profit of certain corporations.

Though there are distinctions, this report treats taxes on payroll and workforce and on property in this category as well. Payroll and workforce taxes refer to taxes paid by employers, employees, or the self-employed as a proportion of the wages or salaries paid to the employee. Taxes on property are applied to actual immovable property (e.g., land), net wealth, and taxes on the change of ownership of property through inheritance or gifts and capital transactions (OECD 2013a).

The DIF options in this category discussed in this document are the following:

- Taxes on currency and financial transactions: taxes placed on individuals and businesses' financial transactions.
- Taxes on remittances: taxes placed on incoming remittances – payments from expatriated citizens or family of citizens from abroad. While these technically consist of external funding, they are included because the option is managed by local governments.
- Taxes on income hypothecated to a national AIDS trust fund: increases in income tax, with revenue generated designated to a specific pool of funding used for HIV programming.
- Leveraging dormant funds: investment of unclaimed assets, with interest accruing as government revenue.
- Mandatory Corporate Social Responsibility (CSR): Though CSR typically refers to voluntary corporate self-restraint from harmful behavior, even if the behavior is technically legal, or financial contributions toward a social good, some countries have sought to institutionalize CSR contributions, legislating a mandatory contribution of revenue or social investment in the tax code or other guiding policy documents.

2. Taxes on Goods and Services

Taxes on goods and services, sometimes called taxes on consumption, are taxes levied on the production, extraction, sale, transfer, leasing, or delivery of goods (OECD 2013a), and on the rendering of services.³ Specific taxes under this category include value-added tax (VAT); sales tax; turnover tax; excise taxes, an important sub-type of which is nicknamed “sin taxes”; and trade tariffs. DIF options discussed in this paper are variations of the below types of taxes on goods and services.

- **Value-added tax:** a tax applied at every stage of the supply chain, unlike the **sales tax**, which is only applied at one stage. VAT is applied as a percentage of the difference between the value of a good when it is sold to someone and the value of the inputs used to produce the final good (EPS-PEAKS 2013). A related tax is the **turnover tax**, which applies to intermediate or capital goods. VAT is typically applied to all goods and services in a country, with specific exceptions.
- **Excise taxes:** domestic consumption taxes on a particular product. Common items on which excise taxes are levied include fuel, tobacco, alcohol, mobile phones, extractive products, and, increasingly, luxury items. These taxes are often earmarked, or hypothecated. **Sin tax** refers to an excise tax on goods or services that have been deemed socially unacceptable, such as tobacco, gambling, and alcohol. Excise taxes can be specific, based on

³ This category also includes taxes on the permission to use goods or services, but this document does not discuss these taxes.

the quantity of the item sold, ad-valorem, based on the value of the item sold, or a mixture of both (WHO 2013b).⁴

- **Trade tariffs** (including customs and import duties): these are taxes levied on products as they enter a country. Trade tariffs are not treated extensively in this paper because their use in developing countries has declined in the last two decades as trade liberalization has grown and will likely continue to do so (Granger 2013; IMF 2011). Nevertheless, it is worth noting that in sub-Saharan Africa, trade tariffs still make up about 25 percent of all tax revenue (IMF 2011).

3. Options that increase private sector participation in the financing and delivery of health services

As outlined below, governments may choose to invest public resources in private sector projects to catalyze private sector contributions to health and thereby collect investment revenue. Alternatively, governments may choose to encourage private sector participation in an essential public good. In order to increase fiscal space in the private health sector, governments may choose to amend or develop policy that liberalizes opportunities for revenue generation among public and private health providers. Furthermore, governments may seek to expand opportunities and incentives for corporations and employers to increase CSR contributions and/or direct investments to health services.

- **Catalytic public investments for private sector development:** when governments invest in a private or quasi-private sector project with the aim of earning revenue from its growth. Such investments still require an initial source of government funds, but have the potential to raise both small and large returns to the public sector.
- **Liberalization of health service delivery for revenue generation:** governments allow public or private sector facilities greater autonomy and flexibility in generating revenue for operational needs, either by diversifying mechanisms of service payment or engaging in non-health related income generation. Such policies can allow facility managers or boards to raise and manage additional operational funds, providing discretionary revenue that can be allocated to the most needed uses.
- **Voluntary CSR:** voluntary investment by private corporations into the health of their employees or the communities they work in through wellness programs or more broadly as part of core business strategy.
- **Social and development impact bonds:**⁵ a type of results-based financing in which the funds raised from investors provide the government or other service providers with long-term capital to deliver or expand a social program or service. Development impact bonds differ from social impact bonds in that they are underwritten and paid by a third party (e.g., international donor) at the time when the social or development impact results are proven.

⁴ Note that the VAT is not the same as the ad-valorem excise tax, though the names are similar.

⁵ Despite its name, social and development impact bonds are not actually “bonds,” debt security instruments that governments, municipalities, and companies can use to raise capital while providing a return to the bond purchaser. See Section 3.3.4 below for more detail.

4. Debt instruments

This section considers loans and bonds. A loan is an agreement between lender and debtor, whereby the debtor receives some amount of money (the principal) and agrees to pay it back in the future with interest. Concessional loans, a hallmark of traditional aid financing, are typically defined with philanthropic intent at below-market rates, meaning with less interest for borrower to repay, and with longer grace periods (OECD 2003). Bonds are a type of loan. Specially, they are debt security instruments that governments, municipalities, or companies can use to raise capital while providing a return to the bond purchaser. They are loans provided to the issuer (i.e., government or local authorities) by a range of private investors who hope to receive a return on investment as the bond matures.

The DIF options in this category discussed in this document are the following:

- Loan conversion: the transformation of existing debt into financing that is invested into specific programs, including for health.
- Buy downs: a results-based option whereby a third party promises to pay back some or all of the interest or principal, or both, to the lender on behalf of the borrower.
- Guarantee-backed loans: a donor-backed revolving credit line that provides short-term loans at below-market rates to countries that need to bridge gaps in donor disbursements to purchase commodities.
- Diaspora bonds: sovereign debt instruments targeting members of the diaspora that can be used to fund development projects, including in health.

5. Other DIF for health

As mentioned, this final category compiles a range of other options relevant for developing countries that do not fit neatly into the first four categories. It also includes some IIF options relevant to developing countries pursuing reforms for financial sustainability. As with categories 3 and 4, this category includes DIF options that have strong roles for both public and private actors.

DIF options included in this category are:

- Health lottery: a type of gambling in which tickets are sold and a prize is given to a random winner, with profits earmarked for health programs.
- Crowd-funding: Internet-based funding platform where businesses and other organizations can raise capital via donations, contributions, or investments from a large group of people. It is premised on the idea that entrepreneurs and charities, businesses, or even governments can generate a large amount of revenue by soliciting small contributions from many investors, rather than seeking out loans or large contributions from a small number of established donors or financial institutions.

Worth noting is the seeming absence of insurance-related revenue-raising options. In fact, some DIF options used to fund insurance schemes are covered in this report, but in a manner that separates the revenue-raising component from the management and purchasing functions of insurance, in accordance with the framework presented in Section 2.1. For example, Ghana uses an increase in the VAT rate and Gabon a turnover tax on mobile phones to fund their national insurance schemes (Section 3.2). Many other of the DIF options discussed here could also be used to support insurance schemes. Other important insurance-related revenue-raising options for health are voluntary premiums, mandatory payroll tax, and co-payments. Because they are



not “innovative,” they are not discussed in the body of this report, but they are included in the table that looks at pros and cons of options, in Annex A.

3. DOMESTIC INNOVATIVE FINANCING OPTIONS

This chapter uses the assessment criteria set out in Chapter 2 to examine in greater detail the DIF options defined in that chapter. The assessments are based on their application in countries and highlight the political and institutional realities that shaped their design and implementation.

The examples discussed include those that have generated large or small amounts of additional resources, and have done so either efficiently or inefficiently; those that have burdened the financially better-off or the poor; and those that have resulted in minimal or extensive macroeconomic efficiency loss. The main point to remember is that all options come with trade-offs. Options that raise significant resources will necessarily burden some group of people or entities, with political or ethical consequences. Generating and pooling additional domestic health resources for the public good (better health outcomes and financial protection) must always be weighed against the political, economic, and social costs of raising that additional funding.

The country examples also emphasize the fact that the success of DIF options, as with all health financing interventions, depends greatly on the country context. For example, the degree to which an increase in the personal income tax rate can generate additional revenue in developing countries depends on the size of the formal sector, revenue for which largely comes from formal sector wages (Bird and Zolt 2003: The larger the formal sector, the more revenue can be generated. The larger the financial sector, the greater the incentive for individuals and businesses to remain in the formal sector and retain access to banking credit, rather than to disappear into the informal sector to avoid paying taxes but losing access to banking at the same time.

Readers, especially those who will participate in the selection, design, and implementation of DIF options, should reflect on how specific country circumstances shaped the design and results of the DIF option, how they can apply lessons learned, and how they can mitigate undesirable trade-offs.

3.1 Taxes on Income and Profit

As discussed in Chapter 2, this DIF category includes taxes on individuals and corporate entities as well as taxes on payroll and workforce and on property. As always, context is important. The effectiveness of the tax depends in part on the size of the formal sector and average wealth (measured in gross domestic product (GDP) per capita) in the country. Payroll taxes target formal sector workers and their employers, which have systems that allow for the tax to be collected and paid easily and the amount of revenue generated fairly predictable, given a certain level of sophistication in the systems – an area targeted for reform in many developing countries – and stability in the economy and job market. The income tax also applies to wages and to income gained through channels other than wages, for example, dividends from investments. A country's ability to enforce payment of these taxes will influence their effectiveness.

The effectiveness of the tax also depends on its design. For example, the tax rate can influence the effectiveness of the tax at generating revenue: a higher rate will bring in more revenue until the rate reaches a point above which small businesses and employees will no longer choose to work for an income, at least not a formal one, because so much of their extra income goes to the tax. Understanding a population's tax tolerance is therefore necessary to maximize tax revenue while minimizing distortions. Progressivity of the tax on income and profits depends on design and economic context.

Individual income taxes can be progressive or regressive depending on how the rates are set. In countries with weaker enforcement capacity, the income tax may become regressive, as higher-wage earners evade taxes in ways that the less well-off cannot. As for the corporate income tax, despite widespread perception that corporate taxes are highly progressive under the assumption that corporations are owned by the wealthy, this is not always the case. Instead, the impact will depend on the openness of the economy, the structure of production, and the structure and evolution of the tax (Auerbach 2005).

Economic theory shows that taxes on income and profit, as with all taxes, reduce economic efficiency in the country, even if some groups benefit from the revenue gained. At some point, no matter how effective the tax is, the government should not raise rates any higher. Higher corporate income tax in particular can reduce the “business friendliness” of a country and thus deter foreign investment, which may hinder the country’s macroeconomic growth.

See Annex A for more analysis of the income tax.

Tax on Income for National AIDS Trust Fund: Zimbabwe

DIF Option Definition and Context: Zimbabwe was the first country to introduce an “AIDS levy.” Revenue from this tax is managed by the National AIDS Trust Fund (NATF) and provides financial support for HIV interventions and for the establishment and secretariat functions of the National AIDS Council (NAC). It was enacted in 1999 by the government of Zimbabwe to demonstrate the government’s political commitment to the fight against HIV/AIDS and reduce reliance on external funding (AIDS 2012 Presentation 2012). The tax, levied on businesses and formal sector employees at a rate of 3 percent of gross monthly earnings, is collected by the Zimbabwe Revenue Authority (ZIMRA) and is directly transferred to the NATF on a monthly basis. The NAC manages the NATF, and its board channels funds to different programs, guided by an annual work plan and budget approved by the Minister of Health and Child Welfare (UNAIDS 2012). Fifty percent goes to antiretroviral treatment programs, 23 percent to program logistical support, 10 percent to HIV prevention, and 6 percent to monitoring, evaluation, and coordination; the remainder goes to creating an enabling environment and to asset accounts (International HIV/AIDS Alliance 2012; National AIDS Council 2011).

Effectiveness and Sustainability: The effectiveness and additionality of the AIDS levy largely depends on the economic climate of the formal sector. All else being equal, if company performance is strong and employee salaries are high, the NATF can do well. In Zimbabwe, the levy generated some additional revenue, but only marginal amounts relative to government health spending—an average of 0.01 percent each year between 2000 and 2006.⁶

The reasons for the low level of contributions of additional revenue from the AIDS levy in Zimbabwe are related to implementation as well as economic context. First, due to weak enforcement, AIDS levy revenue comes from less than half of the formal sector: only 40 percent of the target population currently pays its AIDS levy contributions (Hanene 2012). The potential for raising revenue through the AIDS levy is therefore significantly greater but would require a stronger collection mechanism to leverage. Second, hyperinflation significantly reduced the impact of the funds, particularly between 2008 and 2009.

Revenue from the AIDS levy may be on the rise. Zimbabwe now uses a combination of foreign currencies to control the inflation rate. In 2011, the levy raised an estimated US\$26 million and was expected to raise US\$30 million in 2012 (UNAIDS 2012). However, there is a push to use additional revenue-raising options to raise more funding from the informal sector (IRIN n.d.), thus giving the NATF

⁶ Based on figures in Mpofu and Nyahoda 2008.

more resources to manage. Generally speaking, as a management body, the NATF is seen as a regional best practice and has served as an example of increasing country ownership of HIV/AIDS programs. Several neighboring countries including Botswana, Kenya, Tanzania, and Zambia have conducted study tours to Zimbabwe to learn about the implementation of the AIDS levy (Hanene 2012).

Governance and Efficiency: The efficiency of the collection process is tied to the government revenue collection system, the ZIMRA, and its efficiency in assessing, collecting, and accounting for revenue. To streamline collection, ZIMRA introduced an electronic system in 2010; it facilitates the payment of the tax and reduces corruption by minimizing leaks in revenue collection (Institute of Certified Tax Accountants n.d.; Zimbabwe Revenue Authority 2013).

Taxes on Remittances: Mexico and Kenya

DIF Option Definition and Context: Remittances are funds sent from diaspora communities to families in their home country. Taxing incoming remittances has been identified as a potential source of health funding given their significance in financing throughout the developing world, where remittance flows exceed ODA by threefold (World Bank 2014b). In lower-income countries such as Tajikistan, Nepal, and Lesotho, remittances account for a significant percentage of GDP (52, 25, and 23 percent respectively) (World Bank 2014b). World Bank experts estimate continuing annual increases in remittance flows to developing countries of 8-9 percent, reaching US\$441 million by 2014 (Mohapatra et al. 2011).

Mexico is the world's third largest remittance recipient in terms of absolute flows, following only China and India. To capitalize on this revenue source, the Mexican 3x1 Program for Migrants leverages the potential of "collective remittances" – pooled funds generated from taxing remittances – to finance public sector projects. Collective remittances, as opposed to individual remittances, are easier to monitor and influence. Implemented in 2002, municipal, state, and federal governments have tripled the amount of money sent by hometown associations to finance local development projects such as electrification, water, road paving and maintenance, housing infrastructure, education, and health (Aparicio and Meseguer 2008).

Effectiveness and Sustainability: Mexico's collective remittance program has raised an average of US\$15 million per year with a peak of US\$18 million in 2008. The program has financed more than 6,000 projects in at least 27 states with the help of more than 1,000 community associations. Still, the total amount raised is estimated to account for less than 1 percent of the total remittances sent every year, indicating that there is the potential for the growth and sustainability of this program (Bejar 2011).

Other countries with large remittance flows may consider this option but need to consider how much of the remittance flow is taxable before determining its real potential. For example, estimates of total remittances in Kenya amounted to US\$1.7 billion (5.4 percent of GDP) in 2009 according to the World Bank's 2011 Migration and Remittances Factbook (Lievens et al. 2012). This total includes several types of remittance flows: internal flows from subnational migration as well as informal and formal flows from abroad. However, formal international remittances are the only taxable component and they represent only a third of the total (Lievens et al 2012). With tax application only on the formal sector, the remittance tax may also incentivize remittance senders to use informal channels, further limiting the long-term effectiveness of this tax (Lievens et al. 2012).

Costs of sending the remittances can also cut down on the actual amount of taxable finances. Barriers to competitive markets for "disbursing agents" in the origin country and "remittance service providers" in the recipient country contribute to the high cost (Dalburg Global Development Advisors 2013). Dalburg Global Development Advisors finds that high prices in large part result from regulations in the origin country, where prices vary from more than 13 percent of the remittance value in Germany to only 6

percent in the United States. The G8 and G20 have set targets to reduce the costs associated with sending remittances from an average of 8.4 percent to 5 percent (World Bank 2014b).

Progressivity and Macroeconomic Impact: In many countries, remittances are an important source of income for the poor, and may themselves act to reduce poverty and increase investment in health and education by poor families (World Bank 2014b). For this reason, levying a tax on remittances may place an unfair burden on the poor, and in general counter development objectives. A representative from the Overseas Development Institute has argued that the high remittance taxes paid by Africans is “diverting resources that families need to invest in education, health and a better future,” (Nguyen 2014). From the perspective of promoting equitable development, only when the revenue from the tax on remittances is used to support community development at the local level – and thus facilitate productive investment in education, health, and a better future – is an increase in the cost associated with this financial transfer justified.

In addition to taxing remittances, countries should consider other ways to leverage resources of the diaspora. Plaza and Ratha (2011) document the many types of capital (intellectual, political, cultural, and social, along with financial) that diaspora communities can contribute to their home countries. Among other ways of leveraging their financial capital are diaspora bonds, discussed later in this chapter.

Leveraging Dormant Funds: Kenya

Though not a tax on income, investing so-called “Dormant Funds” is another innovative way the government can capitalize on private income – or in this case, assets. Dormant funds refer to financial assets that remain unclaimed for a specified amount of time. As Lievens et al. (2012) discuss, governments can invest these assets and use interest generated to fund public projects, including in the provision of health and HIV services. Investment would leave the asset itself untouched and should also involve effort to identify its owner. Though the total value of unclaimed assets can be high – reported in 2008 as US\$108 million in Kenya by the Taskforce on Unclaimed Financial Assets – Lievens et al. (2012) estimates that this option would not generate significant additional revenue for health.

Taxes on Financial Transactions: Argentina, Brazil, Zambia

DIF Option Definition and Context: Several countries, including Argentina, Brazil, and Zambia, have enacted taxes on financial transactions on individuals and businesses to generate new revenues for health. In Argentina, the tax applies to current account credits and debits and has been active since 2001. Around the same time, Brazil enacted its levy of 0.38 percent on bank withdrawals and earmarked revenue for health programs; however, this levy was abolished a decade later due to concerns that it was overburdening the population and that proceeds were not actually allocated to health (WHO 2010). However, a few years later Brazil enacted a variant of the tax, targeting foreign stock and bond transactions (Stenberg et al. 2010). Finally, Zambia implemented a 1 percent levy on interest earned on various financial instruments such as savings accounts and government bonds. The revenues from this levy were hypothecated to public HIV treatment programs until it was abolished in January 2013 (Elovainio and Evans 2013).

Effectiveness and Sustainability: In Argentina, reports indicate that between 2006 and 2008 the taxes raised a significant amount of additional revenue – more than the revenue raised through the financial industry corporate income tax (IMF 2010). During the last year of its implementation, Brazil’s levy on bank withdrawals amounted to US\$20 billion. In Zambia, this levy raised US\$3.9 million in 2009 and around US\$2 million in following years before it was abolished in 2013 in order to restore “a culture of savings and investment” (Elovainio and Evans 2013; Stenberg et al. 2010; PricewaterhouseCoopers Ltd, Zambia 2013).

Progressivity and Macroeconomic Impact: Some argue that the burden is not likely to fall on “ordinary people,” who do not typically hold the assets that are affected by these taxes (Robin Hood Tax 2012). As for macroeconomic impact, Brazil’s financial transaction tax on foreign stock and bond transactions may have increased fiscal stability, as inflows of foreign investment can inflate currency, which is detrimental to its exporters (Institute for Policy Studies 2011). In other contexts, however, governments may not want to disincentivize foreign investment. Also, in Zambia, concerns about the disincentives to save and invest were reasons why the tax was politically unsustainable.

Mandatory Corporate Social Responsibility: Indonesia

CSR is typically understood as voluntary corporate self-restraint from harmful behavior (even if technically legal) or financial contributions toward a social good – often done in response to consumer or public demand. Such demands are based on the belief that corporations have an ethical responsibility to the communities, countries, and environments in which they operate, leading governments and the public to call upon corporate entities to do more for social outcomes.

Some countries (such as Indonesia, discussed below) have sought to institutionalize CSR contributions, legislating a mandatory contribution of revenue or social investment in the tax code or other policy documents. Legislating mandatory CSR contributions (either as a percentage of revenue or other defined threshold) can ensure that all foreign and domestic companies are contributing to the protection and development of the societies in which they operate; however, such efforts are often costly to enforce and may discourage foreign direct investment or negatively impact competition. Successful efforts will therefore seek to minimize the need for government oversight and will balance the imperative for CSR contributions with the need to create an attractive investment and operational environment for corporate entities.

DIF Option Definition and Context: Indonesia has taken steps to institutionalize CSR within the political and business culture of the country. Indonesia recognized CSR in policy governing state-owned enterprises as early as 1989 (Gayo 2012), and in the 2000s created sector-specific requirements on industry’s relationship with the environment and society (Juniarto and Riyandi 2012). Building on this foundation, in 2007 the government of Indonesia passed the Indonesian Limited Liability Corporation Law No. 40 Article 74. This law uses stronger language than did prior legal documents to specify that companies involved in natural resources must provide “obligatory” CSR funding, which should be treated as another cost of doing business. The law further states that noncompliant corporations may face sanctions. The stated purpose was to use the law as a preventive measure, deterring companies from engaging in behavior that would be harmful to society and environment and to encourage good corporate governance (Waagstein 2011).

The business community voiced strong opposition to the law and attempted to show it in conflict with the constitution. They argued that the law discriminates against those corporations involved in natural resources, as it is not applied consistently across all corporations. Under the 2007 Indonesia Investment Law No. 25, other corporations were responsible for implementing CSR activities, but are not required to do so in the way that corporations involved in natural resources are under Article 40 of the Limited Liability Corporation Law (Waagstein 2011). They also argue that the law might deter investment, as it functions essentially as a “philanthropy tax.”⁷ Despite these efforts, the Indonesian Court upheld the law’s legality (Oxford Business Group 2009).

⁷ Term used by the *Corporate Social Responsibility in Asia* online journal: <http://www.csr-asia.com/index.php?cat=1>. Accessed March 18, 2013.

In 2012, the government of Indonesia passed government regulations that clarified some specifications for the implementation of the 2007 law (Juniarto and Riyandi 2012). The regulations require companies to pursue CSR programs “inside and outside” the company and be integrated into the company’s work plan and annual budget. The company’s board of commissioners or general shareholders meeting should approve the work plan and budget in accordance with the company’s articles of association, or with other relevant legislation. Additionally, companies must present the results from the prior year’s CSR work in the work plans for review.

However, neither the law nor the regulations provide a set percentage or amount that corporations should spend on CSR or details on the type of programs that qualify (Juniarto and Riyandi 2012). Though not mentioned in the law itself, the government plan presented as part of the Constitutional Court hearing on the law indicates that the fine penalizing firms for noncompliance as well as the level of spending and the type and beneficiaries of CSR programs should be specified by local governments in accordance with their needs and priorities (Waagstein 2011).

Effectiveness and Sustainability: There are not a lot of data showing trends in CSR spending in Indonesia since the law was enacted. Figures do show an increase in CSR spending in Indonesia even before the enactment of this law. For example, the Oxford Business Group (2009) reports that mining companies increased funding for community development by 70 percent from 2006 to 2007. To some extent, this initiative may have contributed to establishing awareness and positive attitudes about CSR within the culture, even if health spending by private companies has not yet increased, or has not yet been documented as increasing (Waagstein 2011). At the very least, the law has brought CSR and corporations’ responsibility to society and the environment into the political discussion. It may be that the law has raised the bar of expectations.

Nevertheless, the law does not specify appropriate procedures for the management, beneficiaries, or governance of the funds. This is particularly problematic in a country where enforcement mechanisms are weak and where stakeholders (public, private, NGO, and society) have insufficient understanding of and consensus on CSR (Waagstein 2011).

Macroeconomic Impact: Business communities argue that mandating CSR makes them less competitive and the economy less efficient by introducing more red tape and demands on the way companies use their revenues. Others argue that a holistic approach incorporating investment in workforce and community wellbeing will not necessarily result in lost efficiency and competitiveness. Instead, CSR can be a business-positive investment in stakeholder engagement, and application and discussion of the law may make smaller and other-sector businesses more aware of CSR (Waagstein 2011).

3.2 Taxes on Goods and Services

As discussed above, taxes on goods and services, sometimes called taxes on consumption, are taxes levied on the production, extraction, sale, transfer, leasing, or delivery of goods (OECD 2013a), and on the rendering of services.⁸ Specific taxes under this category include VAT on all goods and services, excise taxes on specific goods and services, and trade tariffs. This chapter focuses on VAT and excise taxes which have become, in recent years, important sources of financing for general government functions, and health in particular, in many developing countries. Excise taxes discussed include “sin taxes,” where the goods targeted are “bads,” as well as other forms of excise taxes on airfare, tourism, mobile phones, and extractive products.

As with the income tax, assessment of taxes on goods and services will depend in part on a country’s economic situation. All else being equal, the higher the GDP per capita, the more money people have to spend on goods and services and thus the more effective taxes on goods and services will be in generating revenue. That said, socio-economic context also matters: as with taxes on income and profit, a population’s tax tolerance will affect the extent to which rates can be raised. Also, the tax burden on lower-income households in these countries will likely “consume” a larger share of their income relative to higher-income households. This is particularly true with VAT, sales taxes, and other options that apply to all goods and services.

Design can also shape these taxes’ assessment. Generally, taxes on goods and services are relatively easy to administer, though exemptions and different rates for different goods increases the complexity and thus administrative burden (Moore 2013; Granger 2013). Exceptions and rate differentiation may result from the political process and give preferential treatment to one sector over another (Ruiz et al. 2011); they may also result from attempts to protect the poor from unfair burden – for example, by instituting VAT or sales tax exemptions for basic necessities or lower rates for excise tax goods purchased by the poor.

Assessment of the macroeconomic impact varies with each type of tax on goods and services. In part because of their severe impact, developing countries have reduced their traditional reliance on trade tariffs, which are antithetical to free trade that can benefit countries, regions, and the global economy.⁹ In contrast, the IMF now promotes the VAT as a promising option for developing countries in part due to its small distortionary effect relative to other options (IMF 2011; Moore 2013). Some excise taxes can have a positive side effects – for example improved health outcomes by shaping behavior; on the other hand, they can also incentivize participation in the black market. Imposing excise taxes on extractive products or mobile phones may impact competitiveness, pitting revenue raising against overall growth or industry diversification.

See Annex A for more analysis of taxes on goods and services.

Value-Added Tax: Ghana

DIF Option Definition and Context: This is a tax on goods and services applied at every stage of the supply chain, unlike the sales tax, which is applied only at the point of purchase. The VAT is applied as a percentage of the difference between the value of a good when it is sold to someone and the value of the inputs used to use to produce the final good (EPS-PEAKS 2013). For the final consumer, it appears

⁸ This category also comprises taxes on the permission to use goods or services, but this document does not include discussion of these taxes.

⁹ For this reason, this report does not consider them in detail. See Annex A for more detailed analysis of trade tariffs.

similar to a sales tax but the seller will only pay the VAT on the additional value that they added to the product (Granger 2013). The seller is responsible for remitting the VAT to the relevant collection agency. This allows the seller to offset the price they paid (including a VAT from the manufacturer) and ensure they do not pay tax on top of tax.

Since the early 1990s, the use of the VAT has dramatically increased in middle- and low-income countries (IMF 2011). The VAT generally accounts for about 25 percent of all tax revenue in sub-Saharan Africa (Granger 2013). The IMF has been recommending the increased use of VATs in Africa along with regional harmonization to prevent businesses from avoiding the VAT by moving to a neighboring company (Ruiz et al. 2011; IMF 2011). The IMF has advised a single rate of VAT for all sectors and a minimum threshold that will exclude small traders to reduce the administrative and compliance costs (IMF 2011).

Some countries have used an increase in the VAT rate to generate funds for the health sector. In Ghana, this began in 2004 with the introduction of the National Health Insurance Scheme (NHIS), a pro-poor financing strategy aimed at reducing financial barriers to health care services. The NHIS was created in response to concerns about the out-of-pocket fee-for-service system that was the primary health care financing mechanism used at the time, as well as its catastrophic effects on the poorest communities. NHIS implementation included the development of legal frameworks and a National Health Insurance Fund (NHIF). The National Health Insurance Levy (NHIL), 2.5 percent added to the VAT, is collected by the Domestic Tax Revenue Division of the Ghana Revenue Authority through the existing VAT collection mechanism. The protocol is then for the Authority to transfer the funds directly to the NHIF within 30 days of collection (Ghana Revenue Authority 2013).

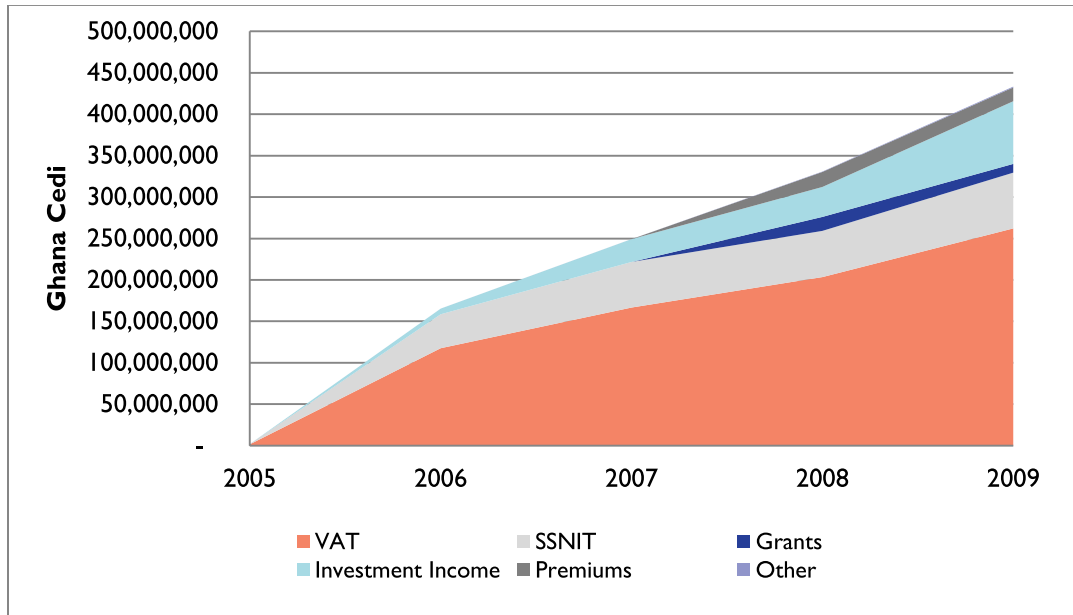
Effectiveness and Sustainability: Between 2005 and 2009, the Ghanaian NHIL generated a total of 751,359,211 Ghanaian cedi for the NHIS. This amount accounts for approximately 60 percent of NHIS funding, down from 70 percent in 2008 (Table 1). Figure 2 shows that other revenue sources have increased in importance, but the NHIL still accounts for the bulk of financing for the NHIS.

Table 1. Sources of NHIS Revenue, 2008–2018 (%)

	2008	2009	2010	2011	2012	2018
Social Security and National Insurance Trust members	23	17	19	20	21	24
Health insurance levy	69	62	62	63	63	63
District Mutual Health Insurance Schemes' premiums	5	6	7	7	8	13
Investment income	2	14	12	10	8	0
Other income	0	0	0	0	0	0

Source: Adapted from <http://programs.jointlearningnetwork.org/content/national-health-insurance-scheme-nhis>

Figure 2. Trends in NHIA Revenue by Source (Ghana, 2005–2009)



Source: Schieber et al. (2011)

As the Ghana example shows, the VAT has the potential to be very effective, although this effectiveness will vary. Countries with more economic openness and higher income levels tend to raise more revenue from VATs than do lower-income countries (IMF 2011). Design and implementation features can also determine effectiveness. For example, insufficient communication with the public about a new or increased VAT, or inadequate refund processes, can result in public or key stakeholder group resistance (IMF 2011). Countries can also take steps to build features that mitigate the incentive for businesses to avoid registration and formalize to avoid the tax. For example, if a business's trading partners are registered to pay the VAT, then they will be encouraged to register so they can claim back the VAT on their inputs (IMF 2011; Granger 2013).

Governance and Efficiency and Progressivity: Despite the generally regressive nature of VATs, one study suggests that the NHIL is mildly progressive, largely because it excludes a wide range of goods and services that are consumed by low-income households (Akazili et al. 2012). This exclusion is in line with IMF recommendations that allow for exemptions on certain goods. Most studies of the impact of the VAT have found it to be relatively neutral in terms of progressivity (IMF 2011). Exemptions on food and other necessities help mitigate its effect on the poor, as has the minimum threshold levels that mean the rural areas are less affected than urban centers (IMF 2011; Granger 2013). Still, the overall recommendation is to keep the design as simple as possible.

The NHIA has faced issues related to administrative efficiency of the VAT as a source of revenue. Key informants indicate that the protocol for transferring funds from the Administration to the NHIA is not always timely, creating cash flow problems for the NHIA. This issue has impacted the functioning of the program. More generally, effective VAT schemes require good record keeping and effective enforcement, given issues of smuggling, underreported sales, fake invoices, and carousel fraud¹⁰ (Granger 2013).

Turnover Tax on Mobile Phones: Gabon

DIF Option Definition and Context: Over the past decade, mobile phone technology has penetrated the developing world. In African countries, mobile phone usage has grown at an average of 18 percent over the last five years – the highest growth rate in the world during this period (Nyambura-Mwaura 2013). Though penetration in Africa has reached an estimated 80 percent, there is still room for more growth (Koetsier 2013).

This expansion has brought potential for revenue generation. These taxes can take many forms, including a tax on profit or turnover of mobile companies, an import or excise tax on hand sets and devices, or on airtime, or a surtax on international incoming traffic. Many developing countries use these taxes to generate public resources.

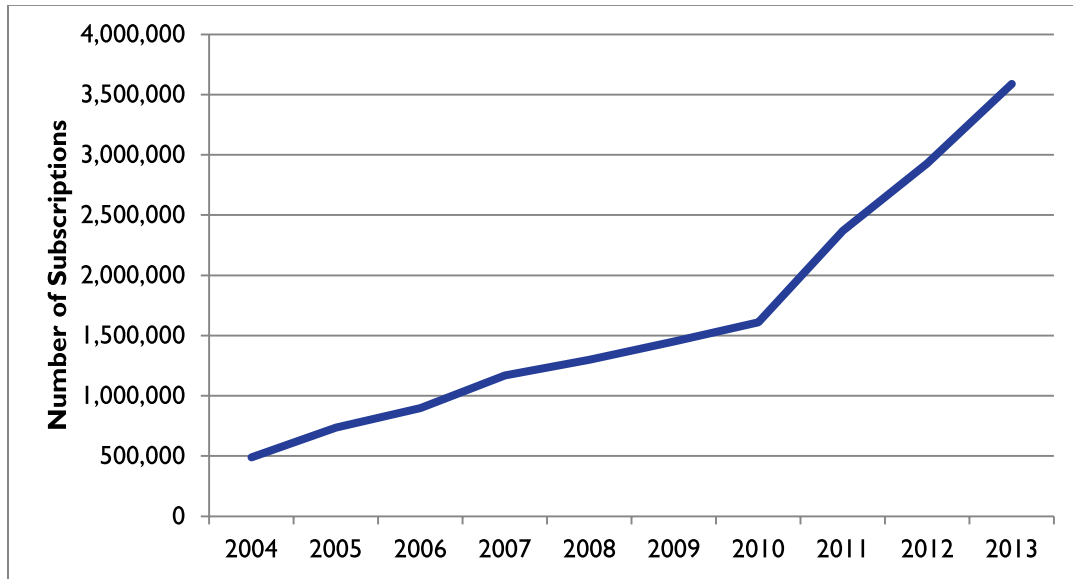
This report looks closely at Gabon, which enacted a 10 percent turnover tax on mobile phone operators in 2008. This tax was paired with a 1.5 percent tax on profits¹¹ of money service operators that send remittances in 2009. Together, these two taxes are called the “Mandatory Health Insurance Levy” (WHO 2013a) because their revenue is earmarked to the National Health Insurance (NHI). Specifically, revenue from these taxes is used to subsidize poor households that cannot afford to pay their contributions – a financial commitment by the government estimated at US\$67 million in 2009 (IMF 2009).

Effectiveness and Sustainability: With the tax on remittance-related money service operators, Gabon raised approximately US\$25 million in 2008 and US\$30 million in 2009, covering just under half of the estimated cost to cover NHI contributions of poor households. Since then, revenues from the Mandatory Health Insurance Levy have increased to about US\$37 million in 2011 (WHO 2013a). Despite the tax, mobile subscriptions in Gabon have continued to grow dramatically (Figure 3). This indicates that the tax is likely to produce a stable source of income for the government. That said, there are political pressure to reduce or remove the tax, given the powerful telecommunications lobby, most vocally seen in the work of the GSMA, a global lobby organization for mobile operators.

¹⁰ Carousel fraud is when traders import goods that incur no VAT, sell the goods, and charge the VAT, then disappear before remitting the tax collected (Granger 2013).

¹¹ Only post-tax profits are targeted in this tax.

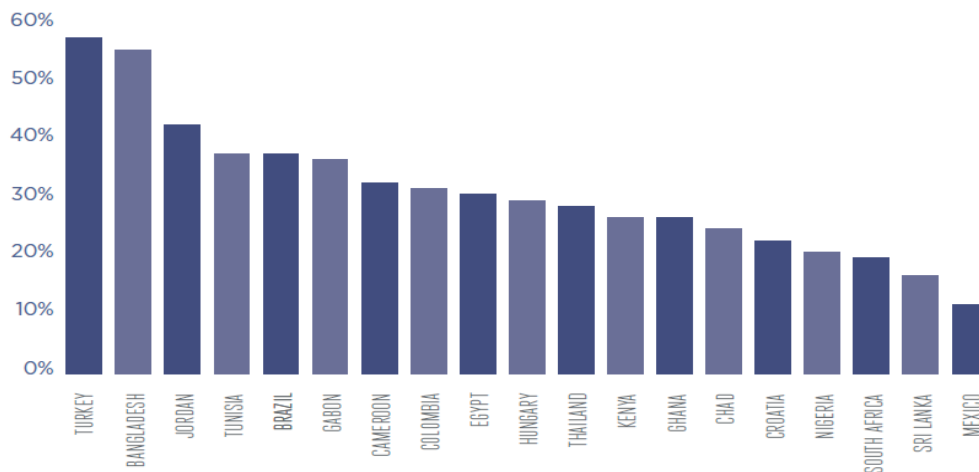
Figure 3. Mobile Phone Subscriptions in Gabon



Source: World Bank (2014a)

Progressivity and Macroeconomic Impact: Deloitte (2014) shows that the tax burden as a percentage of gross revenue in the sector is fairly high in Gabon relative to other countries globally (Figure 4). As with all indirect taxes, mobile industry taxes burdens both producers and consumers, with the distribution of burden depending on market conditions in each country, and especially the extent to which consumers are willing to pay the extra cost. When they are willing, the tax is regressive: poor households for whom purchasing a mobile phone is a considerable investment may be financially burdened by the tax unlike wealthier consumers. When they are not willing, the producers bear the burden, while poor households are barred from access to mobile technology. Regardless of where the burden falls, industry expansion will be constrained. Growth rates in usage will be lower, and mobile operators may see a reduction in foreign direct investment (Deloitte 2014).

Figure 4. Tax Burden on Mobile Services as Percentage of Gross Revenue in the Sector



Source: Deloitte (2014)

Slowing the penetration of mobile technology among poor populations has many developmental drawbacks. Mobile phone technology is itself becoming a tool for poverty reduction and economic development, and has applications in financial, health, learning, and education services, to name a few. Thus, unlike “sin taxes,” discussed below, these taxes target products that carry with them many positive effects on socio-economic development.

Excise Tax: Airline Levy¹²

DIF Option Definition and Context: The air ticket levy is a tax on outbound air tickets that passengers pay when they purchase their tickets. The revenue, which is additional to other airport taxes in the departure country, can be allocated directly to health. UNITAID, an international purchaser of diagnostics products and medicines used to combat HIV/AIDS, malaria, and tuberculosis and maternal and child health conditions, has relied primarily on airline ticket levies to fund its programs. UNITAID was originally established by Brazil, France, Chile, Norway, and the United Kingdom in 2006 after discussions on the need for more international finance to reach the Millennium Development Goals. According to UNITAID (2014), countries currently implementing the air ticket levy to raise public revenue are Cameroon, Chile, Congo, France, Madagascar, Mali, Mauritius, Niger, and the Republic of Korea – among them countries that have been traditional receivers of donor funding.¹³ Organizations like the Leading Group on Innovative Financing are active in promoting the solidarity tax among more countries.

Countries participating in the international scheme can choose to impose the levy and donate revenue to UNITAID. Countries design and implement the tax according to local law, setting its rates, managing the collection of revenue, and allocating some or all of the proceeds to UNITAID. In all countries where it is applied, the tax applies only to departures from countries implementing the tax and not to transit flights, so as to not penalize hub airports (Convention on Biological Diversity 2014). Countries can also use the airline levy independently of UNITAID, using revenue generated to fund domestic health programs.

Effectiveness and Sustainability: At a global level, the levy shows great promise: it has generated an average of about US\$214 million annually, and the portion of this amount contributed to UNITAID makes up about half of the organization’s US\$300 million budget (Convention on Biological Diversity 2014; Leading Group on Innovative Financing for Development 2014). The tax revenue from the levy has also proved to be predictable: UNITAID notes that revenues did not diminish during the global downturn but have remained stable since 2006 (UNITAID 2014).

At the country level, the potential for raising revenue through the airline levy varies depending on factors such as the number of flights departing from the country’s airports, the ability to impose yet another levy, and specific design and implementation decisions. France, which initiated this UNITAID-linked levy, has been quite successful, generating US\$204 million per year in revenue from the levy (UNITAID 2014). Cameroon has also been successful in generating revenue relative to flight traffic, contributing US\$1 million in 2011 (Convention on Biological Diversity 2014). This contribution is particularly notable given that Cameroon started out as a recipient of UNITAID support.

¹² This option is slightly different from the other DIF options discussed in that it generates revenue for health that is then allocated to an international body rather than used directly by local governments to fund their countries’ health programs. It is discussed in this paper anyway, given that the option relies on local governments for implementation and represents an effective North-South collaboration.

¹³ Some contributing members of UNITAID contribute to the organization’s objectives through funding mechanisms other than the airline levy. For example, Brazil contributes from its general budget what would have been generated through an airline levy, while Norway contributes a portion of revenue generated from its carbon emissions tax (Convention on Biological Diversity 2014).

Progressivity and Macroeconomic Impact: Countries can design the air ticket levy with low rates (about US\$1) for economy-class fliers and high rates (about US\$40) for wealthier fliers travelling business and first class (UNITAID 2014). This flexibility in design allows countries to ensure that the tax is pro-poor. It may be fairly efficient for developing countries to implement as well, given that the infrastructure for its collection is typically already ready for use (Lievens et al. 2012).

So far, evidence indicates that the tax has had limited negative impact on macroeconomic status. Notably, despite concerns, implementing countries have not seen a reduction in air traffic due to the tax (Convention on Biological Diversity 2014).

Excise Tax: Extractive Industries: Botswana

DIF Option Definition and Context: Revenues from the extractive (mining) sector are a major source of government revenue in Botswana and have enabled a high level of public spending per capita (Kardan et al. 2011). Different minerals are taxed at different rates: 10 percent for precious stones, 5 percent for precious metals, and 3 percent for other minerals of gross market value (Ministry of Minerals, Energy and Water Resources 2011). The fiscal, legal, and policy framework for mineral exploration is continuously assessed to ensure the appropriate balance between maximizing the country's economic benefits while enabling private investors to earn competitive returns (Creamer 2012).

Effectiveness and Sustainability: Sector-specific taxes have been effective in that revenue from them have allowed the government of Botswana to spend more on health per capita than other countries in sub-Saharan Africa. In the short term, this strategy should continue to yield good results. Recently, De Beers announced its decision to move its rough diamond trading operation from London to Gaborone. This is expected to bring an extra US\$6 billion of diamond sales into the country (Curnow 2012). However, in the long run, relying on these taxes is not a sustainable strategy because of the exhaustible and non-renewable nature of minerals. Tax revenue from extractive industries is uneven over time which, like instability and unpredictability in foreign aid, can cause management and flow problem (IMF 2012).

Progressivity and Macroeconomic Impact: The mechanism is considered pro-poor because the burden falls on large corporations with more capital than households. However, the taxes may also introduce market inefficiencies detrimental to the overall economic development goals of the country.

Sin Taxes: Global

DIF Option Definition and Context: As discussed above, sin taxes are a type of excise tax that target so-called "bads": goods such as alcohol, tobacco, sugar, and gambling that have harmful effects on health and can become addictive. Often these taxes are applied not only for their revenue-generating potential but also to shape behavior – that is, to discourage their use (Gillingham 2014). Because of this health promotional aspect, sin taxes can (though do not always) have a special link with the health sector. Until recently, sin taxes were much more common in developed nations, which began to experience an increasing prevalence of chronic illnesses such as diabetes and other cardiovascular diseases in the early 20th century (WHO 2005). Now, sin taxes are being introduced in developing countries, particular middle-income countries, that are witnessing a "dual-threat" epidemic of infectious diseases and chronic health illnesses.

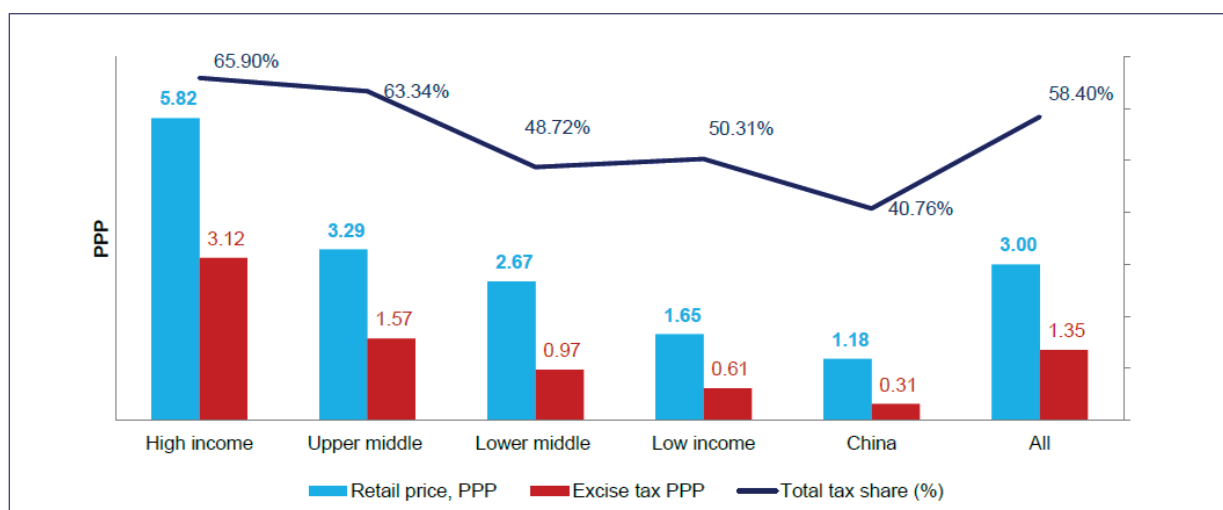
As discussed in Section 2.4, sin taxes may take several forms. A specific excise is applied as a percentage of the number of goods sold, while ad-valorem is applied as a percentage of the value of the goods sold. Many countries have mixed systems for sin taxes. In addition, the VAT applies to these "bad" goods along with all other goods and services in the economy, and it is sometimes included with the specific

and ad-valorem tax rate in the estimate of total tax rate for these goods. Trade taxes for imported products may also be included.

Countries vary in the way they allocate revenue raised from tobacco and other sin taxes. Stenberg et al. (2010) document that two countries (Guatemala and Djibouti) allocate all tobacco tax revenues to health, while many others allocate a set percentage – as little as 1 percent in Bulgaria and 2 percent in Mongolia and Qatar. These examples show that, despite the special relationship with the health sector, sin tax revenue, like all other tax revenue, will only be allocated toward health programs given prioritization of health programs by the government.

Effectiveness and Sustainability: A global review of tobacco excise taxes suggests that many countries have an opportunity to generate more revenues through sin taxes. WHO (2013b) shows that the excise tax as a percentage of the total retail price averages for the most-sold brand is 65.9 percent in high income countries, but only 50.3 percent in low-income countries (Figure 5). Other estimates looking at smaller groups of countries reveal an even sharper cross-income disparity in excise rates for tobacco: Stenberg et al. (2010) estimate that about half of low-income countries apply excise tax rates between 11 and 52 percent of cigarette prices, while the total tax-rate range of about 50-70 percent per pack of cigarettes, used among European Union states, is considered as global best practice (European Commission 2014).¹⁴

Figure 5. Excise Tax as a Percentage of Total Retail Price per Cigarette Pack, by Income Group



Source: WHO (2013b)

Note: Retail price of most sold brand is a weighted average.

¹⁴ Group of low-income countries was created by Stenberg et al. (2010) using the World Bank boundaries for 2009.

Despite their revenue-raising potential, sin taxes can face considerable resistance from powerful businesses linked to these industries. For example, the tobacco industry in the United States spent US\$16.6 million in political lobbying in 2010 (Erikson et al. 2012). In other countries, the tobacco industry has close ties with the government, and the pressure to lower tax rates is strong.

While also a promising option, taxes on sugar or fast food have proven more difficult to design and implement effectively than alcohol and tobacco products. Governments in both developed and developing countries face challenges in defining “unhealthy foods” and, of the many varieties, selecting the ones that should be taxed. As a relatively new type of tax, the global community still has a lot of learning to do to identify best practices.

Governance and Efficiency, Progressivity, and Macroeconomic Impact: Governance and efficiency issues vary with the complexity of the sin tax design. In many countries, tax rates vary based on a host of product characteristics as well as price and sale volume; the more complex, the greater the opportunity for companies to effectively evade the taxes (WHO 2013b).

Sin taxes’ impact on smuggling can also become a concern for countries looking to reform their tax codes, particularly if tax rates vary across countries. However both WHO (2013b) and Erikson et al. (2012) note that the claims of higher sin tax rates increasing smuggling, frequently made by the tobacco industry, are not founded in research. Instead, evidence indicates that other factors are stronger determinants of the size of the black market for these products. WHO (2013b) argues, similarly, that concerns about the effects of tobacco taxes on agricultural sectors are often overstated. Exceptions include countries, such as Malawi, where agriculture and tobacco specifically is a significant driver of GDP.

Sin taxes can have a positive impact on macroeconomic growth through the health impact they create. For example, Hana Ross (2014) estimates that tobacco production and consumption may significantly reduce productivity, around a 1 percentage point loss of GDP in Australia and France, and 3.5 percent in Poland. Lost growth may result from the reduced labor force productivity and inefficient use of financial and other resources – for example, in the need to allocate health system resources to treat people who would be healthy but for smoking, and in the allocation of land and water to produce tobacco rather than food. In this way, sin taxes can have many positive impacts, increasing the number of lives saved and paving the way for economic growth.

In any country considering a new sin tax, it would be useful for the ministries of health and finance to work together on developing a proposal for sin tax reform, taking into consideration the following actions:

1. Simplify the tax structure and develop some elasticity analysis to optimize revenue enhancement and encourage behavior change;
2. Analyze the industry to help forecast revenues and to help regulate against misbehaviors such as tax avoidance through “frontloading” warehouses before implementation, or, in the case of cigarettes, repackaging with smaller numbers of sticks to avoid taxes on standard size packs;
3. Assess the impact on farmers and other workers producing cigarettes; consider developing a retraining or crop subsidy programs;
4. Assess the ability of the government to stop smuggling and contraband, and administer law enforcement programs under a new law. If tax rates are much lower in surrounding countries, a regional approach may be needed, as in Africa, where a regional consortium of countries is looking into developing a harmonized level and approach to sin taxes across countries;
5. Development of a phase-in strategy.

Sin Tax on Tobacco and Alcohol: Thailand

DIF Option Definition and Context: Created in 2001 with the passing of the Thai Health Promotion Foundation Act, Thailand's Thai Health Promotion Foundation (ThaiHealth) is funded by a 2 percent earmark on tobacco and alcohol taxes. The Thai Ministry of Health officials proposed the 2 percent surcharge as a way to raise revenue for health promotion (Tangcharoensathien et al. 2008). They drew upon experiences of Australia's successful Victorian Health Promotion Foundation (VicHealth) – funded by the State through taxes on tobacco – as a basis for the design and implementation of ThaiHealth.

Enacting this tax was not just a way for the Thai government to increase revenue for health promotion programs, but also dovetailed with more than a decade of work on anti-tobacco campaigning. In the years prior to the creation of ThaiHealth, the Thai government had considered policy options for combatting the negative effects of tobacco and alcohol on its population. Anti-tobacco campaigns in the mid-1980s led to legislation and the institutionalization of several organizations in the early 1990s, using tobacco as an entry point to a shift toward health promotion (Tangcharoensathien et al. 2008).

ThaiHealth was established about 10 years after the Government of Thailand began to implement anti-tobacco and anti-alcohol strategies. It is tasked with advocating for, supporting, and financing organizations whose primary focus is health promotion – under a broad definition of health that also includes spiritual well-being and traffic accident prevention. The majority of funding goes toward creating awareness, supporting anti-tobacco and anti-alcohol campaigns, and funding research in health promotion (ThaiHealth 2008). ThaiHealth complements pre-existing health promotion organizations: while the Ministry of Public Health focuses its health promotion funding on clinical preventive services, ThaiHealth serves the role of on-the-ground public service education for citizens on health and well-being (Tangcharoensathien et al. 2008).

Sustainability and Effectiveness: Data indicate that the sin tax generated significant additional revenue for health promotion, at least at first. ThaiHealth's total revenue for the 2005 fiscal year was Baht 2.32 billion (US\$57.9 million), or approximately 18 percent of spending on prevention and public health services, which is a reasonable proxy for health promotion spending (Tangcharoensathien et al. 2008; International Health Policy Program and Ministry of Public Health 2009)^[1]. Based on the historical trend and tax rate, ThaiHealth's revenue is predicted to increase to US\$116 million by 2020 (Tangcharoensathien et al. 2008).

Administrative Efficiency and Governance, Progressivity, and Macroeconomic Impact: When first designing ThaiHealth, the Government of Thailand made efforts to create mechanisms for transparency and good governance. Although ThaiHealth is a tax-funded agency, it is autonomous from the Thai government, though strictly governed by the Cabinet-appointed Governing Board and Evaluation Board. The Fund “reports to the Cabinet and House of Representatives annually on achievement and performance,” further safeguarding against misuse of taxpayer funds (Tangcharoensathien et al. 2008). Sin taxes can “require a strong political will and social consensus, backed up by legislation and effective governance” that is also efficient and transparent (Prakongsai et al. 2008).

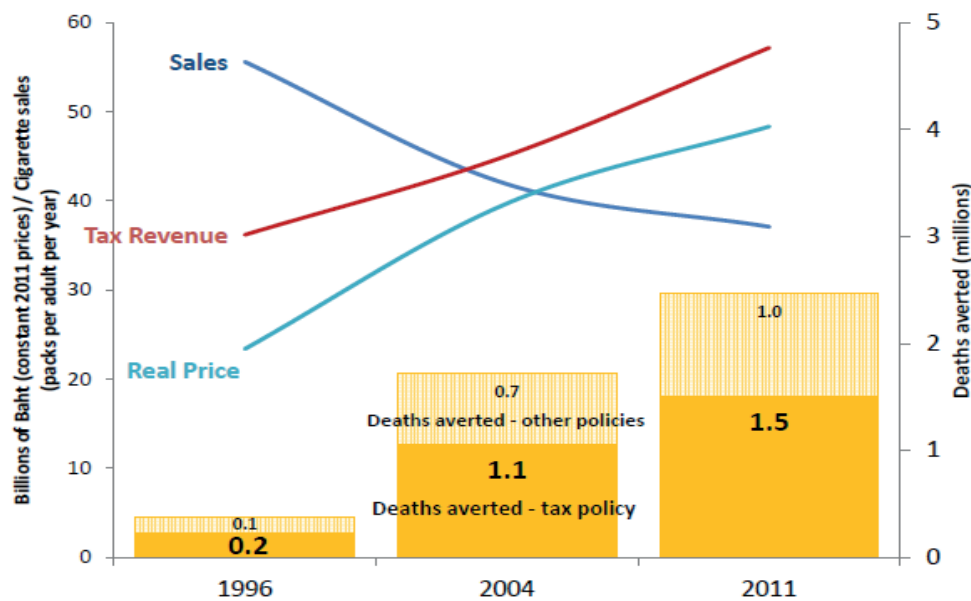
Though the tax has been argued by some to be pro-rich in that citizens occupying the lowest income rungs face spending a larger portion of their discretionary income on tobacco, this assumes that they

[1] The estimate of 18 percent is based on 2006 National Health Accounts data, showing that prevention and public health services for 2006 amounted to 13.1 billion Baht (International Health Policy Program and Ministry of Public Health 2009). Spending on prevention and health services, as measured in the National Health Accounts framework, likely underestimates total health promotion spending, given that some health promotion falls outside the boundary of this National Health Accounts category.

continue to purchase the products at the same rate as prior to the tax (Loi 2008). Arguments abound as to why such an excise tax is pro-rich, but there is little evidence to support this claim (Loi 2008). Conversely, research shows that the poor are usually more responsive to taxes on tobacco and alcohol, opting to use funds for more important household spending (Loi 2008; WHO 2011). WHO (2011) confirms this with additional findings that increases to sin tax rates result in an overall decline in use. Two key evidence points are that: (i) such increased prices on tobacco induce current users to quit and (ii) reduce tobacco use among young people. Findings for alcohol consumption take a similar trajectory (Thavorncharoensap et al. 2010).

While many countries simply consider such taxes on alcohol and tobacco as means for generating overall government revenue, few see the taxes as a policy tool with strong implications for reducing societal impacts of such items and achieving national public health goals (Sornpaisarn et al. 2012). Earmarked taxes on alcohol and tobacco have the potential to finance health promotion programs, and at the same time deter the demand among young adults (Prakongsai et al. 2008). Of course, progress on the latter objective was not just due to the sin tax, but to a broader health promotional effort by the government, of which the sin tax was one component. Figure 6 demonstrates the effectiveness of this approach in Thailand.

Figure 6. Additional Revenue, Decrease in Tobacco Sales, and More Deaths Averted



Source: Ross (2014)

Sin Taxes for Financing UHC: Philippines

The Philippines uses excises taxes on alcohol and tobacco to finance UHC reforms. As discussed in the text box below, taken from Bi et al. (2014), reforms of these taxes in 2012 have addressed design challenges that limited the amount of revenue the taxes generated. In the first year following reform, the taxes were expected to generate PHP 33.96 billion (US\$757.2 million) in additional revenue. If this amount remains constant over five years, these taxes will produce about PHP 169.8 billion (US\$3.8 billion). This represents about 25 percent of total resources needs for UHC reforms between 2012 and 2016, and about 75 percent of the government's commitment to these reforms. This example shows that improved tax structure can improve sin tax performance, with the potential to produce revenue for health system reforms.

The following text is from "Fiscal Space for Universal Health Coverage in Indonesia" (Bi et al. 2014), a World Bank East Asia and Pacific Health Matters Policy Brief.

Box 1: Sin Taxation for Financing UHC in the Philippines

Context and Rationale: Tobacco and alcohol excise tax rates in the Philippines are among the lowest in Asia and the world.¹⁹ This may be one factor that explains why the country has one of the highest smoking rates and the second most consumers of alcohol in Southeast Asia. The Philippines is home to an estimated 17.3 million tobacco smokers, with 1,073 cigarette sticks being consumed per capita annually; 38.9 percent of its population are occasional alcohol drinkers, and 11.1 percent of the population are regular alcohol drinkers. Tobacco and alcohol consumption in the Philippines has significant social and economic consequences: the WHO estimates that 10 Filipinos die every hour from cancer, stroke, and lung and heart diseases caused by cigarette smoking, while the country loses nearly PHP 500 billion annually due to the costs of health care and productivity losses resulting from cigarette and alcohol consumption.

"Since the 1980s, various legislations have been enacted on sin taxes in the Philippines. With the enactment of Republic Act 8240 in 1996, the Philippines introduced a multi-tiered schedule for excise tax on tobacco and alcohol products based on the net retail price (exclusive of VAT) of each brand, with cheaper brands being taxed less than more expensive brands. The Republic Act No. 9334 which took effect in 2005 mandated varying rates of increases for all brands of cigarettes and alcohol products every two years, until 2011. However, the multi-tiered tax system contributed to the deterioration of the excise tax effort and resulted in the erosion of excise tax revenues. Studies showed that rather than discouraging the use of tobacco and alcohol products, it actually encouraged a downshifting of both manufacturers and consumers to cheaper brands. From 1997 to 2011, the excise tax revenues as share of GDP dipped by almost half for both tobacco and alcohol products. The primary reasons for the decline include the inadequate adjustment of specific tax rates to inflation, price classification freeze, and the opportunity provided to the manufacturers to misdeclare higher-priced brands as lower-priced brands. In 2010, out of more than PHP 822 billion total revenue collected by the country, PHP 21.8 billion and PHP 31.7 billion came from alcohol products and tobacco products, respectively.

Sin Tax Reform: The Republic Act 10351 (also known as the Sin Tax Reform 2012) was signed in to law in December 2012 with the objective of restructuring the excise tax on alcohol and tobacco and generating government revenue to finance expansion of UHC. Major features of the Sin Tax Reform 2012 include a gradual shift from a multi-tiered tax structure to a more unitary and specific tax structure (to keep manufacturers and consumers from downshifting to lowertaxed brands and to under-invoiced products, and to achieve more predictable revenue and easier tax administration); an automatic tax rate increase of 4 percent annually for distilled spirits effective 2016, and for cigarettes and beer effective 2018 (to prevent inflation erosion); proper tax classification of tobacco and alcohol products to be determined every two years (to remove the price classification freeze); adherence to the WTO's ruling on distilled spirits and the WHO Framework Convention on Tobacco Control's commitment on cigarettes; and earmarking of incremental revenues (to augment the funds of the UHC program and provide tobacco farmers with livelihood support). Out of the PHP 33.96 billion additional revenue expected to be generated in the first year of reform implementation, PHP 23.4 billion (69%), PHP 6.06 billion (18%), and PHP 4.5 billion (13%) are expected to come from cigarettes, distilled spirits, and fermented liquors, respectively.

"It has been reported that the sin tax collection has reached PHP 21.75 billion (US\$504.2 million) within the first four months of 2013, which is a nearly 25 percent increase compared with same period in 2012, despite the fact that there has been an increase in smuggling and unreported production following the excise tax increases.

Impacts for UHC: Out of the PHP 682.1 billion estimated total cost of UHC from 2012 to 2016, PHP 224.8 billion (33 percent) falls under the national government's financing requirement. The current budget for the UHC program for the period 2013-2016 is PHP 360.8 billion, which accounts for 64 percent of the DOH's target fund of PHP 565.2 billion. Figures show that the sin tax revenue could expand the government budget by 43 percent,²⁸ which equals approximately PHP 515.9 billion. Additional revenues generated from the sin tax will be prominent sources for the financing of the UHC program. While the progress of sin tax reform seems promising, concerns regarding its funding of UHC have been highlighted. Some argue it might be better to have protected funding from general revenues rather than a dependence on the continuation of harmful behavior to finance UHC."

Sin Tax on Soft Drinks: French Polynesia

DIF Option Definition and Context: Like many small island states in the Pacific, French Polynesia faces high levels of obesity and chronic disease. The Harvard School of Public Health reports that in the Pacific Oceania, 15–20 percent of men and 25–30 percent of women are obese. Governments in the region are experimenting with taxes on soft drinks to improve health outcomes while raising revenue.

As with other sin taxes on goods such as tobacco and alcohol, taxes on food and soft drinks can impact health in two ways:

1. By changing the relative prices to influence consumer behavior. As the price of soda relative to water changes (in most cases with water becoming less expensive than soda), consumers respond by buying less soda. The resulting decrease in calorie consumption can prevent obesity and promote health.
2. By using revenue generated from the tax to fund programs for obesity prevention, chronic disease prevention, and health promotion.

French Polynesia is a clear example of a country where such a tax achieved both ends. In 2002, the government enacted two taxes: a production tax on soft drinks and beer and an import tax on soft drinks, beer, and confectionery, including ice cream (Thow et al. 2010). Some controversy emerged and a panel found that because imported spirits are taxed at a higher rate than domestic spirits, the taxes violated measures established by the World Trade Organization.¹⁵

The Ministry of Finance was largely responsible for passing the taxes, and the Ministry of Health played an active role in their design and implementation (Thow et al. 2010). At the same time, the government also established the *Etablissement pour la prevention* (EPAP), a fund for multi-sectoral prevention activities (public health projects including those targeting obesity prevention). Revenue from the taxes financed EPAP operations and programs.

After the formation of a new government coalition in French Polynesia's parliament, the allocation of the tax revenue changed based on the claim that EPAP had not spent its money. Instead, the government directed 80 percent of the production tax revenue to the Ministry of Health and the rest to the general government budget, effectively reducing financing for health. Thow et al. (2010) noted that the funds may shift back to EPAP in the future.

Effectiveness and Sustainability: The soft drink taxes generated significant revenue in French Polynesia. Annually, the production and import taxes brought in about US\$10 million and US\$4.2 million, respectively. Combined revenue from the two taxes in 2005 amounted to approximately 0.9 percent of the total government budget (Thow et al. 2010). The figures imply that the soft drink tax is a viable option for generating sustainable resources for health – albeit with a few caveats. The first is regarding the pros and cons of earmarking funds for health. In French Polynesia, earmarking revenue from this tax to EPAP depended greatly on political forces and the earmark ceased with changes in leadership and government priorities. Additionally, as the health promotion objectives become more effective, revenue will diminish. Insufficient information is currently available about demand elasticity of soft drinks in the Pacific islands to project the implications for sustainability.

¹⁵ A World Trade Organization panel ruled that this type of policy in the Philippines violated free trade obligations. http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds403_e.htm

Governance and Efficiency and Progressivity: Thow et al. (2010) note that, in most examples of small Pacific island states implementing taxes on soft drinks, policymakers piggybacked on existing taxes and levies as a way to increase the efficiency of tax collection. Thow et al. also note that in many countries, advocates argued that the availability of substitutes and alternatives to soft drinks (e.g., water, fruit juice, coconut water) made the taxes less regressive than they would have been had alternatives not been available. In Nauru, policymakers linked the tax on soft drinks with a reduction in the tax on bottled water (Thow et al. 2010), which increased the likelihood that the tax would change consumer preferences while decreasing the burden of the tax on consumers.

3.3 Increasing Private Sector Participation to the Financing of Health Services

3.3.1 Catalytic Public Investments to the Private Sector

Private sector stakeholders – both within and external to the health sector – possess significant financial, human, and logistic resources that could be mobilized to meet national health objectives (IFAD 2007, Colford 2013). Governments may choose to invest public resources into a private or quasi-private sector project that will return revenue for a specific public good and even macroeconomic benefit. As with all investment projects, the potential for returns carries risk. Unsuccessful projects can fail or lose revenue, or come at a cost for the environment. Like all types of DIF options, these investments may have little impact on strengthening public health services if the revenue generated is not directed or used effectively to improve public services.

Nam Theun 2 Hydropower Project; Lao People's Democratic Republic

DIF Option Definition and Context: With loans from 27 partners including the World Bank and the Asian Development Bank, the Lao People's Democratic Republic (Laos) built a 1,075 megawatt (MW) hydroelectric plant on the Nam Theun River, with the objective of using proceeds to support economic development and poverty reduction efforts in the country (World Bank 2011). The Laos government conceived of the project as early as the 1980s and worked with a group of independent environment and social experts beginning in the late 1990s (World Bank 2013b). Partner agencies, including the International Development Association (IDA) and the Multilateral Investment Guarantee Agency of the World Bank, approved the project in 2005 (World Bank 2010). The Nam Theun 2 Power Company Limited, a quasi-government enterprise formed by the Government of Laos and private shareholders, was contracted to complete construction and signed a Concession Agreement with the Government of Laos to share risks. The World Bank organized and conducted monitoring and evaluation of the project. The power plant began operating in April 2010 and generates 1,000 MW of electricity for export to Thailand and 75 MW for Laos. The Nam Theun 2 project invests its revenue in education, health, environmental protection, and infrastructure projects. These include health system strengthening through engagement with government health officials from the province to village level and improvement in public financial management to ensure transparency and accountability of the profits generated from the plant (World Bank 2010).

Effectiveness and Sustainability: When the project was approved, it was predicted that the power plant would generate US\$2 billion over 22 years. This would amount to US\$30 million per year (in nominal terms) for the first 10 years (or until Laos paid back service debt to supporters including the World Bank and Asian Development Bank Independent Evaluation Department), and then US\$110 million per year after that (World Bank 2010). An Asian Development Bank assessment notes that Nam Theun 2 has a high economic internal rate of return (15 percent), and that the Concession Agreement is

well designed to ensure that environmental and social mitigation takes place (Asian Development Bank Independent Evaluation Department 2010).

The project is expected to contribute US\$1.9 billion for poverty reduction efforts over the course of the Concession Agreement (25 years) (Asian Development Bank Independent Evaluation Department 2010). According to a World Bank report, the project built two health centers and provided disease-specific training for health personnel in 2010. The report compares outcomes to baseline rates in 2005 to find significant improvements in many areas, especially maternal health (World Bank 2010).

Some external observers question whether or not revenue from the Nam Theun 2 is actually financing effective programs for economic growth and poverty reduction in a transparent way. International Rivers, an external NGO involved in monitoring the project, has voiced concerns about the transparency and governance issues in Laos as a potential threat to the positive impact this revenue could make (International Rivers n.d.). International Rivers also stands by a report that questions the model of the Concession Agreement, arguing that it fuses the government's business and regulatory roles, and thus represents a conflict of interest for the government (Can and Leader 2005).

Governance and Efficiency, Progressivity, and Macroeconomic Impact: The overall equity of this project depends in large part on the transparency and management of the revenue and how well Laos can compensate the villagers displaced by construction of the dam and power plant, or otherwise affected through the loss of productive farmland and river that provided their livelihoods. International Rivers reports that, with 4000 km² of watershed, Nam Theun 2 has displaced 6,200 people and impacted another 11,000 downstream who rely on the river for means of living (International Rivers, n.d.).

According to the World Bank Nam Theun 2 factsheet, 87 percent of the people displaced and resettled report improvement in livelihood and children of those families have seen dramatic increase in school enrollment (31 percent in 1998 to 90 percent in 2009) (World Bank 2012). An assessment conducted by the Asian Development Bank Independent Evaluation Department in 2010 also notes that the Concession Agreement was designed to ensure sufficient environmental and social mitigation efforts continue, and more generally seeks Nam Theun 2 as a possible model for sustainable and holistic hydropower development.

While the Nam Theun 2 project has thus far achieved its revenue goals, public investments can also result in negative outcomes. They can produce poor or negative returns; can have expected or unforeseen negative environmental or social consequences that outweigh the new revenue; and the public sector may lack the capacity to sufficiently monitor and manage investments. As such, public investment decisions should be approached with caution. Compiling all necessary investment and project information during planning; building the capacity of public officials to initiate and effectively manage investments; and ensuring projects are congruent with the government's environmental and social priorities are integral steps in mitigating potentially negative investment outcomes.

Still, investment in the Nam Theun 2 project will also likely make positive macroeconomic impact. The hydroelectric dam this project build will provide a local supply of electricity, something that will can lower costs for businesses and make them more competitive in international markets, paving the way for growth through exports. As an export itself, the electricity produced by the dam will also directly contribute to this growth trajectory.

3.3.2 Liberalization of Health Service Delivery for Revenue Generation

Governments can allow public sector health facilities to generate revenue by giving the facilities greater autonomy and flexibility to collect and retain fees for discretionary operational and infrastructure needs. This can be done by diversifying the ways in which payment is accepted – such as expanding private and national health insurance options, or introducing approved fee-for-service schedules that rely on out-of-

pocket payments from patients – or allowing facilities to engage in non-health-related income generation. Policies of this nature are often necessarily tied to greater accountability, regulation, and quality oversight given that liberalized service delivery mechanisms (such as diversified fee schedules and payment options) can negatively impact vulnerable health consumers – particularly the poor.

Public and private facilities in a number of resource-limited settings have experimented with public-private mix (PPM) service delivery options, where private fee-bearing services are delivered alongside free (or nearly free) public health services (Söderlund et al. 2003). Employing a tiered fee structure for fast-track service, weekend or evening appointments, brand-name pharmaceuticals, or private inpatient care can allow facilities to generate revenue from health consumers willing to pay for such add-on services without introducing fees for exempted public health services (Söderlund et al. 2003, White and Bouskela 2014). The additional revenue can improve quality of service delivery and promote sustainable operations in both public and private health facilities (Söderlund et al. 2003). PPM has been described as an effective strategy for health worker retention, allowing providers to earn supplemental income while remaining within the public health system (White and Bouskela 2014).

However, there are two primary challenges associated with service delivery liberalization. First, privately generated funds must be additional to public funding allocations, not a substitute for it (Söderlund et al. 2003). Governments in resource-constrained settings may be tempted to shift public funding away from institutions that self-generate revenue (Chernichovsky 2000). If liberalization of service delivery is to make a positive impact on the quality and scope of health services delivered, then facility-generated revenue must be used for infrastructural needs and equipment along with commodity purchases and other daily operating expenditures not covered by regular public allocations (McKee et al. 2006, Wadee et al. 2003).

Second, liberalization policies such as the introduction of tiered service schemes can have a negative impact on vulnerable populations as they entail increasing out-of-pocket spending (Chernichovsky 2000). Health facilities might prioritize the care of higher-income patients in order to generate user fee revenue, negatively impacting the quality of care to lower-income patients (Wadee et al. 2003, Söderlund et al. 2003). In addition, facilities may induce demand for unnecessary fee-bearing services, thereby creating financial hardship or impoverishment across all income groups (McKee et al. 2006). It is therefore critical that liberalization efforts be accompanied by measures to protect patient welfare, ensuring the same standard of care for all patients, regardless of income level or whether or not they purchase add-on or fee-bearing services (Wadee et al. 2003).

Hospital Financial Autonomy through Medicare Relief Societies: Rajasthan, India

DIF Option Definition and Context: In the 1990s, state policymakers in several parts of India experimented with various strategies to increase efficiency, quality, and revenue generation through autonomy of public facilities. In 1995, Rajasthan paired the formation of local management committees and a component of the state-administered health care system called Medicare Relief Societies (MRS) with the removal of restrictions against raising funds from private sources (households above a certain income threshold, philanthropists, community organizations, and financial institutions), and collecting funds through a variety of mechanisms (e.g., user fees for health services, parking fees, and auditorium and cafeteria fees). With the restrictions lifted, there was incentive for MRS to form, and to raise and allocate funding at the local level (Sharma and Hotchkiss 2001).

MRS in Rajasthan rolled out slowly, starting at just one tertiary-level public hospital and then expanding first to other district and medical college hospitals and then to community health centers (CHCs) with 30 or more beds (Policy Reform Options Database 2006). With the launch of the National Rural Health Mission in Rajasthan in 2006, the program expanded yet again to primary health centers (PHCs) (Ministry of Health and Family Welfare (MOHFW) 2011). As of 2007, MRS was operating in Rajasthan's

45 district and subdistrict hospitals, 354 CHCs, and 1,489 PHCs (MOHFW 2011). The government of Rajasthan provides MRS with annual untied funding of 5 lakhs (US\$9,150), 1 lakh (US\$1,830), and 25,000 rupees (US\$458) for district hospitals, CHCs, and PHCs, respectively (MOHFW 2011). It also matches the amount raised by MRS for the purchase of equipment (Government of India Central Bureau of Health Intelligence MOHFW 2006).

Health sector reforms, including this one, have been critical in Rajasthan, the largest state in India. Rajasthan ranks low in health and education development indicators: infant and maternal mortality ratios and literacy rates are below the national average and its maternal mortality ratio is one of the worst in the country (Sen et al. 2009). GDP per capita in Rajasthan is also below the national average, though the state has achieved high growth in the last decade (PHD Research Bureau 2011).

Some MRS revenue-raising mechanisms have encountered opposition from Indian citizens. In 2009, in response to a citizen's complaint, a court ruled unconstitutional MRS registration fees of 5 rupees for inpatient and 2 rupees for outpatient care at a hospital in Bikaner. However, this decision was overturned by a higher-level court in 2012 (Rajasthan High Court – Jodhpur 2012). This case shows that MRS activities are subject not only to government audit but also to scrutiny by citizens.

Effectiveness and Sustainability: According to a study conducted in 2000, Rajasthan's MRS effectively raised revenue for facility-level use. Overall, Rajasthan public hospitals were able to recover an average 10–15 percent of their budget (range, 4 to 25 percent of the sample in the study). In contrast, recovering costs for medical services as budgeted around the same time was only 3.8 percent (Sharma and Hotchkiss 2000). A 2007 review of the National Rural Health Mission in Rajasthan also found that the MRS were a positive feature of the health system in the state and praised the use of the extra revenue in improving facility conditions and equipment (MOHFW 2011).

The 2000 study indicates that the initial intention was to lower government transfers, reallocating them to other priorities, if the MRS were successful. However, this shift in funding did not take place, and government continues to provide untied annual support. These facts indicate that the revenue gained through supplementary mechanisms by MRS at the local level was additional.

Progressivity: Out-of-pocket payments under MRS reforms have increased as the result of more effective enforcement of national laws which exempt the poor and other vulnerable groups only. Before the MRS were created, 90 percent of people received free care, and after only 15-20 percent (Sharma and Hotchkiss 2011). However, those exemptions are followed and continue to protect vulnerable households. Also, guidelines governing the MRS's pricing and allocation policies strive to make revenue generation more equitable. Despite the increase in the number of people who pay user fees at facilities, people below the poverty line, widows, and senior citizens over 70 years of age (among other groups) remain exempt from user fees charged by MRS (Rajasthan High Court – Jodhpur 2012). Additionally, the guidelines establish that the charged fee cannot be greater than 50 percent of the market price. As for allocation, the government requires that 25 percent of funding raised through selling medical goods should be spent on providing free medical goods for the poor.

Revenue Retention and Utilization at Health Facility Level in Ethiopia

DIF Option Definition and Context: In Ethiopia, public health facilities have charged user fees for more than half a century; facilities channeled the fee revenue to the central treasury and received funding from the government budget. In 1998, Ethiopia endorsed a health care financing strategy that included multiple financing mechanisms that promoted cost sharing in provision of health services. Among these mechanisms are revenue retention and utilization (RRU) at the health facility level. RRU reform allows health facilities to retain and use their internally generated revenue, which is additional to their allotment from the regular government budget.

RRU is being adopted region by region. It required each region's legislature to pass a comprehensive health financing legal framework. It also required by development of operational guides and provision of capacity-building support in the reform implementation process. The reform has been rolled out successfully to all of the regional states except the Somali and Afar regions, where RRU implementation is in process. In all regions where the RRU has been implemented, it has been instrumental in mobilizing additional resources for service quality improvements.

Effectiveness and Sustainability: One study suggests that the decentralization of revenue collection to the health facility level stimulates greater sense of ownership of the financing process, which increases the amount of revenue collected (Ageze 2007). The average health centers collected ETB 208,930 (US\$16,209) in retained revenue in Ethiopia's 2009/10 fiscal year. Health centers utilized nearly 73 percent of their retained revenue per quarter, which was additional to the government budget (Zezelew 2012).

Administrative Efficiency and Governance, Progressivity, and Macroeconomic Impact: RRU has been implemented as part of comprehensive health financing reform including systematization of a fee waiver system for the poor. Ethiopia's experience highlights the importance of implementing a comprehensive health care financing strategy that involves multiple financing mechanisms to ensure an effective, efficient, and equitable health system. Coupled with the strategy to systematize the fee waiver system and exemption scheme, the RRU reform allows health facilities to generate additional resources while protecting the poor.

3.3.3 Voluntary Corporate Social Responsibility

Private corporations and companies can be integral partners in mobilizing additional resources for health. By nature, for-profit entities are incentivized to generate revenue and increase shareholder value; however, over the past several decades there have been increasing calls for companies to display "corporate citizenship" in the environments and communities in which they operate, taking on "broader corporate responsibilities – for the environment, for local communities, for working conditions, and for ethical practices" (Catalyst Consortium 2002). The public, national leaders, and consumers are increasingly expecting more from corporations – particularly where severe epidemics such as HIV and AIDS, weak health systems, and widespread poverty require a comprehensive and multi-sectoral response.

Recently, both developed and developing countries have made significant efforts to expand the scope of workplace programs for health. These programs are designed broadly on "employee wellness" in addition to targeting specific health threats such as HIV (Hall et al. 2012, Wellness Africa n.d.). Because the global working population (15–49 year old age group) is disproportionately affected by HIV, employers and workplaces have a unique role to play in protecting the health of their employees.

Although many businesses have argued against further financing of HIV-related initiatives based on the premise that they are already contributing adequately through taxes, a number of workplaces in high-HIV prevalence settings have voluntarily initiated workplace-based HIV programs (Sieberhagen et al. 2011). Lievens et al. (2012) report that in some countries, business coalitions are active in efforts to strengthen its members' response to the HIV epidemic. In Indonesia, more than 55 companies have HIV workplace programs under the umbrella of the International Labor Organization. HIV workplace programs in such settings demonstrate strong health outcomes when corporations develop workplace HIV policies, identify and provide personnel focused on employee health, and sponsor their employees HIV care (either on-site or via established referral) (Sieberhagen et al. 2011).

Given the high incidence of workplace injury, increasing prevalence of noncommunicable diseases, and persisting poverty even among the employed, the "workplace wellness" movement aims to include HIV

programs within a holistic approach to employee health (Sieberhagen et al. 2011). For example, the Malawi Business Coalition against HIV and AIDS, an umbrella organization coordinating the HIV prevention and treatment efforts of 73 private member companies, is incorporating tuberculosis, noncommunicable diseases, and nutrition into HIV workplace programs. Such “workplace health and wellness” programs are in many ways a merger of traditional occupational health and safety programs with previously stand-alone HIV workplace programs, with the addition of broad and contextual health and wellness topics such as nutrition or chronic disease counselling (Sieberhagen et al. 2011). Corporations and other employers are strongly placed to contribute to this effort, as both a demonstration of their social responsibility but also because of gains they may enjoy due to the improved health status of their employees (Hall et al. 2012, Sieberhagen et al. 2011).

Incentivizing Corporate Social Responsibility Contributions as Part of Core Business Strategy

While CSR activities are often seen as altruistic contributions of private actors, investments in employee health and welfare actually can be advantageous and profitable for employers. Efforts to make a business case for “mainstreaming” CSR contributions – including CSR as part of core business strategy – have shown that the returns to the employer (improved employee health, increased productivity, and reduced losses to turnover) often outweigh the costs of providing workplace health programs, employer-sponsored health insurance coverage, or public-private partnerships for employee wellness.

A sophisticated view of CSR goes beyond government’s calling for voluntary contributions or mandating minimum employee protections in the workplace. It may be government that has to “make the CSR case” to companies, providing quantitative proof of the value of employee health to improved business operations and bottom lines. Government must also facilitate CSR by formalizing ways for companies to contribute to public national health insurance and private insurers, or to directly provide health services. While both companies and governments may eschew imposing taxes and/or mandating CSR contributions, government can provide incentives such as allowing the deduction of health-related costs from taxable income. What results is a “win-win-win” for private entities, patients, and government.

In Tanzania, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) in partnership with the Association of Tanzania Employers (ATE) is developing a cost-benefit analysis tool aimed at stimulating corporate investment in the health of Tanzania’s workforce. The tool and accompanying CEO engagement raises awareness on the benefits of workplace-provided health services. One such effort resulted in a trilateral MOU between GIZ, ATE, and Aviv Ltd. (a Tanzania-based subsidiary of global agri-business firm Olam International) in which Aviv Ltd. implements a workplace wellness program at one of its coffee plantations. ATE coordinates and provides a vital link to government, while Aviv Ltd. finances the provision of health information and services including hygiene, malaria, occupational health, and other services beyond HIV. ATE and GIZ have also developed a manual for workplace program coordinators available to interested private companies and their occupational health personnel (Deutsche Gesellschaft für Internationale Zusammenarbeit 2013). Such efforts demonstrate how making a robust case for health service provision results in positive return on investment, and they incentivize private companies to scale up their direct contributions to employee health or other community-wide CSR contributions.

3.3.4 Social and Development Impact Bonds

Social impact bonds (SIBs) and their offshoot, development impact bonds (DIBs), are in fact not bonds but rather a new form of partnership between the public and private sectors. As explained in a 2012 McKinsey report, SIBs are not debt instruments, which have defined maturities and interest rates, as well as stark consequences for failure to meet the terms (Callanan et al. 2012). In contrast, SIBs are partnerships between several stakeholders, governed through a set of contracts. These contracts define the terms of repayment, which are conditional on the achievement of defined and measurable social outcomes (Callanan et al. 2012). Private investors provide financing for programs designed to achieve defined outcomes. If the outcome targets are met, the public sector repays the investors with interest; if targets are not met, the investors may be repaid part or none of their original investment.

SIBs are an innovative way for government to raise private capital in order to pursue projects that would otherwise be unfunded. The funds raised from investors provide service providers with capital to initiate or expand a program, and to achieve measurable positive outcomes for health prevention and other areas of social provision. As discussed, SIBs are a results-based mechanism where financial returns to the private investors are made by the public sector on the basis of program success and improved outcomes for a specific population. If the project is successful, the government will repay investors with a return based on the cost savings the government enjoys due to the program's success (i.e., cost savings by reducing need for a particular curative service). It is important to note that the results-based structure in SIBs incentivize the investor rather than the program implementer, which will receive funding regardless of the outcome achievement. Thus, unlike other types of results-based financing, SIBs do not necessarily create incentives that drive programmatic success.

SIBs are attractive to both governments and private investors in that they provide governments with capital for social programs without risking additional public funds should the project fail. Governments only pay returns for successful initiatives, and at a time when those successes have realized savings (Rosenberg 2013). SIBs are likewise attractive to bond purchasers who benefit from both a financial and social return via a secure and stable financial instrument.

To date, SIBs have only been used in a handful of cases, primarily in high income countries. The first one was issued in 2010 in the United Kingdom to reduce recidivism among former prison inmates. Results on its success as a social intervention and financial instrument are still preliminary: while outcomes have improved, providers have not yet met the target rate for recidivism reduction, and investors have therefore not yet been repaid (Perakis 2014). Nevertheless, interest in SIBs among financiers and governments is growing in the United States and globally (Rosenberg 2012; Perakis 2013).

DIBs are similar to SIBs in that they are a type of payment-by-results agreement in which investors put money into an organization to pay for a social intervention that improves outcomes while accumulating savings, which are used to repay investors at a profit if the intervention proves successful. They differ from SIBs in that they are designed for countries where governments cannot yet afford to guarantee repayment of bond returns; these bond returns are therefore underwritten and paid by a third party (e.g., international donor) at the time when the social or development impact results are proven.

A recent report by the Development Impact Bond Working Group (2013) presents case studies on DIBs, all at different stages of the design and implementation process. One of the case studies, launched in 2014, is the U.K. Department for International Development's £1.5million (US\$2.4 million) DIB to reduce sleeping sickness in Uganda through the purchase of drugs that treat infected cattle as part of disease control (Mair 2014). Another example from Mozambique, unusual for its voluntary CSR aspect, is explored in detail below.

Malaria Performance Bond: Mozambique

DIF Option Definition and Context: The South Africa-based restaurant chain Nando's is working with Dalburg Capital to develop and launch a 12-year DIB called the Mozambique Malaria Performance Bond (MMPB) (Rosenberg 2013). The MMPB has not yet been launched, but it has generated significant interest in the development community. Current reports state that, with its partners, Nando's is setting up a trust and operating company, which will function as the intermediary and oversee the contracts over their 12 years (Devex 2014). Within its pilot area of Maputo Province, the MMPB target is to provide long-lasting insecticide-treated nets to 90 percent of the population most at risk for Malaria, and 85 percent of targeted areas with indoor residual spraying (Devex 2014). Repayment will include 5 percent interest if specified targets are met, while only half of the principal will be paid back if those targets are not met (Devex 2014).

Effectiveness and Sustainability: Reports indicate that Nando's is launching the DIB in 2014 (Saldinger 2013). The same source reports that investors include wealthy individuals and foundations, who will take on risk normally born by the government, and will provide up-front capital needed to scale the intervention (Saldinger 2013). Repayment to investors will in part come from mining industries such as Anglo American and BHP Billiton, with the implications that it is private enterprises, rather than traditional donors, who will step in to contribute and provide financial backing for this experiment (Rosenberg 2013). Nando's itself has also made significant contributions in leading the effort to move the MMPB from idea to reality, and is active in making the case for private investment into Malaria prevention (Saldinger 2013).

However, as of the publication of this report, the MMPB has not yet been officially launched, nor has a list of investors with clear commitments been released. There is also discrepancy in reporting about its scale, with one source stating that it will be worth US\$25-30 million (Rosenberg 2013), and another stating it will be worth US\$500-700 million (Patton 2014). Even if it is released in the near future, it will be many years before its efficacy can be assessed.

Governance and Efficiency and Macroeconomic Impact: Both SIBs and DIBs are complex arrangements. At this early stage in their development, partners around the world are still gaining experience and identifying best practice, and transactional costs remain high. The Center for Global Development and Social Impact, organizations that lead international understanding and know-how of DIBs, list the stages, including resource and expertise needs, of DIB design and development. Before implementation begins, stages include idea generation and scoping, building the business case including the financial model, and contracting procurement, and raising capital – all of which may require sophisticated skills and planning (Development Impact Bond Working Group 2013). The Center for Global Development and Social Impact recommend that in the near term, donors should understand and cover these costs as a way to develop new expertise and nurture a new market in DIBs (Development Impact Bond Working Group 2013). This investment may prove worthwhile beyond health financing given that development of DIB markets may also complement broader efforts to expand the financial industry in Mozambique.

3.4 Debt Instruments

Governments, like individuals, companies, and all other types of organizations, can borrow funding to pay for immediate needs, taking on debt to repay in the future. Funding to scale immediate needs can save the government later on, for example, disease prevention can eliminate the need for more costly treatments for patients in health facilities. It can also pave the way for economic development, for example, through infrastructure investments. However, accumulating debt is not always prudent for countries that already bear heavy debt burdens and have bleak prospects for reducing debt levels in the near term.

This section first considers several types of innovative loans, which can allow governments in low- and middle-income countries to borrow funding for health interventions without facing undue burden. Changing the terms of the initial agreement, through debt conversion and forgiveness programs, can also provide a way for external partners to allow low- and middle-income countries to focus the revenue they do raise on urgent health and other social needs, rather than on debt repayment.

Bonds are also a type of loan. In contrast to loans, which are typically made by one financial institution, financing for bonds can come from the general public as well as private enterprises. Because of this difference, bonds can be traded among financiers. One type of bond, which targets the diaspora community, is discussed in this section.

While technically not domestic according to the definition presented in Section 2.2, these innovative financing options are considered in this report to demonstrate how external partners, as well as individual and corporate bond purchasers, can unleash domestic funding effectively and without threatening recipient countries' fiscal health. These options can free government funds previously used for debt repayment, and thus markedly increase discretionary funds for governments to utilize in their national budgets or direct toward specific needs such as financing health projects.

3.4.1 Loans

Loans, and in particular concessional loans, have been a traditional source of financing for low- and middle-income countries for many decades. While a generic loan is made based on the market interest rate and a defined grace period, concessional loans are typically defined with philanthropic intent at below market rates, meaning with less interest for borrower to repay, and with longer grace periods (OECD 2003).

Despite these concessional terms, some low- and middle-income countries have accumulated significant levels of national debt. Commitments to pay down that debt can further constrain already limited governments from using domestic revenue for social investment. Moreover, some low- and middle-income countries face relatively high market interest rates (Financing for Development (F4D) and Pledge Guarantee for Health (PGH) 2013). For them, taking out new non-concessional loans to cover health care expenses, for example, given gaps in disbursement of donor funds, can raise the cost of delivering health care while accelerating debt accumulation in an unsustainable way.

Development partners, international finance institutions, and low- and middle-income country governments have worked out several options to address these challenges. Loan conversions, for example, convert the debt still owed to the lender into productive investments in health, as managed either by the country itself or by implementers such as the Global Fund through the Debt2Health program (see below). The buy down is similar to loan conversion, but refers to future rather than existing debt and is conditional on successful project implementation. To address the challenge of high interest rates, options such as the revolving credit line established by PGH with financial backing from USAID and the Swedish International Development Agency (SIDA) as well as participation by

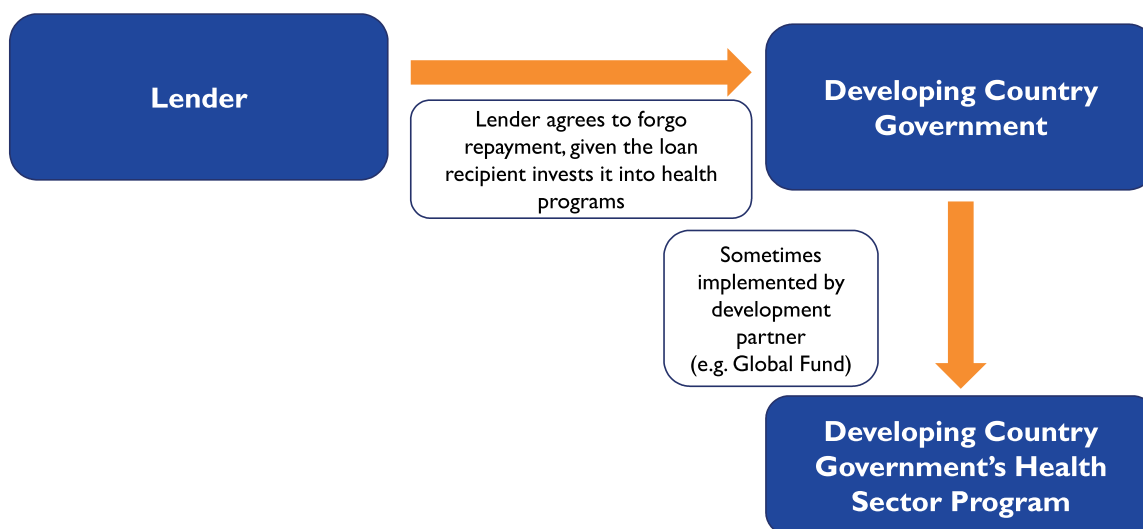
commercial banks and commodity suppliers allows low- and middle-income countries to access short term loans at below market interest rates financing for purchasing commodities in a timely and efficient manner (F4D and PGH 2013).

However attractive any loan package may be, countries and development partners will still need to conduct careful analysis of projected revenue and existing debt stock in order to ensure that the additional debt burden does not change their macroeconomic standing (Lievens et al. 2012).

Loan Conversion: Debt2Health, Heavily Indebted Poor Countries, and Multilateral Debt Relief Initiative

DIF Option Definition and Context: As Figure 7 demonstrates, a loan conversion involves the transformation of debt into funding that is invested into specific programs. After the lender agrees to forgo payment, the developing country government can use funds that would otherwise have been spent to pay down the debt to fund health programs. Debt2Health is a special case of a loan conversion in that the Global Fund is also involved as partner and deal broker. The funds that become available for country health programs are invested into the Global Fund, which manages the health sector program according to normal Global Fund standards and procedures.

Figure 7. Loan Conversion



Source: Adapted from Policycures (2014)

The HIPC program and the related Multilateral Debt Relief Initiative (MDRI) are also about converting loan payments into investments on health and education programs in order to reduce poverty (IMF 2014b). The World Bank and IMF initiated the HIPC program in 1996 in partnership with the so-called “Paris Club” composed of mostly industrial nations (IMF 2014c, Presbitero 2008). HIPC targets low-income countries that “face unsustainable debt burden that cannot be addressed through traditional debt relief mechanisms,” while at the same time have shown commitment to and engaged in strategic planning for debt reduction (IMF 2014b). After major industrial countries met for their G8 meeting in 2005, the IMF, the World Bank’s IDA, which offers concessional loans, and the African Development Fund (ADF) initiated the MDRI to supplement the HIPC program. MDRI targets countries with per capita income below US\$380, with the objective of helping them achieve the 2015 Millennium Challenge Goals (IMF 2014c). The MDRI focused on 100 percent debt relief for IMF, IDA, and ADF loans only, in part because the official debt for many of these countries was significant (Presbitero 2008).

Effectiveness and Sustainability: Some evidence points to the success the Debt2Health has had in shifting low income country participants' spending away from debt payments to social program investments. As of 2010, the Global Fund had brokered four Debt2Health agreements, in total worth about US\$210 million (Garmaise 2010). In one of them, US\$75 million owed to Australia by Indonesia was converted in 2010, with half invested in a Global Fund program to fight tuberculosis. Similarly, in the same year, US\$27 million owed to Germany by Cote d'Ivoire was converted, with half invested in a Global Fund program to fight HIV/AIDS (Taskforce on Innovative International Financing for Health Systems 2014). In another example, Germany made an agreement with Egypt to convert 6.6 million euros of debt, with half invested into a Global Fund anti-malaria program in Ethiopia (Taskforce on Innovative International Financing for Health Systems 2014).

The HIPC project and the MDRI seem similarly successful. The IMF (2014b) reports that HIPC countries' spending on debt payments was more than twice spending on health and education together before the HIPC program, and only a fifth of health and education spending after the program. Overall, as Presbitero's (2008) analysis in Figure 8 shows, levels of poverty reducing expenditure, including those on health, have increased over the period of HIPC and MDRI interventions. The total value of debt converted is also impressive: the MDRI alone has converted about US\$3.4 billion worth of debt since it began (IMF 2014c).

Figure 8. Increases in the Levels of Poverty-reducing Expenditure During HIPC and MDRI Period



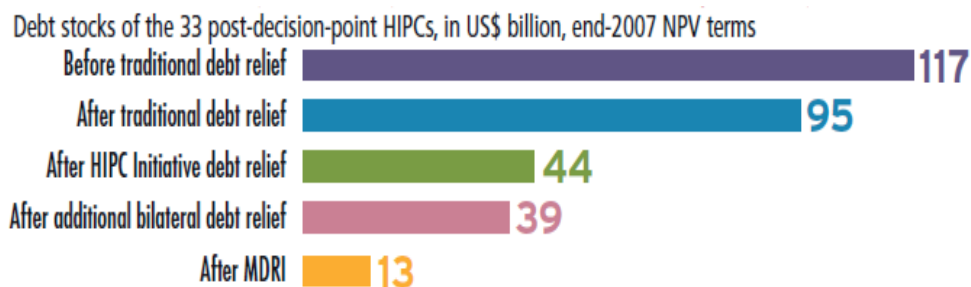
Source: Presbitero (2008)

However, as Kaddar and Furrer (2008) note, “a dollar of debt does not necessarily translate into an additional dollar of expenditure on poverty (let alone specifically on health).” For example, some countries may decide that reducing taxes, rather than increasing social spending, may be the better way to reduce poverty after a loan conversion (Kaddar and Furrer 2008). As with all DIF options, raising new revenue, or in this case repurposing it from loan payments to domestic purposes, will not mean additional resources for the health sector unless health is prioritized relative to other sectors and government spending needs. But ministry of health officials in many countries benefiting from loan conversion agreements are at a disadvantage: lack of knowledge about the process and timeline of loan conversion can leave them unprepared to advocate for resources.

Some HIPC and MDRI beneficiaries, such as Cameroon, track use of debt conversion funding separately in order to allay fears about this question. The control over funds comes at a price, however: introducing a parallel system for tracking makes less efficient use of public human and financial resources (Kaddar and Furrer 2008). Also, governments can simply reduce spending on health and education in other parts of the budget, given targeted nature of loan conversion funding, nulling the positive effect the loan conversion may seem to have on health spending (Kaddar and Furrer 2008). To some extent, this is similar to the Debt2Health system, whereby the Global Fund remains in control of the new funding available, thereby ensuring appropriate use of the funds but limiting the extent to which governments can have ownership over their own resources.

Macroeconomic Impact: Debt2Health, HIPC and MDRI have certainly reduced the debt stock for many heavily indebted countries. Figure 9 demonstrates this for the 33 HIPC and MDRI beneficiary countries that received full relief. Reducing indebtedness paves the way to eliminating barriers to poverty reduction and growth – not just increased spending on health and other social programs, but also because reducing “debt overhanging” lessens the burden on businesses and households throughout the economy as well as on the government (Presbitero 2008).

Figure 9. Reduction of Debt Stocks in HIPCs Receiving Full Relief



Source: Presbitero (2008)

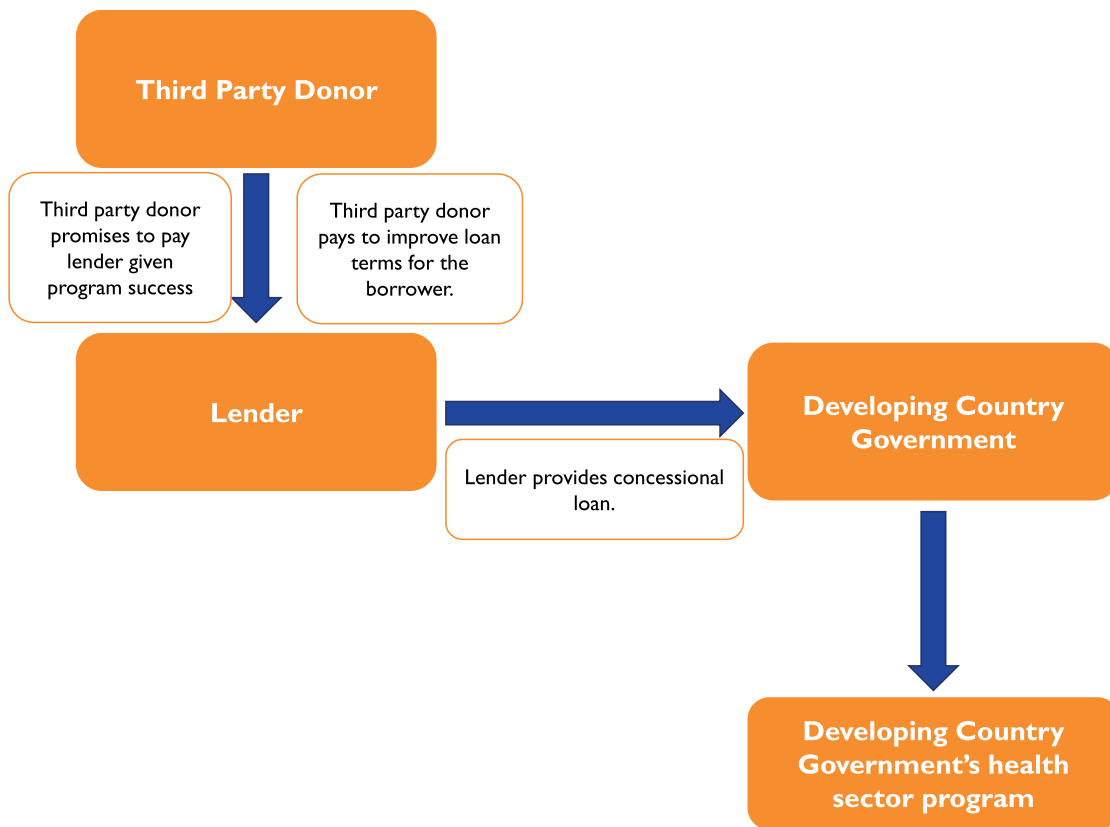
However, while the amount of debt converted is significant, not all creditors are participating in the effort to ensure sustainable borrowing and development. A joint IDA-IMF report (2007) indicates that non Paris Club creditors only provided about a third of the expected relief as part of the HIPC initiative. Of these 50 countries, only seven provide full relief, 22 partial relief, and 21 no relief (World Bank 2008). A host of factors can impede creditors’ ability and willingness to deliver relief. Some, such as Honduras and Uruguay, state that they are financially unable to provide the relief while other lenders, such as Columbia and Ecuador, are legally constrained because their central banks hold the debt. Political factors have pushed countries such as Libya and China to provide relief under their own initiatives. Other factors, such as the promise of new credit along with weak debt management capacity, may dampen debtor countries’ interest in debt relief (IDA IMF 2007). Economists Serken Arslanalp and Peter Henry summarize, saying “the danger is that [the 2005 G8 meeting declaration] may amount to a Pyrrhic victory: a symbolic win for advocates of debt relief that clears the conscience of the rich countries, but leaves the real problems of the poor countries unaddressed” (Presbitero 2008).

Buy Downs for Polio Eradication: Nigeria

DIF Option Definition and Context: In international development, buy-downs occur when a third party promises to pay back some or all of the interest or principal, or both, to the lender on behalf of the borrower (Results for Development 2013). Buy-downs can have a results-based component, whereby the third party promises to pay back part or all of the lender on behalf of the country borrowing the funds given successful implementation of the projects funded with the loan (Policy Cures 2014).¹⁶ Figure 10 demonstrates the institutional and financial arrangements that make up a buy down.

¹⁶ The term “buy down” can refer to other financial instruments related to mortgages that allow buyer to obtain lower rates for at least some period.

Figure 10. Buy Downs



Source: Adapted from Polycyures (2014)

The Global Polio Eradication Initiative, including WHO, Rotary International, CDC, UNICEF, and the Gates Foundation have partnered with international development banks and other donors to implement results-based buy downs for funding polio eradication programs in countries such as Pakistan and Nigeria, where polio remains endemic (World Bank 2012c). The buy down in Nigeria was first initiated in 2005. The loan, offered by the World Bank, was worth US\$28 million and was free of interest and long term. Its objective was to provide the Government of Nigeria with funding to purchasing oral polio vaccine. Additionally, the loan was tied to a commitment by the World Bank's partners – the Gates Foundation, Rotary International, and the UN Foundation – to “buy down” the loan given the success of interventions financed by the loan (Gates Foundation 2014). Funding for the buy downs came from a trust fund established by these partners, generating US\$120-140 worth of funding to invest in Nigeria and other countries as well (Gates Foundation 2014). A second loan of US\$95 million was provided to the Government of Nigeria under similar terms in 2012, after the number of polio cases fell from 1,100 to 62 between 2006 and 2011 (World Bank 2012). The Polio Eradication Initiative has extended similar financing arrangements to Pakistan (Global Polio Eradication Initiative 2011).

Pakistan has also made other types of buy down arrangements with donors and lenders in order to finance its polio eradication efforts. Unlike the buy downs described above, another buy down did not have a results based component and was meant to reduce interest rates. This loan worth US\$227 million came from the Islamic Development Bank (IsDB) with support from the Gates Foundation. This loan originated in part from the IsDB's ordinary funds, used to issue market loans (Islamic Development Bank Group Business Forum 2014). The Gates Foundation then committed to pay for the mark up associated with the use of ordinary funds as well as the administrative fees associated with leveraging the

IsDB's concessional funding. This commitment opened up more IsDB funding that could be used to finance projects at below-market rates, thus ensuring that Pakistan could use more of its own resources on the eradication effort (Islamic Development Bank Group Business Forum 2014).

Effectiveness and Sustainability: These innovative concessional financing options show the successful coordination that can occur between international development banks and philanthropic foundations – the one offering the low or no interest loan, and the other removing other financial barriers to countries' use of borrowed funding. They can allow the international community to facilitate sustainable borrowing by low- and middle-income countries while also helping to ensure that the funds borrowed are used for the urgent needs such as polio eradication for which the funds are intended.

Guarantee-Backed Loans: Ukraine

DIF Option Definition and Context: Guarantee-backed loans are loans that have the potential to increase the amount of funding external partners can use to support health and other development programs while also empowering fund recipients to smooth funding gaps by accessing credit that would otherwise be prohibitively expensive. While the conditional financing loans discussed above address challenges with sustainable debt financing through long-term loans, guarantee-backed loans, as implemented through the non-profit organization, PGH, provide another complementary system for short term loans, used to purchase commodities to bridge gaps in donor disbursements.

PGH provides the platform for a public-private partnership between bilateral donors, commercial banks, and developing countries to address a development finance challenge. USAID and the Swedish International Development Agency (SIDA) provide a \$100 million of annual credit, which is used to open a revolving credit line with commercial banks and other commodity suppliers (F4D and PGH 2013). USAID and SIDA guarantee 50 percent of all loans made to governments and other organizations that receive donor funding, which significantly lowers interest rates and makes the loans affordable to them. The affordable short-term financing allows governments to reduce stock-outs and their consequences: purchasing of high cost emergency products and higher unit costs from supplier due to payment delays and increased risk (F4D and PGH 2013).

Effectiveness and Sustainability: Because the average loan is six months, this revolving credit line can accommodate US\$1 billion of lending capacity each year (F4D and PGH 2013). PGH reports that 126 countries use this financial service (PGH 2014). The PGH 2013 report highlights several successful examples. In Ukraine, access to this short-term loan credit line significantly lowered the cost of drugs used to treat hepatitis C, which has high co-morbidity rates with HIV in Ukraine. The decrease in price made it possible to procure the drug through a Global Fund grant.

As with the loans discussed above, the funding generated through guarantee-backed loans is not additional but will ultimately be paid back by the government or other fund recipient. On the other hand, these debt instruments allow fund recipients to channel funds that would have been spent paying higher prices or higher interest rates on the drugs and doctors' salaries that are needed to improve health outcomes.

3.4.2 Bonds

Bonds are debt security instruments that governments, municipalities, and companies can use to raise capital while providing a return to the bond purchaser. Technically speaking, bonds are a loan provided to the issuer (e.g., national or local governments) by a range of private investors who hope to receive a return on investment as the bond matures. Government-issued bonds can benefit the public sector by providing immediate access to domestic funds for capital development or other large-scale projects and activities, especially those that open up revenue streams (for example, building a road using funding

raised through bonds can be repaid through the collection of tolls) (Callanan 2012). Governments may choose to issue bonds of varying maturity in order to attract both low- and high-risk investors, or may decide to waive or lower taxes on income and capital gains from the bonds in order to attract large corporate investors. Recently, the World Bank Group has also begun issuing bonds in local currency as a way to develop nascent capital markets in developing countries (World Bank 2014b).

An innovative type of bond that can be used to finance health sector development are diaspora bonds, used by governments from developing countries with extensive diaspora living in OECD and other developed countries to incentivize and attract members of the diaspora to support national development. Diaspora bonds are sovereign debt instruments, long-dated securities that are redeemable when mature (in contrast to foreign currency deposits, which are redeemable at any time). Countries value this type of bond because they are a stable source of revenue for infrastructure development and other long-term investment projects, and, in some cases, can be provided at rates with a lower country risk premium than established in global markets.

Bond purchasers can also benefit from these bonds; as with a charitable donation, buying this bond allows them to be patriotic and thereby support development in their country of origin. Diaspora bonds can also provide them with a chance to diversify their asset portfolio and reduce risk. For bond purchasers, the main risk is that their country will not be able to pay back the loan in the currency of the issued bond, when the currency is foreign. There is little risk, though, that their country will not be able to pay back in local currency, which, despite risk of inflation, may not be a bad asset to acquire for diaspora members with continuing financial or familial links. Similarly, currency devaluation would not be a high risk for these purchasers (Ketkar and Ratha 2007).

However, country experiences suggest that reaching migrant populations can be difficult, and convincing them that the bonds are safe and stable is even more challenging. For governments, diaspora bonds can be sustainable but require repayment as well as assumed economic growth and political stability.

As a purely voluntary form of revenue, diaspora bonds do not burden households who do not choose to participate. Also, the financing source in this case is not domestic, but foreign; bond purchasers are likely an economically stable share of the expatriot community with disposable income to invest in this way.

Diaspora Bonds: Nepal

DIF Option Definition and Context: Nepal issued diaspora bonds in 2010 and 2011 in order to raise funds for infrastructure development. Having a source of government-owned funds for development was particularly important for Nepal, which is heavily reliant on foreign aid for development. The 2010 and 2011 bonds had annual interest rates of 9.75 and 10.5 percent, respectively. Both were denominated in Nepalese rupees, had five-year maturities, and came with tax-free coupons semi-annually (Probst 2012).

The idea for implementing diaspora bonds was raised by the Nepalese Finance Minister during a budget speech. Then, after positive reception, they were issued by the Ministry of Finance and the Nepalese central bank, Nepal Rastra Bank, with minimal external assistance (Probst 2012).

Effectiveness and Sustainability: Both attempts at generating funding through diaspora bonds in Nepal were disappointments. In 2010, active diaspora bonds came to a value of US\$60,000, only 4.5 percent of the targeted US\$13.4 million, a target that already had been revised down from the original US\$93.8 million. In 2011, active diaspora bonds came to a value of US\$47,000, only 0.68 percent of the targeted US\$69.5 million (Probst 2012).

Nevertheless, it is estimated that overall savings by the Nepalese diaspora is approximately US\$1 billion, or about 8 percent of GDP in Nepal. Also, remittances into Nepal come to 23 percent of GDP, which is

thought to be a low estimate. These indicators show that Nepal does have the potential to leverage diaspora bonds more effectively. The 2010 and 2011 problems with yield likely lay in the way the bonds were constructed, promoted, and organized for sale (Probst 2012).

Analysts have outlined reasons why these issuances were not effective (Probst 2012):

- Nepal targeted a limited number of countries, including only two of the top 10 countries with the largest Nepali diaspora populations (Qatar and Saudi Arabia, excluding others such as India, the United States, the United Kingdom, and Japan).
- The period of bond offerings was too short, one week in the first round and 73 days in the second.
- Excessive regulations involved with obtaining a license to issue bonds prevented or de-incentivized remittance and other companies from promoting and selling the bonds to potential buyers.
- Technical details of the bonds and the mechanics of their purchase were overly complex and did not sufficiently ameliorate risk for buyers.
- Promotion of the bond lacked a clear statement for the ultimate use of the revenue, and little work was done to activate a sense of commitment and nationalism to the home country among potential diaspora buyers.

It seems reasonable to consider these funds would not displace other domestic funds; in the Nepalese context, whether or not they would displace foreign assistance for infrastructure development is hard to say definitively.

Governance and Efficiency: Successful implementation of diaspora bonds requires countries to have not only a large diaspora in OECD countries, but also reasonable public financial management systems (Ketkar and Ratha 2007). Over the last two decades, Nepal has experienced considerable political upheaval and its republic was established only recently, in 2008. Though the country does have an extensive diaspora in several OECD countries, including the United States, United Kingdom, and Japan, it may be that institutional capacity was not strong enough to implement diaspora bonds successfully. As a voluntary bond targeting a wealthy population, this mechanism does not have any negative implications for equity.

Diaspora Bonds: India

DIF Option Definition and Context: India issued diaspora bonds three times: in 1991, 1998, and 2000. The purpose of the issuance was shoring up exchange reserves to fend off balance-of-payment crises in India. As in Nepal, the diaspora bonds in India were implemented by the country's central bank, the State Bank of India (Gumede et al. 2012). In recent years, India has also been using appealing savings accounts terms in order to leverage the wealth of the diaspora to support development.

Effectiveness and Sustainability: In contrast to Nepal, India raised over \$11 billion through its diaspora bonds: 1.6 billion in 1991, \$4.2 billion in 1998, and \$5.5 billion in 2000 (Ketkar and Ratha 2007). This comparison shows that, in addition defining features of the bond, factors such as publicity and targeting are also critically important to effective implementation of diaspora bonds (Ratha 2011). It may be that other political and economic factors, including relative size of the diaspora, may also have influenced the difference in outcomes.

Governance and Efficiency: In its three bond issuances, India avoided some costs by not registering the financial instrument with the U.S. Security and Exchange Commission (SEC) for permission to sell bonds to diaspora investors in the United States, where there is a large population of Indian foreign nationals. India described the debt instruments as “foreign-currency deposits” rather than “bonds.” As a result, India not only circumvented a US\$500,000 fee and potential delay, but also avoided higher costs

and less flexible bond terms that SEC compliance would have required. Ketkar and Ratha note that if India were to issue bonds in the United States again, it likely would need to register with the SEC. However, given the increasingly permissive environment for accessing the diaspora in the United States and the success of India's past gains from diaspora bonds, it is unlikely that registration with the SEC will result in significant inefficiencies (Ketkar and Ratha 2007).

3.5 Other Domestic Innovative Financing Options

3.5.1 Lotteries

Lotteries, managed by both public and private actors, have long contributed to social investments in the United States and Europe. Historical experience from the 18th and 19th century in the United States shows that lotteries were widely used to raise government revenue when the tax base was weak, though they were banned from around 1900 to 1964 due to concerns that it targeted poor populations (Rychlak 1992). More recently, a privately run social lottery scheme in the United Kingdom generated 27 million pounds in 2011, the proceeds of which were given to charities and other organizations, including those with health related objectives (Good Causes – The Health Lottery 2013). Lotteries can also act as donors in and of themselves. For example, the Dream Fund of Dutch Postcode Lottery gave the Clinton Health and Access Initiative, along with its partner STOP AIDS NOW! 8.8 million euros (US\$11.5 million) in 2011 to initiate an aggressive HIV testing campaign in Swaziland, with the aim of bringing people living with HIV onto treatment sooner and lowering incidence of new infections (Clinton Health and Access Initiative 2011; Lievens 2012).

Today, stakeholders in low- and middle-income countries are also using lotteries to raise revenue for social investments, including within the health sector. The example below, from Kerala State in India, provides an example of a new lottery established by a local government to support a specific public health program and operated by an existing state lottery system.

Health Lottery: Kerala State, India

DIF Option Definition and Context: The Karunya health lottery of Kerala State, India, is one of seven weekly lotteries that is run by Kerala State Lotteries. It offers 10 million rupees (about US\$214,000) for first prize winners (Kerala State Lottery 2013). Lottery profit is used exclusively to finance the Karunya Benevolent Fund scheme, which subsidizes treatment expenses for underprivileged patients suffering from acute illnesses including cancer, hemophilia, heart, and kidney diseases, or in need of palliative care (Kerala State Lottery 2013).

Using a health lottery to fund a program targeting treatment or monitoring of chronic diseases can be understood in the context of the epidemiological and economic landscape in Kerala State. Though Kerala scores higher than the national average on most human development indicators including in health and education (United Nations Development Programme 2011), morbidity and chronic disease are continuing challenges. Similarly, though it has the lowest rural poverty in India (Biswas 2010) and its GDP per capita of US\$1,211 is higher than the national average of US\$862, Kerala's economy has stagnated in the past several years because of its reliance on remittances and tourism (Government of India Central Statistics Office 2013).

The health lottery was established and implemented through democratic processes in Kerala State. In February 2012, the cabinet of Kerala State passed a proposal to implement the Karunya Benevolent Fund scheme, with the lottery as its financing mechanism (Webindia 123 Feb 2012; Official Web Portal of Government of Kerala 2013). The Union Defense Ministry initiated the scheme later that month. The fund is managed by a Ministry of Finance committee, which is headed by a medical doctor at the Kerala

Medical Service Corporation, a state-owned hospital (Webindia123 2013). Providers accredited to participate in this scheme expanded to include nongovernment providers in December 2012 (Webindia123 Dec 2012).

According to a recent assessment, states in India occupy one of two polar positions on government lotteries. Seventeen states ban lotteries in order to avoid the social ills and risks associated with irresponsible gambling. Opponents argue that this policy pushes revenue away from public coffers into the black market, where it can fuel illegal activities including the drug trade. Kerala and 12 other states hold lotteries to supplement government resources for social sector development. A recent assessment found few studies on the pathology, prevalence, and patterns of gambling behavior in India – information that could guide policymakers in shaping gambling regulation to maximize social welfare. This discussion is particularly relevant as the national government is said to be considering legalizing gaming in order to raise revenue for public goods (Benegal 2013).

Sustainability and Effectiveness: After the first year and a half of implementation, the scheme provided about US\$19,000 while income from the lottery grew from US\$95,000 in the first year to over US\$400,000 in the second (Government of Kerala 2013). While the amount provided is marginal when compared to Kerala's 2011 public health expenditure of approximately US\$442 million, health funds generated through the Karunya Benevolent Fund have already provided benefits to 10,307 patients in need, and have paid to open dialysis units in 27 government hospitals (Government of India Ministry of Health and Family Welfare 2014; The Hindu 2013).

Because the Kerala health lottery was created for the explicit purpose of financing the Karunya Benevolent Fund (rather than supporting health sector initiatives more generally), the funds generated seem to be additional to other funding entering the health system from regular public allocations. However, literature on the earmarking of lottery revenue to specific social goods (e.g., education and health) includes mixed findings that show revenue as additional and as fungible (Rychlak 1992), making it impossible to be entirely confident about the additionality of health-targeted revenue in Kerala or other states with government lotteries that finance social development.

Looking solely at financial sustainability, using lotteries as a revenue-generating mechanism for health has great potential given the size of the lottery market in India – estimated to be around US\$2.6 billion. However, currently only 40 percent of lottery activity is legal with proceeds entering the government as tax or as revenue. The gambling market is even larger. Analysts estimate that legalizing gambling would bring in 2 percent of GDP as government revenue (Benegal 2013). These figures indicate that, all else being equal, the government could leverage this market for health and other areas of development with great effect.

At the global level, Lievens (2012) estimates that lotteries around the world generate about US\$50 billion in public sector revenue. Authors wonder whether there is space for new health-specific lotteries. It may be that, as with all DIF options, additional revenue raised by the government will not be allocated to health causes unless health is prioritized among other public funding needs.

Governance and Efficiency, Progressivity, and Macroeconomic Impact: This health lottery is run by the Kerala Lottery India, which has been operating since 1967 (Kerala State Lottery 2013). As such, it is unlikely that extra effort is needed to implement and monitor the health lottery.

Stakeholders in India are currently engaged in discussion about whether the benefits of state-sponsored lotteries outweigh the risks lotteries present to the population. A number of other countries, also confronting these ethical issues, have earmarked at least a small percentage of lottery revenue for the design and delivery of gambling addiction programs (Alberta Gaming and Liquor Commission 2014). As mentioned above, more information is needed on the specific demographics of lottery purchasing in Kerala to inform this discussion. Though successful in raising revenue, there is concern that these states

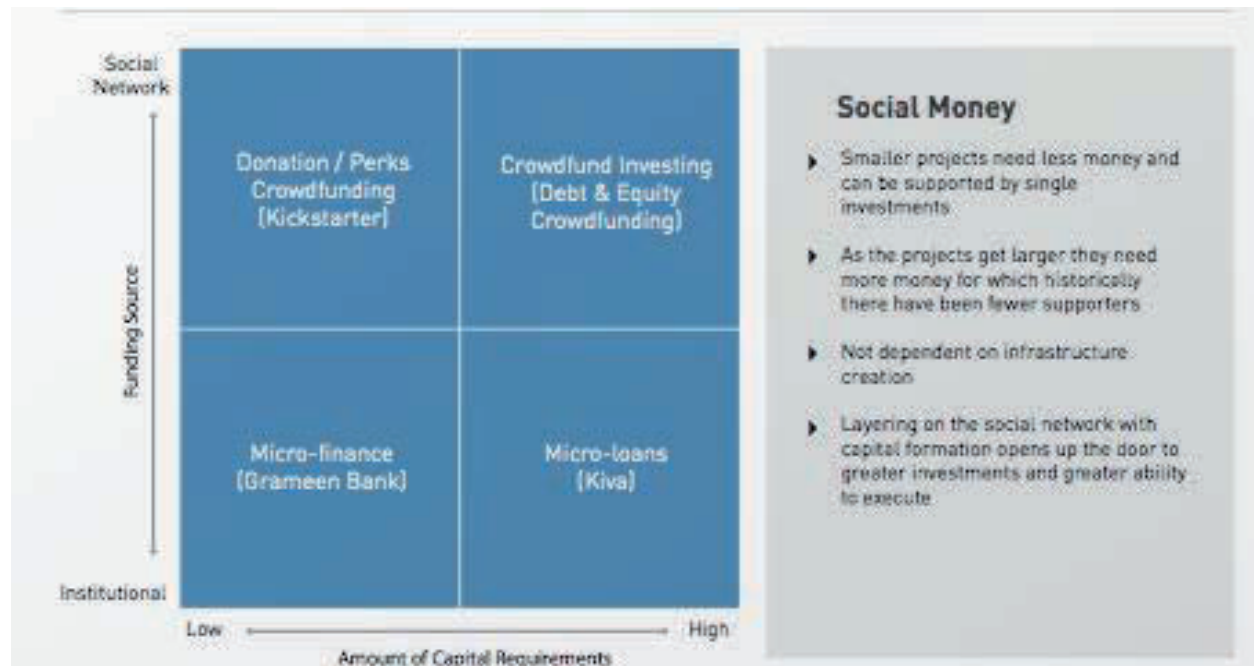
ignore the potential pitfalls state-supported lotteries may have on poor or middle-class purchasers and their families.

3.5.2 Crowd-Funding

Crowd-funding (or crowd-sourcing) is a largely Internet-based funding platform through which businesses and other organizations can raise capital via donations, contributions, or investments from a large group of people. It is premised on the idea that individual entrepreneurs, charities, NGOs, and businesses can generate a large amount of revenue by soliciting a small contribution from many investors, rather than seeking out loans or large contributions from a limited number of established donors or financial institutions. According to the World Bank (2013), although still largely a developed-world phenomenon, crowd-funding has developed into a multi-billion dollar global industry that could prove a critical source of capital for the aforementioned entities in the developing world. Success of crowd-funding among charities, NGOs, and social entrepreneurs confirms this platform could particularly lend itself to social and health-related financing efforts.

As shown in Figure 11, crowd-sourcing can be applied to projects with low and high capital requirements, with the main difference being whether funds are sourced from institutions, individuals in a social network, or a combination thereof. For example, crowd-funding through the Kickstarter social platform typically hosts projects with low capital requirement, and therefore can rely on numerous small donations from multiple individuals. By contrast, Kiva, a nonprofit organization that connects micro-loan financiers and borrowers, typically hosts projects with higher capital requirements. Multiple investors contribute to the Kiva platform; this allows entrepreneurs to solicit the loan directly from the Kiva institution, rather than interacting with multiple investors. Choosing the right crowd-sourcing option for a project thus requires an assessment of the project and its capital requirements, and then selecting between an institutional loan (i.e., Grameen Bank or Kiva) or a multiple investor donation or investment platform (i.e., Kickstarter or Kiva).

Figure 11: The Amount of Capital Grows with the Social Network



Source: World Bank (2013)

Of note, Kickstarter (and other crowd-sourcing platforms) have recently begun tightening restrictions on the type of health projects that can be funded, including those that are “heavily regulated” or “claiming to cure, treat or prevent an illness or condition” (Kickstarter 2014). This appears to be an attempt to minimize Kickstarter’s (and other platforms’) liability should projects lead to adverse outcomes, and will impact the type of health projects that can be pursued via these mechanisms. Despite these restrictions, crowd-sourcing may become a strong mechanism through which entrepreneurs can pursue financing for new health-related technologies or products delivery. Two relatively new online platforms – MedStartr and Healthfundr – were created with health care innovators in mind.

Started in 2012, MedStartr is a health care crowd-funding platform that helps health care innovators pitch and successfully fund their projects to a broad online audience. This dedicated health innovation crowd-funding platform has ten rules for projects it endorses, all of which must have definable and reachable goals (MedStartr 2014). There are three service options for projects seeking to participate, ranging from a maximum two hours of MedStartr assistance (a “facilitated” campaign) to full-service. Of note, for offering the service, MedStartr maintains a 5-12 percent share of the revenue handled through the platform (MedStartr 2014). MedStartr offers two types of campaigns: All or Nothing or KWYR (Keep What You Raise) (MedStartr n.b.). All or Nothing campaigns mean that the funds are yours only if you reach (or pass) your funding goal, with MedStartr keeping five percent of revenue raised. KWYR, the more popular (and safer) option (MedStartr n.b.), is precisely what the name alludes to – you keep what you raise even if you don’t meet your goal, minus eight percent of revenue raised which goes to MedStartr.

Another health care innovation crowd-funding platform is Healthfundr, which operates quite differently from MedStartr. Rather than focusing on small health innovation projects like MedStartr, Healthfundr is more interested in large investments for cutting-edge start-up companies in the health sector. The platform lauds itself as “an online platform to make investing in and building health startups more efficient, transparent, and accessible,” simply, “a better way to invest in health startups” (Healthfundr 2014). Healthfundr’s model is simple: accredited investors are able to choose where and how much they invest across a range of health start-ups ranging from health IT to patient empowerment. Health innovation start-ups hosted on Healthfundr get higher visibility, “more efficient capital raising,” and more connections (Healthfundr 2014). The platform claims to help a greater number of innovations reach market investors to see more returns, and patients to find more benefits (Healthfundr 2014).

A particularly relevant example of crowd-funding for health is the MedStartr-hosted project, “Building Health and Hope in Congo,” the first phase of nonprofit Channel Initiative’s Build Hope pilot project. The campaign raised \$2,166 (\$166 over its goal) to build a health clinic in the Mwenga territory of the Democratic Republic of the Congo (MedStartr n.b.). Another successful MedStartr project was “Saving Mothers: Partnering with Community Health Workers Globally.” The campaign for the nonprofit’s project to provide “free surgical treatment to underserved women” in the Dominican Republic exceeded its goal of \$4,500 by \$610 – raising a total of \$5,110 (MedStartr 2014c).

3.6 Summary Table

Table 2 consolidates the discussion of all the DIF options presented above, highlighting the key points particularly relevant for appreciating how health professionals may or may not want to take advantage of them. The last column presents a rough guide to the assessment based on all the criteria used. Readers should be cautioned that any final assessment depends in large part on country context, and the measures used in this column are subjective.

Table 2. Key Points from Assessment of DIF Options

Key: **Criteria 1:** Efficiency and Sustainability, **Criteria 2:** Governance and Efficiency, **Criteria 3:** Progressivity, and **Criteria 4:** Macroeconomic Impact

DIF Option	Key Points from Assessment	Criteria*			
		1	2	3	4
Tax on Income for AIDS Trust Fund	Low effectiveness in Zimbabwe but has potential in countries with larger formal sectors, stronger enforcement, and better guards against corruption.	×	√	√	-
Tax on Remittances	Good option for local governments seeking to fund specific programs for communities affected by the tax, but may become intolerable if there are already considerable fees on remittance payments.	√	√	×	×
Leveraging Dormant Funds	Worthwhile to do because there are few negative consequences, but will only produce marginal amounts of revenue.	×	-	√	√
Financial Transaction Tax	Can raise significant amount of revenue, and can control foreign investment with positive (monetary stability) or negative (reduced investment) outcomes depending on country context.	√	-	√	√
Mandatory CSR	Not effective in the short term, but may have long-term benefits if businesses begin to change behavior and become more socially responsible institutions as a result.	×	×	√	√
Value Added Tax	Ghana and others have effectively hypothecated increases to health needs, but tax tolerance will not support indefinite rate increases. Currently in fashion because considered a highly effective tax with relatively low efficiency loss. Exemptions for basic items such as food are essential to reduce burden on the poor.	√	×	×	√
Turnover Tax on Mobile Phones	Effective in raising significant revenue; however, it also negatively affects poor communities not only as a financial burden but also in the lost opportunities for other poverty reducing/health benefiting functions increasing mobile phone penetration brings.	√	√	×	×
Airline Levy	Effective especially when revenue pooled through UNITAID which improves efficiency of the commodity market globally. Countries can also use this option independently.	√	√	√	√
Excise Tax on Extractive Industries	Along with other extractive industry taxes, one of the largest sources of income for many resource rich countries, though as with all other DIF options only some part is allocated to health. Not relevant for other countries.	√	×	√	×

DIF Option	Key Points from Assessment	Criteria*			
Sin Taxes	Effective in raising funds as well as changing behavior in ways that improve health outcomes and improve productivity of the workforce. Resulting improvements in health outcomes also lessen demand for health services over time.	√	×	×	√
Catalytic Public Investments	In Lao PDR, the hydroelectric dam will lower costs of energy, improve productivity of businesses, and raise living standards of households which gain access to electricity. But the environmental impact is controversial. Countries might consider other similar projects with less environmental impact, even if returns are not quite as large.	√	√	×	√
Liberalization of Health Service Delivery	Good way to raise a small but meaningful amount of funding at the facility level, as long as there are clear and enforceable exemptions for the indigent and other vulnerable groups.	×	√	×	√
Voluntary Corporate Social Responsibility	Can raise small but targeted funding used to improve health status for workforce and surrounding community.	×	√	√	√
Development Impact Bonds	Still too early to assess definitively because no DIB has been implemented yet. Indications are that DIBs will require significant financial and technical resources to administer but investment in them may pay off.	?	×	√	√
Loan Conversion	Good way for donors to allow country governments to focus their revenue on social projects rather than on debt repayment, but there is a finite amount of debt to convert.	×	√	√	√
Buy Downs	As with loan conversion allows governments to focus their revenue on social projects. As a results-based approach, it has added benefit of incentivizing governments to achieve results and spend loan funding productively.	×	√	√	√
Guarantee-Backed Loans	Good way for development partners to facilitate access to short-term loans for commodity purchasing, saving governments expecting donor funds money that otherwise would be spent on high interest rates and drug prices.	×	×	√	√
Lotteries	Effective in Kerala State in funding a specific government program, though marginal relative to total health funding needs. May have potential for generating more revenue but if scaled up, some revenue gained should be used to invest into addressing problems with gambling addition lotteries may feed.	×	√	√	√
Crowd-Funding	Can allow entrepreneurs, NGOs, and others access to invest in innovative ideas that otherwise would not have any backing, and in this way provides an important, though, small piece of the puzzle.	×	√	√	√

4. CONCLUSIONS

This report is intended to promote the understanding of DIF options for health professionals in the public and private sector, including health planners in the ministry of health, managers of health insurance schemes, and other stakeholders of health system reform who are involved in designing and implementing health programs and in developing health sector strategy for the short and long term. To this end, it analyzes global experiences at national and subnational levels in enacting and implementing DIF options, in each case considering various aspects of an option's implementation: i) the context relevant for its adoption, ii) the amount of revenue that it has raised and has the potential to raise in the future, the burden it places on the poor relative to other socio-economic populations, iii) the efficiency with which its revenue is collected, the strength of its enforcement and the extent of transparency in its governance, and finally iv) its macroeconomic impact, both positive (e.g., workforce productivity gains through a tax on cigarettes) and negative (e.g., loss of economic value at the national level). These country-specific analyses are then placed within the context of traditional financing for health and resource mobilization in the country. The synthesis of these analyses is intended to allow readers to draw upon lessons learned from other countries as they substantiate and localize discussion on revenue generation strategies and other plans for sustainable health financing.

Country examples highlight the important point that enacting any of the DIF options discussed involves making trade-offs. No one option can optimize all assessment criteria, and an option's problematic aspects will be exaggerated if a country relies on the option too much. Instead, governments and their private sector counterparts need to adjust the mix of options in a way that optimizes revenues and minimizes distortions, increasing total amount of revenue to the extent possible given tax tolerance of the population and political and economic realities.

The examples in the section on taxes in this report illustrate this point. Taxes targeting business, be they taxes on income or on goods and services, have the potential to generate revenue – the more so with greater sophistication in tax administration and stronger governance. Revenue generated may support public services of interest to the business community, such as roads, schools for educating the workforce, and health facilities to keep that workforce healthy. However, at the same time, when too high, the burden they inflict may affect businesses' ability to sell exports in competitive external markets, contribute to economic growth and diversification, and generate employment – all of which are important to the country's long-term growth and typically an important component of the national development strategy. Also, after a tax rate has reached some maximum threshold, businesses as well as consumers will no longer tolerate the tax, which may incentivize movement of business away from the formal and into the informal sector – bad for both businesses and government. It might also carry political implications – loss of political support and the likelihood that new leadership may undo revenue-generating policy previously established. Hence, discussion about increasing taxes targeting business to generate new funding for health should depend on tax tolerance and political realities, as well as the existing level of total tax burden.

Other taxes should be used or increased with care. Taxing remittances, for example, may generate significant resources at local levels, but may also result in lost income for those most in need and for whom remittances may provide a lifeline out of poverty. Remittance taxes, along with other types of taxes, should also be pursued with an eye to efficiency: as discussed in the report, transaction costs due to regulations for entities managing the flow of remittances can also carry significant costs, with further lost income for poor households; the global community has an important role to play in alleviating this

burden (Dalburg Global Development Advisors 2013). Revenue from these taxes, along with others options such as lotteries that can substantiate local government revenue, may be better tolerated, and thus more sustainable, when linked to the financial support of specific local public goods that can improve the lives of those whose individual income is forgone.

Similarly, while debt instruments can also generate a significant amount of revenue, low- and middle-income countries – especially those with an already significant debt burden – must pursue these instruments with extreme caution. Donors can play an important facilitative role in unleashing domestic funding, using various types of concessional loans and associated financial instruments such as loan conversions and buy downs to allow countries to focus their spending on social spending including for the provision of health services. However, donors must also work with countries to assess national fiscal health and debt sustainability, and be sure that any new debt they offer will not satisfy immediate thirst while endangering long-term interests of the government and its citizens.

Though they may also impact the poor, sin taxes and some other excise taxes show promise and should be pursued to a greater extent in the developing world. This is particularly true of alcohol and tobacco taxes, on which there is significant international experience to draw. While still at an experimental stage, sugar and fat taxes are also worth pursuing – and countries across the income spectrum are doing so. When revenue from sin taxes are used to fund health promotion programs, as in Thailand, the tax can act both as the carrot (more public services for health promotion) and the stick (higher prices for “bads”), increasing the potential for making a meaningful impact on the population’s health status, while also generating revenue. This linkage between increases in sin taxes and health promotional activities may also make the tax more tolerable, and thus more sustainable, for the population, as with taxes on remittances and lotteries.

Beyond taxes and debt instruments, increasing private sector contributions to the financing of health services provides a number of complementary options to health financing, though they also come with their own trade-offs. Catalytic public investments, as in the hydropower project in Lao PDR, have the potential to generate significant revenue, but the benefit of additional revenue must be weighed against any human or environmental impact that may set back progress toward greater equity and sustainable development. DIBs, like taxes on sugar and fat, are still at an early stage of development. Nando’s efforts in Mozambique to set up a 10-year DIB for malaria prevention also may have the potential to generate significant revenue, though this has yet been demonstrated. However, at least in the near term – until there is more global experience and expertise from which to draw – evidence indicates that DIBs require highly sophisticated technical management that may only be replicable in specific contexts.

Other options promoting private sector participation, such as voluntary CSR and liberalization of revenue generation at the health facility level, may generate revenue in an amount insignificant at the national level but that can, in the right hands, be used to improve service quality and access. For example, wellness programs coordinated by the ATE are designed to benefit bottom lines of participating employers while also ensuring better, more productive lives for their employees. Though these programs may not account for much when compared with other public programs, their local design has the potential to affect real health impact in the workplace or at the community level. Similarly, liberalization of services in Ethiopia did not generate a lot of money relative to total national health spending, but the effects of using highly localized revenue dramatically improved health facility infrastructure investments, which may have improved service quality for beneficiaries.

Given understanding of these trade-offs and how they interact with contextual factors, the analyses of country experiences with DIF options show that DIF options can supplement traditional health financing in low- and middle-income countries, with improved domestic ownership over and sustainability of health financing. With these analyses in mind, government actors in low- and middle-income countries should invest in strategic thinking about health resource generation. Such strategic thinking should

develop through an open and collaborative environment for multi-sectoral collaboration and with an awareness of private sectors strengths. Importantly, it should also involve consideration for national strategic plans with which health resource generation strategies need to align.

Some may question the feasibility for health professionals reading this report to move new ideas about DIF options into action. Indeed, the political process for drafting, garnering support for, enacting into law, and implementing DIF and other options is complex and highly localized. Discussion of DIF options in this report is not intended as a prescriptive list from which health professionals can independently make selections, but rather as a way to provide insight into the DIF options themselves as well as a framework for continuing, and localizing analysis of them. This type of discussion and analytical process will serve a range of health system stakeholders well as they contribute to the effort to make the health system more sustainable and equitable, gradually filling the resource gap while protecting households from an excessive burden of out-of-pocket spending.

Others might also question the ultimate value of raising additional resources for health if those resources are not used wisely. This report emphasizes the fact that the value of additional resources for health is predicated on the following: i) new funds are used to effective ends, such that health investments made with them result in improved health outcomes for the beneficiary population; ii) new funds are used in a technically efficient way, such that inputs purchased with them produce the maximum potential amount of high quality services; and iii) new funds are allocated efficiently, such that priority needs, especially those of the poor, with high impact receive sufficient investment relative to other types of investment. Only in meeting these conditions can value-for-money be achieved and will the cost of generating new resources be worthwhile.

It is also important to note that initiatives to raise additional revenue are rarely considered in isolation but rather are themselves typically part of a larger health system reform, which likely has implications for the efficiency and effectiveness of health system spending. For example, Ghana's VAT rate increase occurred in the context of the establishment of the NHIS, which introduced new institutions to manage funds and purchase services. DIF options with a results-based component (e.g., buy downs) can themselves contribute not only to more resources generated but also to improved effectiveness and efficiency in the use of those resources. Also, though not discussed in this report, reforms that address inefficiency within the health system are themselves capable of "raising" resources in that they can produce savings then available for more productive purposes. As the World Health Report 2010 clearly states, all countries, no matter what income level, can and should engage in reforms to improve efficiency of health financing (WHO 2010).

In sum, as international assistance for health in low- and middle-incomes levels, country governments and their private sector partners can and should pursue options that can gradually increase available domestic resources for health as part of comprehensive health system reform in alignment with national development objectives. Even those countries that may need to remain donor dependent in the short term should begin thinking and setting in place the institutions and plans to generate more sustainable resources from domestic resources in the future. The first step is careful analysis of the pros and cons of available options given other countries' priorities and experiences. Governments can then to consider how DIF options including those presented in this report might play out in local contexts. Using this type of process to develop a robust resource mobilization strategy can guide actors – public agencies, civil society, private partners, and donors – along a pathway toward increased health system sustainability, local ownership, and most importantly, strengthened health outcomes for their citizens.

ANNEX A: OPTIONS FOR REVENUE GENERATION: TABLE OF PROS AND CONS

As a supplement to the assessment of country experiences with DIF options, this annex presents a table with higher-level notes on options for generating resources for health, both traditional and innovative, domestic and foreign, and public and private. It encompasses some of the material in Chapter 3, placing DIF options within a larger context of revenue raising for health as a whole. Unlike Chapter 3, this annex includes some traditional options, such as out-of-pocket spending and prepayment for private and community-based insurance.

In its assessment of revenue-generating options, this annex compiles considerations that originate in economic theory as well as literature documenting experiences in developing countries. It is important to note that academics and practitioners remain engaged in a lively debate on the assessment of these options as they interplay with other components of public policy and the economy. The content of this annex therefore should be treated as a guide to understanding these options rather than a definitive assessment. Though not definitive, this discussion, as with that in Chapter 3, can be useful for readers who participate in the selection, design, and implementation of DIF options and need a broader understanding of revenue generation.

Table A-1. Table of Revenue Generation Pros and Cons

A. Pros and Cons of Taxes on Income and Profits

Assessment Criteria	Pros and Cons
Definition	<ul style="list-style-type: none"> Income tax applies to a certain percentage of the income earned by corporations and individuals (i.e., personal and corporate income taxes). Income tax applies to income of all kinds, including wages and investment dividends. Trends: income tax, especially the personal income tax, accounts for a small part of tax revenue in developing countries, in contrast to developed countries. However, corporate income taxes have accounted for a larger percentage of government revenue in developing than in developed countries.
Effectiveness and Sustainability	<ul style="list-style-type: none"> In developing countries, effectiveness depends on the size of the formal sector (where employees have regular wages and hours) because personal income tax in developing countries is largely drawn from formal sector employee wages. Effectiveness also depends on GDP per capita: the larger the formal sector and the higher GDP per capita, the more income there is to tax. Effectiveness of income tax depends on the ability to reduce noncompliance/tax evasion. Developing countries lose substantial funds (estimated \$50 billion) annually from non-compliance from individual income taxes (Tax Justice Network 2005 in IMF 2011), and many countries struggle to enforce compliance with state-owned enterprises and multinational corporations. Above a “peak tax rate,” governments will no longer gain extra revenue by increasing the income tax rate. This idea is captured in the “Laffer Curve” which postulates that taxes at 0 and 100 percent rates will produce nothing, and that some rate in the middle will maximize public revenue. The reason is that corporations and individuals will not want to generate

Assessment Criteria	Pros and Cons
	<p>additional income since they know they will not keep a large portion of it. While this theory is likely an exaggeration of reality, there is general agreement about this relationship between tax rate and revenue. However, there is no consensus on how to estimate the peak rate, which may be based on context and overall tax tolerance in the population.</p> <ul style="list-style-type: none"> • Political pressure to reduce corporate income tax, provide tax holidays, or establish no-tax zones can reduce effectiveness of the corporate income tax as compromises will cut into revenue gains.
Governance and Efficiency	<ul style="list-style-type: none"> • Efficiency depends on the country's capacity to enforce compliance. The greater that capacity, the more revenue the country can raise for each dollar spent to collect it and enforce compliance. • Improving efficiency may involve not just making a financial investment in enforcement, but also political capital needed to oppose the entrenched interest groups.
Progressivity	<ul style="list-style-type: none"> • The individual income tax does not burden poor, informal sector workers. If revenue gained is spent in support of these workers, the income tax redistributes funding to these populations. • Income tax design can impact the level of progressivity: the tax is increasingly progressive when the tax rate increases as taxable income increases. • Enforcement and implementation can also affect the progressivity: in developing countries, the evasion of taxes by wealthy individuals is the norm, and many large companies, including state-owned enterprises and multinational corporations, are expert at evasion. As a result, the income tax falls on less-wealthy wage earners and smaller companies. • In competitive markets, companies will bear the burden of the corporate income tax because if they raise the prices on consumers, consumers will buy similar products from other companies; in noncompetitive markets, however, consumers will bear the burden of the corporate income tax because companies will raise prices to pass the tax to them. When companies bear the burden, they may or may not reduce wages for workers, depending on labor markets and regulations.
Macroeconomic Impact	<ul style="list-style-type: none"> • The income tax essentially taxes a “good” thing, that is, working (personal income tax) or productive enterprise (corporate income tax). Some economists argue that the income tax essentially punishes workers and employers for making positive contributions to the growth of the economy and should not exceed a certain level without risking a negative drag on productivity (given disincentive to work and invest as the tax increases) and competitiveness in global markets (given burden of tax on companies operating in competitive markets, as discussed above). • Higher corporate income tax can reduce “business friendliness” of a country and thus deter foreign investment. • Higher corporate income tax can counter other macroeconomic efforts to nurture fledgling industries and diversify industrial makeup to protect against economic shocks. • Raising the corporate income tax may increase the size of the informal sector because firms can decide not to participate in the formal economy. Nonparticipation will mean that these firms will not be able to use official financial sector resources, such as borrowing large amounts of funding for investment – easy to forfeit for sectors that need less investment cash and in countries with underdeveloped financial sectors.

B. Pros and Cons of Value Added and Sales Taxes

Assessment Criteria	Pros and Cons
Definition	<ul style="list-style-type: none"> • VAT is a tax paid at every stage of the supply chain including at the last point of purchase. • Sales tax occurs only at the last point of purchase.
Effectiveness and Sustainability	<ul style="list-style-type: none"> • VAT and sales tax, especially VAT, are becoming a “robust” source of general tax revenue in many developing countries and account for 25 percent of all government revenue raised in sub-Saharan Africa. It is considered more effective than the alternatives for developing countries. • Effectiveness depends on level of income: the higher GDP per capita, the more goods people will buy and the more revenue can be raised. • The degree to which developing countries rely on VAT depends in part on the country’s economic openness, as openness implies that countries have reduced or eliminated taxes on trade and replaced them with VAT. • VAT is imposed on imports as well as domestically produced products and inputs. This means that its implementation is in part reliant on the customs administration, as well as the quality of coordination between domestic industry and customs. See below section on trade tariffs for more information.
Governance and Efficiency	<ul style="list-style-type: none"> • Efficiency indicators show that developing countries perform significantly worse than developed countries in collecting VAT. The IMF argues that there is substantial room for improving efficiency if countries move toward a simpler designs that will reduce compliance costs. • IMF recommends a high threshold level in the design of the VAT – set where “the collection costs saved are balanced against the revenues lost” (IMF 2002). At such a rate, despite revenue lost from the threshold, the government will save in administrative requirements. However, some countries continue to set threshold levels below IMF recommendations. • Tax collection is easier at the border, which is one reason that VAT performance correlates with level of trade. • In an effort to ensure that VAT does not become a tax on exports, refunds can be provided to exporters. Though worthwhile to do, this policy will require significant administrative effort to ensure compliance. • IMF (2011) argues that “VAT introduction can catalyze improvements in tax administration.”
Progressivity	<ul style="list-style-type: none"> • Consumption taxes are, as their name indicates, imposed on the consumer. Theoretically, this means they are more regressive than the income tax because the rich will pay the same amount as the poor. However, recent research shows that income tax is not much more progressive in developing countries, given the way it is implemented. • The level of burden on the poor will vary depending on whether essential goods such as food staples are excluded or not. Tax designs with higher rates applied to luxury items will also be more progressive. • VAT will never be very regressive in developing countries, where the tax is not enforced in rural, poor areas, may have exemptions on items purchased by the poor (e.g., some food products), and will likely establish a size “threshold” to exempt small and likely poorer enterprises and those who purchase their goods.
Macroeconomic Impact	<ul style="list-style-type: none"> • Generally thought to carry less economic cost than the alternatives.

C. Pros and Cons of Trade Tariffs

Assessment Criteria	Pros and Cons
Definition	<ul style="list-style-type: none"> Trade tariffs (aka customs duties) are applied to goods passing through political borders (typically imports). Trend: in sub-Saharan Africa, trade tariffs were a primary source of income for governments. These tariffs have been gradually replaced by other consumption taxes, but still account for a quarter of tax revenue in sub-Saharan Africa.
Effectiveness and Sustainability	<ul style="list-style-type: none"> Though trade in services is a rising area of international trade, and one outside the scope of trade tariffs, trade in goods is projected to continue increasing. Trade tariffs are thus likely to remain a significant source of income for developing countries.
Governance and Efficiency	<ul style="list-style-type: none"> Proliferation of regional trade agreements adds burden on the customs process because a range of rates and rules must be applied appropriately depending on characteristics of the goods. Reforms to reform incentives for customs administration officials can do a lot to reduce leakage of revenue due to corruption. However, the IMF states that to date many developing countries still have a ways to go in pursuing these reforms. Smuggling – not paying taxes on goods and services that cross the border – will occur when there are trade tariffs. Increasing tariff rates may increase the incentives to smuggle. These taxes can be politically attractive because they protect domestic producer groups.
Progressivity	<ul style="list-style-type: none"> Trade tariffs result in wealth transfer from consumers to producers; with tariffs in place, local producers, facing less global competition, can charge higher prices which consumers will pay.
Macroeconomic Impact	<ul style="list-style-type: none"> Results in economic loss given that the additional value gained by producers who can charge higher prices is smaller than the cost to consumers purchasing higher-priced goods. Trade tariffs can artificially protect local industries, which may reduce their incentive to increase productivity; eventually, this protection will make them less competitive in a global market, participation in which is necessary for strong long-term growth. If the goods taxed include goods sold to industries, rather than consumers, those “downstream” industries can be negatively affected by the higher prices, and this may affect employment in those industries. Trade tariffs may incur reciprocal tariffs that affect domestic industry’s ability to export. Many economists argue that trade liberalization (requiring reduction or elimination of these taxes) will lead to long-term benefits for the country’s economic growth, labor markets, and competitiveness. However, the benefits may not be realized immediately and may be distributed unevenly across and within countries. For noncompetitive industries in developing countries facing global competition, short- to mid-term transition will likely involve layoffs as industries go bankrupt or restructure to become more productive. Bankruptcy and restructuring will also imply a decrease in revenue from those domestic firms through other types of taxes (e.g., corporate income tax). Some evidence shows that the transition away from dependence on trade tariff revenue has been and continues to be difficult for many developing countries, and may in part explain the slow rate of progress in tax revenue generation. For “infant” industries that have not yet taken root in the country, trade tariffs can provide needed protection from external competition at a vulnerable stage of development and thus support efforts to diversify and expand industrial sector. Other trade tariffs may be beneficial, for example, in maintaining an adequate level of food security.

D. Pros and Cons of Excise Taxes

Assessment Criteria	Pros and Cons
Definition	<ul style="list-style-type: none"> Excise taxes apply to specific goods such as tobacco and alcohol products as opposed to VAT and sales tax, which applies to all goods, with specified exceptions. Excise taxes are distinct from trade taxes in that they apply to goods bought and sold within the country. Common goods associated with excise tax include tobacco and alcohol products, fuel, cars, and mobile phones. Trends: the importance of these taxes varies regionally, playing a larger role in Asia and South America and a smaller role in sub-Saharan Africa, the Middle East, and Central Asia.
Effectiveness and Sustainability	<ul style="list-style-type: none"> Effectiveness will depend on how sensitive consumers are to variations in the prices of the goods: if consumers are not sensitive, then there may be large potential for generating revenue; if consumers are sensitive, then the increase in price associated with the tax will reduce demand and hence the tax revenue. Earmarking this revenue toward health may be challenging politically, even if a great deal of revenue is generated.
Governance and Efficiency	<ul style="list-style-type: none"> Administration of these taxes is often concentrated among the few companies that produce the goods in question. Different rates for excise taxes among neighboring countries can create the incentive for smuggling, with likely loss of revenue as a result. As with the VAT, effectiveness of revenue collection is in part reliant on the integrity of the customs administration, where bribery and corruption can result in significant loss of revenue.
Progressivity	<ul style="list-style-type: none"> Consumption taxes are, as their name indicates, imposed on the consumer. Theoretically, this means they are more regressive than the income tax because the rich will pay the same amount as the poor. However, recent research shows that income tax is not much more progressive in developing countries, given the way it is implemented. The level of burden on the poor will vary depending on whether essential goods targeted are consumed by poor populations. Excise taxes targeting luxury goods, mostly consumed by wealthy consumers, will be more progressive than those, like fuel, that will likely impact everyone equally.
Macroeconomic Impact	<ul style="list-style-type: none"> Macroeconomic impact will likely vary depending on the good targeted. Excise taxes on “bads” (i.e., sin taxes) may result in increased productivity for the workforce, given changed behavior and its effect on health outcomes. Excise taxes on intermediate goods (used as an input to production), such as fuel, may increase the cost of production and put a weight on economic activity. Excise taxes on mobile phones may reduce penetration of mobile technology, limiting the potential programs for poverty reduction and development that use this technology to reach poor populations.

E. Pros and Cons of Taxes on Large Extractive Industries

Assessment Criteria	Pros and Cons
Definition	<ul style="list-style-type: none"> Revenue generation from large extractive industries can take many forms including corporate income tax, rent tax, and royalties. Economic rents are payments to the producer in excess of the returns to productive economic activity (including all costs and normal investment return). Industries affected include mining and petroleum. Taxation of small “artisanal” extractive industries, in many ways (environmental/legal) more similar to agriculture than to large extractive industries, likely require different taxation approach.
Effectiveness and Sustainability	<ul style="list-style-type: none"> Countries with a large extractive industry sector tend to rely heavily on resource-based revenue (over 50 percent in countries with petroleum reserves and over 20 percent in countries with mining industries). Rents are common for extractive industries, and governments can arguably tax a large part of the rent without making these industries less profitable. While they can often generate significant amounts of revenue, the exact amount is volatile and unpredictable. They also require payment of large “sunk costs” early on, before any payoff in the form of revenue is possible. Effective taxation of large multinational corporations or state-owned enterprises involved in the extraction industry can be difficult: some multinational corporations have sophisticated techniques for tax evasion – sometimes more sophisticated than the government tax collection system – and state-owned enterprises may have political means to “abuse or ignore the tax system” (IMF 2011). Multinational corporations may be more sophisticated than host government in tax issues; state-owned enterprises can be politically powerful. There is speculation that sub-Saharan Africa has a significant amount of undiscovered natural resources that can eventually support industry and hence taxation. Design of fiscal scheme can affect potential amount that can be generated. When tied to price, the government will get a lot of revenue when prices are high, but is also more at risk when prices go down, which may negatively impact progressivity of the tax.
Governance and Efficiency	<ul style="list-style-type: none"> Should theoretically be the same as efficiency in generating revenue from other industries, but it often is worse in developing countries, with overly complex regulations and fragmented administration, among other issues. Facing the challenges with enforcement and the dangers of corruption is part of implementing extractive tax schemes. These issues are present with regard to both private and state-owned enterprises. Because of their mixed public-private ownership, maintaining transparency can be particularly difficult with state-owned enterprises, given potential unclarity about the roles and responsibilities of different government agencies. Uncertainty about prices as well as extraction-specific conditions (geological and environmental), input costs, and political risk color all aspects of government-investor relations, including tax collection and enforcement.
Progressivity	<ul style="list-style-type: none"> Generally progressive in that most of the goods produced are likely exported and do not fall on domestic consumers.
Macroeconomic Impact	<ul style="list-style-type: none"> Dependency on revenue from extractive industries is often correlated with low transparency with regard to public accounting of revenues. Countries with large extractive industries will often face other development challenges such as lower growth of more productive, downstream industries (aka the “resource curse”), the result of monetary, governance, and other factors. Because they are more reliant on the financial sector for large investments needed, they are less likely than other types of industries to move out of the formal sector given increases in tax rates. Environmental issues and concerns associated with extraction may be sidelined with the potential for significant revenue and the engagement of major political powers in public and private sectors.

F. Pros and Cons of Payroll Tax for Social Health Insurance

Assessment Criteria	Pros and Cons
Definition	<ul style="list-style-type: none"> • Mandatory payroll tax, paid by employers and employees when paying and receiving salaries. • Revenue from this tax is clearly linked to a specified benefits package and is typically managed by an insurance fund, typically at least somewhat independent from the government.
Effectiveness and Sustainability	<ul style="list-style-type: none"> • This is effective and sustainable way to generate resources; however, in many developing countries, the amount generated through this tax is insufficient to support the program, particularly with reforms to expand it to additional populations. In these situations, subsidization from other government revenue sources or donors is necessary. • The amount that can be generated long term is dependent on the incentives targeted populations have to participate in the scheme and contribute their premiums. If participating facilities have high user fees but good-quality services, people will likely want to participate to take advantage of the program. If, on the other hand, targeted populations do not use public services anyway, or do not feel a financial burden when they do, they will find ways to avoid paying their premiums, even though it is mandatory.
Governance and Efficiency	<ul style="list-style-type: none"> • Efficiency depends on the country's capacity to enforce compliance. The greater that capacity, the more revenue the country can raise for each dollar spent to collect it and enforce compliance. • Improving efficiency may involve not just making a financial investment in enforcement, but also political capital needed to oppose the entrenched interest groups.
Progressivity	<ul style="list-style-type: none"> • Employee contribution is linked to salary amount and is therefore progressive. Some countries will include "contribution ceiling" to limit the extent to which wealthy are burdened by the tax. • Designs vary in the relative amounts contributed by employee and employer, with implications for the level of progressivity. • Limited to those who make wages at registered employers, thus de facto exempts poor, rural workers.
Macroeconomic Impact	<ul style="list-style-type: none"> • Similar to income tax with regards employee payroll tax • As with the income tax, this essentially taxes a "good" thing, that is, working (personal income tax) or productive enterprise (corporate income tax). Some economists argue that the income tax essentially punishes workers and employers for making positive contributions to the growth of the economy and should not exceed a certain level without risking a negative drag on productivity (given disincentive to work and invest as the tax increases) and competitiveness in global markets (given burden of tax on companies operating in competitive markets, as discussed above). • Higher corporate income tax can reduce "business friendliness" of a country and thus deter foreign investment. • Higher corporate income tax can counter other macroeconomic efforts to nurture fledgling industries and diversify industrial make-up to protect against economic shocks. • Raising the corporate income tax may increase the size of the informal sector because firms can decide not to participate in the formal economy. Nonparticipation will mean that these firms will not be able to use official financial sector resources, such as borrowing large amounts of funding for investment – easy to forfeit for sectors that need less investment cash and in countries with underdeveloped financial sectors.

G. Pros and Cons of Out of Pocket Payment

Assessment Criteria	Pros and Cons
Definition	<ul style="list-style-type: none"> • Direct spending by households at health care providers when health care goods and services are needed • Can take the form of user fees, co-payments, purchase of drugs, etc.
Effectiveness and Sustainability	<ul style="list-style-type: none"> • Overreliance on out-of-pocket spending from households characterizes for health revenue characterizes most developing country health systems.
Governance and Efficiency	<ul style="list-style-type: none"> • Out-of-pocket spending is very efficient to collect, as health care providers will typically accept payment at the point of care. • Eliminating out-of-pocket spending entirely might not result in positive results for beneficiaries of the health system: in fact, out-of-pocket spending can increase quality of health services delivered when revenue remains at the local level.
Progressivity	<ul style="list-style-type: none"> • Out-of-pocket spending is regressive as the poor spend a larger portion of their income on health than wealthier groups • Reliance on out-of-pocket revenue is regressive and can push people into poverty, or deeper into poverty. • Overreliance on out-of-pocket payment means that some will not seek the care they need; this will increase disease burden and reduce productivity of the people.
Macroeconomic Impact	<ul style="list-style-type: none"> • Overreliance on out-of-pocket payment means that the poor will spend catastrophically, or be pushed into (or deeper into) poverty as a result of seeking health care. This goes against development goals of reducing inequality, which is a key part of balanced and sustainable economic growth.

H. Pros and Cons of Prepayment

Assessment Criteria	Pros and Cons of the Revenue Generating Options
Definition	<ul style="list-style-type: none"> Individual/household payment, typically as employees, for health goods and services through private or community-based insurance* that is delinked from the timing and level of their health need. (*Community-based insurance schemes can be either public or private.) Private prepayments can be either mandatory or voluntary depending on the nature of the associated insurance scheme. In developing countries, most private or community-based insurance schemes are voluntary in nature and come as an employment benefit. (Taxes paid that are then used to provide health services (through national insurance or governmental health programs, for example) are also considered prepayments for health. They are not treated in this section but would likely come from general or earmarked government revenue. Prepayments in the form of payroll tax premiums for payroll tax are also treated separately in this annex).
Effectiveness and Sustainability	<ul style="list-style-type: none"> Given economic growth, this is a sustainable form of domestic resource mobilization. However, if the economy contracts and people lose their jobs, their private insurance benefits obtained through their employer, along with their contributions, will end. As with income tax, amount this mechanism can generate is dependent on the sophistication of the financial system, GDP per capita, and the size of the formal sector. The amount that can be generated long term is dependent on the scale and sustainability of the associated social, private, or community-based health insurance scheme, which in turn has a multitude of factors beyond the scope of this table. As with payroll tax for social health insurance, the amount that can be generated long term is dependent on the incentives targeted populations have to participate in the scheme and contribute their premiums. If participating facilities have high user fees but good-quality services, people will likely want to participate to take advantage of the program. If, on the other hand, targeted populations do not use services anyway, or do not feel a financial burden when they do, they will find ways to avoid paying their premiums.
Governance and Efficiency	<ul style="list-style-type: none"> Enforcement is an issue insofar as ensuring that employees/households receiving benefits have made their payments. As with income and payroll tax, efficiency of voluntary private insurance contributions will improve as investment creates stronger enforcement systems. Community-based insurance schemes may lack sufficient staff to properly collect contributions and enforce payments among beneficiaries, with potential implications for their financial viability.
Progressivity	<ul style="list-style-type: none"> Burden of private prepayment falls on the households making payments. However, prepayments are considered less of a burden than out-of-pocket spending, even if prepayments exceed what would have been spent out-of-pocket, because households can adequately plan for prepayments and will not have to bear the concern over facing potential catastrophes, or be forced into financial ruin given an unexpected need for expensive health services. In most developing countries, the poorest income groups will not be able to afford these payments; an insurance scheme will subsidize their contributions or exclude this population group from the pool. How progressive these prepayments are depends on the design of the pooling schemes and the health system overall, which will likely have several pools. For example, the poorest income groups excluded from one scheme may be included in another in a health system that strives to provide comprehensive financial protection for the entire population.
Macroeconomic Impact	<ul style="list-style-type: none"> Voluntary pre-payment is less likely to result in catastrophic or impoverishing payment by households, particularly for those who prepay to receive health insurance coverage.

*Sources: Bird and Zolt (2003); Carrin (2003); Gelan (2007); GIZ (2010); Gordon et al. (2005); Gottret and Schieber (2006); Hsiao and Shaw (2007); IMF (2012). IMF (2011); IMF (2002); Irwin (2009); Keen (2003); United Nations (2012).

ANNEX B. CONTEXT FOR DOMESTIC INNOVATIVE FINANCING OPTIONS FOR HEALTH

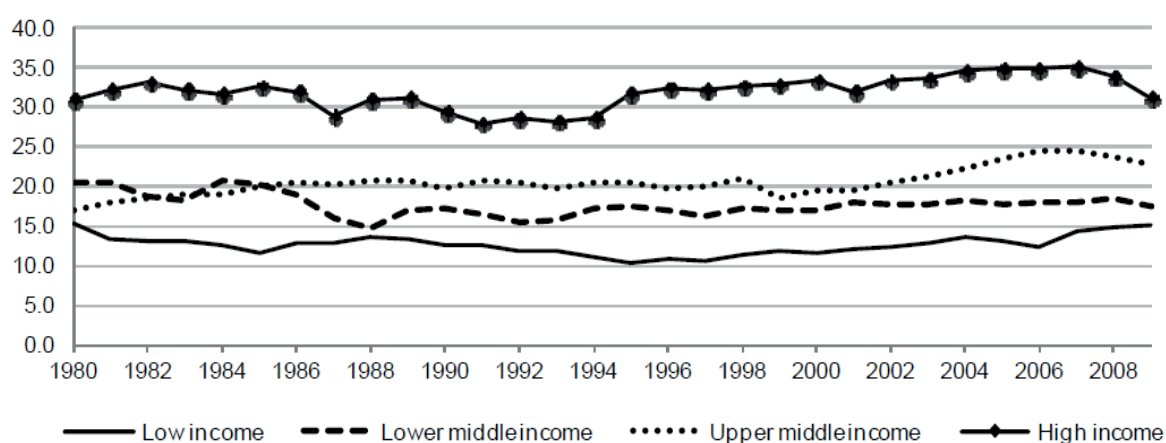
In this report, we used assessment criteria to evaluate DIF options through countries' experiences with them. This discussion demonstrated that all DIF options vary widely in their effectiveness and sustainability, progressivity, governance and efficiency, and macroeconomic impact; moreover, no one option scores highly in all of these areas. To adopt a DIF option, and reap the additional revenue it provides, requires making trade-offs. This annex provides some context to public health officials thinking through these DIF options and whether or not to advocate for them.

Ability of the Government to Raise Revenue and Spend on Health

In addition to increasing the percentage of government budget allocated to health, public expenditures for health are also tied to fiscal capacity: the amount of funds going into government revenues as a share of GDP.

Revenue collection capacity is a key component of fiscal capacity. Revenue collection capacity, as measured with the indicator of tax revenue as a percentage of GDP, has remained fairly constant since 1980 for all income groups, though in upper middle-income countries (UMICs) the tax-to-GDP ratio rose from 16 to 24 percent and in low-income countries (LICs), it fell from about 15 percent to 10 percent, before rising again to about 15 percent between 1995 and 2010 (IMF 2011; Fleisher 2013; Morrissey 2013). Figure B-I shows these trends.

Figure B-I. Tax Revenue as a Percentage of GDP 1980-2010 By Income Group



Source: IMF (2011)

Factors determining revenue collection and fiscal capacity include level of national income, economic growth, debt stock and flow, and sophistication of the tax administration. Figure B-1 shows that the level of national income is an important factor, given the stratification of the indicator by income level across all years. Economic growth is also a factor – the more the per capita income, the more the government has to tax. However, per capita GDP has grown much more dramatically during this period than tax revenue as a percentage of GDP: GDP per capita increased by more than 50 percent across income groups between 1995 and 2010, and especially in LICs and lower middle-income countries (LMICs), but as noted, tax-to-GDP ratios have remained fairly level.

Tax administration, both its technical and administrative aspects, is one factor that may explain this discrepancy. Improved tax administration can improve the degree to which the government can effectively enforce tax law while also set up barriers to corruption. For example, in Africa, capacity to pay taxes tends to be highly concentrated in a small number of people and companies that can often evade taxes using power and influence. The majority of the population has less political power and influence, and typically has low taxable capacity that is costly to collect, especially in rural areas. The result is that only middle-size firms tend to pay taxes.

Understanding debt is also an important component of understanding fiscal capacity of a government to spend on health and other social programs. Two primary indicators are debt-to-GDP ratios, which measures the existing stock of debt a country carries, and “primary balances,” which measure budget surpluses and deficits. Fleisher et al. (2013) show that debt levels relative to GDP decreased across all income groups, and most significantly among low income countries, between 1995 and 2010. These reductions may imply that revenues increased relative to government spending during this period, though programs like the HIPC and MDRI may also have played a role.¹⁷ Despite this increase, total government spending have also been increasing, and primary balances were negative (i.e., in deficit) for all income groups between 1995 and 2010, which has less optimistic implications (Fleisher et al. 2013).

While tax revenue in these countries has not grown faster than GDP during this period, the mix of taxes has shifted, with the VAT coming to be used much more than trade tariffs. Also, there is a growing reliance on extractive industries (mining, oil drilling) among resource-rich countries. Salient findings from tax trend analyses (IMF 2011, Morrissey 2013, IMF 2012) include the following:

- Countries across all income groups have increased revenues from VAT, with the largest increase among UMICs, from less than 3 percent of GDP in the 1980s to 7 percent in 2000-2009, about the same percentage as high-income countries (HICs). Revenues from corporate income taxes have also increased across all income groups, even as countries have reduced statutory corporate tax rates. Since 1980, personal income tax revenues have been low and flat among LICs and LMICs (less than 2 percent of GDP), have risen slightly among UMICs (from 2 percent to 3 percent), and have declined in HICs (from almost 10 percent to less than 9 percent).
- The biggest change in tax revenue by tax source in developing countries has been the decline in trade tax revenue, which is related to the international movement to reduce trade barriers. Both LICs and LMICs relied heavily on import taxes in the 1980s as the taxes are relatively easy to administer and politically attractive because they protect domestic producer groups. From the 1990s to 2010, trade tax revenue fell from more than 4 percent of GDP to 2.3 percent among LICs, and from almost 5 percent to less than 2 percent among LMICs.
- Regionally, tax revenue performance has improved in sub-Saharan Africa since the mid-1990s, with the tax-to-GDP ratio growing from a low of nearly 11 percent in 1995 to 15 percent in 2010. In

¹⁷ Debt levels in high-income countries likely rose in recent years due to the 2008 economic downturn.

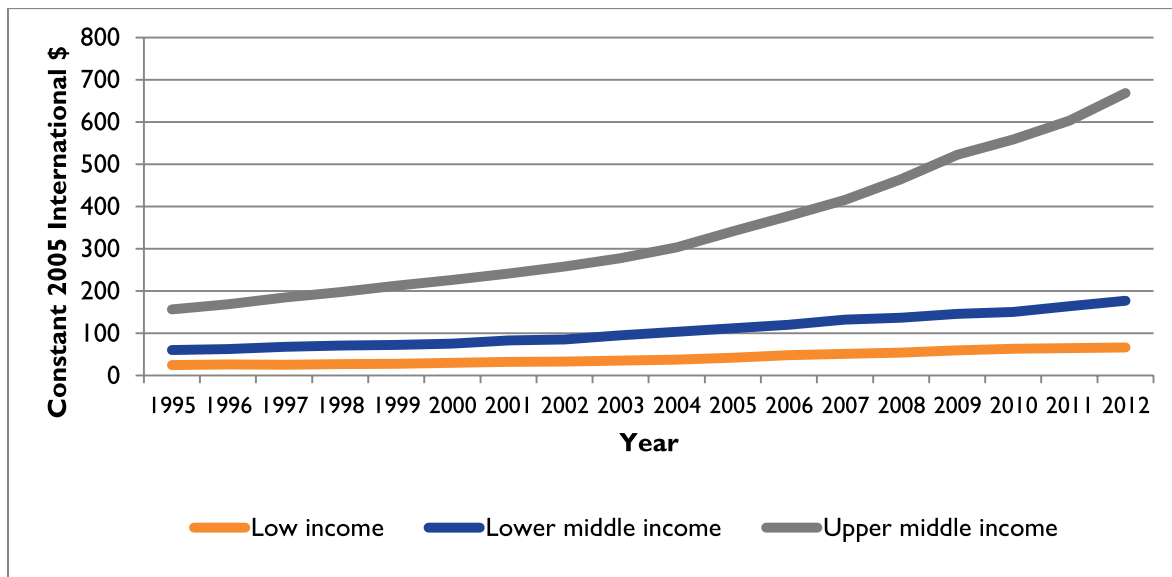
Latin America and the Caribbean, the ratio grew from approximately 12 percent in 1980 to 18 percent in 2010. In contrast, Asia has not experienced growth over time; the tax-to-GDP ratio in 2010 was 13 percent, about the same as in 1980.

- Finally, countries rich in natural resources such as oil and minerals have experienced a surge of tax revenue related to extraction since the 1990s. In Africa alone, “...resource-related tax revenues nearly tripled as a share of national income between the late 1990s and the start of the financial crisis” (Muribu 2010). Because there are many different ways to generate revenue from extractive industries (corporate income tax, revenue rent tax, royalties), the data presented above on the mix of taxes do not disaggregate resource-based taxes. The disadvantage of resource-based taxes is that their revenues are volatile and unpredictable. Also, there is evidence that these taxes can displace more stable sources of tax revenue. Despite the disadvantages, many developing countries rely heavily on resource-based revenue – it represents more than 30 percent of total government revenue in countries such as Angola, Timor-Leste, Nigeria, Yemen, and Botswana.

Spending on Health

Globally spending on health at the country level has been increasing. Figure B-2 shows the increased health expenditure per capita according to income categories. While HICs have shown a very substantial increase, even LICs have made progress in increasing overall health expenditures, moving from an average of \$25 per capita in 1995 to \$66 in 2012 and lower-middle income from \$61 to \$178 (World Bank 2014).

Figure B-2. Health Expenditure per Capita



Source: World Bank (2014)

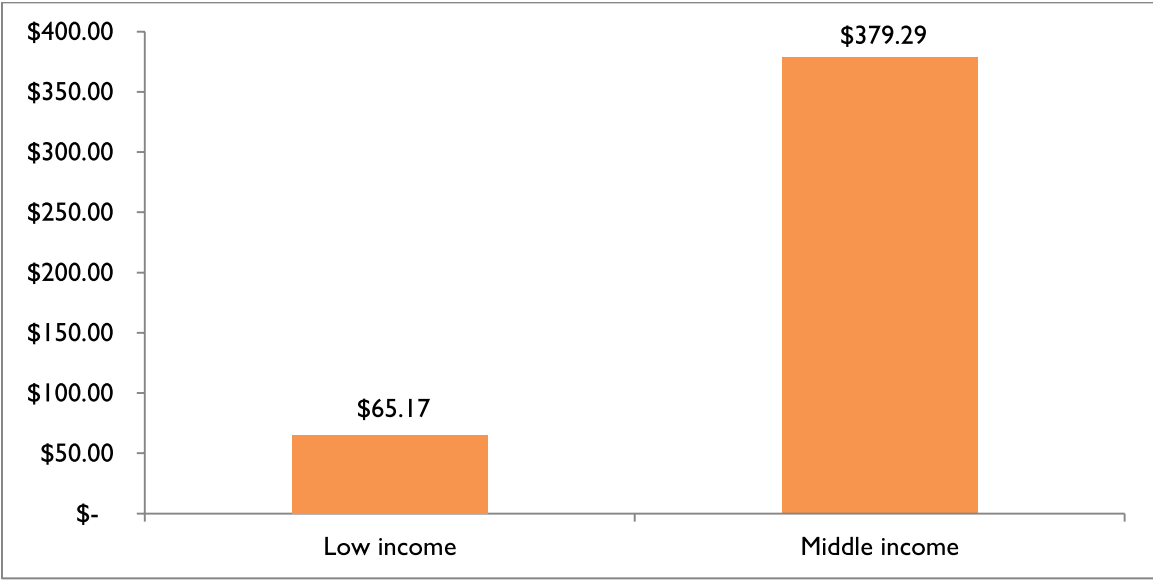
Increased ability of the government to collect more tax revenue – whether due to economic growth and rising income or other factors – has been shown to move with increased spending on health. Specifically, Fan and Savedoff (2014) found that increasing government expenditure as a percentage of GDP (an indicator of the government’s resource mobilization capacity) was associated with a 0.634 percent increase in total health spending, primarily coming from an increase in government spending on health.

The study links increased government capacity to raise revenue not only with increase government-led health spending but also with reductions in out-of-pocket spending as a percentage of total health spending. Authors found that out-of-pocket spending as a percentage of total health spending did not seem influenced by changes in national income but was influenced by the government’s ability to mobilize resources. Their analysis found that an increase of 10 percentage points in the share of government spending of GDP was associated with a 1.9 percentage point decline in the share of out-of-pocket expenditures in total health spending (Fan and Savedoff 2014). Authors refer to this combined trend as the “health financing transition” (Fan and Savedoff 2014).

The available literature has attributed a number of factors to the increase in health spending including raising national incomes, changes in more expensive medical technologies and practices, population aging, health financing models, good governance factors, and higher prices relative to other goods and services (Fan and Savedoff 2014, Farag et al. 2012, Xu et al. 2011). The extent to which these factors contribute to growth in health expenditure varies across studies conducted according to the specifications of the models used. Still, most studies agree that increased income is the most significant factor (Fan and Savedoff 2014, Xu et al. 2011). In other words, as income rises, so does spending on health. Consensus on this point means that promoting economic growth can also promote and allow for increases in resources for health.

Given this close relationship between income and health spending, it is not surprising that levels of health spending vary across income groups. Indeed, data on health spending per capita by income group does reveal large disparities (Figure B-3). This disparity becomes more concerning with the fact that external sources, such as bilateral and multilateral organization outside of the country, contributed 28.7 percent of total health expenditure in LICs in 2011 while only providing 0.8 percent to middle-income countries (World Bank 2014a). These data indicate that global inequities in health spending exist even with significant donor support.

Figure B-3. Health Expenditure per capita, PPP 2011 (constant 2005 international \$)



Source: World Bank (2014a)

Government Prioritization of Health

While absolute increases in budget are helpful, most low- and middle-income countries are keen to increase the government's share of total health spending, which may require larger budget allocations. Government health spending as a percentage of total government budget is the primary indicator used to measure the extent to which governments prioritize health relative to other sectors. Fleisher et al. (2013) have found that countries from all income groups, and almost all regions allocated more of their budget to health as their incomes increased between 1995 and 2010. During the same period, government spending became a larger component of health financing. These findings indicate that health may be a “luxury” good that is purchased more as income rises (Fleisher et al. 2013).

The World Bank-Japan study by Maida et al. (2014) shows that government prioritization of health has enabled insurance coverage expansion in the case study countries. Table B-I shows that, apart from Brazil, Indonesia, and Vietnam, all the countries in the study that have reached significant population coverage allocate at least 10 percent of the government budget to health (Maeda et al. 2014). In both Ghana and Vietnam, the government significantly increased the share of health in the budget during the period of rapid population expansion, mainly to subsidize coverage for the poor. In Ghana and Indonesia, although both countries raised the priority for health in the government budget at the time universal coverage programs were put in place (from 8.7 percent to 12.1 percent in Ghana and in Indonesia from 5 percent to 6.2 percent), neither country has increased the share of government spending on health in the budget since that time, and neither has been able to push population coverage beyond 50 percent.

Table B-I. Changes in Fiscal and Macroeconomic Variables in Countries Expanding Population Coverage

Country	Period of rapid population coverage expansion ¹	Income classification at the end of the period or currently ¹	Change in population coverage (%)	Change in GNI per capita		Change in government share of THEI (%)	Change in health share in government budget ¹ (%)
				Nominal (\$)	Real (%) ²		
Ghana	2003–present	Lower-middle	6.6–38	320–1,550	45	41.0–56.1	8.7–11.9
Indonesia	2004–present	Lower-middle	28–413	1,090–3,420	74	39.5–34.1	5.0–5.3
Peru	2003–present	Upper-middle	36.8–65	2,160–6,060	79	58.7–56.1	15.4–15.0
Vietnam	2002–present	Lower-middle	16–67.5	430–1,550	82	30.5–40.3	6.3–9.4
Brazil	1988–2000	Upper-middle	50–100	2,250–3,860	41	43.0–40.3	N/A–4.1 (8.7 in 2011)
Thailand	2001–2006	Lower-middle	63–96	1,900–2,890	41	56.4–72.7	10.4–13.4 (14.5 in 2011)
Turkey	2002–2012	Upper-middle	64–98	3,480–10,830	111	70.7–74.9	9.1–12.9
France	1945–1978	High	N/A–100	N/A	453	N/A	N/A (15.9 in 2011)
Japan	1945–1961	Middle	70–100	N/A	229	N/A	N/A (18.2 in 2011)

1. Ghana: 2003 National Health Insurance Law (Act 650) pass. Coverage expansion stalled since 2010.

Indonesia: 2004 Jamkesmas government-funded insurance program for the poor introduced. Coverage expansion stalled since 2010.

Peru: 2003 SIS introduced to cover the informal sector and the poor. Coverage expansion is continuing.

Vietnam: 2002 introduction of Health Care Fund for the Poor. Coverage expansion is continuing.

Brazil: 1988 health established as a right in the constitution and the SUS was established. UHC is considered to have been reached in 2000 when the Family Health Strategy fully implemented expanding primary care coverage.

Thailand: 2001 introduction of the Universal Coverage Scheme. Universal coverage reached by 2006.

Turkey: 2003 Health Transformation Program initiated (2002–2012 period of coverage expansion referenced in case study).

France: 1945 General Social Security system adopted. 1961 insurance extended to farmers and 1966 to the self-employed. 1978 insurance extended to uncovered workers. All remaining uncovered population covered in 2000.

Japan: The last municipalities established community insurance plans in 1961 and enrollment became compulsory for all.

2. World Development Indicators, 2013.

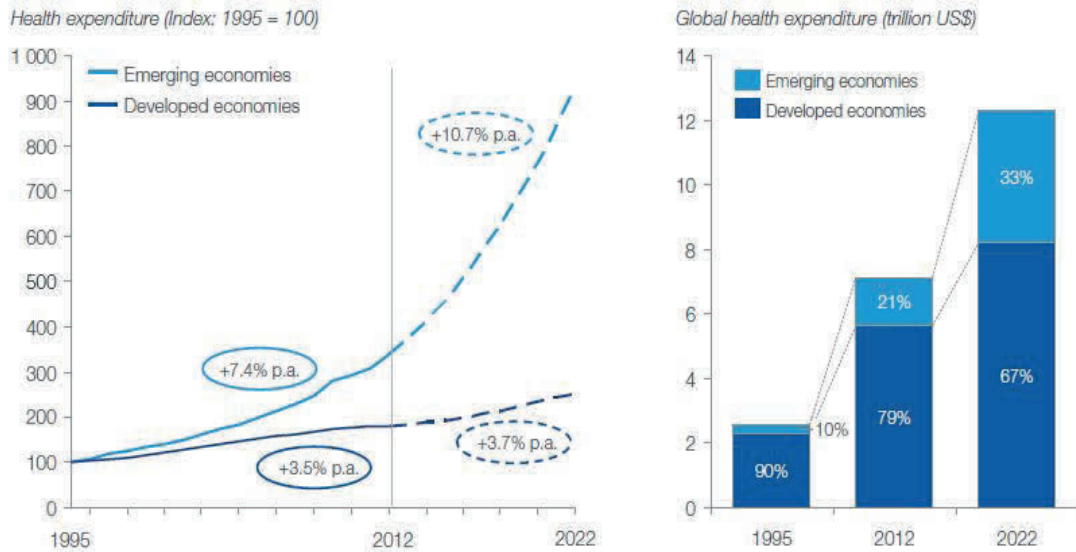
3. Source: (Harimurti P, 2013)

Source: Maeda et al. (2014)

Note: THE=total health expenditure; GNI=gross national income

Recent trends suggest “good news” in terms of greater fiscal capacity, greater relative prioritization for health, and increased percentages of new GDP growth set aside for health. It also reflects a shift in the balance of spending toward emerging economies. As shown in Figure B-4, if this trend continues, one-third of global spending on health in 2022, on par with spending by developed economies in 2005, will come from emerging economies. Specifically, “for every additional US\$100 spent on health in 2022, fully half will come from emerging economies” (World Economic Forum 2014).

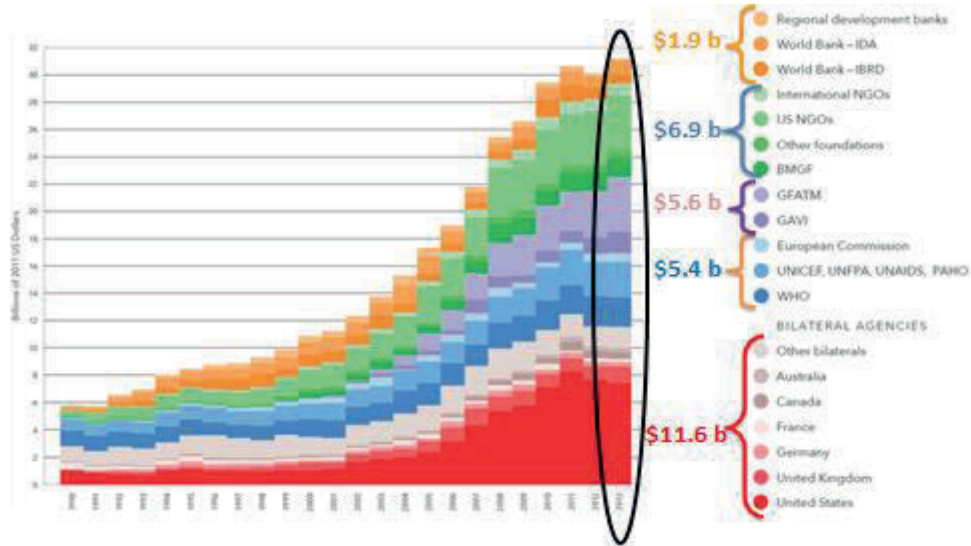
Figure B-4. Projected Global Health Spending 2022 for Emerging and Developed Economies



Source: World Bank, Business Monitor International, Boston Consulting Group in World Economic Forum (2014)

A recent report by Otterson et al. (2014) suggests that, except in a few LICs, health financing will primarily come from domestic sources in most countries. The report shows 2012 data that show 70 percent of total health expenditure originates from domestic sources in LICs, and 86 percent in LMICs. At the same time, as demonstrated in Figure B-5, levels of development assistance for health have plateaued – growing from US\$6 billion in 1990 to US\$30 billion in 2013, but at a slower and slower rate (Institute for Health Metrics and Evaluation 2014). These findings indicate that health programs will become more reliant on domestic sources in the future. The ability to generate new, additional funding from domestic resources while also improving efficiency and value for money is now the critical task for developing countries.

Figure B-5. Development Assistance for Health, 2013



Source: Institute for Health Metrics and Evaluation (2014)

ANNEX C: INNOVATIVE FINANCING FRAMEWORKS

An innovative financing framework helps decision makers to review a set of possible funding options that, when used in an effective and timely manner, can generate *additional* resources for reaching health system objectives and goals, summarized in UHC goals of achieving universal access to quality services at affordable prices. This section summarizes the major existing innovative financing frameworks, by organization and author, as a resource for health professionals. Two frameworks (Brookings Institution and Atun et al.) offer conceptual guidelines for innovative financial decision making; the other two (World Bank and UNDP) categorize financing mechanisms. Each framework has conceptual links with the WHO health systems model presented in Chapter 2.

The Brookings “framework” (de Ferranti et al. 2008) is actually more a tool for assessing financing options than a categorization of innovative financing mechanisms. It takes policymakers through steps that allow them to compare the benefits and costs of each financing option in terms of sustainability, ability to generate revenue, and political and institutional feasibility. Policymakers must then apply reason, economic theory, and empirical evidence to map the financing process – to determine the sources of the funding and the goods and services to which it will be allocated – to better understand which opportunities to pursue.

Atun et al. (2012) develop a value chain framework for innovative financing, with a particular emphasis on health; countries consider the steps in the chain to assess the value of different financing mechanisms. The authors use the platform of the WHO model, such that the key elements are resource mobilization, pooling of financial resources, channeling of resources to countries, allocation of resources to different health system functions, and funding for implementation of programs. The desired end product of this value chain is the effective, efficient, and equitable channeling of new funding for health in order to achieve better health outcomes and health system performance. One of the major risks policymakers should consider during this process is an excessive expectation about the yield and sustainability of each innovative financing mechanism, either because of high start-up costs or lower than expected yields; the volatility of funding is another concern.

Table C-1 summarizes the main features of these four innovative financing frameworks.

Table C-1: Analytical Frameworks for Assessing Innovative Financing Options

Organization	Framework	Summary
Brookings Institution (de Ferranti et al. (2008))	Proposes three frameworks: (1) comparing pros and cons of alternative options, (2) reasoning from basic principles and common sense, and (3) mapping a problem to understand it better	<ol style="list-style-type: none"> 1. Assess the pros and cons of each option in terms of sustainability, revenue generation, feasibility, etc. 2. First question to ask is what are the possible sources for obtaining the required funding, then use logic, economic principles, and evidence and experience from countries and institutions to further develop mechanism 3. Evaluates where the funds are coming from (i.e., government, donation, investment, combination), type of service delivery within countries (i.e., public vs. private), product delivery to countries, and product discovery and development
Rifat Atun et al.	Uses a value chain framework to	<ol style="list-style-type: none"> 1. Key elements of the value chain are resource

(2012)	conceptualize and define innovative financing	<p>mobilization, pooling of financial resources, channeling of resources to countries, allocation of resources to different health system functions, and funding for implementation of programs</p> <p>2. Desired end product is rapid channeling of new additional funding for health at scale for better health outcomes</p>
World Bank (Girishankar 2009)	Provides a framework to organize and understand the mix of innovative financing mechanisms	Broadly categorizes innovative mechanisms in terms of use: (1) private mechanisms, (2) solidarity mechanisms, (3) public-private partnership mechanisms, and (4) catalytic mechanisms; and of source (1) leverage private, and (2) mobilize public
UNDP (Hurley 2012)	Provides a framework to assess mechanisms against nine key questions	Evaluates (1) additionality, (2) predictability, (3) ownership, (4) capacity development, (5) fragmentation, (6) sustainability, (7) possibilities for scaling up, (8) revenues raised, and (9) impact

In the World Bank framework, Girishankar (2009) categorizes innovative financing mechanisms based on definitions proposed by the Taskforce on Innovative Financing for Health Systems. The framework breaks down innovative mechanisms into (1) private mechanisms, (2) solidarity mechanisms, (3) public-private partnership mechanisms, and (4) catalytic mechanisms. Private financing methods are conducted solely through the private sector; solidarity mechanisms, like diaspora bonds, remittances, lotteries, and debt swaps, are often voluntary and a collective action to raise revenue; public-private partnerships occur when the private sector provides financial assistance to or partners with the public sector to improve investment capacity; catalytic mechanisms are those in which the public sector invests in private sector projects as a means by which to collect revenue, either via long-term investments or to encourage private sector growth in essential public services.

In some cases, the public sector may reprioritize its commitments to health to provide financial assistance for start-up health insurance companies, thereby expanding the breadth of the population covered. Government may also choose to invest in sector-specific projects and use return-on-investments to spend on health. These projects often choose to deregulate or “autonomize” health providers by allowing them to collect and retain additional revenue through user fees or cost-sharing mechanisms, thereby improving their solvency, efficiency, and performance. Harding and Preker (2000) provide a framework for this autonomization, but also accountability, of the providers.

Finally, the UNDP offers a slightly different set of categories to frame innovative financing mechanisms. While the UNDP’s categories also include solidarity mechanisms, the model merges private, public-private partnerships, and catalytic methods into a single category. It includes alternatives such as debt-based instruments and taxes, which can be sector-specific, consumption, financial, or global taxes (taxes on the entire economy). The UNDP model also discusses a series of questions for policymakers as they consider various financing options (Hurley 2012).

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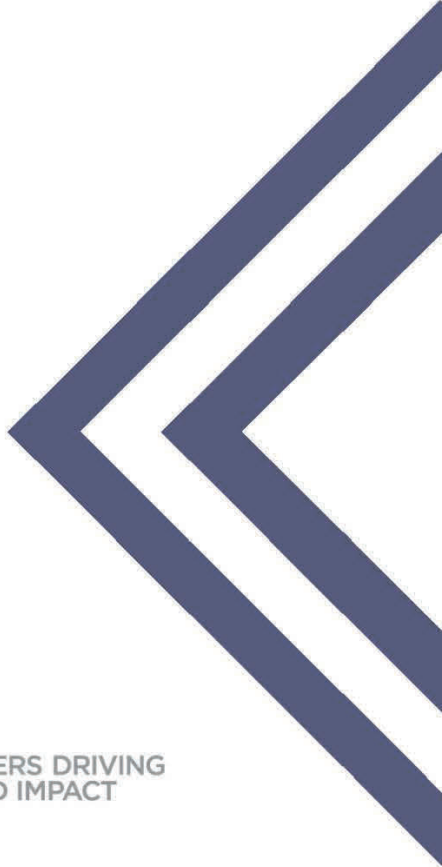
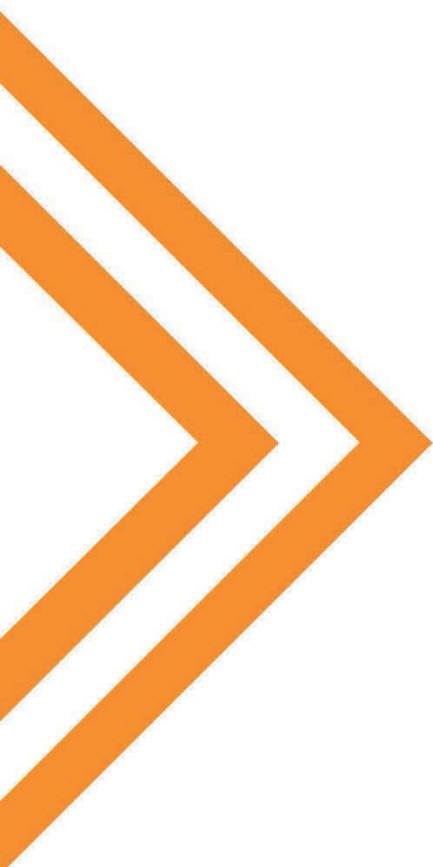
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