

First Universal Health Coverage Financing Forum Raising Funds for Health

Background Paper

The purpose of this paper is to guide discussions at the first UHC Health Financing Forum that will take place in Washington from 14-15 April 2016. It has been through numerous drafts building on comments from experts based in the World Bank Group and USAID, the two Forum cosponsors, as well as from the Technical Working Group for the Forum which includes experts from academia, government, the Bill and Melinda Gates Foundation, GAVI, the Global Fund, IMF and WHO. The paper will be revised again subsequent to the discussion during the Forum, so comments are still welcome. Please address them to:

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Executive Summary

Introduction

1. This paper focuses on health financing for universal health coverage (UHC), in particular, raising resources for health.
2. Universal health coverage is the objective that all people will obtain the health services (promotion, prevention, treatment, rehabilitation and palliation) they need without financial hardship. It responds to the desire of all people that the health services they might need to use are available, of good quality, and affordable.
3. Health financing policies and strategies are influenced by many factors at both the global and country levels. One important recent development is the endorsement of the sustainable development goals (SDGs) by all countries, which has implications for health system directions over the next 15 years and the associated health financing strategies.
4. The SDGs are ambitious, requiring countries to scale up or maintain health services not just for the “MDG diseases and conditions” but also for non-communicable diseases, cancers and mental health. They specify prevention of road traffic accidents and environmental hazards, and strengthen national capacities for early warning, risk reduction and management of health risks¹.
5. To achieve this level of ambition, it will be necessary to continually assess and address a variety of health systems constraints. All are important, but the focus of the First UHC Financing Forum and this paper is on health financing.
6. Health financing is, of course, more than simply about raising funds. It is the interaction between decisions made in three areas – raising funds, pooling them, and using them to purchase services– that determines the ability of the system to finance the necessary services, spread the financial risks of ill health across the population, and operate efficiently and equitably.
7. However, raising sufficient revenue for health is the first fundamental problem and the focus of this paper which considers options for raising more government revenues, giving more priority to health in the allocation of government revenues, and development assistance for health.
8. Out-of-pocket payments are not considered as an option for raising more money for health because they are generally regressive, deter the poor and vulnerable from using or continuing needed health services, and result in severe financial hardship for others.

Health Financing Trends and Composition

9. Economic growth is typically accompanied by a growth in total and public health expenditure and a decrease in out-of-pocket spending as a share of total health expenditure. At the same time, as countries transition from low to middle-income country status, access to development assistance falls and potentially threatens the financial and institutional

¹ The resolution mentions the following environmental hazards: chemicals and air, water and soil pollution.

sustainability of health systems. Together, these shifts in financing are increasingly being referred to as the “health financing transition”.

10. The pace at which this transition occurs and the levels and composition of expenditures vary substantially across countries – even among those at the same level of economic development.
11. When countries fail to invest in health at similar rates to comparator countries, it is typically because governments lack the capacity to effectively collect revenues, do not sufficiently prioritize health in the overall budget and/or fail to effectively leverage financing from the private sector.
12. Countries at all income levels continually struggle to raise funds for health, as shown by the recent financial and economic crisis that led to falls in total health spending in many high income settings. However, the extent of the problem is much greater in low and middle income countries given the considerable gap between health needs and current levels of health service coverage.
13. In all countries, improving value for money and results – i.e. efficiency – is also critical and must necessarily accompany efforts to raise funds for health. The relative emphasis given to efficiency versus raising more funds typically differs as GDP per capita increases, with relatively more weight given to the efficiency question.
14. This forum, however, does not explicitly address efficiency. It cuts across all health financing functions – revenue generation, pooling and purchasing – and is so important it is likely to be a focus of a subsequent Forum.

Raising additional government revenue

15. In many low and middle income countries there is considerable potential to increase government revenue by being more efficient in the collection of existing taxes, expanding the range of taxes and charges – including broadening the tax base – and/or borrowing on capital markets.
16. However, improvements in the capacity of countries to manage and use additional moneys will often be required to mitigate potential fiscal, monetary, and exchange rate risks; and the political feasibility of making changes to the tax system, including introducing any new taxes, will differ across countries.
17. Borrowing, including issuing sovereign bonds, does not increase money for health over a long term horizon, but “frontloads” financing for immediate investment needs. Although there has been some expansion of sovereign debt recently in low and middle income countries, it is limited to a few countries and there are increasing concerns that countries might not be able to meet their debt obligations at maturity.
18. SHI is increasingly seen by low and middle income countries as a means of raising additional funds for health or protecting them from the general budget negotiation process, although the evidence that its introduction can raise additional funds is sparse. There is also some evidence that payroll taxes for SHI might increase unemployment and reduce the rate of formalization in the economy.
19. The private sector has been hailed as a great potential source of additional resources. Yet there is limited evidence to suggest it will result in greater financing for the health sector – at least in the near future – as private sector engagement in low and lower middle income countries remains hampered by underdeveloped legal and regulatory frameworks and poor

business enabling environments. The exception is private health insurance which may play a supportive role to government and publicly-mandated finance for people who can afford to pay when coupled with regulation of the private health insurance market.

20. Perhaps the most immediate contribution of the private sector lies in its capacity as a source of disruptive innovation – developing simpler and cheaper delivery models that enable the participation of new consumers previously excluded from traditional markets.

Priority to health

21. There is considerable variation across countries in the extent to which they prioritize health in government budgets.
22. For many, giving more priority to health could raise more funds to maintain or improve health – e.g. raising the share of health in overall government expenditures from 5% to 10% would allow public health expenditures to double. However, the magnitude of these gains in the longer run are probably less than the potential from improvements in government revenue and tax collection efforts.
23. Given the low levels of GDP per capita in low and lower-middle income countries, many will also likely require continued DAH in the short to medium term to finance the significant gap between the health expenditures they could finance from domestic sources and needs.
24. Prioritization is fundamentally a political issue, and little is known about why some countries are able to give more priority to health and some are not. While Ministries of Finance often argue that they cannot give more funds to health because of inefficiency, waste and poor public financial management practices in health, it is not clear whether improvements in these areas result in a larger share of the government budget.

Development assistance for health (DAH)

25. DAH expanded rapidly in the first decade of the MDGs, focused largely on specific “MDG diseases or conditions”. There was also a transformation in the source of funding, with “non-traditional donors”, particularly the Bill and Melinda Gates Foundation, assuming greater importance compared to the traditional bilateral donors.
26. The financial crisis starting in 2008, however, resulted not only in falls in the rate of growth of DAH but also falls in some years in DAH in dollar terms and in country expenditures financed from DAH.
27. While all recipient countries have the capacity to expand domestic funding for health in various ways, some will be unable to achieve all the SDG health targets, and even assure their populations coverage with a limited set of health interventions (with financial protection) without continued and, in some cases, increased DAH.
28. Innovative international financing options offer some hope of supplementing the declining traditional sources of DAH, but so far their impact has been limited.
29. A number of critical questions around the future of DAH in the SDG era need to be answered rapidly. They are outlined in the box below on 10 Critical Questions:

10 critical questions for the SDG era

30. Some of the issues around raising funds for health are well known – e.g. the technical options for additional taxes and charges, or the way that existing government revenue collection could be made more efficient.
31. Some, however, are more controversial or involve questions that remain to be answered. They are listed here and will be a focus in this Forum

Raising Funds for Health: 10 Critical Questions

1. Raising revenue through out-of-pocket payments for health is generally undesirable because it reduces access to needed services for people who cannot afford to pay and results in financial hardship for others. Some European countries, however, increased OOP payments for health after the financial crisis of 2008. Are there circumstances in which raising revenue through OOP payments is justified?
2. A number of different “innovative” financing options are available for countries to choose from based on the experience of LICs and LMICs. Is there enough experience to say which are the most politically acceptable to the population, and which are the most politically feasible to implement given the competing interest groups in health?
3. When should government revenues be earmarked for health, if at all? Is there a case of earmarking for public goods such as emergency response?
4. Does SHI lead to increased revenues for health, or only to an increased need for governments to raise revenue to subsidize increased utilization?
5. Are LICs and LMICs reaching the limit of their capacities to borrow commercially in a prudent fashion?
6. What is the role of the private sector in contributing to revenue generation?
7. What are the obstacles to governments giving more priority to health in their expenditure and how can they be overcome?
8. Where DAH is associated with fungibility or displacement of domestic funding for health, what do we know about how the displaced funds are used and the impact on health?
9. Should DAH still be made available to countries with the capacity to finance health care for their own poor and vulnerable, but choose not to do so?
10. As countries get richer, what criteria should be used to decide if DAH should be scaled down or out, and how can criteria be designed that protect the poor and vulnerable but give countries the right incentives?

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1. Introduction

This paper focuses on health financing for Universal Health Coverage (UHC), particularly on raising funds for health. UHC, now widely accepted as a goal for health systems development, is the ambition that all people will be able to obtain the health services they need (promotion, prevention, treatment, rehabilitation and palliation) without financial hardship.

The development and implementation of health financing strategies and policies are influenced by many factors at both national and international levels. One recent example is the adoption by countries of the Sustainable Development Goals (SDGs) which have important implications for the direction of health strategies and health financing requirements at country level over the next 15 years.

The SDGs differ to the MDGs in that they seek to be applicable to countries at all stages of development – about development rather than “developing countries” (UN, 2015). The level of ambition is very high, illustrated in the health goal where the 13 sub-goals/targets address not just the unfinished agenda of communicable disease, and reproductive, maternal, newborn, child and adolescent health, but also the growing burden of cardiovascular disease, cancers and mental health problems. Also included are targets to reduce substance abuse and deaths and injuries from road traffic accidents and environmental hazards, while others seek to strengthen national capacities for early warning, risk reduction and management of health risks². UHC is one of the 13 health targets, and can be seen as the link tying together all the other more specific targets.

To achieve the health SDG, countries will need to be able to scale-up or maintain many health programs at the same time while focusing on the whole – the overall health and wellbeing of people - as well as on the individual components. This will require the ability to continually assess and address health system constraints. There are many: shortages, lack of motivation and maldistribution of health workers; poor infrastructure; low quality health services; a lack of essential medicines; suboptimal leadership and governance; and insufficient or inappropriately used information. While all these constraints can be important, this paper focuses particularly on health financing not least because in many low and middle income countries, the financial resources required to move closer to UHC and to meet the SDGs are insufficient.

The next section of the paper briefly describes the various functions of a health financing system. The purpose is to recognize that revenue generation by itself does not solve all the problems associated with a health financing system. The combination of many interrelated policy choices determines the availability of funding for health, the degree of protection against the financial risks associated with ill-health, and the efficiency and equity of the financing system. The rest of the paper then concentrates on revenue generation. It begins by reviewing trends in total health expenditures and in domestic revenue mobilization, then moves to considering the room to increase domestic revenue generation overall, and for health. This includes options for raising

² The resolution mentions the following environmental hazards: chemicals and air, water and soil pollution.

more funds and for giving higher priority to health. This is followed by a discussion of the changing the role of development assistance for health as countries transition from externally-financed to domestically funded health systems and programs.

Neither the paper nor the first UHC Forum explicitly address the question of getting better value from existing resources, i.e. efficiency. Efficiency – doing the right things, and doing the right things right - is critical to ensure that the available revenues go further, and efforts to improve efficiency complement efforts to raise additional resources. Efficiency cuts across all three health financing functions rather than simply being associated with revenue generation, and because the topic is so important, it is likely to be the focus of a subsequent UHC Financing Forum.

Finally, this document does not seek to resolve all of the outstanding questions in health financing or in revenue generation. Its purpose is to set the scene for the Forum by describing patterns and trends and what is known about policy responses, but also to indicate where controversies or unanswered questions remain: the issues that will be discussed at the Forum.

2. Health financing and its contribution to UHC

Health financing is not only about raising funds and Figure 1 describes the three financing functions typically included in health financing frameworks – pooling and purchasing in addition to revenue generation (Gottret & Schieber, 2006) (WHO, 2010). The associated policy questions are also included for each function, although the figure departs a little from standard practice by dividing the purchasing function into two sub-components of what to purchase and how to purchase. This shows that purchasing involves more than a focus on personal health services, including how best to finance and ensure the availability of critical public health functions such as the need for outbreak response and preparedness highlighted by the recent Ebola outbreak.

The linear nature of Figure 1, however, does not capture the important interactions between decisions made in each of the subcomponents. The extent to which the health financing system ensures that the necessary services are available; that people can afford to use them and, in doing so, are protected from financial catastrophe and impoverishment due to out-of-pocket health payments; and that the health system is efficient, equitable and of good quality; is determined by the mix of decisions made across all three financing functions. While each individual decision matters, it is the combination of decisions on revenue generation, pooling and purchasing (what to purchase, from whom and how to pay) that is critical.

Figure 1: Health Financing Functions

Function	Questions
Revenue Generation	<p>Who pays?</p> <p>When?</p> <p>What type of payments?</p> <p>How much in relation to capacity to pay?</p> <p>Who collects and how?</p>
Pooling	<p>How many pools – e.g. separate for public health functions? Separate for different population groups?</p> <p>Who manages and what governance structures?</p> <p>Who is eligible to draw from pooled funds?</p>
Purchasing: What? <ul style="list-style-type: none"> • Personal health services and benefits package • Public health functions, including population-based promotion and prevention 	<p>What personal level services will be available/guaranteed – e.g. prevention, treatment, rehabilitation, palliation?</p> <p>What public health functions will be financed – e.g. outbreak investigation and preparedness/resilience, M&E, audit, population prevention/promotion etc.?</p>
Purchasing: How?	<p>Who will provide the services/activities?</p> <p>How will they be recompensed?</p>

**Health
Financing
Organization**

Nevertheless, the starting point is revenue generation which determines the ability of countries to pool funds and subsequently purchase or provide the health services and public health functions that people need. It is important for all countries, regardless of their income levels, but is particularly pertinent for low- and middle-income countries. For example, the Lancet Commission for Investing in Health estimated that an additional USD 70 to USD 90 billion annually would be necessary to ensure that a set of needed health services cutting across the health issues identified in the SDGs is universally available, including the funding necessary to strengthen the health system. This means that current levels of health spending (from domestic and external sources combined) in low- and lower middle-income countries would have to rise by a third, a substantial increase (Jamison, et al., 2013) (Evans & Pablos-Mendez, forthcoming).

3. Health financing trends and composition

Globally, total health spending per capita (constant prices) increased fourfold between 1995 and 2013 from a median of US\$93 to US\$396 – rising faster than GDP growth in the majority of countries (Annex 1). Spending as a share of GDP also increased from 4.9 to 6.4 percent (Figure 2). While economic growth over the last two decades has been an important driver of increased health spending in nearly all low and middle income countries (LICs and MICs), the levels and composition of expenditures vary substantially across countries at the same level of economic development (Figure 3).

The higher rate of growth in health spending than GDP has been ascribed, in high income countries (HICs) to a combination of factors: an aging population and the associated change in the burden of disease to higher cost, more chronic conditions; the continuous availability of new and often more expensive medicines and health technologies; increasing population demand with increasing incomes; and a range of public choices made around pooling and purchasing. In low- and middle-income countries, the reasons remain poorly understood, although there is a general consensus that health financing policy decisions are important³.

³ The bulk of the literature on health expenditures has focused on income elasticities and GDP growth as a determinant of cross-country differences in health spending. While there is broad consensus regarding the importance of income, nearly four decades of empirical research has produced no agreement on how much. Early studies carried out between the 1970s and 1990s using cross sectional data mostly from OECD countries found income elasticities of near or above one, suggesting health is a luxury good. They also found that aggregate income explained over 90 percent of the variation in health expenditures across countries, implying that factors other than income were of marginal significance (Gerdtham and Jonsson, 2000). More recently, the dynamic and time series properties of health and GDP data have been taken into account resulting in lower elasticities below unity classifying health care as a necessity rather than a luxury (Baltagi and Moscone, 2010; Samadi and Rad, 2013; Lu and Zhu, 2014; Fan and Savedoff, 2014).

Figure 2: Total, private, and government health expenditures as share of GDP (median spending)

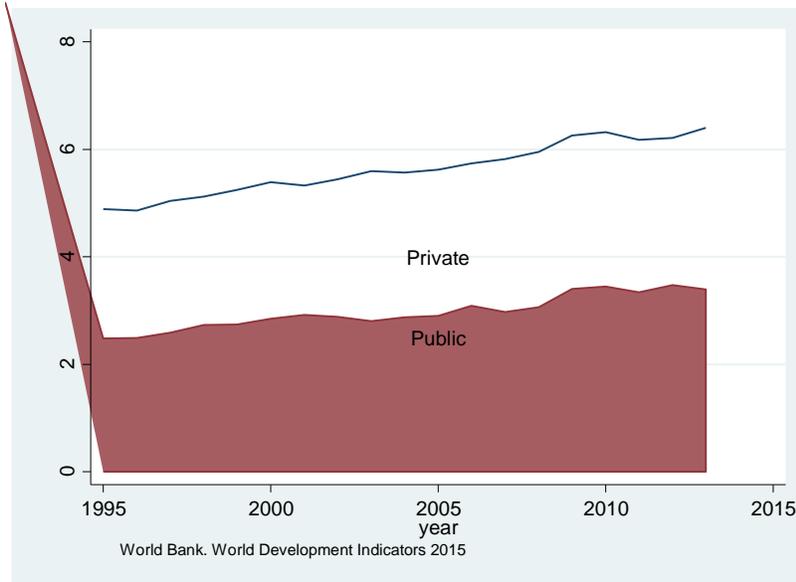
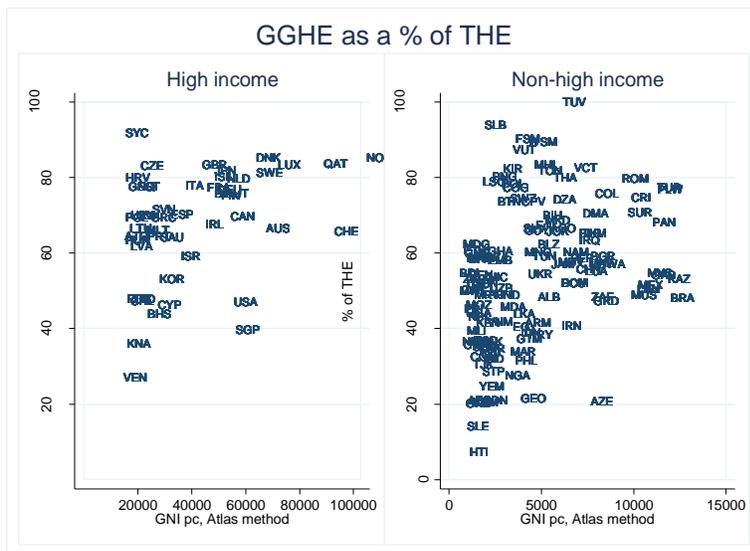


Figure 3: Government health expenditure (including compulsory social health insurance) as a share of total health expenditure by GNI per capita 2013



High income countries account for the bulk of health expenditures globally and have driven much of the increase in per capita expenditure over the last two decades further exacerbating the existing mismatch between countries' health financing needs and health spending (Table 1 and Figure 4). In the mid-2000s, for example, low and lower-middle income countries accounted for 84 percent of the global population and 90 percent of the global disease burden, but only 12 percent of global

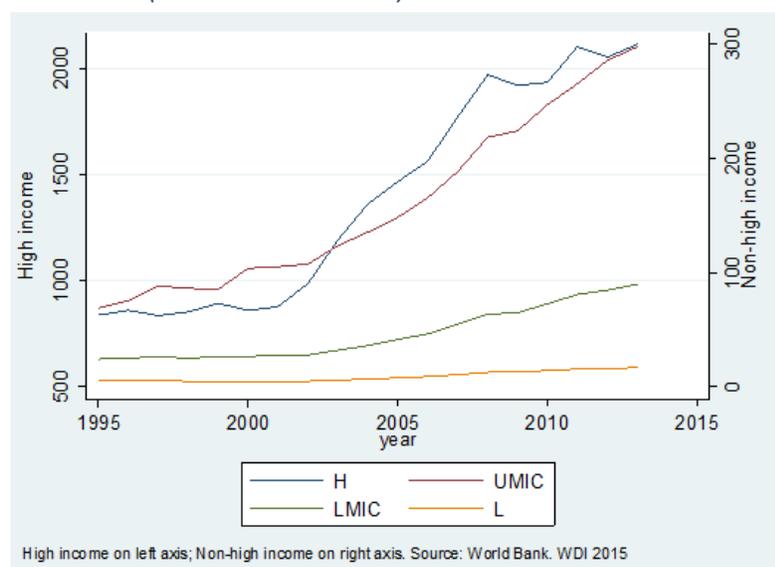
health spending (Gottret & Schieber, 2006). Real health expenditure per capita increased by US\$1,780 in high income countries as a group between 1995 and 2013 compared with just US\$30 in low income countries and, in 2013, ranged from US\$13 per capita in the Central African Republic to US\$9,715 per capita in Norway. Country differences were equally striking for real per capita government expenditure, which varied from US\$4 in Myanmar to US\$8,303 in Norway.

Table 1: Changes in median health expenditure per capita, 1995-2013 (constant 2005USD)

	THE per capita		GGHE per capita	
	1995	2013	1995	2013
H	763	2037	393	1246
UMIC	111	436	63	248
LMIC	37	123	16	75
L	12	40	4	15
All	93	396	50	218

Source: World Bank, World Development Indicators 2015.

Figure 4: Average government health expenditure per capita by country income group 1995-2013 (constant 2005USD)



The figures in Table 1 hide the impact of the financial and economic crisis that hit HICs in 2008, although they can be seen in Figure 4. Total and government health expenditure per capita in these countries fell in 2009, 2010 and in 2012, arresting the earlier growth in both series. Falls in dollar terms did not occur in the other income groups, although the rate of growth fell in LMIC and UMICs. As we show later, health expenditure in LICs financed by development assistance for health also fell after the crisis.

Government expenditure is the largest source of health spending in all income groups except LICs where private expenditures (predominantly out of pocket (OOP) payments) accounted for 60

percent of total health spending in 2013 (Table 2) (WB, 2016). However, economic growth is typically accompanied by an increase in the share of total health expenditure derived from compulsory pooled funds, a mix of government revenues and compulsory health insurance which is frequently called simply “government expenditure”, and a decrease in the out-of-pocket share. At the same time, as countries transition from low to middle income status, they lose some development assistance for health, now mostly concentrated in LICs – 28.6 percent of total health expenditure in 2013 compared to 6.4 percent in lower middle income countries. This is increasingly being referred to as the “health financing transition”. However, OOP payments as a share of total health expenditure are similar in low and lower middle income countries, perhaps a reflection of the difficulty of instituting pre-paid/pooled financing at low income levels. In 2013, private insurance represented only a negligible share of total health expenditure globally – the median level across countries was 2.5 percent (Figure 5⁴).

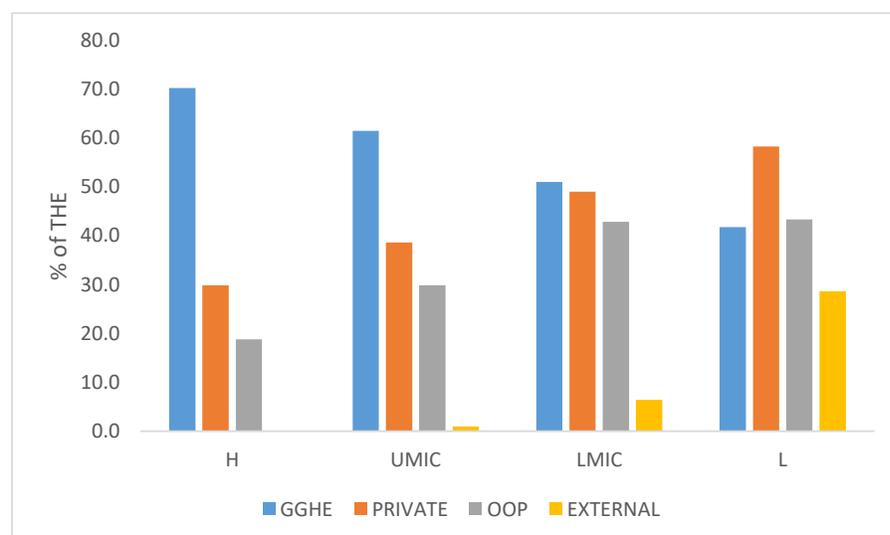
Table 2: Median health expenditures as a share of total health expenditure by source and income level in 2013

	GGHE	PRIVATE	OOP	EXTERNAL
H	70.2	29.8	18.8	0.0
UMIC	61.4	38.6	29.8	1.0
LMIC	51.0	49.0	42.8	6.4
L	41.7	58.3	43.3	28.6
World	60.0	40.0	30.1	3.7

Source: WHO, Global Health Expenditure Database 2015.

Notes: GGHE+PRIVATE=THE; In many low income and lower income countries external financing is counted as government health expenditure.

Figure 5: Total health expenditure by source, 2013



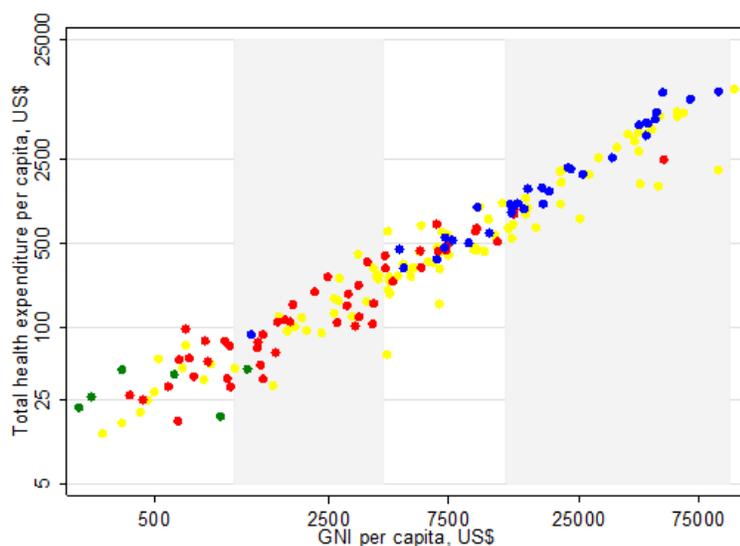
Source: WHO, Global Health Expenditure Database 2015.

⁴ It is possible to separate government expenditure from domestic and external sources, for example, only for years in which a full country health accounts study has been undertaken.

Note: The four columns are not additive and externally sources expenditures are also included in the columns showing expenditure by government and by private entities.

Another way of depicting the way the sources of health finance differ across countries at different income levels is depicted in Figure 6, which plots total health expenditure against GNI per capita for 2013. Countries are color-coded based on the largest source of financing for health - general government revenues (yellow), social health insurance (blue), and OOPs (red). Even though there is some double counting because external funding is also included in government and private health expenditures, countries where donors are the largest source of health financing are in green. Recognizing that this simplifies a complex reality where in most countries there is a mix of financing sources, social health insurance “dominance” as a source of financing is largely among UMICs and HICs, while tax financing “predominance” spans the entire income spectrum.

Figure 6: Total Health Expenditure per capita by GNI per capita, US dollars, 2013



Source: WHO, Global Health Expenditure Database 2015.

Notes: Countries are color-coded based on the largest source of financing for health - general government revenues (yellow), social health insurance (blue), and OOPs (red).

The problem with out-of-pocket payments

In most LICs and LMICs, there is considerable scope for raising revenue through increased tax collection efforts, as discussed in the next section. However, many governments have yet to build the public finance systems that effectively capture growing wealth for investments in health and other social sectors. As a result, the unmet demand for health financing is met through OOP expenditures (Box 1). In 27 low and lower middle income countries, OOP expenditures in 2013 accounted for more than 50 percent of total health spending and represented an average 40 percent among all LIC and LMICs (WB, 2016).

High OOP payments are a concern for many reasons (Smith & Nguyen, 2013). First, the uncertainty and high-cost associated with certain illnesses mean that OOP payments can be large and unpredictable for households in the absence of adequate pre-payment or risk-pooling arrangements. This puts their ability to consume other important goods and services at risk, while an inability to smooth consumption over time directly reduces welfare and may lead to informal risk-management strategies such as borrowing or selling assets that can hinder productivity. Second, even though most countries support the principle that payment for health care should be based on ability to pay and access to services based on need, OOP payments are regressive and impose significant barriers to access for the poor. Third, the information asymmetries⁵ associated with illness and treatment options mean that hospitals, laboratories and companies have significant market power over the patients. As a result, providers can take advantage of their superior knowledge to charge for unnecessary additional services, higher prices or both.

Increasing OOP payments are generally undesirable, certainly for the poor, so it is not considered as an option for raising additional funding for health in this report, which focuses on ways that countries can raise additional funds for health through pre-payment and subsequent pooling. The options considered include domestic resource mobilization through taxation and government charges, social health insurance, borrowing, higher priority to health in government budget and expenditure decisions, and development assistance for health. The paper will also consider the role of the private sector independent to the question of OOP payments.

Box 1: What are out-of-pocket expenditures?

Out-of-pocket spending for health by households is incurred when a health expense is either not (fully) subsidized or not (fully) reimbursed through government funding or insurance or both. Such spending can include full payment by the patient if a service is not included in a formal benefits package (if one exists), as well as partial contributions in the form of copayments, deductibles or co-insurance (Smith & Nguyen, 2013). The payments may be incurred at public or private providers. The payments may be “formal” in that they are part of an official policy of cost sharing, or “informal” if the payments do not adhere to official rules.

OOP health expenditures are called “catastrophic” when they exceed some threshold share of either total or non-food expenditures, typically 10-25 percent of the former and 25-40 percent of the latter. In East Asia and Pacific, the headcount of those living in households spending more than 10 percent of total expenditures on health was 8 percent (Van Doorslaer, et al., 2007); in Europe and Central Asia, that ratio is over 10 percent (Smith & Nguyen, 2013); in Latin America and the Caribbean, the ratio was 11 percent (Dmytraczenko & Almeida, 2015). In the EU-15 by contrast, the ratio was 5.8 percent (Smith & Nguyen, 2013). Crucially, in all three regions, the incidence of catastrophic payments was correlated with a country’s reliance on OOPs for health financing. In addition, a higher reliance on OOP payments is associated with greater inequality in the use of health services for both inpatient and outpatient care. The

⁵ Information asymmetries mean that health service providers have much more knowledge about the cause of illness, prognosis and treatment options than patients who generally need to trust that the provider acts in their best interests.

inequality in utilization often implies that the benefit incidence of public spending also disfavors the poor.

Pre-payment with subsequent risk-pooling arrangements can largely address the adverse effects of OOP payments. First, by making small regular contributions to future health care needs through taxation or insurance premiums, a household will be better off if it were to face the risk of unpredictable and potentially catastrophic OOP payments due to one of its members falling ill. Second, financing health care through general government revenue or social health insurance, where contributions are based on income or wages by definition links payments to ability to pay. Health care utilization would then be based on need, assuming the population has equal access to quality health services. However, higher levels of public spending through general taxation or social health insurance does not automatically improve equity and financial protection. Weak purchasing arrangements and poor governance in the health sector can lead to rent-seeking by providers and hinder efforts to reduce OOP payments (Liang & Langenbrunner, 2013) (Smith & Nguyen, 2013) (Somanathan, et al., 2014).

While OOP payments are undesirable in most cases, there is considerable debate around whether their complete elimination is desirable. Some services such as cosmetic surgery may not warrant subsidization, for example. Some other services such as expensive treatments for some cancers may be outside of the scope of many LIC health budgets, requiring societal decisions to be made about what should be covered and by how much – in such cases people who can afford to pay are typically not denied the right to access the services. It has also been argued that OOP payments can be an important tool for creating greater patient responsibility. Patient cost-sharing is, however, a complex issue and a growing body of evidence suggests that *less* patient cost sharing may be desirable for a broader range of services than traditionally believed (Smith & Nguyen, 2013). This issue will be further debated at the Forum.

4. Raising more domestic revenues

As highlighted in the previous section, global health expenditure growth has exceeded GDP growth meaning that the health system has absorbed a larger share of government, employer, and household incomes (Hsiao & Heller, 2013). At the same time, there remains a considerable gap between needs and current levels of expenditure in low income countries (Jamison, et al., 2013) (McIntyre & Meheus, 2014) and even high income countries have struggled to maintain their levels of health expenditure subsequent to the financial crisis of 2008.

There are a number of ways in which the need for additional fiscal space for health can be met. First and foremost are conducive macroeconomic conditions and increases in overall government revenue – even if the share to health does not change, the size of the overall pie is larger. Second is ensuring that resources get allocated to the health sector through earmarking and specific commitment devices such as pre-paid insurance schemes. Third, is a re-prioritization of health in overall budget allocation decisions – even if the size of the pie does not change, the share to health is larger. Fourth, is access to health sector grants and donor aid and finally fifth, is improvements in efficiency which will ensure “more health for the money” (Tandon & Cashin, 2010). In LICs and LMICs the main issue remains how to meet the considerable gap between health needs and

current levels of health service coverage, as health care systems develop, the focus shifts increasingly to policies that aim to improve efficiency and deliver cost-effective quality care.

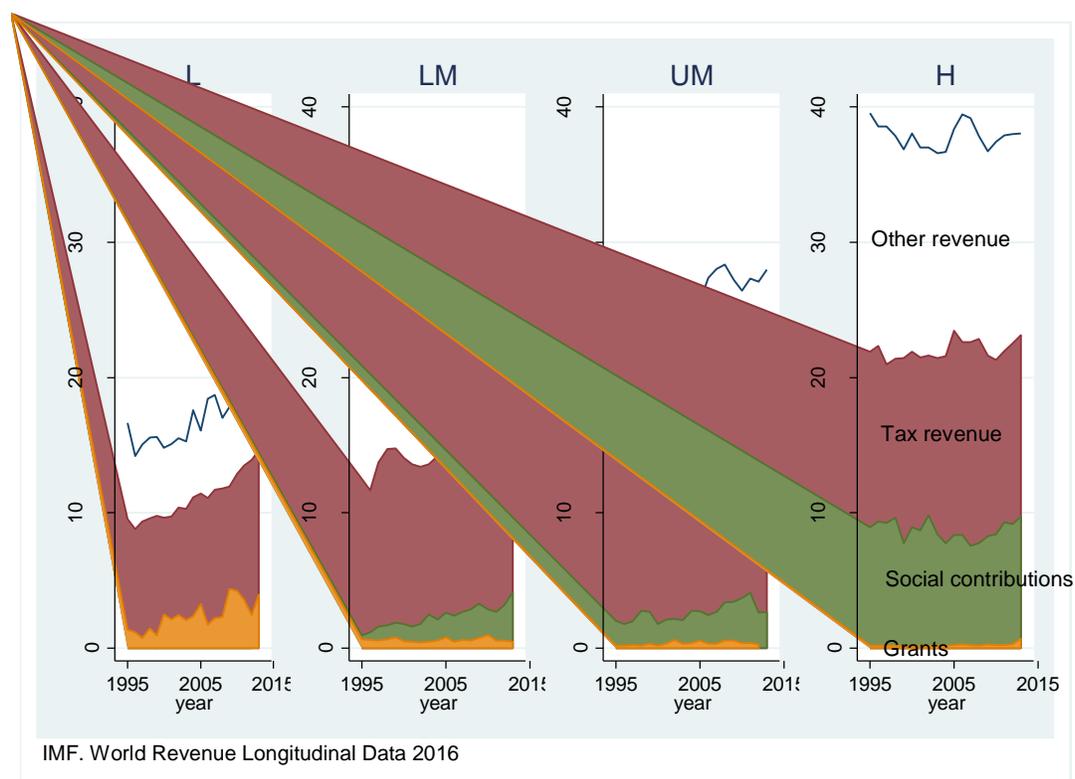
The following section considers the potential of government to raise domestic resources while subsequent sections tackle the prioritization of health in government budgets and DAH.

a) Government revenue mobilization

Government revenues are an important determinant of fiscal space and the capacity of a government to spend on health. Improved revenue generation can result from economic growth, from improved administration of existing tax and nontax collection efforts, from expanding the tax base in terms of people or companies that contribute, from the introduction of new taxes and other revenue sources, and/or from borrowing which offers governments a means to smooth out consumption over time and finance productive investments immediately (WB, 2006).

Over the last two decades, economic growth has been accompanied by increases in government revenue in all country income groups on average, except in the HICs. In general, richer countries raise more revenue as a share of GDP; taxes make up the largest share across all income groups; social contributions are used almost exclusively in high income countries; and development assistance, as expected, are important predominantly for low income countries (Figure 7). There is, of course, considerable diversity across countries within the income groups. Interestingly, tax revenues as a share of GDP fell after the financial crisis in all country income groups except LICs, where there have been continuous increases since the early 2000s. This resilience after the 2008 economic crisis in LICs is associated with continued economic growth, greater scope to increase their tax effort from a noticeably lower level, and improvements in fiscal capacity following public financial management reforms (IMF, 2011).

Figure 7: Trends in total government revenue 1995-2013 (medians)



Tax revenues as a share of GDP are relatively low in many LICs and LMICs – nearly half had tax shares of less than 15% of their GDP⁶. Estimating the additional per capita revenue these countries could raise by increasing their tax ratios to 20% of GDP – an arbitrary but often suggested benchmark⁷ – results in average gains of \$US28 and \$US76 per capita for LICs and LMICs respectively (

Only a few studies have controlled for country-specific macroeconomic and institutional differences, finding that countries with low GDP per capita tend to exhibit low tax efforts, and that increasing their tax efforts could increase their revenue by an estimated average of 2 to 4 percent of GDP. Applying this percentage to the data used in Annex 2 suggests more modest average per capita increases of US\$45 in LMICs and US\$12 in LICs (

Table 3). However, they also found that a number of countries (e.g. Senegal, Kenya, Zambia, Mozambique, and Burkina Faso) are already operating near their tax capacity – suggesting that for these countries improvements in tax collection efforts are unlikely and additional sources of fiscal space for health would need to be identified.

⁶ In 2013, out of 157 countries where data is available, 9 high income (Venezuela, Kuwait, Oman, Singapore, Bahrain, Qatar, Saudi Arabia, The Bahamas, Equatorial Guinea) and 10 upper middle income (Lebanon, Iraq, Libya, Iran, Gabon, Costa Rica, Dominican Republic, Panama, Azerbaijan, Turkmenistan) countries also had tax shares of less than 15 percent of their GDP – predominantly resource rich or conflict affected countries.

⁷ Tax shares of 20 and 25 percent, while desirable, may be difficult to achieve given administrative and capacity constraints (Heller, 2005, 2006; IMF, 2011).

Table 3 and Annex 2). Given that median per capita government expenditure on health was only \$US15 and US\$ 75 in LICs and LMICs in 2013, the increased tax revenue offers the potential for relatively substantial increases in health spending depending, of course, on how much of the increased revenue governments allocate to health.

However, these calculations give only an indication of the potential to raise additional tax revenues, recognizing that many factors influence the ability of countries to translate this potential into reality. In the process of economic development, countries tend to move from easy-to-collect taxes such as on imports and/or exports to harder-to-collect taxes such as those on income (Besley & Persson, 2013). Such transitions are driven by changes in the structure of the economy. For instance, a decline of the informal sector allows for a broader tax base, an increase in the size of firms gives rise to a mechanism for better enforcement, and a move towards trade liberalization decreases reliance on trade taxes (Besley & Persson, 2013). Large inequalities in income distribution, weak institutions and corruption generally have negative impacts on this process while the relationship between tax performance and trade openness has been more ambiguous (Mahdavi, 2008) (Le, et al., 2012) (Pessino & Fenochietto, 2010) (Gupta, 2007) (Baunsgaard & Keen, 2010). Empirically, there is also strong evidence to support that developing countries rich in natural resources struggle to transform wealth into assets that promote economic development (

Box 2).

Only a few studies have controlled for country-specific macroeconomic and institutional differences, finding that countries with low GDP per capita tend to exhibit low tax efforts, and that increasing their tax efforts could increase their revenue by an estimated average of 2 to 4 percent of GDP⁸. Applying this percentage⁹ to the data used in Annex 2 suggests more modest average per capita increases of US\$45 in LMICs and US\$12 in LICs (

Table 3). However, they also found that a number of countries (e.g. Senegal, Kenya, Zambia, Mozambique, and Burkina Faso) are already operating near their tax capacity – suggesting that for these countries improvements in tax collection efforts are unlikely and additional sources of fiscal space for health would need to be identified (Fenochietto & Pessino, 2013) (Pessino & Fenochietto, 2010) (IMF, 2011) (Le, et al., 2012).

Table 3: Estimated average increase per capita (US\$) if countries increased their tax/GDP ratio to 20% and/or improvements in tax collection efforts increased revenue by 3% of GDP (2013)

	Additional revenue if tax collection were 20% of GDP (pc US\$)		Additional revenue if tax improvements increased revenue by 3% of GDP (pc US\$)	
	N	Average (range)	N	Average (range)
LMICs	25	\$76 (11 - 209)	43	\$45 (20 – 91)
LICs	26	\$28 (4 - 67)	32	\$12 (5 – 22)

⁸ They created an index of tax effort defined as the ratio between a country’s maximum tax capacity – estimated based on a set of control variables such as GDP per capita, population growth, trade openness, share of agriculture, corruption, etc. that take into account a country’s specific macroeconomic and institutional features – and the amount actually raised.

⁹ We take the 3% as the halfway between the 2-4% range.

Source: Author's calculations based on IMF. World Revenue Longitudinal Data 2016.

Box 2: The revenue performance of resource rich economies

Using resource wealth to invest in human and capital assets that promote economic development has proved challenging for many developing economies. The IMF has classified 29 low and lower middle income countries as resource-rich based on whether at least 20% of their total exports were natural resources or whether they derived at least 20% of their revenue from natural resources using average data for 2006-2010 (Annex 2). Based on this classification and a recent analysis by Venables (2016), four key characteristics emerge. First, many rely heavily on natural resources for revenue. Second, savings is generally low indicating a preference for current consumption over investment. Third, growth performance in general has been poor, or at the very least normal, when it should have been faster than normal. And finally, revenues can be highly unpredictable due to the volatility of commodity prices which often gets passed on as volatility in government spending.

Why has resource wealth been so hard to capture? The discovery, development, and rent capture of natural resources is dependent on considerable technical expertise and good governance – two prerequisites often absent in developing economies. Investments are generally made by foreign-owned companies expecting to share with the government a return on their investment. Ideally, the issuance of exploration and development licenses and agreements on royalties and rent taxes are negotiated in a transparent and competitive process that can secure a high fraction of the rent for the state. In practice, the terms and conditions of contracts offer poor terms to the host country. Sound fiscal and monetary policies that smooth out the effects of revenues from volatile, time-limited resources are also lacking. Patronage politics and a lack of incentive to develop other non-resource tradable sectors and state capacity exposes resource rich economies to the unpredictability of the markets.

Sources: (IMF, 2012b) (Venables, 2016)

Improving tax efficiency

Among the leading sources undermining LIC's and LMIC's capacities to raise revenue are tax avoidance and evasion and tax incentives to companies particularly relating to the exploitation of natural resources (Mascagni, et al., 2014). There is considerable controversy and debate in this area. For example:

- i) Two common tax avoidance and evasion practices are transfer pricing – also known as base erosion and profit shifting (BEPS) – and capital flight¹⁰. While there is no clear figure of the amount of revenue lost to these and other similar activities, estimates from developing countries as a group range from US\$70 billion to US\$420 billion a year (Crivelli, et al., 2015) (UNCTAD, 2009).

¹⁰ Transfer pricing, a practice in which multinational corporations shift profits to subsidiaries in tax havens, is a legal but aggressive tax strategy used to avoid paying higher corporate taxes. Capital flight is an illegal practice where wealth is transferred to secret offshore accounts and not declared for tax purposes.

- ii) Tax exemptions, tax credits, preferential tax rates, and/or deferred tax liability are common incentives used to attract foreign investors. But there is limited evidence to suggest that tax incentives result in more foreign investment and that this investment has a positive impact on economic growth in developing countries. One estimate puts the loss of revenue from tax exemptions on the order of 20 to 30 percent of actual revenue (Mascagni, et al., 2014).
- iii) It is also argued that resource wealth displaces domestic taxation in countries with low institutional capacity. This is generally because large resource windfall revenues create less of an incentive for economic diversification. Opportunities for rent-seeking and corruption become more prevalent and politicians sometimes negotiate outside the country's tax rules with multinational companies (MNCs)¹¹ that have the resources and tax specialists to pursue their own interests (Mascagni, et al., 2014).

Addressing these losses in revenue where they occur would complement the efforts of LICs and LMICs to raise additional domestic resources, some of which could flow to health. In resource rich countries, the IMF recommends that countries use a combination of a royalty and tax on rents, in addition to a corporate income tax applied to all businesses (IMF, 2011). It also recommends strengthening tax administration and revenue policies to close loopholes, limit exemptions, and empower tax authorities with the tools to better negotiate and enforce contracts with profit shifting MNCs. Regional cooperation and agreements could also limit tax competition between countries that drive them to offer foreign investors costlier and costlier tax incentives.

New taxes and charges

In addition, mechanisms to broaden the tax base include income taxes and consumption taxes and there are many examples of low and middle income countries that have introduced new taxes over the last decade, providing additional government revenues that flow totally or partly to health (WHO, 2010). Income and value-added taxes (VAT) are currently the dominant sources of government revenue in the developed world, where the potential to increase personal income taxes is determined partly by the rate of formalization of the labor force - informality averages 40 percent in developing countries currently (WB, 2016). The IMF also recommends replacing inefficient production or sales taxes with a simple broad based VAT citing it as the instrument with the most revenue raising potential (IMF, 2011). Excise taxes are also widely applied on products such as fuel, alcohol, and tobacco and have been seen as a potential source of revenue for health in developing countries. There is debate, however, around the extent to which these revenues should be earmarked for health, discussed subsequently.

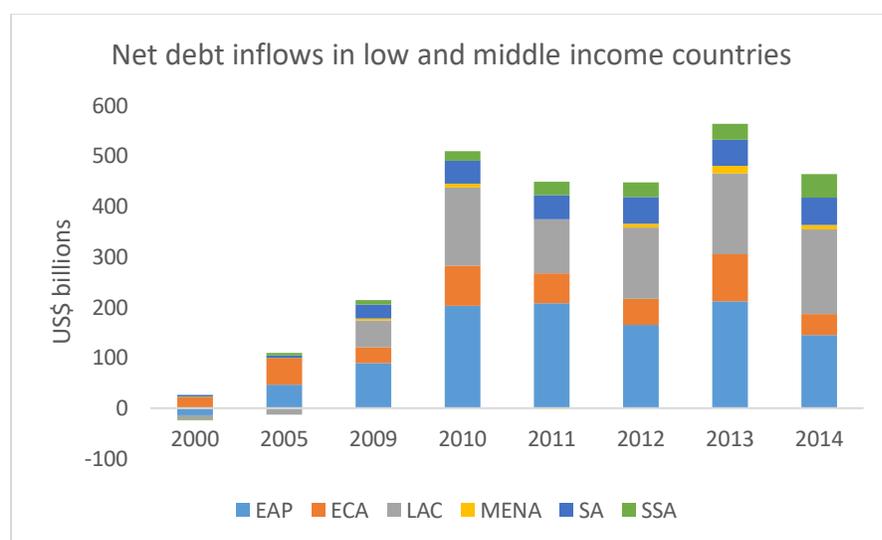
Borrowing including sovereign bonds

In countries where it is not possible to increase tax collection efforts either by being more efficient in the collection of existing taxes and charges, or by expanding the range of taxes and charges, borrowing offers governments a means to smooth out consumption over time and finance productive investments immediately. There is not, however, a net increase in funds overall – the money raised for immediate spending will have to be repaid subsequently.

¹¹ Production from the extractive industries has been dominated by large MNCs (GEP, June 2015).

Taking advantage of a protracted period of low interest rates, high liquidity, and access to new sources of external financing, debt increased dramatically over the last two decades in low and middle income countries – net flows grew from US\$2.2 billion in 2000 to \$464 billion in 2014 – (Figure 8) (WB, 2016). Faced with significant development needs, a decline in access to concessional financing¹², and limited options in local markets to fund the budget, debut issuers have been able to fund large infrastructure projects, diversify their investor base, create reference bonds for the corporate sector, and, in some cases, restructure debt to improve or restore liquidity (Guscina, et al., 2014).

Figure 8: Growth in net debt flows in low and middle income countries 2000-2014



Source: World Bank. International Debt Statistics, 2016.

However, the major share of net debt inflows is concentrated in a few countries. In 2014, the top ten borrowers¹³ accounted for 74 percent of all flows with Brazil and China accounting for 40 percent combined (WB, 2016). Nevertheless, since 2004 there has been a surge of developing country governments issuing bonds for the first time, managing to raise approximately US\$18 billion. In general, issued debt among first time issuers was denominated in hard currency (US dollar or Euro), offered relatively high fixed coupons with maturities of 5 to 10 years, and ranged in size from US\$200 to US\$1,000 million (Annex 4) (Guscina, et al., 2014).

While such bonds have helped emerging economies diversify their sources of finance, financial deepening does not guarantee financial stability. Even though average public debt in LICs and LMICs is relatively low – 38.7 and 44 percent as a share of GDP compared with 62.1 percent in

¹² Between 1995 and 2013, the number of low income countries nearly halved from 63 to 34 with profound implications to how development aid is allocated. In 2013, 62 countries were classified as IDA eligible and 20 as IDA/IBRD blend countries. By 2020, projections estimate anywhere between 23 and 44 countries to graduate from IDA eligibility. IDA eligibility criteria is based on the lack of creditworthiness on international markets and the concept of relative poverty as measured by GNI per capita. Of the 29 countries recently graduating to MIC status, 14 are also graduating from GAVI assistance.

¹³ China, Mexico, Turkey, Brazil, India, Malaysia, Indonesia, Kazakhstan, Colombia, Thailand.

high income countries in 2013 – limited debt management capacity exposes them to considerable risk (WB, 2016). Recent falls in commodity prices, increases in U.S. interest rates, fluctuations in exchange rates, and slower growth overall increase these risks¹⁴. Partly because of this, in 2013 only 31 LIC and LMIC countries (out of 83) had a credit rating that allowed them to access international capital markets, and only three (Philippines, Morocco, and India) had an investment grade rating above BBB¹⁵. This means that the costs of commercial borrowing are still high relative to grants or concessional loans (WB, 2013).

Past experience with emerging market sovereign debt highlights the risks associated with this recent increase in borrowing: during the 1980s and 1990s, surges in debt were associated with a surge of debt and currency crises, ending in debt restructuring (IMF, 2012). Persistent budgetary deficits continue to add to the public debt which might be increasingly difficult to maintain and could lead to the need to cut government spending in the future. Signs of default stress are already reported among emerging market bond issuers in the Democratic Republic of Congo, Côte d'Ivoire, Gabon, Ghana, Rwanda, and Zambia, with Jamaica defaulting on its sovereign debt in 2010 (Stiglitz & Rashid, 2013).

Earmarking and hypothecation

Even if the measures described above lead to increases in overall government revenue, there is no guarantee that they will be allocated to the health sector. Governments often earmark specific taxes to health or use commitment devices such as pre-paid insurance schemes to “guarantee” at least some resources to health.

Compulsory contributions to health insurance, by employers and/or employees, are one form of earmarking and the next section considers whether there is evidence that social health insurance (SHI) leads to a net addition to domestic resources for health. Taxes on products known to be harmful to health (sometimes known as “sin taxes” because they encourage consumers to reduce consumption of these harmful products) are widely used and are sometimes earmarked for the health sector or some part of it – for example: health promotion funds; specific health activities such as tobacco control or alcohol reduction programs; treatment of certain diseases or specific health expenditures such as for cancer or AIDS treatment; or to subsidize health insurance contributions for some population groups.

There is considerable debate about whether hypothecation of tax revenues for health is desirable or not, something to be discussed further at this Forum. In general, ministries of finance prefer not to have their hands tied by hypothecation while frequently health ministries and health advocates prefer hypothecation on the grounds that these monies cannot, at least in theory, be taken for other purposes. However, regardless of the view taken about earmarking, increasing taxes on harmful products such as tobacco will not only cut consumption and improve health, but raise

¹⁴ As the majority of emerging economies borrowed in U.S. dollars, they run the risk of needing to devote a larger share of their revenues in depreciated local currency to service their debt.

¹⁵ The primary purpose of a credit rating is to enhance access to private markets and lower debt issuance and interest costs. (Standard & Poor; Moody's, Fitch, 2013).

funds, at least some of which can be allocated to health. For example, it has been estimated that increasing excise taxes on tobacco products in some of the countries with relatively low tax rates could raise additional revenues equivalent to between 10% and 25% of current health expenditures, (WHO 2010).

b) Social Health insurance

This section reviews the capacity of SHI to mobilize additional resources for health, as well as the progressivity of this source of health finance and its impact on labor markets.

Capacity to mobilize additional resources for health

While the origins of health insurance were associated with the desire to reduce the financial risks associated with ill-health and the subsequent, potentially catastrophic, cost of care, it is often argued that since SHI is essentially an ear-marked tax within the broader tax system it would result in a larger and more stable revenue base for health. There are also other reasons why many LICs and MICs have seen SHI as having a direct link with revenue generation. First, given weak income tax collection capacity in many countries, earnings-based insurance contributions from formal sector workers are more feasible to collect. Second, while tax revenues fluctuate with the economic cycle, and the health ministry's share of tax revenues is vulnerable to negotiations within government, SHI revenues are viewed as more predictable because they are earmarked for health (Wagstaff, 2010). Third, because SHI contributions are linked directly to entitlements, the population might be more willing to pay them than other types of taxes.

The evidence does not, however, show clearly whether the introduction that SHI results in a larger revenue base for health than would otherwise have been the case. There is evidence of various types of problems. First, the 'tax base' for the easy collection of SHI premiums is smaller than the tax base of the economy as a whole, limited largely to formal sector workers and their employers. If the aim is to cover the entire population through SHI contributions from the formal sector, the contribution rate in countries where large fractions of the population are not in the formal-sector would need to be very high, or SHI funds would cover a relatively small share of needed health services. Second, enrollees avoid paying their contributions in part or in full in many settings (e.g. Colombia, Philippines, Russia, Mexico) (Escobar & Panopoulou, 2003) (Jowett & Hsiao, 2007) (Twigg, 1999) (Scott, 2006). When SHI revenues are lower than expected as a result of contribution evasion, the ability of the system to fund needed services is reduced and there is pressure to increase contribution rates and/or to obtain subsidies from general government revenues to cover the deficit (Wagstaff, 2010). Third, the introduction of SHI may be seen by Ministries of Finance as an opportunity to re-allocate part of the revenues previously allocated to health to other sectors. For instance, in Kazakhstan the Ministry of Finance reduced the allocation of tax revenues to the health sector as SHI contributions were introduced, regarding them as a substitute for tax revenues not a complement (Langenbrunner, et al., 2008).

Impact on the progressivity of health financing

SHI contributions with contribution ceilings tend to be regressive with the rich paying a lower share of their income than the poor (Wagstaff, 2010). Any flat-rate contributions imposed on the

informal sector add to the regressivity, although examining progressivity only by considering SHI contributions can be misleading where general government revenues are used to subsidize the SHI system. Even taking all sources of health financing into account, however, O'Donnell et al. (2008) found that in 13 Asian countries, the health financing systems that were predominantly SHI-financed (eg. Korea, Japan, Taiwan) were more regressive than those that were predominantly financed through general tax revenues (Hong Kong (China), Malaysia and Sri Lanka) probably because general tax revenues are frequently fairly proportional or progressive (Wagstaff, et al., 1992) (Wagstaff, et al., 1999) (O'Donnell, et al., 2008).

Impact on labor markets

The impact of SHI on unemployment and the rate of formalization of the economy is subject to debate. SHI could reduce the demand for labour by raising labour costs, thus reducing employment and wages. The OECD has recommended that member countries lower payroll taxes (OECD, 1999) for this reason, although the evidence for a subsequent increase in employment and the rate of formalization is mixed (Wagstaff, 2010). However, a study of 28 countries in Europe and Central Asia found that SHI increased wages by 20%, reduced employment as a share of population by 10% and increased self-employment by 17% after controlling for other determinants, lending some support to the argument (Wagstaff & Moreno-Serra, 2009). On the other hand, the study found no impact on agricultural employment, a widely used proxy measures for the size of the informal economy.

Increasing SHI coverage in the informal sector

The high level of informality in most LICs and MICs has often proved a constraint for expanding contributory SHI. Historically, informality tended to decline with increases in GDP per capita, which was an enabling factor in the growth of contributory SHI in the OECD countries that first developed the system, as well as in Japan, Korea and Taiwan (China) in the 1970s and 1980s. Recently, informality has proved more persistent (**Error! Reference source not found.**). It has not been difficult to enroll the formal sector and the poor (with full subsidies) in new national insurance schemes – e.g. Indonesia, Philippines, Thailand, Vietnam – but collecting contributions from the rest of the informal sector has proved difficult¹⁶. Even partial subsidies for premiums, even when combined with assistance in enrolling (for instance, information and reminders), has been less effective than had been hoped in increasing enrollment in the informal sector and, therefore, in translating OOP payments to prepayment (Capuno, et al., 2014) (Wagstaff, et al., 2014).

Countries have responded in two ways to these challenges. Some have rapidly expanded SHI-based coverage to large segments (>90%) of the population, - e.g. Argentina, Colombia, Mexico, China, Thailand, Mongolia – by completely or almost completely subsidizing coverage in people not in formal sector employment. The budgetary implications of this fast route to UHC are

¹⁶ Somanathan et al. 2015. EAP Economic Update (get full reference)

significant. Other countries have progressively expanded enrollment primarily through contributory methods (Chile, Costa Rica), a slower and more challenging process¹⁷.

SHI enabling factors

The motivation for LMICs and LICs to propose the introduction of SHI is not totally, and maybe not even mostly, related to the possibility of raising new sources of revenue for health. However, the potential of SHI to be an additional and viable source of domestic revenues for health is influenced not only by macroeconomic conditions and the rate of formalization of the labour force but also by the administrative, technical and regulatory capacity of countries to collect and pool revenues and purchase services. Details of these requirements are discussed elsewhere and are beyond the scope of this paper (Doetinchem, et al., 2009).

c) Private sector finance

Growing interest in the role of the private sector in health in low and middle income countries has led to many organizations and institutions developing roadmaps and engagement strategies to harness its potential (IFC, 2010) (WB, 2013) (McKinsey & Company, 2009) (USAID, 2009) (IFC, 2008) (IFC, 2011). While the bulk of the literature has focused on the use of private providers in the delivery of health care services, the following section considers both the private sectors' potential to raise additional resources for health and improve the performance of health care provision.

Role of private sector in financing

Private Health Insurance

Raising funds for UHC largely through compulsory prepaid contributions does not rule out a role for private financing in health. People will inevitably pay for some services out-of-pocket: some services may not be included in the mandated benefits package; users may want better amenities or faster service than available from prepaid and pooled funding; or, services included in the benefits package may involve co-payments, sometimes substantial ones. Private (voluntary) health insurance (PHI) is an option for reducing the financial risks associated with such payments. In LICs and LMICs, it is also sometimes argued that introducing PHI may be a stepping stone for increased risk pooling, given large informal economies, inefficient taxation mechanisms, high OOP spending and weak institutions (Pauly, et al., 2006). **Error! Reference source not found.** provides an overview of PHI and its functions.

¹⁷ UNICO reference

Box 3: What is private health insurance?

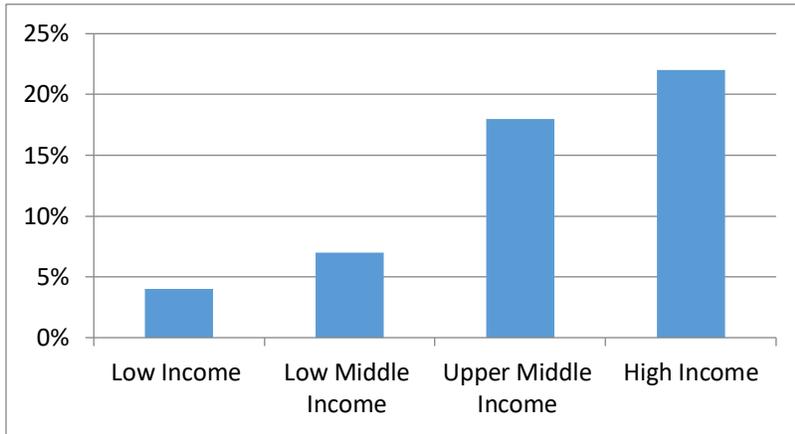
Private health insurance (PHI) involves coverage of a set of health services financed through private, non-income-related premiums (in contrast to tax-based or SHI contributions) made to an insuring entity. A contract between the private party and insurance entity specifies the coverage guarantee and the terms and conditions for payment or reimbursement of health services. The insuring entity assumes much or all of the risk for paying for the contractually-specified services.

In most cases, PHI markets are voluntary. Among OECD countries, Switzerland and the Netherlands mandate the purchase of health insurance by individuals for base-line service coverage, but competing private insurance entities collect the premiums and purchase services on behalf of their enrollees. People can also take out top-up insurance with the same entities for services not included in the base-line. PHI schemes vary across countries in terms of whether it is the primary or additional source of financing and in the latter case, additional to what. The functions of voluntary PHI may be categorized as follows:

- (a) *Primary*. The main source of health care coverage for a population or sub-population. Switzerland is an example.
- (b) *Substitutive*. Coverage is limited to individuals who are excluded from or opt out of statutory health insurance. In Germany, for example, about 11 per cent of individuals – most of them high earners – opt out of social insurance in favor of PHI.
- (c) *Complementary*. Coverage for services that are not covered by statutory health insurance, such as dental care or medicine copayments. In France, over 96 per cent of the population has complementary insurance to cover additional user charges.
- (d) *Supplementary*. Enhances consumer choice of health products and services. For example, patients may have access to quicker care, more health care providers, or better hospital amenities such as a private room.

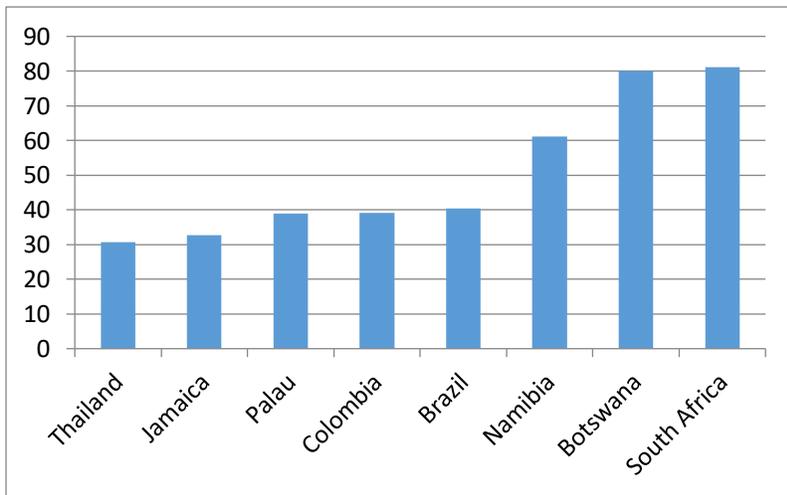
As noted earlier, PHI accounts for a relatively small share of global health expenditures. In 2012, only 15% of total private health expenditures was through PHI, compared to 77% from household OOPs (Figure 9). This world average was driven by upper-middle-income and high income countries where private insurance represented 18% and 22% of private health expenditures respectively, specifically 8 countries (out of 47) where PHI represents more than 30% of private health expenditure (Figure 10). PHI represented 4% and 7% of private health expenditures in LICs and LMICs respectively (Source: Jorge's paper).

Figure 9: PHI as % of Private Health Expenditure (2012) [add axis labels]



Source: Jorge's paper

Figure 10: Upper-middle income countries with high PHI as % of private health expenditure (2012)



Source: Jorge's paper

Strong public oversight and regulation are critical for PHI to be an effective financing mechanism given the market failures to which it is vulnerable to (see Box 3). In Switzerland and the Netherlands, both of which have private sector insurance entities collecting contributions and using them to purchase services for their enrollees, coverage of base-line insurance is mandatory to avoid adverse selection. Insurers are legally bound to charge a single rate for defined populations (community rating) and are forced to cover patients with pre-existing health conditions. Moreover, Swiss and Dutch government authorities apply risk-equalization formulas that transfer funds across the different insurers to alleviate the financial burden on insurers that cover more high-risk individuals (Reinhardt, 2004) (Cheng, 2010) (Leu, et al., 2009).

The regulation needed to address PHI market failures contributes significantly to the administrative costs (Woolhandler, et al., 2003) and cannot correct for all the shortcomings of PHI. The Netherlands and Switzerland have two of the most expensive health systems in the European Economic Area measured in terms of total health expenditure as a share of GDP (Wouters & MacKee, 2016). PHI market failures also contribute to high private health expenditures and numbers of uninsured in the US (Maynard & Dixon, 2002). A review of high-income countries on measures taken to correct failures in PHI found that while some are usually effective (e.g. compulsory coverage), other are only moderately effective (e.g. community rating) (Hsiao, 1995).

The impact of PHI on key health system outcomes in OECD countries also varies depending on the type of PHI, the regulatory environment and the relationship between the private and statutory systems. Data from Europe indicate that PHI generally leads to inequitable access to health care, does not contain costs or increase efficiency, and undermines the financial stability of statutory health insurance (Mossialos & Thomson, 2002) (Thomson & Mossialos, 2004). Countries such as Australia and Chile where PHI supplements mandatory SHI have had similar experiences (Armstrong, et al., 2010) (Hall, et al., 1999) (Sapelli, 2004).

The experience from OECD countries shows that PHI can play a role in expanding coverage to people who can afford to pay contingent on a strong regulatory environment and public sector oversight. In discussing the role of PHI, the Forum therefore needs to consider whether it is feasible for LICS and LMICS to strengthen or develop and implement the legislative and regulatory frameworks needed to address PHI market failures.

Community-based health insurance (CBHI), a form of voluntary PHI, has gained currency in many LICS and LMICS in recent decades (Box 4). It has not, however, allowed coverage with financial protection to expand to the levels required by the aspiration of UHC, even in poor communities being limited to people who can afford to pay the premiums.

Box 4. What is Community-Based Health Insurance?

Community-based health insurance (CBHI) - small, autonomous PHI schemes run by individual communities that can potentially be scaled up (Carrin, et al., 2005) - is one of the most common applications of PHI in LICS and LMICS. CBHI schemes have grown in prominence over time with several examples from Africa.

Calls for more widespread application of CBHI in UHC programs are tempered by the evidence emerging. A systematic review published in 2004 concluded that “CBHI arrangements are at best complementary to other more effective systems of health financing” and found little evidence that CBHI improves health care quality or efficiency (Ekman, 2004). Many of the schemes, including those in Kenya and Uganda, have been found to be small-scale and lacking in adequate funding, risk pooling, and governance (Carrin, et al., 2005) (Basaza, et al., 2009).

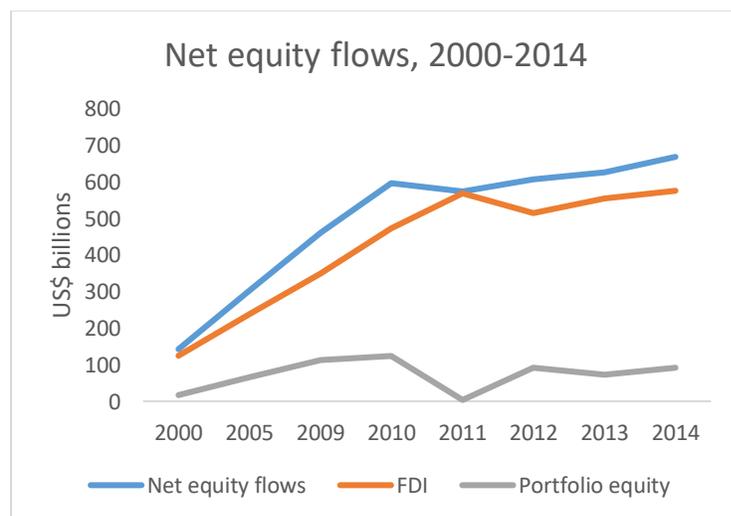
The CBHI scheme in Rwanda, widely touted for its success in improving access to services, is notable for the high levels of regulation it is subject to: there is high uptake of the community

schemes due to various incentives, the central government and donors provide stewardship and financial and institutional backing, and the central government redistributes some of the pooled funds between communities (Wouters & MacKee, 2016). In this sense, it operates more like a social health insurance scheme and is therefore markedly different to the other CBHI schemes described in this box.

Private sector investment

Many countries are also looking to foreign direct investment (FDI), domestic small and medium sized enterprises (SMEs), and public-private partnerships as a way to ease the pressure on the public system, improve the quality of service delivery, and contribute to technology and knowledge transfers. In 2014, net equity flows to low and middle income countries, not just for health, totaled US\$669 billion – increasing almost five-fold since 2000, especially through inflows of FDI (**Error! Reference source not found.**), but remains concentrated among just a few countries in LICs and LMICs mainly due to underdeveloped legal and regulatory frameworks and poor business enabling environments (WB, 2016) (WB, 2016) (UNCTAD, 2009).

Figure 11: Net equity flows to LICs and LMICs 2000-2014



Health specific investments are even more limited and generally directed towards inpatient care, pharmaceutical and medical products, and outpatient services for cardiovascular, oncology, and metabolic/lifestyle diseases as they hold the greatest potential investment opportunity within the sector. Domestic private health organizations or social enterprises tend to be even narrower in scope focusing on a few clinical procedures within a small catchment area. This allows them to streamline operations and deliver high volume or high margin services at reduced costs (IFC, 2008) (IFC, 2010) (Bhattacharyya, et al., 2010). In countries where the thrust of public policy in health is to strengthen primary care, investments in inpatient care and high-end technologies may sometimes create policy conflict about where resources should be best targeted.

Private investment in hospitals, medicines and/or other medical products, for example, clearly increases capital expenditures. At the same time, the recurrent costs of maintaining the new infrastructure are sometimes high, meaning that the capital investments need to be serviced by generating substantial recurrent incomes. Someone has to pay – generally insurance pools, governments, and individuals – and this paper argued earlier that an increase in OOP payments is generally undesirable, certainly for the poor. Staff also need to be found to run private sector service delivery, and the question of whether this results in shortages in the public sector is widely debated (Basu, et al., 2012) . While the role of the private sector in service delivery is well established and discussed further in the next section, the question of the net impact of private finance in health is still controversial and will be considered in a plenary session in this UHC Forum.

Role of private sector in service delivery

It is undeniable that the private sector provides many of the health services in many low and middle income services and without these services, many people would not be able to obtain needed health services. While calls for a larger role for the private sector in health service delivery are often premised on the assumption that private sector services are necessarily more efficient and of better quality, the evidence is mixed. The private sector performs better on drug supply, timeliness, and patient hospitality. However, recent reviews point to poor quality of care and worse patient outcomes and efficiency than in the public sector – partly because of the perverse incentives for unnecessary testing and treatment that are provided by fee-for-service systems (Patouillard, et al., 2007) (Berendes, et al., 2011) (Basu, et al., 2012) (Herrera, et al., 2014). This may, of course, reflect the enormous heterogeneity in the private sector, where low and high quality providers operate side by side for different segments of the market. There is also no agreement on the benefits of public-private partnerships (PPPs), in particular with regards to efficiency and effectiveness of treatments, despite their increased adoption in healthcare.

A more active regulatory role from the government is critical for ensuring that private sector provision is effective in achieving key health system goals, not least because of market failures in the health as discussed in the previous section. Where the private sector plays a significant role in the provision of health care in OECD countries (e.g. in Japan it is the predominant provider), countries have strong capacities for public oversight and the regulation of service provision, both in the public and private sectors. In settings where a government's regulatory capacity is limited however, private delivery may reinforce the development of two-tiered systems where access and quality of care are decided by ability to pay – with no guarantee that the private sector even provides better quality. There may also be a crowding out effect with the transfer of public funds and personnel to the private sector with subsequent reductions in public sector resources for the health sector (Basu, et al., 2012).

Developing government capacity to identify the incentives and shared risk-return tradeoffs that encourage private sector engagement and balance public and private sector interests is seen as one way to overcome these problems and maximize the potential of the private sector. These include: (i) recognition that public sector problems will require public sector solutions, e.g. basic public

health services with significant externalities; (ii) focus on the development of regulation and enforcement capacity that steer the delivery of services towards national health goals¹⁸; (iii) level the playing field across international and domestic entrepreneurs and public and private providers.

Perhaps the most immediate contribution of the private sector lies in its capacity as a source of disruptive innovation – developing simpler and cheaper delivery models that enable the participation of new consumers previously excluded from traditional markets. In a review of the most cited examples of business model innovation, approaches included:

- i) tiered fee strategies in which services differed only in amenities and waiting time but not clinical quality allowing wealthier patients’ choices to cross-subsidize the cost of care for lower income individuals;
- ii) task-shifting whereby simpler medical services were performed by lower and mid-level professionals to decrease operating costs;
- iii) specialization and high volume, low unit-cost delivery that maximized the use of infrastructure; and
- iv) outreach and telemedicine that increased the availability of services in previously underserved areas.

While examples tended to have a narrow clinical focus and were delivered through vertical approaches, knowledge diffusion could lead to replication or adoption by broad-based health services (Bhattacharyya, et al., 2010).

Domestic revenue generation summary

In many low and middle income countries there is considerable potential to increase government revenue, either by being more efficient in the collection of existing taxes or expanding the range of taxes and charges or the range of people or companies paying taxes. The political feasibility of different types of changes to the tax system and introducing any particular type of tax will differ across countries, while improvements in the capacity of countries to manage and use additional moneys will often be required to mitigate potential fiscal, monetary, and exchange rate risks of any increase in revenue.

Borrowing, including “innovative bonds”, does not increase money for health over a long term time horizon, but “frontloads” financing for immediate investment needs. Although there has been some expansion of sovereign debt recently in low and middle income countries, it is limited to a few countries and there are increasing concerns that countries might not have the capacity to repay their debt.

SHI is increasingly seen by low and middle income countries as a means of raising additional funds for health or protecting them from the general budget negotiation process, although the evidence that its introduction can raise additional funds in these countries is currently sparse.

¹⁸ It is important to recognize that many of the policy tools and instruments that can be used to influence and collaborate with private sector actors are important for the efficient functioning of the health sector as a whole. This highlights that health sector performance is less about public or private delivery and more about the incentives and capacity to oversee and regulate provision.

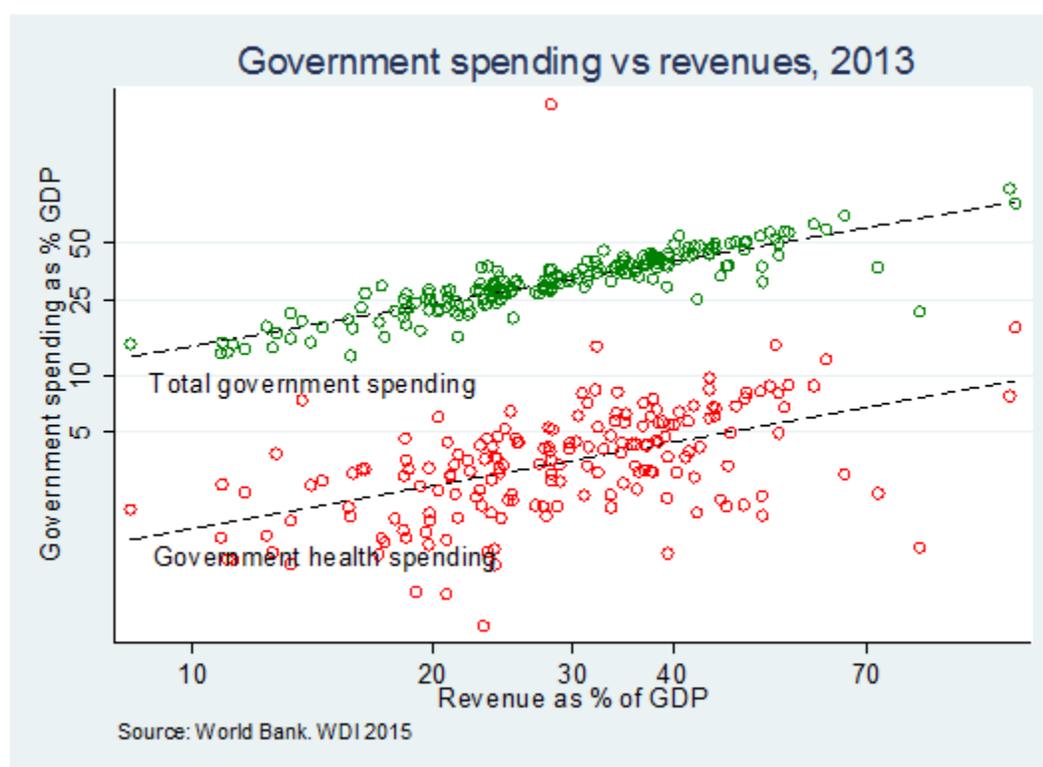
There is also some, though disputed evidence that payroll taxes for SHI, if they are introduced, might increase unemployment and reduce the rate of formalization in the economy.

Finally, although the private sector is a substantial, sometimes the predominant provider of health services in many countries, this paper is about raising funds for health where the evidence on the private-sector's contribution is less clear. Private health insurance has a role to play in providing financial risk protection for services or charges not covered by national (insurance or provision) systems. There is also growing evidence of the value of the private sector as a source of innovation in health, which sometimes can result in greater quality or more value for money.

5. Prioritizing health in government expenditure decisions

Raising additional funds in the ways discussed in previous sections is one way of increasing fiscal space overall. In the end, however, regardless of how much revenue governments' raise, the critical decision is how much they choose to allocate to health. Figure 12 show that while total government spending is very closely correlated with government revenues, both as a share of GDP, there is much greater variation around the regression line in government spending on health. Public policy choices matter.

Figure 12: Government spending vs. revenues as a share of GDP, 2013



A number of normative health spending targets have been recommended over the years. In 2001, several sub-Saharan governments made a commitment to allocate at least 15 percent of their budgets to the health sector as signatories of the Abuja Declaration. In 2014, the *Global Health Security Working Group on Health Financing* recommended that governments in LICs and LMICs spend a minimum of 5 percent of GDP or at least US\$86 per capita on health. Based on these benchmarks, most governments (across all income groups) fail to give priority to health – although it could also mean that the benchmarks are not appropriate.

Rather than using global targets to assess what priority governments should give to the health sector, another approach is to compare how countries prioritize health relative to the average of countries in their income group. In 2013, public spending on health accounted for, on average, 10.3% and 10.8% of total government expenditure, 3.4% and 2.5% of GDP, and reached US\$90 and US\$17 per capita in LMICs and LICs respectively. Taking per capita government health

spending for illustrative purposes, 46 countries allocated less than the average of total government spending for their income group. Moving these countries to the average would raise an additional US\$42 per capita for health in LMICs and US\$6 per capita in LICs on average. Some countries could more than double their current levels of health spending in this way.¹⁹

This is a little over half the \$76 per capita that LMICs could raise in terms of total government revenues by increasing their tax to GDP ratio to 20%, and about a quarter of the \$28 per capita that LICs could raise in the same way (see Table 3 earlier). However, in this case, all the money is for health whereas health would get only a share – on average less than 11% - of the increased general government revenues. If additional priority for health is combined with additional revenue raising as discussed in the previous section, the additional “fiscal space” for health could be substantial.

Low prioritization is essentially a policy decision by government and recent experience suggests that where governments want to increase the priority given to health, they can. It might also be influenced by a limited capacity for planning, budgeting and expenditure management in Ministries of Health making it harder to make the case for health as an efficient and cost-effective sector. In many countries, budget allocations also tend to follow a policy of historical budgets rather than comparing needs and possible results across sectors. Linking expenditures to outcomes might be one way of improving the efficient allocation and use of resources, inform governments’ strategic planning and long term investment decisions, and improve the accountability of governments and donors alike. There are three reasons why this is not easily achieved.

First, there are data and capacity constraints to better informing the prioritization and budgeting process upstream and monitoring budget execution and service delivery downstream. There is a lack of consistent and up-to-date data on available resources for health, the cost and use of health services, changes in disease prevalence and population structure, and health outcome measures. For instance, National Health Accounts (NHAs) are a tool for estimating and tracking health expenditures using a standardized classification system and methodology. Over the years, country governments and development partners have invested heavily in establishing NHA capacity in countries, but with mixed results. While NHA’s have been successfully institutionalized and the information used regularly as part of the policy process in an increasing number of countries, in many others NHA’s have been one-off efforts with little institutionalization (Powell-Jackson & Mills, 2007).

Secondly, even when the information and know-how are available, the budgeting process is an inherently political activity largely determined by the relative power of the Ministry of Health vis-à-vis other line ministries, and, within health, the level of influence of health professionals on third

¹⁹ These results must be interpreted with caution. The data used in Annex 5 come from national health accounts estimates, which typically report only expenditures through governments (including mandatory SHI). This is a mix of domestically generated resources and those provided by DAH as explained earlier, so in some ways the priority to health also reflects the priorities of donors.

party purchasers. Therefore, it is incumbent to also increase transparency on resource allocation decisions and sector performance to promote greater accountability of the policies and institutions that govern the use of funds.

Third, health sector budget proposals are often constrained by the legal and institutional framework within which the annual budget law is prepared, approved, and executed. Revenue rules that set minimum or maximum limits on tax collection, expenditure rules that limit total or sectoral spending, budget balance rules that bind the annual deficit, and/or debt rules that cap the maximum public debt, together impinge on the options available to either increase or reprioritize resources for health. On the institutional front, fragmentation in public financial management with multiple financing agents and different schedules for authorizing, committing, and disbursing funds to lower administrative levels and/or implementing units can lead to cash flow problems and delays in service delivery. IMF guidelines for budget preparation advise working towards a consolidated multiyear budget where all available resources from both the government and development partners are held in a single fund in order to get a complete and predictable resource envelope for the sector over the medium term (IMF, 1999).

Ultimately, however, the decision to invest more in health is a social and political choice. In making that decision, governments take into account political priorities and the perceived importance of other sectors as well as health. Certainly, the health sector's ability to highlight results and efficiency, and to improve budget planning and execution would be valuable, but these need to be overlaid by strong political commitment to giving priority to health.

Prioritizing health summary

There is considerable variation across countries in the extent to which they prioritize health in government budgets. For many, giving more priority to health could raise more funds to maintain or improve health. Combined with the potential from improvements in government revenue and tax collection efforts described in the last section, increasing priority to health would help countries move more rapidly to UHC.

Prioritization, however, is fundamentally a political issue, and little is known about why some countries are able to give more priority to health and some are not. While Ministries of Finance often argue that they cannot give more funds to health because of inefficiency, waste and poor public financial management practices in health, it is not clear whether improvements in these areas result in a larger share of the government budget. However, even with more priority given to health, the low GDP per capita in LICs and LMICs and the associated low levels of health spending compared to needs implies that many will also require continued DAH in the short to medium term.

6. Development Assistance for Health

a. Trends and patterns

Health featured prominently in the Millennium Development Goals (MDGs) – three of the 8 goals were specifically on health and targets on nutrition and essential medicines were included in two of the other goals – and international funding to help lower income countries address their health problems increased rapidly after the Millennium Declaration of 2000. Between 2000 and 2008, annual disbursements of development assistance for health (DAH) increased from just over \$11 billion to over \$28 billion, the annual yearly rate of growth more than double that of the period 1990-2000 (IHME, 2015)²⁰ Box 4 provides a description of the four different data series available on DAH.

The financial and economic crisis that hit the high-income countries in 2008 led to economic stagnation or decline and increasing public debt in most of the traditional donor countries. Real GNI per capita declined in high income countries as a group in 2009, and has risen only slowly since. In the European Union countries, real GNI per capita stagnated after 2010. At the same time debt to GDP ratios in the high income countries increased rapidly – from 39.3% in 2007, to 53.4% in 2010, to over 67% in 2012 (WB, 2016)²¹. As a result, domestic health spending as a share of GDP, declined each year from 2009 to 2011 in this group of countries, rising only slowly thereafter. With a declining real GDP per capita, real health spending per capita also fell in the group of donor countries (WB, 2016) (OECD, 2015).

The debate around the role of DAH changed. The dialogue shifted from finding additional money to meet the gap between need and availability in recipient countries to one of stressing the importance of recipient countries showing value for money, efficiency and results. The need for recipient countries to raise additional domestic resources for health was also increasingly stressed, with strategies for “graduation” from DAH being developed by GAVI and the Global Fund (e.g. (Saxenian, et al., 2015).

²⁰ Disbursement data started to be reported by donors only in 2002, so the disbursements for earlier years reported by IHME are back projections based on reported commitments. The OECD-DAC data base shows similar proportional increases in disbursements after 2002. DAH includes both the health and the population and reproductive health categories in the OECD-DAC classifications.

²¹ <http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG/countries/EU?display=graph>

Box 4: Development Assistance for Health: Concepts

Official Development Assistance (ODA) encompasses flows (cash, kind or in services) deriving from official government sources with the “promotion of the economic development and welfare of developing countries as its main objective” (OECD DAC 2013). **Development Assistance for Health (DAH)** describes flows specifically targeted for health (and population) from all sources including foundations.

Four data series on ODA and DAH are available:

1. **Commitments** are financially-backed written documents where donors promise to provide financial assistance to recipient countries directly or through multilateral organizations. Mostly, commitments are not intended to be totally disbursed in the year the promise is made. Commitments are inherently lumpy because of the multi-year planning cycles of many donors, so show more variation across years than disbursements.
2. **Disbursements** are the amount of aid transferred from donors, in cash or in kind or in services. Once disbursed, the funds are considered spent by the donor even if they are not spent in the same year by the recipient. Disbursements reported by donors in any given year usually are only part of an earlier commitment depending on the planning cycle of the donor. Some funds that are disbursed are not intended to be spent by or in a recipient country, but are spent within the donor country on activities linked with health aid – e.g. health of asylum seekers, health research. Disbursements started being reported to the OECD’s Development Assistance Committee only in 2002.
3. **Country programmable aid (CPA)** captures how much of each disbursement the donor reports was available for spending within a recipient country. It started being collected only in 2004 and data are not available for all donors.
4. **Health expenditure in recipient countries** that comes from external sources is captured only through national health accounts (NHAs) which typically separate total national health expenditure into expenditures originating from domestic and external sources.

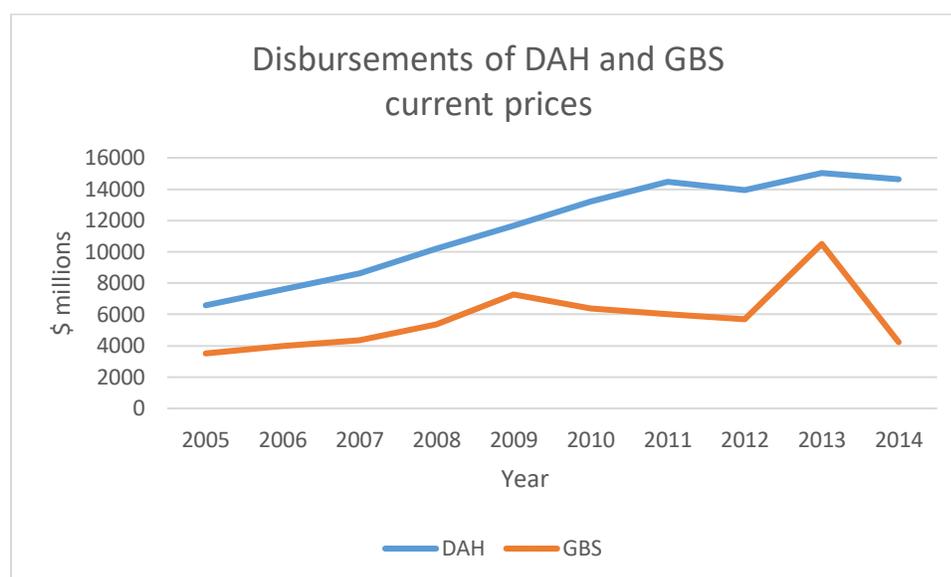
The four series can be used to ask different questions. For example, are donor promises of future aid falling requires an assessment of commitments. Has the amount disbursed by donors fallen since the financial crisis requires assessment of disbursements, while the amount donors report is available for countries to spend requires a review of CPA. CPA and the amount of country expenditure from external sources reported in national health accounts should be the same, but rarely is due to a number of factors: the difficulty of obtaining CPA information from a number of major donors; non-reporting by some long standing and emerging donors of any of these data; and inaccuracies in country NHA studies or projections.

Source: (Van de Maele, et al., 2013)

The impact of the financial crisis started to be felt in terms of DAH promises and flows in 2010. Figure 13 illustrates using disbursements where the rate of increase fell dramatically from pre-crisis levels, with falls in nominal terms reported in both 2012 and 2014 (IHME, 2015) (OECD, 2015). The figure also shows that disbursements of development assistance in the form of general budget support (GBS), some of which facilitates health spending, fell in each year after 2009 except for

2013. Commitments made to provide future GBS fell even more, by almost 70% from 2013 to 2014 to a level that was even lower than the 2005 GBS commitments.

Figure 13: Reported Disbursements of DAH and GBS, 2005-2014



Source: OECD Creditor Reporting System. Data extracted 4 March 2016.

Country health expenditures per capita derived from external sources (in USD terms at official exchange rates) in low-income countries taken as a group show small yearly increases from the financial crisis to 2012, with a slight fall in 2013 (WB, 2016). This hides, however, considerable variation across countries. In 15 of the 29 low-income countries for which information is available to 2013, per capita domestic spending from DAH sources fell, mostly starting in 2011. Against this, only four LICs have had continual increases in DAH-origin domestic spending since the financial crisis.

Before moving to considerations of the future of DAH during the SDG era, four further points are important. The first is that despite the vast increase in DAH since 2000, domestically sourced funding remains the most important component of total health expenditures at country level, even in the LICs. The share of externally-sourced funding in total health expenditures in the LICs taken as a group peaked at 36.4% in 2011 and has fallen since, to just over 30% in 2013. This converse is that close to 70% of all resources for health in these countries are domestically generated – although there is again considerable variation across countries.

The second is that, not surprisingly, most DAH disbursements went to the diseases and conditions targeted by the MDGs, with maternal, newborn and child health and HIV/AIDS obtaining the greatest shares. Non-communicable diseases and injuries and overall health system strengthening received very little (Dieleman, et al., 2015).

The third is that the sources of DAH changed radically. In 2000, traditional bilateral and multilateral agencies were the predominant players, but by 2015, Dieleman et al. (2015) suggest that the Bill and Melinda Gates Foundation had contributed more than any other individual donor except the US government over the previous 15 years, while new public-private partnerships like GAVI, the Global Fund and UNITAID were developed as alternative mechanisms for channeling DAH to countries (Sridhar, et al., 2015). A number of non-traditional donors also emerged from the BRICS countries and the Middle East, adding to the available DAH but also making it more complex to track DAH because a number of them do not report their commitments or disbursements to the OECD-DAC.

Finally, the proportion of DAH allocated to low income countries increased, while the number of low-income countries fell. As stated earlier in this paper - in 1990, 28.6% of total disbursements were designated for middle income countries according to IHME, but that by 2014 this had dropped to 6.4% (IHME, 2015). This was largely due to the scale up in DAH after 2000 being concentrated more heavily in LICs.²²

b. Policy issues for the SDG era

A number of important issues for the future of DAH in the SDG era have emerged. They are discussed in turn.

The “adequacy” of domestic financing and transition from DAH. It is important to highlight – stressed earlier in this paper - that many countries currently receiving DAH will be unlikely to be able to raise sufficient funds domestically to ensure universal coverage with even a modest set of key health interventions and with financial protection in the near future. Continued, and in many cases, increased DAH will be important. The immediate withdrawal of DAH by all donors would put them at the edge of a financial cliff, and the unilateral withdrawal of DAH by individual donors would place increased pressure on other donors not to withdraw.

GNI per capita has long been considered to be an indicator of a country’s relative wealth/poverty, so linked to country capacity to finance their own development. It is positively correlated with a country’s capacity to raise government revenue, some of which can finance health. At the same time, there is considerable variation across countries in the amount of government revenue actually raised at any level of GNI per capita (see previous section). Health needs also vary considerably across countries with similar levels of GNI per capita, suggesting that phasing out DAH requires more complex considerations than simply considering GNI per capita. The question of whether other criteria should be used, or used in addition to GNI per capita, is now the focus of considerable discussion.

Even in the agencies where GNI per capita plays a role in deciding on graduation from concessional finance, it is not the only criterion used. Eligibility for IDA concessional loans from the World Bank Group is certainly linked to GNI per capita, but moving from low-income to middle-income status does not make countries automatically ineligible. Between 1995 and 2013, the number of low income countries nearly halved from 63 to 34 yet 62 countries were still IDA

²² In 2000, LICs spent an average of \$1.76 per capita provided by DAH compared to \$0.57 and \$0.60 per capita in LMICs and UMICs respectively. By 2013, these expenditures had risen to \$11.14 in LICs, compared to \$2.25 and \$1.28 per capita in LMICs and UMICs (WHO NHA data base, data extracted 4 March 2016).

eligible, and 20 more were eligible for a mix of concessional and non-concessional loans (called blend countries). A country's creditworthiness on international markets is also a consideration used to determine continued eligibility for IDA.

GAVI has also introduced a policy for graduation in which GNI per capita figures prominently: the cut point is higher than the threshold at which countries move from a LIC to a MIC in World Bank terminology – US\$1,580 compared to \$1,045.²³ In addition to GNI per capita, GAVI considers whether countries have achieved at least 70% coverage with DPT3 immunization as an additional criterion. The Global Fund, through its Equitable Access Initiative Partnership with a number of other agencies, is also in the process of considering what criteria in addition to GNI per capita should be used to determine when it can stop providing grants to countries (www.theglobalfund.org/en/equitableaccessinitiative).

It is important that any criteria introduced by donors to program a withdrawal of DAH are well thought out and implemented in a way that does not put the capacities of countries to move closer to UHC and to achieve the health SDG targets at risk. At the extreme, the withdrawal of DAH could reverse some of the health gains made during the MDG era.

Health needs of the poor in middle-income countries. Frenk and Moon (2013) recently argued that the global health governance is changing, and there are now four main functions it must fulfill: the provision of traditional development finance; technical cooperation (including capacity building); humanitarian assistance in emergencies; and agency for the dispossessed, protecting the rights of groups where governments cannot or are unwilling to do so. The debate described in the previous section around when development assistance, the first function, can end is entwined with the debate around the fourth function, agency for the dispossessed (Frenk & Moon, 2013).

During the MDG era, nearly 950 million people escaped from poverty and, at the same time, the picture of where the world's poor live changed.²⁴ Sixty-three percent of people living under \$1.25 a day now live in MICs: 90% of these people live in only four countries (India, Nigeria, China, and Pakistan) (WB, 2016). This raises complex questions over whether DAH should still be targeted at the MICs who now have a greater capacity to raise funds domestically, but where most of the world's poor now live. One view is that the continued provision of DAH in these settings would allow governments to neglect their own poor and dispossessed. The other view is that withdrawal of DAH from the country in which they live is now classified as a MIC is not appropriate because the poor still need assistance. A human rights perspective would support this view: where governments do not or cannot yet act in the interests of their own poor and dispossessed, the international community (as argued by Frenk and Moon) has a moral obligation to provide the DAH essential to support these people. This is now one of the most pressing issues to resolve for DAH in the SDG era²⁵.

²³ GNI per capita in the World Bank thresholds are calculated using the Atlas method to reduce the impact of exchange rate fluctuations on international comparisons (see <https://datahelpdesk.worldbank.org/knowledgebase/articles/378832-what-is-the-world-bank-atlas-method>).

²⁴ \$1.25/ a day poverty line

²⁵ http://www.gatesnotes.com/Development/Who-Should-Get-Foreign-Aid?WT.mc_id=00_00_00_share_em

Innovative international financing: a supplement to traditional DAH. Innovative financing, in the opinion of the Leading Group on Innovative Financing for Development, is a mechanism for raising funds for development in a complementary way to traditional ODA. The most important feature is that these should be predictable and stable (Leading Group on Innovative Financing for Development 2016). However, the term has also been used for new ways of channeling and allocating funds to countries, such as GAVI and the Global Fund and to ways of improving aid effectiveness (e.g. (Atun, et al., 2012); (Task Force on Innovative International Financing for Health Systems, 2009)).

There is considerable overlap between “innovative” ways of raising funding at country level – discussed earlier in this document - and at the global level. For example, compulsory solidarity levies on airline tickets have been introduced in some countries to provide funding to UNITAID which then uses the money to finance medicines for HIV, tuberculosis and malaria (UNITAID). At the same time, other countries impose various types of taxes on airline travel as ways of financing domestic spending, though not necessarily for health: Kenya is one of a number of African countries that have recently introduced an airline ticket tax partly to finance AIDS (Oberth & Whiteside, 2016) (Okech & Mukuusi, 2012).

Loan guarantees can also be introduced at the global or country level. They could be made by donors to guarantee country borrowing from the IBRD or commercial lenders, or by governments to cover the risks of private sector lenders. They reduce the costs of borrowing, making more funds effectively available to governments or to the private sector within countries. Other innovations do not necessarily raise additional funds for health. For example, bonds sold on the international market to finance health (like the immunization bonds used for GAVI) essentially make future flows of DAH available now: the future flows are needed to repay the bonds and interest. Advance market commitments use DAH to stimulate research and development for needed medical products, although they also can reduce the market price of medical products effectively making the available funds go further.

However, these new initiatives remain small compared to overall DAH and country health expenditures. Around US\$ 5.5 billion was raised for the health sector between 2002 and 2011 (UNDP Innovative financing for development: a new model for development finance 2012). They can also have relatively high transaction costs, and rely largely on traditional providers of DAH, so it is not clear the extent to which they are additional to the DAH that would have been provided in their absence.

While it is not clear the extent to which innovative financing has complemented traditional DAH, they do offer possibilities for thinking about some of the other questions about the future of DAH if traditional donors are reducing their funding. One of the possible alternatives would be to change the nature of the DAH from a grant to a guarantee or subsidy for an IBRD or commercial loan. This would reduce the cost of borrowing, while helping countries move to a more sustainable financial situation.

Fungibility, displacement and additionality. In an influential paper, Lu et al (2010) argued that health aid is partly fungible in the short term, but fully fungible in the longer term: for every dollar of DAH, domestic resources allocated to health decrease by more than \$1 in the long run (Lu, et

al., 2010). A considerable number of papers have since examined whether and the extent to which recipient countries reduce domestic funding for health on receipt of DAH (e.g. (Farag, et al., 2009) (Garg, et al., 2012).

The Lu et al. study has been criticized on a number of grounds: it did not separate out DAH that was off-budget from on-budget aid (Van de Sijpe, 2012) (Van de Sijpe, 2013) (Morrissey, 2015) and it relied on multiple imputation to fill in missing data for a relatively high proportion of data points, something that is argued to be unreliable when the missing data is for the dependent variable (Morrissey 2015). However, Dieleman et al. (2013) reassessed the Lu et al. findings accounting for off-budget aid, then Dieleman & Hanlon (2014) ran a larger panel of data to assess the impact of increases and decreases in DAH separately (Dieleman & Hanlon, 2014). They again concluded that increases in DAH resulted in some displacement of domestically sourced funding to health on aggregate, though it was partial rather than full fungibility. Interestingly, decreases in DAH were not associated with any statistically significant increase (or decrease) in domestically sourced finance for health.

While there now seems to be consensus that some form of fungibility or displacement of domestic funding has occurred, although not in all countries, Morissey (2015) recently raised a larger question of why fungibility matters. He argued that there was no evidence that development assistance reduces recipient governments' tax efforts or that fungibility has resulted in aid being used less effectively. There is little proof, he claimed, that using the aid the way the donor preferred would have produced better results than using it in the way the recipient country actually did. Indeed, there is little more than anecdotal evidence showing where the domestic funds that were reprogrammed away from health were spent – if they were spent on female education, or poverty reduction, it is possible that they had a large impact on health. An obvious next step in this debate would be to understand where the displaced domestic funds were spent, and what the effect was.

DAH and effective development cooperation. Four High Level Fora on Aid Effectiveness took place during the MDG era - in Rome (2003), Paris (2005), Accra (2008) and Busan (2011). The objective was to develop a set of practices for development partners (funders and recipients) that would maximize the chances that development assistance would complement domestic financing to meet the ambitious MDG targets.²⁶ In addition to Declarations and Agreements on principles of good practice, the IHP⁺ partnership emerged to foster more effective development cooperation in health.²⁷ A set of seven behaviors outlining how partners could change for the better were agreed, with intermittent self-reporting of progress based on score cards.²⁸ Some of these behaviors link directly to health financing: e.g. DAH inputs should be recorded on budget and in line with national priorities; financial management systems should be harmonized and aligned with those of recipient countries using country systems with capacity building to strengthen them where

²⁶ www.oecd.org/dac/effectiveness/thehighlevelforaonaideffectivenessahistory.htm

²⁷ www.internationalhealthpartnership.net

²⁸ <http://www.internationalhealthpartnership.net/en/news-videos/ihp-news/article/seven-behaviours-how-development-partners-can-change-for-the-better-325359/>

necessary; joint monitoring of process and results should be undertaken, based on one information and accountability platform.

These behaviors were developed because of the recognition that DAH funding has often been used to support disease specific programs according to donor priorities rather than the health services that the country wishes to develop in its health sector plan. Recognizing that national budgeting, financial management and audit systems were sometimes weak, donors also frequently bypassed them and instituted parallel systems at country level. The 2014 IHP+ monitoring report suggests that there has been limited progress in these areas (IHP+ 2014). Almost all development partners reported reductions in the percentage of aid that was recorded on budget since 2010/11 and there was still considerable uncertainty in recipient governments about the predictability of donor funding for their national health plans or medium term expenditure frameworks over the next three years. A new IHP+ monitoring round will take place in 2016.

Donor agencies face pressure from their own governments to show rapid results from their DAH, while public-private partnerships like GAVI and the Global Fund, as well as multilateral agencies, are under pressure from their governing bodies to show results. It takes time to strengthen national systems while establishing parallel systems under the control of the donor is seen as being a more reliable way of ensuring rapid results. In the longer run, however, this fragmentation will begin to cause problems for countries in the process of replacing DAH with domestic financing – the transaction costs of incorporate the programs that are managed with parallel systems into their own systems can be substantial.

c. DAH Summary

The first decade of the MDG era saw a remarkable increase in global solidarity for health with rapid expansions of DAH, focused largely on specific “MDG diseases or conditions”. The financial crisis starting in 2008, however, has resulted not only in falls in the rate of growth of DAH but also falls in some years in DAH in dollar terms and in country expenditures financed from DAH. While all recipient countries have the capacity to expand domestic funding for health in various ways, some will be unable to achieve all the SDG health targets, and even assure their populations coverage with a limited set of health interventions (with financial protection) without continued and, in some cases, increased DAH.

Innovative financing options at the global level offer some hope of supplementing the declining traditional sources of DAH, but so far their impact has been limited. Moreover, a number of critical questions need to be answered rapidly including:

- a. Which countries should have priority for continued DAH and how should that be decided?
- b. Is it appropriate to cut DAH that currently supports the health of the poor and dispossessed in countries that graduate to middle-income country status?
- c. Where fungibility occurs, where are the displaced funds spent and what results are achieved?
- d. Are there ways of reconciling donor requirements for rapid results with country requirements for scaling up many types of health programs concomitantly, and building the systems that enable them to do so?

7. Conclusions and Key Messages

This paper has focused on some important issues related to the generation of resources for health, the first of the three health financing functions. It did not discuss questions of pooling or purchasing (what and how), or the overarching question of efficiency or equity. Mobilizing domestic and/or external resources to finance a country's path to UHC, or even to maintain past achievements, is daunting in the face of the unfinished agenda associated with the MDGs, the rise in the burden of non-communicable diseases and injuries even in LICs, partly associated with population aging, and the ever increasing population demand for new and better health services. Raising and channeling additional resources into inefficient health systems is not fiscally sustainable. Improving efficiency while at the same time keeping a constant focus on the poor and vulnerable, are both critical elements with or without sustained efforts to increase domestic revenues for health. These issues will be the focus of subsequent Forums.

Raising revenue for health is something fundamental to countries at all income levels, something that has been highlighted since the 2008 financial crisis which resulted in falls in health expenditures per capita in many high income countries. However, not surprisingly, this paper has focused more on issues relating to low and lower-middle income countries: but most of the options for raising more domestic resources for health are also applicable to richer countries.

There are a number of technical options for raising additional domestic revenues, at least some of which can be used for health. Economic growth itself generally results in increasing government revenues, and increasing government spending across all sectors, even if no other actions are taken to increase health spending. The recent slowdown in growth even in low-income countries, however, suggests that governments cannot be passive in hoping that economic growth will provide the resources they need to scale up health services and financial protection to meet the health targets in the SDGs, but that they will need to take a more active role in finding additional funds for health.

Improving the efficiency of revenue collection for existing taxes and charges, and expanding the range of taxes and charges and/or the proportion of people and firms that contribute, are things that all countries can consider. There is also sufficient experience now in low and middle income countries to provide a "menu of options" from which countries can choose for introducing new forms of revenue collection. Efforts to minimize tax avoidance and evasion and to limit tax incentives to multi-national countries, particularly in countries with natural resources, can contribute a great deal to raising more government revenues, but individual country efforts need the support of the global community acting to implement the promises of the Addis Ababa Action Agenda on Financing for Development of July 2015²⁹. Specifically, countries promised to act together to ensure multi-national corporations report country-by-country to the tax authorities in

²⁹ United Nations. 2015. The Addis Ababa Action Agenda of the Third International Conference on Financing for Development, July 2015. www.un.org/esa/ffd/wp-content/uploads/2015/08/AAAA_Outcome.pdf

which they operate, to end harmful tax practices, to encourage fair and transparent royalty agreements for natural resources, and to take action to limit illicit financial flows.

While the private sector can help to overcome some bottlenecks, by investing in infrastructure for example, and while it is an important source of health services provision and innovation in most settings, it cannot be expected to pay for recurrent health services or for public goods. The money to expand service coverage and financial protection must come from the traditional sources: largely pooled funds in the form of government revenues and/or insurance. In general, raising additional funds for health through OOP payments is to be discouraged, certainly in countries that are still a long way from UHC.

Commercial borrowing and the issuing of various forms of innovative bonds are also options for “front-loading” government expenditure – essentially borrowing to spend now in the knowledge the loan/bond will have to be repaid from future government revenues. Many low and lower-middle income countries have rapidly expanded their borrowing recently, and with the slowdown of growth, lower commodity prices, and general uncertainty about the global economy suggests that further expansions in many countries need to be considered very carefully. In addition, sovereign bonds have not raised a great deal of funding, so do not offer a panacea to the need to find sustainable sources of funding.

In addition to raising additional domestic resources for health, there is also considerable room for many LIC and LMICs to give more priority to health in government spending. This alone could contribute substantially to available resources in many settings. Some countries, however, even with rapid economic growth, increased priority to health and innovative approaches to raising more domestic funds, will not be able to reach a level of per capita health spending that guarantees their entire populations coverage with a set of needed health services and with financial risk protection – the essence of UHC. DAH will still be required in such cases and the reductions in DAH that have occurred recently, particularly in ODA, are a cause for concern. It is important to consider carefully the pace of any withdrawal of DAH from countries to take into account country capacities to increase domestic sources of funding.

While these conclusions are relatively uncontroversial, the Forum offers the opportunity for sharing country experiences in these areas, and hearing the views of ministries of finance, ministries of health and many development partners. At the same time, a number of issues that are controversial or where the evidence is still inconclusive emerged from the paper. The agenda for this first UHC Financing Forum was deliberately built around some of these issues. The 10 key questions are outlined below, although this does not, of course, preclude other issues from being discussed as well.

Raising more Money for Health: 10 Unresolved Questions:

Raising more domestic revenues

1. The paper argued that increasing revenues by raising out-of-pocket payments for health is generally undesirable because it reduces access to needed services for people who cannot afford to pay and results in financial hardship for others. Some European countries, however, increased OOP payments for health after the financial crisis of 2008. Are there circumstances in which raising revenue through OOP payments is justified?
2. A number of different “innovative” financing options are available for countries to choose from based on the experience of LICs and LMICs. Is there enough experience to say which are the most politically acceptable to the population, and which are the most politically feasible to implement given the competing interest groups in health?
3. When should government revenues be earmarked for health, if at all? Is there a case of earmarking for public goods such as emergency response?
4. Does SHI lead to increased revenues for health, or only to an increased need for governments to raise revenue to subsidize increased utilization?
5. Are LICs and LMICs reaching the limit of their capacities to borrow commercially in a prudent fashion?
6. What is the role of the private sector in contributing to revenue generation?
7. What are the obstacles to governments giving more priority to health in their expenditure and how can they be overcome?

Development assistance for health

8. Where DAH is associated with fungibility or displacement of domestic funding for health, what do we know about how the displaced funds are used and the impact on health?
9. Should DAH still be made available to countries with the capacity to finance health care for their own poor and vulnerable, but choose not to do so?
10. As countries get richer, what criteria should be used to decide if DAH should be scaled down or out, and how can criteria be designed that protect the poor and vulnerable but give countries the right incentives?

Annex 1: Real rate of growth 1995-2013 (%) (using constant LCU)

	GDP	THE	GGHE	PRIVATE	PRIVATE		
					OOP	PRIVATE INSURANCE	EXTERNAL
Albania	4.8	3.2	9.0	0.6	0.5	.	-4.8
Algeria	3.6	6.3	6.4	5.9	5.9	5.3	6.3
Angola	8.3	8.4
Antigua and Barbuda	2.3	3.3	3.2	3.6	2.9	6.4	.
Argentina	3.5	3.7	4.4	2.4	2.1	2.2	28.0
Armenia	6.7	4.6	6.3	3.6	3.5	.	7.7
Australia	3.3	4.7	4.7	4.5	5.6	2.9	.
Austria	1.9	2.6	2.8	2.1	2.8	0.7	.
Azerbaijan	10.2	10.0	9.1	10.2	10.4	.	8.4
Bahamas, The	2.3	3.6	4.2	3.2	4.9	1.7	.
Bahrain	4.9	5.1	5.2	4.9	2.7	7.9	.
Bangladesh	5.7	6.0	5.8	6.1	5.9	18.8	12.4
Barbados	1.4	2.8	2.2	3.9	4.4	2.3	.
Belarus	6.3	-0.8	-1.2	0.2	2.2	.	12.4
Belgium	1.8	3.9	3.8	4.1	4.0	8.0	.
Belize	4.3	5.6	5.7	5.6	4.8	16.2	3.4
Benin	4.3	4.1	5.2	3.1	2.4	38.3	5.1
Bhutan	7.5	7.0	7.4	6.1	5.9	.	.
Bolivia	4.0	5.8	7.0	2.8	3.8	-1.5	0.8
Botswana	5.3	6.9	7.5	6.3	0.0	25.2	17.7
Brazil	3.1	5.0	5.7	4.5	3.5	5.8	-1.7
Brunei Darussalam	1.3	0.4	1.3	-5.0	-5.1	.	.
Bulgaria	2.3	4.6	3.3	7.2	7.1	.	.
Burkina Faso	6.3	7.9	10.4	5.4	4.6	11.6	9.8
Burundi	2.5	5.9	9.0	3.5	0.6	14.5	16.4
Cabo Verde	5.6	5.1	4.6	6.8	6.4	7.7	15.6
Cambodia	7.7	9.7	10.0	9.7	8.0	11.5	8.2
Cameroon	3.9	5.7	8.1	4.8	4.8	.	7.6
Canada	2.6	3.7	3.6	4.0	3.4	4.8	.
Central African Republic	-0.8	-1.0	0.0	-1.8	-2.0	0.9	8.8
Chad	6.9	5.0	5.3	4.8	4.8	2.5	-0.4
Chile	4.3	5.7	7.8	4.3	4.1	4.6	-18.4
China	9.6	12.4	13.1	11.7	10.5	.	6.2
Colombia	3.4	4.4	6.3	0.8	-1.2	6.7	6.1
Comoros	2.0	3.4	-0.4	6.9	4.6	.	.
Congo, Dem Rep	2.7	11.9	28.1	7.5	6.6	.	26.1
Congo, Republic	3.8	5.6	7.2	2.2	2.1	8.5	4.1
Costa Rica	4.5	7.0	6.9	7.4	7.7	11.4	37.2
Cote d'Ivoire	2.2	1.7	3.1	1.1	0.8	2.9	8.5
Croatia	2.1	2.5	2.1	4.7	2.0	.	-100.0
Cyprus	2.3	4.8	6.3	3.7	3.0	14.5	.
Czech Republic	2.3	2.6	2.1	6.1	5.8	.	.
Denmark	1.2	2.7	2.9	1.7	1.4	5.1	.
Djibouti	2.8	8.0	8.4	7.4	7.5	4.2	.
Dominica	2.1	3.0	3.0	3.1	2.7	.	.

Dominican Republic	5.2	5.4	10.9	2.7	3.2	1.5	6.6
Ecuador	3.6	7.7	7.3	8.1	9.6	-1.6	0.5
Egypt, Arab Republic	4.7	6.3	5.5	6.9	7.4	10.0	-9.1
El Salvador	2.2	2.7	5.9	-0.7	-1.5	13.9	0.0
Equatorial Guinea	21.0	18.1	18.6	16.7	15.7	.	9.4
Eritrea	1.7	-0.2	-0.5	0.1	0.1	.	4.0
Estonia	4.5	3.9	3.1	8.5	7.5	.	.
Ethiopia	7.7	11.1	13.6	8.5	9.4	15.6	17.4
Fiji	2.1	3.7	2.8	6.3	6.4	6.1	6.8
Finland	2.3	3.3	3.5	2.5	2.1	2.2	.
France	1.6	2.3	2.1	2.9	2.1	2.9	.
Gabon	1.8	3.6	5.9	1.7	1.7	1.7	-7.8
Gambia, The	4.1	5.5	9.2	2.4	2.3	9.4	22.0
Georgia	6.0	7.2	16.0	6.1	4.7	.	.
Germany	1.3	1.9	1.6	3.1	3.3	3.0	.
Ghana	6.2	8.2	9.1	7.1	9.2	3.6	11.4
Greece	0.9	1.9	3.5	-0.7	-0.9	3.5	.
Grenada	3.1	3.7	4.2	3.3	3.0	.	-100.0
Guatemala	3.4	6.2	6.5	6.1	5.3	8.0	10.2
Guinea	3.2	4.9	5.0	4.8	4.8	4.8	9.9
Guinea-Bissau	1.4	4.0	2.8	4.3	3.9	.	13.5
Guyana	2.9	7.3	6.1	10.9	11.3	7.8	12.0
Haiti	1.4	3.5	-5.9	6.1	1.0	.	3.6
Honduras	3.7	7.7	7.1	8.2	8.2	14.6	4.3
Hungary	2.1	2.5	0.9	7.3	5.6	.	.
Iceland	3.3	3.7	3.5	4.8	4.4	.	.
India	6.9	6.8	7.8	6.3	6.0	15.2	5.5
Indonesia	4.2	7.7	8.2	7.3	7.6	3.2	.
Iran, Islamic Republic	3.7	7.2	6.7	7.6	7.0	10.3	-1.2
Ireland	4.1	5.7	5.2	6.6	6.2	7.9	.
Israel	3.9	3.8	3.1	5.1	4.0	14.8	.
Italy	0.5	1.9	2.3	0.7	0.1	1.9	.
Jamaica	0.3	3.1	3.6	2.5	2.2	3.9	-8.7
Japan	0.8	3.1	3.1	3.2	3.3	3.1	.
Jordan	4.8	3.9	4.2	3.4	3.9	12.9	7.3
Kazakhstan	6.3	5.6	4.5	7.2	7.2	3.8	3.0
Kenya	3.8	5.0	4.4	5.5	5.4	5.9	18.3
Kiribati	1.5	1.4	0.6	.	.	.	-1.2
Korea, Rep.	4.5	8.4	10.6	6.7	6.2	13.2	.
Kuwait	4.0	2.5	2.6	2.3	2.1	4.8	.
Kyrgyz Republic	4.6	5.2	6.0	4.2	3.9	.	17.8
Lao People's Dem	6.9	3.0	1.9	4.4	3.7	.	22.6
Latvia	4.4	4.8	4.4	5.5	5.3	.	.
Lebanon	4.4	-0.2	2.8	-2.2	-3.0	1.1	-1.3
Lesotho	4.1	6.5	9.5	1.2	0.4	.	17.5
Libya	0.6	1.8	4.2	-1.5	-1.5	.	.
Lithuania	4.5	5.3	4.7	6.8	7.5	.	.
Luxembourg	3.4	4.8	4.3	9.4	8.1	.	.
Macedonia, FYR	2.6	0.8	1.6	-0.6	-0.6	.	-7.5

Madagascar	2.9	3.0	6.2	0.0	0.3	3.4	14.0
Malawi	4.4	9.2	10.9	7.9	3.8	4.7	14.4
Malaysia	4.7	6.8	6.8	6.7	7.1	10.6	-100.0
Maldives	6.9	10.7	10.6	10.8	16.5	12.5	-1.9
Mali	4.5	6.7	5.1	8.1	8.1	23.0	18.9
Mauritania	4.2	2.9	3.1	2.8	2.6	15.4	0.9
Mauritius	4.1	6.1	5.4	6.7	8.0	-2.7	6.0
Mexico	2.9	4.5	5.7	3.5	3.2	9.8	5.1
Micronesia, Fed. Sts.	0.0	2.1	1.8	6.2	6.1	.	2.7
Moldova	3.0	4.5	2.5	6.9	7.3	.	.
Mongolia	7.2	11.6	9.7	16.8	19.0	.	6.6
Morocco	4.5	7.7	8.0	7.6	8.3	3.8	8.0
Mozambique	8.3	10.4	8.4	12.9	6.1	.	12.7
Namibia	4.4	5.4	4.5	7.3	6.1	6.1	12.6
Nepal	4.2	5.3	8.3	3.8	3.0	.	4.1
Netherlands	1.8	4.3	5.0	-0.2	1.0	-1.6	.
New Zealand	2.6	4.5	4.9	2.8	2.1	3.0	.
Nicaragua	3.8	5.5	4.5	7.1	6.3	.	0.2
Niger	4.9	4.9	7.7	3.8	3.5	-4.5	3.5
Nigeria	7.2	7.3	7.8	7.1	7.1	7.5	22.9
Norway	2.1	3.2	3.3	2.8	2.7	.	.
Oman	3.7	1.6	1.3	2.8	2.7	2.8	.
Pakistan	4.2	4.8	6.8	3.9	3.2	9.2	18.5
Panama	6.7	6.6	6.7	6.5	6.2	8.3	-1.4
Papua New Guinea	3.8	5.2	4.8	7.3	8.4	11.8	12.1
Paraguay	2.9	5.6	5.9	5.3	5.4	4.2	15.6
Peru	4.8	5.8	6.4	5.2	5.1	5.3	-3.5
Philippines	4.6	6.6	5.3	7.4	7.4	11.6	5.2
Poland	4.1	5.1	4.9	5.8	4.1	.	10.8
Portugal	1.1	2.5	2.7	2.2	3.1	10.7	.
Qatar	11.7	8.5	10.2	3.5	0.3	.	.
Romania	2.4	4.9	5.3	3.5	3.4	.	.
Russian Federation	3.6	4.8	2.3	8.9	11.1	6.4	.
Rwanda	8.2	13.8	16.5	11.3	11.8	35.0	27.1
Samoa	2.5	4.8	6.0	-0.4	-2.1	.	7.8
Sao Tome and Principe	3.9	3.4	2.0	4.1	5.0	.	0.7
Saudi Arabia	4.5	5.0	6.2	3.4	1.9	10.0	.
Senegal	3.9	4.5	7.3	2.5	1.3	13.3	11.2
Seychelles	3.9	2.1	2.6	-1.6	-6.8	.	16.1
Sierra Leone	4.0	6.6	4.4	7.1	5.6	-0.4	26.3
Singapore	5.6	8.1	6.8	9.2	9.0	.	.
Slovak Republic	3.9	5.7	4.3	11.5	9.6	.	.
Slovenia	2.5	3.6	3.1	5.0	4.1	6.0	.
Solomon Islands	2.2	4.0	4.0	2.9	3.0	.	8.6
South Africa	3.1	4.1	5.3	3.2	0.2	4.1	24.6
Spain	2.1	3.1	3.0	3.5	3.0	6.5	.
Sri Lanka	5.4	5.2	4.9	5.5	5.3	12.5	.
St Lucia	1.6	5.6	4.7	6.9	6.7	1.7	.
St. Kitts and Nevis	2.5	4.5	1.7	7.2	6.8	10.8	-100.0

St. Vincent and the Grenadines	2.5	4.4	4.3	5.2	5.2	.	.
Sudan	9.9	9.5	9.8	9.5	9.7	6.0	23.8
Suriname	3.9	5.2	7.1	2.2	7.6	.	-10.7
Swaziland	2.3	5.4	7.0	2.3	4.0	2.2	19.1
Sweden	2.4	3.5	3.2	5.4	4.7	.	.
Switzerland	1.9	3.1	4.3	1.3	1.7	0.0	.
Tajikistan	6.4	10.8	8.8	11.9	11.0	.	.
Tanzania	5.8	10.3	9.3	10.8	8.0	4.4	18.1
Thailand	3.0	4.5	7.7	-1.0	-2.9	6.4	31.6
Togo	2.7	5.9	8.3	4.1	3.9	3.4	21.2
Tonga	0.9	2.1	3.4	-1.6	-2.3	.	.
Trinidad and Tobago	5.4	5.7	5.7	5.6	5.2	10.3	12.2
Tunisia	4.2	5.3	6.3	4.0	4.5	1.0	6.7
Turkey	4.1	8.9	9.4	7.2	4.8	.	-11.4
Turkmenistan	10.4	7.8	8.3	7.0	7.0	.	.
Uganda	6.9	7.8	12.8	5.6	5.9	6.1	17.6
Ukraine	1.9	2.1	1.0	3.8	3.9	.	9.3
United Arab Emirates	4.7	5.6	4.9	7.7	7.0	9.7	.
United Kingdom	2.0	3.7	3.7	3.8	2.8	3.0	.
United States	2.4	4.0	4.2	3.7	2.8	4.1	.
Uruguay	3.1	0.4	3.0	-3.1	1.9	-1.1	-1.8
Uzbekistan	6.3	5.5	5.4	5.6	5.3	.	25.3
Vanuatu	2.7	4.4	5.4	0.1	-1.2	3.8	0.2
Venezuela, RB	2.6	2.9	0.3	4.3	4.4	3.8	-16.5
Vietnam	6.7	7.5	8.8	6.7	6.0	.	4.8
Yemen, Rep	3.4	3.6	2.3	4.1	4.3	1.0	.
Zambia	6.0	6.4	8.5	4.3	5.5	14.5	12.6
H average	3.4	4.1	4.1	4.3	3.8	5.3	-16.0
UMIC average	4.2	5.3	5.9	4.5	4.4	6.7	-1.6
LMIC average	4.4	5.6	6.1	5.3	5.3	8.0	9.0
LIC average	4.4	6.4	7.4	5.8	4.7	10.4	13.7
Total	4.0	5.2	5.6	4.9	4.5	7.2	4.6

Source: (WHO, 2016)

Annex 2: Estimates of additional tax revenue per capita if tax collection could be increased to 15% and 20% of GDP in turn

LMIC	Gvt revenue as % GDP	Tax revenue as % GDP	GDP pc (US\$)	Tax revenue pc (US\$)	Additional revenue if tax collection were 20% of GDP (pc US\$)	Additional revenue if tax improvements increased revenue by 3% of GDP (pc US\$)
Armenia	23.7	22.4	2237	501	-	67
Bhutan	28.9		1969			59
Bolivia	39.2	26.1	1260	329	-	38
Cameroon	18.0	13.2	961	127	65	29
Cape Verde	24.2	18.0	2749	496	54	82
Congo, Republic	46.9	12.0	1944	234	155	58
Côte d'Ivoire	19.8	15.7	1017	160	44	31
Djibouti	32.2	19.8	1144	227	-	34
Egypt	23.0	14.3	1560	223	89	47
El Salvador	18.5		3033			91
Georgia	27.5	24.7	2089	517	-	63
Ghana	16.5	14.0	730	102	44	22
Guatemala	11.6	11.0	2315	254	209	69
Guyana	25.7	20.7	1277	264	-	38
Honduras	23.0	14.7	1569	231	83	47
India	19.8	16.7	1127	188	37	34
Indonesia	17.1	12.4	1732	215	132	52
Kiribati	.	14.9	1160	173	59	35
Kosovo, Republic	24.6		2733			82
Lao People's Dem Rep	22.7	15.0	706	106	36	21
Lesotho	60.1	50.7	934	474	-	28
Mauritania	27.8	17.7	654	116	15	20
Moldova	36.7	21.7	1043	227	-	31
Mongolia	31.3		1631			49
Morocco	28.7	23.0	2462	566	-	74
Nicaragua	23.4	14.6	1326	194	71	40
Nigeria	11.1	8.5	1030	87	119	31
Pakistan	13.3	9.9	769	76	77	23
Papua New Guinea	28.2	24.8	1085	269	-	33
Paraguay	22.1	12.3	1718	211	133	52
Philippines	18.5	14.1	1501	212	88	45
Samoa	33.9		2737			82
Senegal	22.7	18.4	797	147	13	24
Solomon Islands	54.3	31.9	1104	352	-	33
Sri Lanka	12.4		1883			56
Sudan	10.9	6.3	837	53	115	25
Swaziland	35.7	34.7	2400	832	-	72
São Tomé & Príncipe	33.5	16.0	974	156	39	29
Ukraine	43.3	24.4	2094	511	-	63
Uzbekistan	36.3	20.2	846	171	-	25
Vanuatu	21.3		2098			63
Vietnam	22.9	18.9	986	186	11	30
Yemen, Republic	23.9	7.1	729	51	94	22
Zambia	18.4	14.7	1020	150	54	31
LMIC average	26.4	18.3	1506	275	76	45

L	Gvt revenue as % GDP	Tax revenue as % GDP	GDP pc (US\$)	Tax revenue pc (US\$)	Additional revenue if tax collection were 20% of GDP (pc US\$)	Additional revenue if tax improvements increased revenue by 3% of GDP (pc US\$)
Afghanistan, I.R	24.4	6.9	417	29	54	13
Bangladesh	10.6		593			18
Benin	20.4	16.3	567	92	21	17
Burkina Faso	23.9	16.5	504	83	18	15
Burundi	29.7	12.4	153	19	12	5
Cambodia	18.4		672			20
Central African Republic	8.4	5.2	450	23	67	14
Chad	20.8	15.5	738	114	34	22
Comoros	43.0	12.1	606	73	48	18
Congo, Dem. Rep.	15.8	9.7	273	26	28	8
Eritrea	17.3	10.4	200	21	19	6
Ethiopia	15.9	12.4	274	34	21	8
Gambia, The	18.5	14.2	443	63	26	13
Guinea	19.9	17.7	308	55	7	9
Guinea-Bissau	12.6	7.6	442	33	55	13
Haiti	20.8	11.9	460	55	37	14
Kenya	19.7	16.3	614	100	23	18
Kyrgyz Republic	34.5	20.5	577	118	-	17
Liberia	28.1	18.5	276	51	4	8
Madagascar	10.9	9.3	272	25	29	8
Malawi	34.3	23.9	259	62	-	8
Mali	21.1	14.7	480	71	25	14
Mozambique	32.2	22.9	413	95	-	12
Myanmar	23.2					
Nepal	19.3	15.2	399	61	19	12
Niger	25.2	15.6	290	45	13	9
Rwanda	25.1	14.5	394	57	22	12
Sierra Leone	13.3	9.9	396	39	40	12
South Sudan	19.0					0
Tajikistan	26.9	18.4	459	84	7	14
Tanzania	15.7	12.2	468	57	37	14
Togo	20.9	15.8	414	65	18	12
Uganda	12.7	11.3	418	47	36	13
Zimbabwe	27.7	25.3	469	119	-	14
LIC average	21.5	14.4	138	20	28	12

Notes: Missing values indicate no data; “-“ indicate country is already collecting 20% of tax revenue as a share of GDP; government and tax revenue combine central and subnational revenue collection. Data for columns 2 and 3 are from IMF. World Revenue Longitudinal Data 2016. Data for column 4 is from WB. World Development Indicators 2016. Data for columns 5-7 are author’s calculations based on columns 2-4.

Annex 3: Resource rich countries

Country	Type of natural resources	GNI pc in 2010 US\$	Natural resource exports in % of total exports†	Natural resource fiscal revenue in % of total revenue†
Congo, Dem. Rep.	Minerals and Oil	180	94	30
Liberia	Gold/Diamond/Iron Ore	210		16
Niger	Uranium	360		
Guinea	Mining Products	390	93	23
Mali	Gold	600	75	13
Chad	Oil	710	89	67
Mauritania	Iron Ore	1,000	24	22
Lao PDR	Copper and Gold	1,010	57	19
Zambia	Copper	1,070	72	4
Vietnam	Oil	1,160	14	22
Yemen	Oil	1,160	82	68
Nigeria	Oil	1,170	97	76
Cameroon	Oil	1,200	47	27
Papua New Guinea	Oil/Copper/Gold	1,300	77	21
Sudan	Oil	1,300	97	55
Uzbekistan	Gold/Gas	1,300		
Cote d'Ivoire	Oil/Gas	1,650		
Bolivia	Gas	1,810	74	32
Mongolia	Copper	1,870	81	29
Congo, Rep.of	Oil	2,240	90	82
Iraq	Oil	2,380	99	84
Indonesia	Oil	2,500	10	23
Timor-Leste	Oil	2,730	99	
Syrian Arab Rep.	Oil	2,750	36	25
Guyana	Gold and Bauxite	2,900	42	27
Turkmenistan	Oil	3,790	91	54
Angola	Oil	3,960	95	78
Gabon	Oil	7,680	83	60
Equatorial Guinea	Oil	13,720	99	91

Source: (IMF, 2012b)†average data for 2006-2010.

Annex 4: First time sovereign debt issuances in international markets

Country	Year	Yield at issue	Size (\$ mn.)	Maturity (years)	Moody's (at issue)	S&P (at issue)	Currency
Pakistan	2004	6.8	500	5	B2	B	USD
Vietnam	2005	7.2	750	10	Ba3	BB-	USD
Ecuador	2005	11.1	650	10	Caa1	CCC+	USD
Seychelles	2006	9.5	200	5	n.a.	B	USD
Ghana	2007	8.5	750	10	n.a.	B+	USD
Sri Lanka	2007	8.3	500	5	n.a.	B+	USD
Gabon	2007	8.3	1,000	10	n.a.	BB-	USD
Georgia	2008	7.5	500	5	n.a.	B+	USD
Senegal	2009	9.5	200	5	n.a.	B+	USD
Belarus	2010	9.2	600	5	B1	B+	USD
Montenegro	2010	8.0	254	5	Ba3	BB	EUR
Albania	2010	7.6	407	5	B1	B+	EUR
Jordan	2010	4.2	750	5	Ba2	BB	USD
Nigeria	2011	7.1	500	10	Not rated	B+	USD
Namibia	2011	5.8	500	10	Baa3	Not rated	USD
Zambia	2012	5.6	750	10	Not rated	B+	USD
Bolivia	2012	4.9	500	10	B3	BB-	USD
Mongolia	2012	5.2	1,000	10	B1	BB-	USD
Mongolia	2012	4.2	500	6	B1	BB-	USD
Angola	2012	7.0	1,000	7	Ba3	BB-	USD
Paraguay	2013	4.6	500	10	Ba3	BB-	USD
Honduras	2013	7.5	500	10	B2	B+	USD
Tanzania	2013	6.5	600	5	Not rated	Not rated	USD
Rwanda	2013	7.0	400	10	Not rated	B	USD
Armenia	2013	6.3	700	7	Ba2	Not rated	USD
Mozambique	2013	8.5	500	7	Not rated	B	USD
Kenya	2014	6.9	1,500	10	Not rated	B+	USD
Kenya	2014	5.9	500	5	Not rated	B+	USD
Ethiopia	2014	6.6	1,000	10	Not rated	B	USD

Source: (Guscina, et al., 2014). For Ethiopia, Kenya, Mozambique, and Angola CBonds.com

Annex 5: Priority to health in LICs and LMICs 2013

LMIC	Gvt. HE as % GDP	Gvt. HE as % gvt. exp.	GDP pc (US\$)	Gvt. HE pc (US\$)	Ext. as % THE	HE pc if gvt. spent 5% of GDP on health (US\$)	Additional spending required to reach US\$90
Mauritania	1.8	6.3	681	.	7.2	34.1	
Yemen, Rep.	1.2	3.9	742	19	.	37.1	71.3
Lao People's Dem. Rep.	1.0	3.6	752	16	26.8	37.6	73.9
Ghana	3.2	11.8	769	60	13.2	38.5	29.5
Sudan	1.4	10.6	771	24	2.6	38.6	65.6
Pakistan	1.0	4.7	790	14	6.9	39.5	76.3
Senegal	2.3	8.1	796	24	28.9	39.8	66.0
Uzbekistan	3.1	9.3	899	61	1.7	45.0	28.7
Lesotho	8.8	14.1	974	98	35.1	48.7	-
Sao Tome and Principe	2.0	6.4	988	32	28.7	49.4	58.1
Cameroon	1.8	8.0	989	23	6.3	49.5	66.6
Vietnam	2.5	8.7	1029	47	2.2	51.5	43.3
Zambia	2.9	11.7	1054	54	34.2	52.7	35.7
Nigeria	1.1	8.0	1056	32	5.2	52.8	58.2
Cote d'Ivoire	1.9	8.5	1079	29	7.7	54.0	61.2
Solomon Islands	5.0	10.0	1113	94	31.9	55.7	-
Papua New Guinea	3.6	9.9	1121	75	20.7	56.1	14.4
Moldova	5.4	14.1	1136	121	4.8	56.8	-
Kiribati	7.8	8.0	1176	137	17.8	58.8	-
Djibouti	5.3	14.1	1183	82	.	59.2	7.4
India	1.3	4.7	1190	20	1.1	59.5	70.1
Bolivia	4.8	12.4	1323	136	2.9	66.2	-
Guyana	4.4	14.8	1336	165	7.9	66.8	-
Nicaragua	4.7	19.5	1367	83	6.2	68.4	6.8
Egypt, Arab Republic	2.1	5.5	1567	62	0.2	78.4	28.3
Honduras	4.3	14.1	1577	96	4.5	78.9	-
Philippines	1.4	7.5	1581	38	1.4	79.1	51.4
Mongolia	3.3	8.3	1796	147	3.7	89.8	-
Indonesia	1.1	6.0	1810	42	1.1	90.5	48.3
Paraguay	3.6	15.2	1929	152	0.6	96.5	-
Congo, Rep.	3.3	8.7	1961	101	4.9	98.1	-
Bhutan	2.8	8.4	1977	66	13.7	98.9	23.6
Sri Lanka	1.4	7.8	2004	45	.	100.2	44.8
Vanuatu	3.4	15.8	2092	108	32.7	104.6	-
Ukraine	4.2	8.7	2138	170	0.7	106.9	-
Georgia	2.0	7.1	2160	75	2.6	108.0	14.5
Armenia	1.9	7.4	2310	66	6.5	115.5	23.7
Guatemala	2.4	17.7	2341	85	1.9	117.1	5.0
Micronesia, Fed. Sts.	12.1	20.4	2341	368	68.4	117.1	-
Swaziland	6.3	18.0	2430	191	16.6	121.5	-
Morocco	2.0	6.0	2531	64	0.8	126.6	25.7
Samoa	5.8	15.4	2685	242	21.9	134.3	-
Cabo Verde	3.3	9.8	2739	121	19.6	137.0	-
El Salvador	4.6	20.9	3063	177	2.0	153.2	-
Timor Leste	1.2	5.7	.	.	46.9		
LMIC average	3.4	10.3	1556	90	13.1	76.5	42.2

L	Gvt. HE as % GDP	Gvt. HE as % gvt. exp.	GDP pc (US\$)	Gvt. HE pc (US\$)	Ext. as % THE	HE pc if gvt. spent 5% of GDP on health (US\$)	Additional spending required to reach US\$17
Burundi	4.4	14.0	155	12	73.3	7.8	4.9
Eritrea	1.4	4.6	197	7	34.0	9.8	9.2
Malawi	5.5	13.1	264	13	68.3	13.2	3.6
Madagascar	2.7	17.8	271	12	38.6	13.5	4.4
Central African Republic	2.0	13.4	283	7	47.0	14.1	10.1
Congo, Dem. Rep.	1.8	14.3	288	8	52.4	14.4	8.2
Niger	2.4	8.5	291	10	11.7	14.5	6.7
Ethiopia	3.0	17.1	295	15	32.3	14.7	1.7
Liberia	3.6	13.2	299	16	57.8	15.0	0.8
Guinea	1.7	6.8	307	9	19.3	15.4	7.8
Rwanda	6.5	23.5	401	41	38.0	20.1	
Nepal	2.6	15.1	409	17	10.2	20.5	
Sierra Leone	1.7	10.8	410	14	31.3	20.5	3.0
Afghanistan	1.8	7.1	415	12	18.6	20.8	5.0
Uganda	3.9	23.0	418	26	45.5	20.9	-
Togo	4.4	17.4	424	28	5.9	21.2	-
Guinea-Bissau	1.2	8.3	433	.	14.2	21.6	
Mozambique	3.1	8.8	433	19	48.4	21.7	-
Gambia, The	3.6	13.2	450	17	35.7	22.5	-
Haiti	0.7	2.5	473	6	25.9	23.7	11.0
Mali	2.9	12.2	476	21	22.8	23.8	-
Tajikistan	2.1	7.5	481	21	10.3	24.0	-
Tanzania	2.0	10.3	487	18	33.2	24.4	-
Burkina Faso	3.7	13.3	522	27	22.7	26.1	-
Benin	2.5	11.0	583	20	23.2	29.1	-
Comoros	1.9	7.5	613	17	.	30.6	-
Bangladesh	1.1	7.8	621	11	8.6	31.1	5.5
Kyrgyz Republic	3.9	10.2	625	51	8.7	31.3	-
Kenya	1.5	5.9	632	19	45.2	31.6	-
Cambodia	1.5	7.5	709	16	13.4	35.4	1.2
Chad	1.4	5.9	744	14	8.8	37.2	3.0
Myanmar	0.5	1.9	.	4	15.3		12.8
South Sudan	0.7	3.0	.	6	68.5		10.3
LIC average	2.5	10.8	434	17	30.0	21.6	6.1

Sources: For GDPpc (US\$) (*WB, 2016*), for health expenditure data (*WHO, 2016*), for columns 7-8 author's calculation. Notes: HE=health expenditure; Ext. as % THE=external resources on health as % of total health expenditure; column 7 is the additional government health expenditure in US\$ per capita terms required of countries to reach the average spend for their income category; "--" indicates the government is spending at or above the average health spend for their income category; "" indicates missing data.

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