FINANCING TUBERCULOSIS: CONTEXT; ECONOMIC CASE; AND POLITICAL CONSIDERATIONS

Technical Report

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About HS4TB

The USAID Health Systems for Tuberculosis (HS4TB) project seeks to transform the way country leaders and health system managers understand and work toward TB control and elimination. HS4TB is a five-year USAID contract focusing on health systems priorities that most directly support achievement of TB outcomes, with a focus on health financing and governance in the USAID TB priority countries. The project helps countries increase domestic financing, use key TB resources more efficiently, build in-country technical and managerial competence and leadership, and support policy formation and dissemination. HS4TB is led by Management Sciences for Health (MSH) in partnership with Nathan Associates and Open Development.

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The thematic areas identified in the third section of this report arose from conversations with a small group of former Ministers of Finance representing various geographic, epidemiologic, and economic profiles. HS4TB would like to sincerely thank these former Ministers for their time and commitment to advancing the dialogue on the inter-related priorities of health and economic growth.

INTRODUCTION AND RATIONALE

The COVID-19 pandemic's devastation of population and economic health around the globe has tragically settled any remaining doubts about the interdependent relationship between health and the economy. This technical report provides background information and context for examining this interdependent relationship. It also outlines some options for approaching this health-and-economy relationship at country level, via a dialogue between Ministries of Finance and Ministries of Health that may help to bring more resources and greater efficiency to the health sector and to the TB response.

There are several reasons to prioritize an understanding of the relationship between health and the economy. First, there is abundant evidence that improved health contributes to improved economic development, and vice versa (see Part 2A). Better economic performance resulting in better employment and per-capita income for households substantially contributes to the health of the households and, at the same time, better health status of the population increases labor productivity and growth.[1]

Second, the financing of healthcare accounts for a substantial share of both government total budget expenses as well as total country gross domestic product (GDP). In many low-income countries, such financing may go predominantly to the public healthcare system, though almost all higher income countries also provide public financing for healthcare delivery by the private sector.[2] Less explicitly, but equally important, governments make decisions of public financing allocations across many non-healthcare sectors, such as education, that also contribute substantially to the country's health status.

Within public financing for healthcare, governments make complex decisions on the level and distribution of funding across many health programs and entities. Public finance decisions often also include a consideration of the inputs from international Development Assistance for Health (DAH). This can entail contracting debt with multilateral banks for health-related programs or authorizing intra- or extra-budgetary allocations from bilateral or multilateral donors. Overall, DAH represents a small proportion of total health expenditures in the world (DAH is only US$41 billion a year as compared to US$7.9 Trillion of total health expenditures)[3]. However, in highly donor-dependent countries, DAH represents an important share of total health expenditures.

Considering this complex set of variables, how do governments make these funding and policy decisions? As the leaders of a country's macroeconomic and fiscal performance, Ministers of Finance are central authorities and decision-makers in resource allocation and economic policy, including in the health and healthcare funding policy and implementation process. Much has been written about the importance of these decisions and abundant literature exists describing the resulting levels, distribution, and organization of health and healthcare financing – often written through the lens of analyzing the political economy of health financing reform.[4] However, not much systematic understanding exists on how these decisions are made in practice. What are the key drivers of these decisions: What information,

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[1] Jamison DT, Summers LH, et al. Global health 2035: a world converging within a generation. Lancet. 2013 Dec 7;382(9908):1898-955. doi: 10.1016/S0140-6736(13)62105-4.

[2] WHO. 2020. Private Sector Landscape in Mixed Health Systems. https://www.who.int/docs/default-source/health-system-governance/private-sector-landscape-in-mixed-health-systemsc23a2a3a-dc7a-4ef2-8c11-09d74fdb606e.pdf?sfvrsn=b1b58b15_1&download=true

[3] Source: Institute of Health Metrics and Evaluation (IHME), Financing Global Health, Published April 23, 2020. Available at: http://www.healthdata.org/data-visualization/financing-global-health

[4] For example, see Health Systems & Reform, Volume 5, Issue 3 (2019). Available at: https://www.tandfonline.com/toc/khsr20/5/3?nav=tocList

processes, and dynamics guide the MOF's health-related allocation advice (both cross-sector and health-sector-specific) to the country leadership? What explicit and implicit desired outcomes do Governments and Ministers of Finance optimize for? Are MoFs discouraged from greater investment in health due to a perceived lack of absorptive capacity or lack of demonstrated impact? What would help to optimize such decisions to contribute to the overall development strategy of the country, particularly for public health measures? These are some of the questions that are addressed in the current document. The dynamics of these processes, and some possible improvements to them, are outlined in Part 3.

Health outcomes depend on the level, quality, and institutional arrangements of spending. Ministers of Finance are responsible for budget planning in the short and medium term, for presenting a budget proposal to the President and eventually to Congress, and, finally, for the execution of the approved budgets. As such, Ministers of Finance have a huge influence on the allocation and quality of spending. Therefore, it is important to understand the rationale that drives Ministers of Finance decisions on health spending, both to improve the quality of health spending and of health outcomes.

In practice, Ministers of Finance determine budget allocations for the health sector through three functions. First, on budget allocations for the health sector vis-à-vis other sectors, including education, infrastructure, and national defense, among other spending items (inter-sectoral allocation). Second, on budget allocations within the health sector, which includes government spending in infectious diseases in general, but also tuberculosis (intra-sectoral allocation). And finally, on health policies enacted through regulatory bodies and other governance approaches that impact the insurance industry, social security institutions, subnational governments, and even the private sector through tax policy.

In this context, the USAID-funded Health Systems for Tuberculosis (HS4TB) Project facilitated a dialogue on health financing with a group of former Ministers of Finance. The main objective of this dialogue was to provide a collaborative space to learn and discuss what informed and drove Ministers of Finance when it came to health financing, i.e., the dynamics and decision-making behind financing public health care (the health sector budget) and key health care programs such as TB more specifically. Through this process, it quickly became apparent that an urgent and broader dialogue about health and the economy was needed (see Part 3).

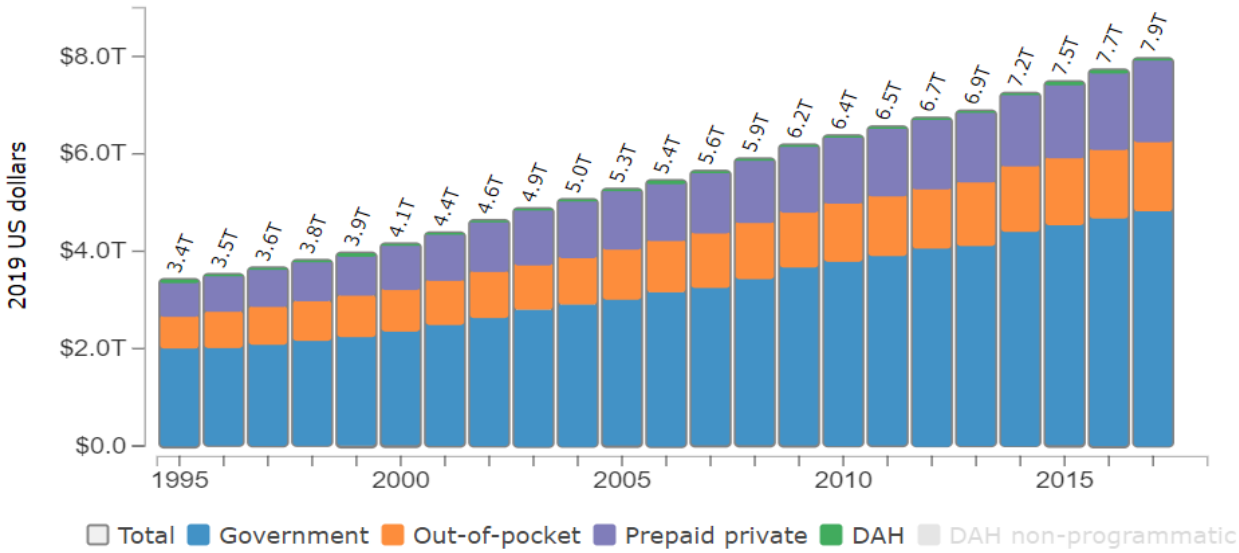
This technical report provides background information and outlines themes from these dialogues. It is organized in three sections. First, it summarizes key aspects of health and healthcare financing in the world, including DAH in general and TB programs in particular. Second, it reviews the relationship between macroeconomics and health, and the evidence relating to the economic case for investing in health and, specifically, TB. Finally, it describes opportunities to deepen the essential dialogue on health and the economy beyond the budgeting for public financing of health care that has traditionally been the focus of the MOF and MOH relationship.

PART 1: OVERVIEW OF HEALTH AND TB FINANCING

A. THE GLOBAL HEALTH FINANCING LANDSCAPE

Before the COVID-19 pandemic, health spending was growing faster than the overall economy globally, particularly in low- and middle-income countries. In 2017, the most recent year for which total health spending data are available, health spending had reached $7.9 trillion globally (Figure 1).

Figure 1. Total spending on health, by source, 1995-2017 (2019 US Dollars)[5]



While health spending accounted for 9.7% of the global economy, that figure ranged from 2.3% of GDP in Bangladesh to 17.0% in the US.[6] Government health spending made up 60.7% of total spending; prepaid private health spending, 20.6%; out-of-pocket spending, 18.5%; and development assistance for health (DAH), 0.2%. Figure 2 and Figure 3 show the changing composition of health spending by source, including the increase in the proportion of health spending from the government, relative to economic development.

The health sector has become one of the main sectors of the global economy. It influences labor force participation, productivity, and human capital formation through various channels, and thereby has an influence on overall macroeconomic outcomes. The demand for health sector jobs is expanding rapidly, and labor shortages are evident almost everywhere as the supply of health skills trails demand.

[5] Source: Institute of Health Metrics and Evaluation (IHME), Financing Global Health, Published April 23, 2020. Available at: http://www.healthdata.org/data-visualization/financing-global-health
[6] Source: World Bank Indicator Database, data from 2018. Available at: https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS

Figure 2. The share of health spending by source varies with increasing GDP per person, 2017[7]

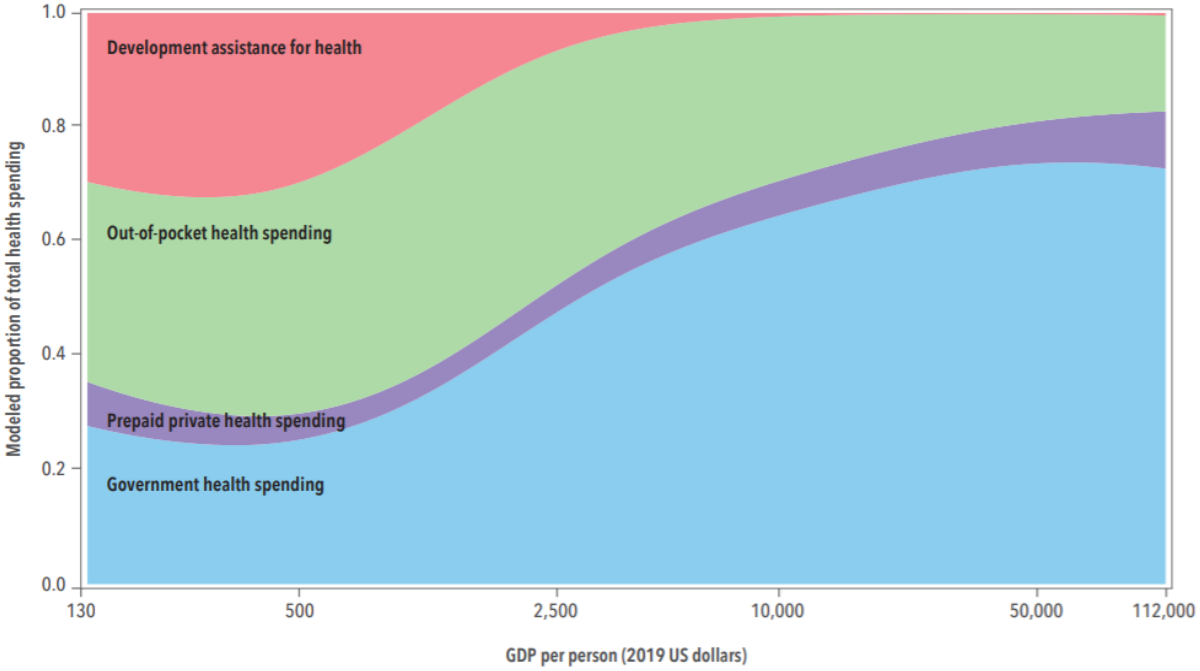
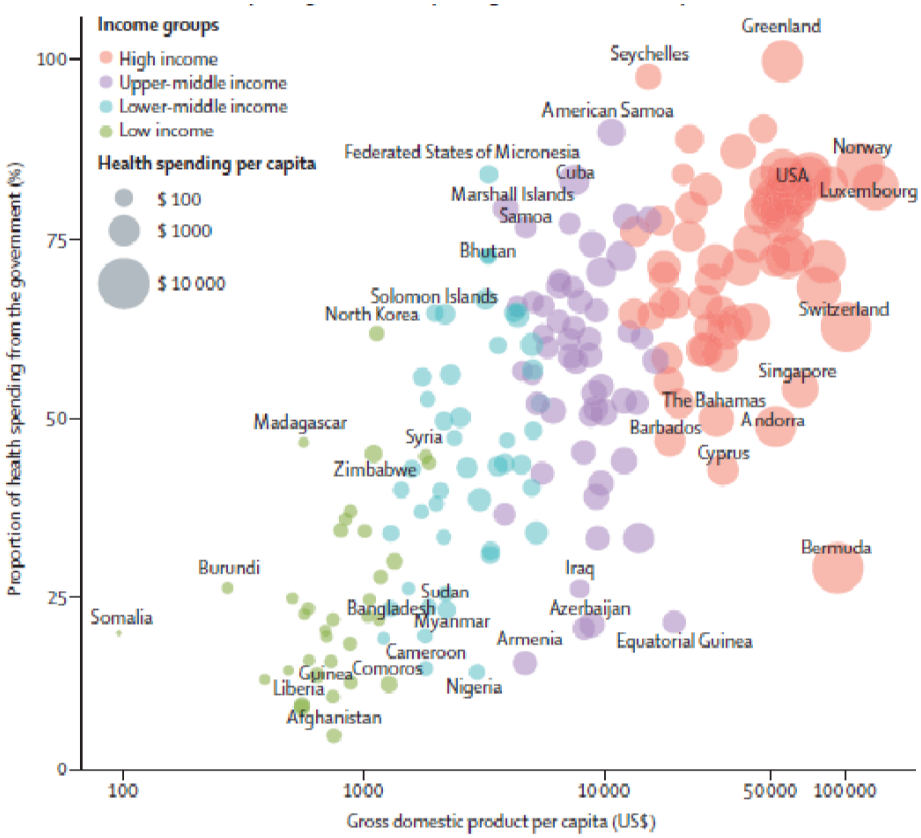


Figure 3. Health spending per capita, and the proportion of health spending from the government, increase with economic development



[7] Source: *IHME. (2020). Financing global health 2019: Tracking health spending in a time of crisis.*

In the journey towards realizing the ambitious goal of universal health coverage (UHC), more countries have been expanding health benefits, creating new institutional arrangements for health financing and allocating public funds to expand health service coverage. Countries from all regions and at all levels of income have been implementing health financing reforms to expand coverage.

Tracking government health spending and prepaid private health spending as percentages of overall health spending may provide insight on where countries are on the path to financial risk protection. While service provision is a key part of achieving UHC, it is not the only part. If patients can only access high-quality care at the expense of household welfare or while being pushed into poverty, this is at odds with the financial protection concept of UHC. Financial risk protection, through government and prepaid health financing, may increase universal health service coverage and reduce the chances of medical impoverishment.

At the aggregate level, external aid is a small share (less than 1%) of global health spending, and it has declined as a percentage of health spending in middle-income countries. DAH is most relied upon in low-income countries, where it constitutes around a third (27.7%) of the 2017 health spending.

In LMICs, researchers have observed fungibility of health aid with domestic spending on health, whereby recipient governments substitute aid for domestic resources. Fungibility has been shown to be greater when there is a large number of donors in the country.[8] There is also some evidence that fungibility is more likely with external aid provided to government than with aid provided to non-government organizations. There may also be intra-sectoral fungibility, e.g., if countries allocate a higher proportion of their domestic health financing to areas that traditionally attract less investment from DAH.

Of course, the global financial outlook changed abruptly in 2020 in light of the COVID-19 pandemic. Fiscal space for national governments, be they rich or poor, has become tighter. And the consequences of the economic contraction will be particularly acute in low-income countries where not only will they face tighter domestic budgets for health, but they may also receive less DAH as many donors choose to cut aid budgets, most notably, for example, the UK.

B. FINANCING TUBERCULOSIS

The COVID-19 pandemic has clearly illustrated the negative impact of highly transmissible airborne diseases on global health, the economy, and security. By the end of 2020, an estimated 88 million additional people were pushed into extreme poverty due to the pandemic[9], and the global economy had contracted by an estimated 3.5 percent.[10] Despite economic recovery in 2021, global output is estimated to be about 2 percent below pre-pandemic projections by the end of the year.[11]

Tuberculosis (TB), like COVID, is a highly transmissible airborne disease that is a threat to the economy and security. After COVID-19, TB is the world's second leading cause of death from an infectious agent (above HIV/AIDS), according to the 2021 WHO Global TB Report.[12] Globally in 2020, an estimated 9.9

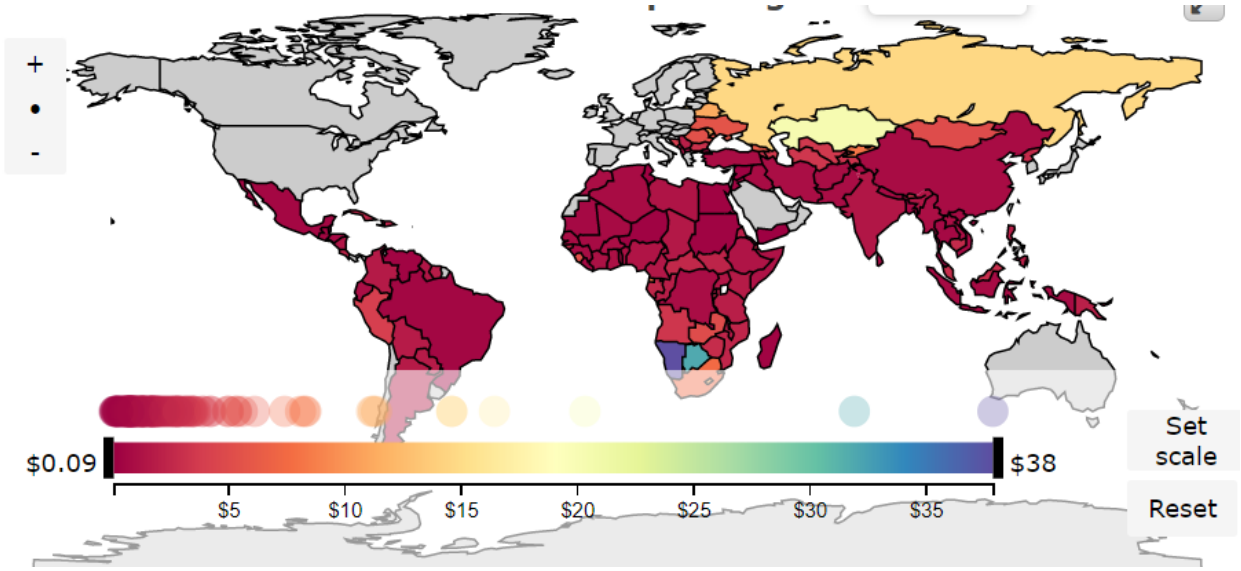
[8] UNU -WIDER. The Fungibility Problem: Budget Support, Aid On Delivery Or Project Aid? Helsinki: UNU-WIDER, 2013.
[9] World Bank, https://blogs.worldbank.org/voices/2020-year-review-impact-covid-19-12-charts
[10] IMF, https://www.imf.org/en/Publications/WEO/Issues/2021/01/26/2021-world-economic-outlook-update
[11] World Bank, Global Economic Prospects 2021. Available at: https://www.worldbank.org/en/news/press-release/2021/06/08/world-bank-global-economic-prospects-2021
[12] WHO. Global tuberculosis report 2021. https://www.who.int/teams/global-tuberculosis-programme/tb-reports/global-tuberculosis-report-2021

million people fell ill with TB and 1.5 million people died from TB. Based on factors such as nutrition, immune and housing status, TB disproportionally affects the economically disadvantaged and marginalized in society; groups that are very unevenly distributed both within a country and globally. Drug-resistant TB is a growing worldwide threat, driving treatment costs higher and further exacerbating the economic impact of TB. Meanwhile, the impact of the COVID-19 pandemic on TB has been especially devastating – one million fewer people were notified with TB in 2020, as compared to 2019.[13]

The visible impact of COVID has led to prioritization of domestic investment in the COVID response. In rare instances such as in Japan in the mid-late 20th century,[14] TB has had similarly high public visibility leading to substantial domestic investment. But in most countries, a high TB burden has not led to such political visibility and investment. While there is political will rallied around this disease - Sustainable Development Goal 3.3 aims to end tuberculosis (and certain other communicable diseases) as an epidemic by 2030 – turning this into action will require additional resource mobilization and global efforts.

In 2017, $10.9 billion was spent on tuberculosis in low- and middle-income countries: $6.9 billion in government spending, $2.1 billion in out-of-pocket spending, $225.0 million in prepaid private spending, and $1.7 billion in donor financing. In other words, in these countries, DAH accounted for 15.8%, prepaid private spending 2.1%, out-of-pocket spending 18.7%, and government spending 63.5%.

Figure 4. Total Health Spending per Capita on Tuberculosis, 2017 (US Dollars)[15]



[13] The Global Fund Results Report 2021. Available at: https://www.theglobalfund.org/en/news/2021-09-08-global-fund-results-report-reveals-covid-19-devastating-impact-on-hiv-tb-and-malaria-programs/

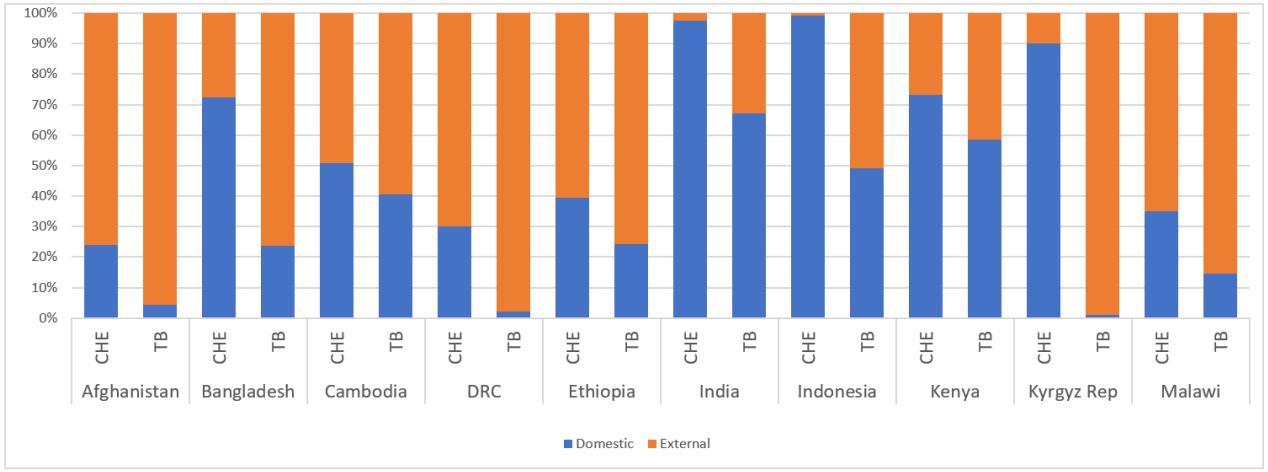
[14] Seita, A. "Think PHC, Do TB". Integration-based scale up of tuberculosis control in Japan. https://cdn1.sph.harvard.edu/wp-content/uploads/sites/114/2012/10/rp217.pdf

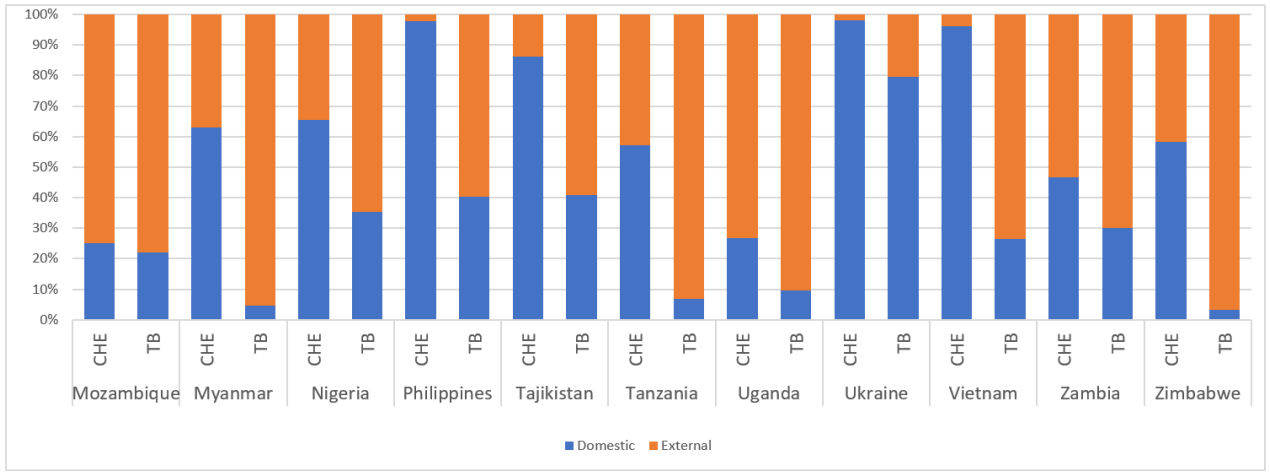
[15] Source: Institute of Health Metrics and Evaluation (IHME), Financing Global Health, Published April 23, 2020. Available at: http://www.healthdata.org/data-visualization/financing-global-health

Figure 5 compares the breakdown of domestic and external spending on TB to the same breakdown for current health expenditure (CHE), for a number of high-TB burden countries.[16] Notably, the reliance upon external aid in all the countries was greater for TB than it was for the overall health sector. In some cases - such as Kyrgyz Republic, Myanmar, Vietnam, and Zimbabwe – there was a very clear imbalance between the proportion of domestic resources funding for the overall health sector compared to the TB programme.

[16] Note that the TB figures relate to "funds received", as reported by country National Tuberculosis Programmes to the WHO; the funds received are not always equivalent to actual expenditures.

Figure 5. Comparison of Domestic vs External spending as a percentage of CHE (current health expenditure), and of TB spending, for selected TB-endemic countries, 2018[17]

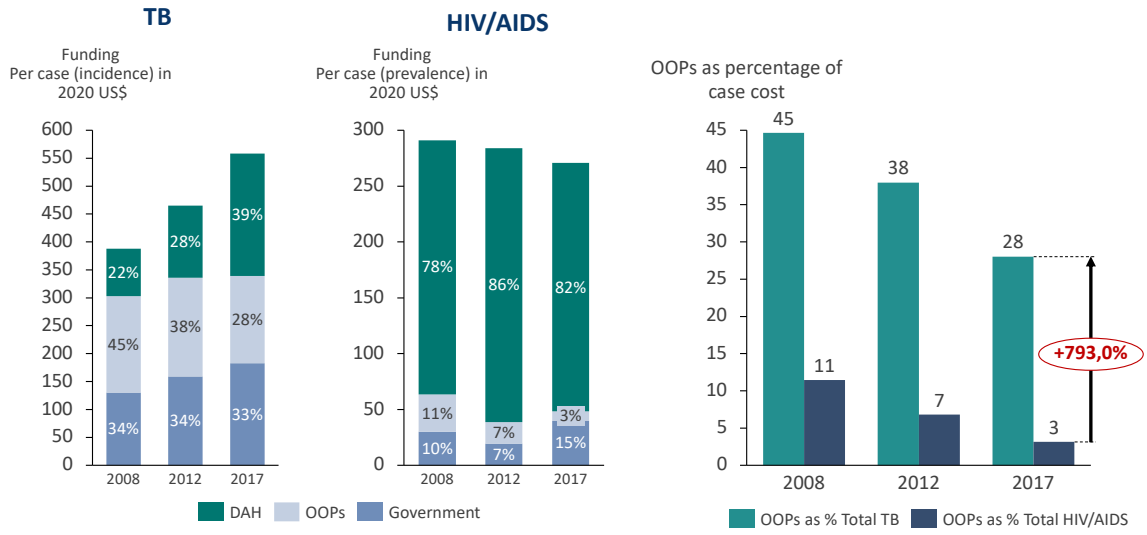




[17] Source of TB expenditure: WHO TB database, available at: https://www.who.int/teams/global-tuberculosis-programme/data. Source of Current Health Expenditure: WHO GHED, available at: https://apps.who.int/nha/database

A striking contrast exists between global donor funding for HIV/AIDS and for TB. Donor funding accounts for 85% of all HIV/AIDS funding per case but less than 40% of TB funding per case (Figure 6).

Figure 6. TB funding is more reliant than HIV/AIDS funding on domestic government and OOP resources



Source: Adapted from IHME "Financing Global Health" 2021

This dynamic is driven by multiple factors, including insufficiently robust and persuasive data analytics and the lack of an economic case for TB. There are global and country-level databases devoted to collecting TB information – the key elements of which are summarized above – but there is a need for analytics that highlight: the critical impact of TB; the spillovers and externalities of TB infrastructure in addressing recent and future airborne epidemics/pandemic; and the striking differences in financing and resource allocation when compared with other key drivers of burden of disease (e.g., HIV/AIDS).

Similarly, while evidence for the economic case for investing in TB exists – summarized in Part 2 of this report – there is not a sufficiently persuasive and coherent case that goes beyond microeconomic analysis (e.g., cost-effectiveness) to demonstrate the critical impact of TB on development, poverty, productivity, growth, and other macroeconomic factors, setting it in the context of not only other drivers of burden of disease but also other sectoral investments critical to health and development.

PART 2: THE ECONOMIC CASE FOR HEALTH AND THE TB RESPONSE

A. THE RELATIONSHIP BETWEEN MACROECONOMICS, HEALTH, AND POVERTY

Part 1 summarized the current health and TB funding landscape. In Part 2, we now review some of the literature about how health and the economy intersect, the arguments made to justify greater investment in health and TB, and the political context for these arguments.

As one entry point to the vast topic of health and the economy, there have been several notable commissions on macroeconomics and health[18]. In the late 1990s and early 2000s, the prevailing perspective was that "wealthier is healthier" – that economic growth was a major driver of improved health outcomes – which influenced both individual countries and many of the global financial bodies that support international development. However, there has been a growing recognition that, in addition, "healthier is wealthier", since a healthy population is a more economically productive population. These two perspectives continue to be keenly debated among economists and policymakers.[19] The outcome of this debate is important, since MOFs aim not just for macroeconomic stability (see Part 3) but also for economic growth – so any evidence that health investments lead to growth should influence the MOF.

In a background paper for the World Bank's World Development Report 1993, Lant Pritchett and Larry Summers used the relationship between income levels and health to argue for an emphasis on economic growth in poor countries as a method of increasing population health.[20] According to this view, if countries are growing, the health of their inhabitants will look after itself. As noted by Cutler, Deaton and Lleras-Muney, *"Pritchett and Summers's title, 'Wealthier is Healthier', has become a banner under which some economists defend economic liberalization against claims by the public health community and others that it has harmed health."*[21] Easterly[22] weakened the "wealthier is healthier" argument by showing that the effect of increased income on population health over reasonable time spans appears to be quite weak. Indeed, less than a decade later, WHO's Commission for Macroeconomics and Health[23] inverted the

[18] For example, the World Bank's World Development Report published in 1993, Investing in Health, is the only WDR so far that has focused on global health. It was the first major health report to be targeted at finance ministers and remains one of the most widely cited WDRs in the Bank's history. The 1999 World Health Report (WHR), the first WHR issued by WHO Director General Gro Harlem Brundtland, estimated that half of the health improvements between 1960 and 1990 in LMICs were from changes in two social determinants: income and education. In 2001, Macroeconomics and Health: Investing in Health for Economic Development, the report of the Commission on Macroeconomics and Health chaired by Jeff Sachs. The Commission on Social Determinants of Health, chaired by Michael Marmot, was established by WHO in 2005 to lay out evidence for how to promote health equity through sound social and economic policies and to foster a global movement towards its achievement. In 2008, The Growth Report: Strategies for Sustained Growth and Inclusive Development, the report of Commission on Growth and Development chaired by Michael Spence. The mandate of the Commission on Growth and Development was to gather the best understanding there is about the policies and strategies that underlie rapid economic growth and poverty reduction.

[19] For another review of this topic, see Chapter 3 of Pan-European Commission on Health and Sustainable Development. 2021. Drawing light from the pandemic:: A new strategy for health and sustainable development. A review of the evidence.

[20] Lant Pritchett and Lawrence H. Summers. Wealthier is Healthier. The Journal of Human Resources. Vol. 31, No. 4 (Autumn, 1996), pp. 841-868 (28 pages). https://doi.org/10.2307/146149

[21] Cutler, D., Deaton, A., & Lleras-Muney, A. (2006). The determinants of mortality. Journal of economic perspectives, 20(3), 97-120. https://rpds.princeton.edu/sites/rpds/files/media/cutler_deaton_the_determinants_of_mortality_jep.pdf

[22] Easterly, W. Life During Growth. Journal of Economic Growth 4, 239–276 (1999).

[23] WHO Commission on Macroeconomics and Health. (2001). Macroeconomics and health : investing in health for economic development / report of the Commission on Macroeconomics and Health. World Health Organization. https://apps.who.int/iris/handle/10665/42435

"wealthier is healthier" message, arguing that if countries invest substantially in health, economic development will follow ("healthier is wealthier"). Many observers credit the latter report for successfully raising the profile of global health in the international arena and promoting the long-neglected link between health and wealth.

Several years later, economists went a step further, illustrating that relatively inexpensive public health interventions and policies can have remarkable impacts on population health, even in very poor countries. In a working paper for the 2008 Growth Report[24], Bloom and Canning state (rather definitively) that *"the major force behind health improvements has been improvements in health technologies and public health measures that prevent the spread of infectious disease, and not higher incomes"*.

The relationship between wealth and health should also be considered through the lens of inequality and poverty reduction, i.e., not just the level of health but how wealth and health are distributed across and within countries. Biggs et al. found that, when poverty and inequality were constant or decreasing, there was indeed a very strong relationship between increasing GDP and health metrics (higher life expectancy and lower TB and infant mortality rates). However, when poverty or inequality was increasing, greater GDP had no effect on TB mortality rates, and lower or no effect on other population health measures.[25]

Poor communities are subject to a much higher burden of TB. Before moving to the specific case for TB-related investments (see next section), it is therefore important to consider the general case for pro-poor and anti-poverty investments (not just in health), and the evidence for a relationship between growth and poverty reduction. For this, we quote extensively from an article[26] by Dani Rodrik, Ford Foundation Professor of International Political Economy at the Kennedy School of Government:

> Does growth benefit the poor? *Yes, in general. The absolute number of people living in poverty has dropped in all of the developing countries that have sustained rapid growth over the past few decades. In theory, a country could enjoy a high average growth rate without any benefit to its poorest households if income disparities grew significantly—in other words, if the rich got richer while the incomes of the poor stagnated or declined. This outcome is rare, however; income distribution (for example, as measured by the Gini coefficient, which ranges from 0 for absolute equality to 1 for absolute inequality) tends to be stable over time within countries. …*
>
> Is poverty reduction good for growth? *Again, yes, in general. It is hard to think of countries where a large decrease in the absolute number of people living in poverty has not been accompanied by faster growth. [But] just as we can imagine growth occurring without any reduction of poverty, we can also imagine a strategy of poverty reduction that relies exclusively on redistributing wealth from the rich and the middle classes to the poor. In principle, a country pursuing redistributive policies could reduce poverty even if its total income did not grow. But we would be hard pressed to find real-world examples. Policies that increase the incomes of the poor—such as investments in primary education, rural infrastructure, health, and nutrition—tend to enhance the productive capacity of the whole economy, boosting the incomes of all groups.*

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[24] Bloom, D. E., & Canning, D. (2008). Population health and economic growth. Health and growth, 53.
[25] Biggs B, King L, Basu S, Stuckler D. Is wealthier always healthier? The impact of national income level, inequality, and poverty on public health in Latin America. Soc Sci Med. 2010 Jul;71(2):266-273.
[26] Dani Rodrik. Growth Versus Poverty Reduction: A Hollow Debate. Finance and Development. December 2000, Volume 37, Number 4. https://www.imf.org/external/pubs/ft/fandd/2000/12/rodrik.htm

What does a high correlation between growth and the incomes of the poor actually tell us? *Practically nothing. …A strong correlation between economic growth and poverty reduction is compatible with* both *of the following arguments: (1) only policies that target growth can reduce poverty; and (2) only policies that reduce poverty can boost overall economic growth. Therefore, the observed correlation between growth and poverty reduction tells us little of interest as far as policy choices and priorities are concerned.*

The real question is not whether growth is good for poverty reduction or vice versa, but whether the well-being of the poor should enter into the equation as an independent determinant of policy choices, in addition *to the usual focus on macroeconomic stability, microeconomic efficiency, and institutional quality.*

Should economic reform strategies have a poverty focus? *Yes, for at least three reasons. …*

First, in considering social welfare, most people, and democratically elected governments in particular, would give more weight to the well-being of the poor than to that of the rich. The economy's growth rate is not a sufficient statistic for making welfare evaluations because it ignores not only the level of income but also its distribution. A policy that increases the income of the poor by one dollar can be worthwhile at the margin, even if it costs the rest of society more than a dollar. From this perspective, it may be entirely rational and proper for a government considering two competing growth strategies to choose the one that has a greater potential payoff for the poor, even if its impact on overall growth is less assured.

Second, even if the welfare of the poor does not receive extra weight, interventions aimed at helping the poor may still be the most effective way to raise average incomes. Poverty is naturally associated with market imperfections: the poor remain poor because they cannot borrow against future earnings to invest in education, skills, new crops, and entrepreneurial activities. They are cut off from economic activity because they are deprived of many collective goods (such as property rights, public safety, and infrastructure) and lack information about market opportunities. …

Third, focusing on poverty is also warranted from the perspective of a broader, capabilities-oriented approach to development. An exclusive focus on consumption or income levels constitutes too narrow an approach to development. As Nobel Laureate Amartya Sen has emphasized, the overarching goal of development is to maximize people's ability to lead the kind of life they value. The poor face the greatest hurdles in this area and are therefore the most deserving of urgent policy attention.

…Policymakers [including Ministers of Finance; see below] make choices all the time. The lens through which they perceive health and development will profoundly affect the outcomes. …[For example,] how should a government resolve the trade-off between higher spending on poverty-related projects [including health)… and the need for tight fiscal policies?

Beyond fiscal policy, decisions regarding market liberalization and institutional reform also lead to clear trade-offs between growth, health, and poverty. These factors all affect the decision to invest in health, which we consider in more depth in the following sections.

B. THE CASE FOR INVESTING IN HEALTH AND IN TB

We have discussed the current funding scenario for health and TB (Part 1) and the broader relationship between macroeconomics and health that provides context for the health funding discussion (Part 2A). We now turn to the specific case for investing in health and in TB.

As countries seek to make progress towards universal health coverage (UHC), the concept of increasing fiscal space for health has gained significant prominence in policy discussions.[27] Mechanisms to increase fiscal space for health include: (i) conducive macroeconomic conditions; (ii) reprioritization of health within the government budget; (iii) an increase in health sector-specific resources (i.e. earmarked funds); (iv) health sector-specific grants and foreign aid; and (v) an increase in the efficiency of existing health expenditure.[28]

While economic growth is beyond the control of Ministries of Health, they can advocate for budget reprioritization / domestic resource mobilization and efficiency-improving measures as key drivers of expanding fiscal space for health. Domestic resource allocations are determined by finance decision-makers who must juggle multiple fiscal objectives such as revenue raising and resource allocation across competing and interacting priorities. Identifying diverse pathways to increase domestic government resources for health is critical.

All health systems face numerous sources of inefficiencies, and there are also many options for improving efficiency, primarily within the health financing system. These possibilities include: raising revenue more effectively; using the tax system to reduce consumption of products that harm health; reducing fragmentation in pooling; ensuring that pooled funds purchase the interventions that deliver the greatest impact for the money; and modifying provider payment mechanisms to encourage both efficiency and quality.[29] Within the wider health system, efficiency gains can be sought by: extracting lower costs for medicines; testing and ensuring the quality of distribution chains to address leakages; and modifying legislation to encourage the use of generics.[30]

Increasing fiscal space for health requires a solid underpinning in the case for investing in health.[31] The World Development Report (WDR) 1993[32] showed finance ministers that well-chosen health expenditures were not an economic drain but an investment in economic prosperity and individual wellbeing. It argued that allocation of resources towards cost-effective interventions for high-burden diseases offered a rapid and inexpensive pathway to improvements in welfare. Health is also a critical investment based on the variable risks for individuals, and the unpredictability of the resulting economic shocks.

Published alongside WDR 1993, and providing much of the evidence underpinning its conclusions, the first edition of Disease Control Priorities (DCP) attempted to systematically assess value for money (cost-effectiveness) of interventions that would address the major sources of disease burden in low-income and middle-income countries (LMICs). The second edition of DCP (DCP2), published in 2006,

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[27] Barroy, H., Sparkes, S., Dale, E., & World Health Organization. (2016). Assessing fiscal space for health expansion in low-and-middle income countries: a review of the evidence. https://apps.who.int/iris/handle/10665/251904

[28] Tandon, A., & Cashin, C. (2010). Assessing public expenditure on health from a fiscal space perspective. https://openknowledge.worldbank.org/handle/10986/13613

[29] World Bank. (2017). Second annual UHC financing forum: greater efficiency for better health and financial protection. Background paper. https://thedocs.worldbank.org/en/doc/5d7befa83cbafe469a1f9a5d591eb443-0140062021/related/Background-Paper-Second-Annual-UHC-Financing-Forum-FORUM.pdf

[30] Ibid.

[31] Tandon, Ajay; Bloom, Danielle; Oliveira Hashiguchi, Lauren; Hoang-Vu Eozenou, Patrick; Cain, Jewelwayne; Nigam, Aditi; Nagpal, Somil eds. 2021. Making the Case for Health: A Messaging Guide for Domestic Resource Mobilization. Joint Learning Network for Universal Health Coverage. https://www.jointlearningnetwork.org/resources/messaging-guide-making-the-case-for-drm-for-health/

[32] World Bank. 1993. World Development Report 1993 : Investing in Health. New York: Oxford University Press. © World Bank. https://openknowledge.worldbank.org/handle/10986/5976

updated and extended DCP1 most notably by explicit consideration of the implications for health systems of expanded coverage of high-priority interventions. The third edition of DCP (DCP3), published between 2015-18 as a series of 9 volumes, focused on the content of a benefits package.

In every iteration of DCP, control of tuberculosis has emerged as one of the most cost-effective uses of public expenditure, and a key item in the essential health service packages. And importantly, DCP3 developed an extended cost-effectiveness approach to explicitly include financial protection (and equity) in the economic assessment of health interventions.[33] Because tuberculosis is a disease of the poor, and because the poor who suffer from tuberculosis spend a large amount of money on treatment, publicly financed tuberculosis treatment has the potential to avoid a much higher number of cases of poverty, compared to other health interventions – see figure 7 for nine interventions provided through universal public finance in Ethiopia.[34]

Figure 7. Financial risk protection afforded (poverty cases averted) versus health gains (deaths averted), per US $100,000 spent (in 2011 USD), for each of the nine interventions provided through universal public finance in Ethiopia

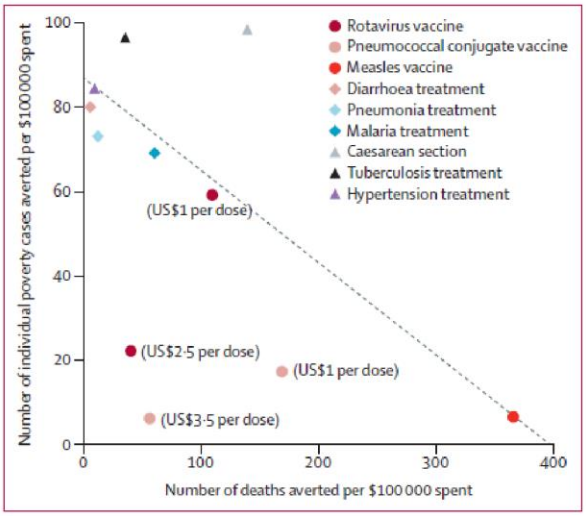

Figure: **Financial risk protection afforded (poverty cases averted) versus health gains (deaths averted), per US$100 000 spent (in 2011 US$), for each of the nine interventions provided through universal public finance in Ethiopia**
Dashed line represents a trend line.

It is worrisome that roughly 19% of the $10.9 billion spent on TB in LMICs came from out-of-pocket spending[35] (see Figure 6, Part 1). Financial risk protection, through government and prepaid health financing and other social protection schemes, can reduce the chances of medical impoverishment.[36]

[33] The Extended Cost Effectiveness Analysis (ECEA) approach used in the DCP3 includes financial risk protection (FRP) by estimating the amount of OOP expenditures (direct medical costs, direct nonmedical costs, indirect costs) that could be affected by a specific policy and estimates the number of catastrophic health expenditures averted and poverty cases averted. Equity benefits are addressed in terms of health distribution; if a health policy provides more health benefits to poorer than to richer segments of the population, the policy would be deemed equity enhancing.
[34] Verguet S, Olson ZD, Babigumira JB, Desalegn D, Johansson KA, Kruk ME, Levin CE, Nugent RA, Pecenka C, Shrime MG, Memirie ST, Watkins DA, Jamison DT. Health gains and financial risk protection afforded by public financing of selected interventions in Ethiopia: an extended cost-effectiveness analysis. Lancet Glob Health. 2015 May;3(5):e288-96.
[35] Source: Institute of Health Metrics and Evaluation (IHME), Financing Global Health, Published April 23, 2020. Available at: http://www.healthdata.org/data-visualization/financing-global-health
[36] For the possible pathways by which social protection can impact TB outcomes, see Figure 2 of the Health and Social Protection Action Research & Knowledge Sharing (SPARKS) Network: Rationale, Objectives and Work Plan

However, there are at least two challenges here. First, a substantial percentage of TB-related impoverishment comes from opportunity costs (e.g., loss of productive time due to illness and time seeking care), which can only be compensated via the financing of not just health provision but also of social protection schemes. Second, the percentage of overall health financing (not specific to TB) that is covered by out-of-pocket expenditure is persistently high in LICs and MICs, until it finally starts to decrease as countries approach HIC status (see Figure 2). Thus, there are clearly challenges to addressing and reducing out-of-pocket spending in LICs and MICs.

The TB epidemic is perhaps first and foremost a moral issue, as the people dying are mainly poor and marginalized, and largely without a voice. But it is an economic issue as well, affecting people in their prime. Recently, employing a "full-income approach"[37], Silva et al.[38] estimated that meeting the SDG tuberculosis mortality target in 2030 would avoid ~24 million tuberculosis deaths and ~$13 trillion in economic losses when compared to a 'business as usual' scenario of maintaining current TB control efforts. Meanwhile, the cost of meeting the 2030 global TB mortality target in 2045 rather than in 2030 is an estimated 5.7 million additional TB deaths and US$3.0 trillion in economic losses.

The economic case for investing in tuberculosis programming is compelling. Treatment interventions for both drug-sensitive TB[39] and drug-resistant TB[40] are highly cost effective in low and middle-income countries, including via private healthcare delivery channels.[41] Movement from facility-based to community-based TB treatment models have further reduced TB-related health system costs and increased efficiencies. This results in a strong return on investment for TB,[42] in part due to the externalities of TB as an airborne infectious disease. TB is also a global health security issue with drug-resistant TB being a prime example of the most virulent forms of antimicrobial resistance.

A limitation of the DCP series has been its reliance on cost-effectiveness analysis as its evaluative framework, hence limiting evidence to inform how best to allocate health budgets to maximize population health. Unlike DCP, the Copenhagen Consensus Center has employed benefit-cost analysis

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Report from the first SPARKS consultation, Karolinska Institutet, 15-16 December, 2016, at https://www.who.int/docs/default-source/inaugural-who-partners-forum/sparks-report.pdf. For further information and references on TB and social protection, see the SPARKS homepage at https://sparksnetwork.ki.se/ .

[37] A full-income model estimates the impact of health indicators on economic welfare by combining estimates of mortality and value of statistical life (VSL) to convert the value of lives lost to disease or saved by intervention into monetary measure. This is then added to the estimates of lost market production and interpreted as lost welfare. Often this is compared with current year's GDP as a benchmark.

[38] Silva S, Arinaminpathy N, Atun R, Goosby E, Reid M. Economic impact of tuberculosis mortality in 120 countries and the cost of not achieving the Sustainable Development Goals tuberculosis targets: a full-income analysis. Lancet Glob Health. 2021 Oct;9(10):e1372-e1379.

[39] Baltussen R, Floyd K, Dye C. Cost effectiveness analysis of strategies for tuberculosis control in developing countries. BMJ. 2005 Dec 10;331(7529):1364. doi: 10.1136/bmj.38645.660093.68.

[40] Fitzpatrick C, Floyd K. A systematic review of the cost and cost effectiveness of treatment for multidrug-resistant tuberculosis. Pharmacoeconomics. 2012 Jan;30(1):63-80.

[41] Floyd K, Arora VK, Murthy KJ, Lonnroth K, Singla N, Akbar Y, Zignol M, Uplekar M. Cost and cost-effectiveness of PPM-DOTS for tuberculosis control: evidence from India. Bull World Health Organ. 2006 Jun;84(6):437-45. doi: 10.2471/blt.05.024109.

[42] Vassall, A. and the Copenhagen Consensus Center. 2014. Benefits and Costs of the Tuberculosis Targets for the Post-2015 Development Agenda. https://www.copenhagenconsensus.com/sites/default/files/health_perspective_tb_-_vassall.pdf An India-specific analysis indicated that each rupee spent on tuberculosis would yield benefits of between 11.9 and 71.9 rupees: https://www.copenhagenconsensus.com/publication/india-perspective-tuberculosis

to prioritize within and between development sectors. In a recent piece of work,[43] the Center sought to identify the smartest targets for the post-2015 development agenda:

> *"In a world of limited resources, we can't do everything, but how should we prioritize? The Copenhagen Consensus Center provides information on which targets will do the most social good relative to their costs. The final decision on choosing goals will definitely rest on a number of factors, not just economics – but knowing the costs and benefits provides an important piece of information."*

The Center analyzed the benefit-cost ratios for the SDG targets, including those for health, in terms of the social, economic and environmental benefits for every dollar spent. Although details on the methodology are limited, investments in the health sector emerge as among the best in terms of their ROI. And within health, tuberculosis control emerges as one of the best investments a country can make.[44]

However, there are some challenges in translating these health economics studies into clear advocacy messages for financing stakeholders. First, it can be challenging to define and communicate the projected investment impacts. TB is epidemiologically a slow-moving disease. In the short term, current program costs generally cover the treatment of active disease -- and this both saves lives and constitutes an easily understood outcome. However, such treatment interventions may have limited impact on reducing TB incidence.[45]

Related to this, public health programs like TB require not just investing in curative care but also investing in two areas that are not always prioritized during financing discussions: (a) improved health access for low-income and marginalized populations, based on the association between poverty and TB;[46] and (b) strengthened public health functions such as notification, contact investigation, adherence monitoring, active identification of patients with mild symptoms in the community, and preventive treatment. Such public health functions, in contrast to TB-related curative healthcare, require different health system staffing and infrastructure and distinct financing channels;[47] this raises some additional challenges when explaining TB budget needs to non-health stakeholders.

In short, and as noted by William Jack two decades ago[48], there are strong reasons to favor public intervention due to the specific characteristics of TB. *"First, there are clear contemporaneous externalities*

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[43] Post-2015 Consensus. https://www.copenhagenconsensus.com/post-2015-consensus

[44] See the second page of https://www.copenhagenconsensus.com/sites/default/files/post2015brochure_m.pdf for the full list of targets that were analyzed. See also https://www.copenhagenconsensus.com/sites/default/files/outcomedocument_col.pdf and https://www.copenhagenconsensus.com/sites/default/files/expert_outcome_one_pages_combined.pdf for related graphics.

[45] Dowdy D W, Chaisson R E. The persistence of tuberculosis in the age of DOTS: reassessing the effect of case detection. Bull World Health Organ 2009; 87: 296–304. See further discussion of this in the final sections of: Wells WA. Onions and prevalence surveys: how to analyze and quantify tuberculosis case-finding gaps. Int J Tuberc Lung Dis. 2017 Nov 1;21(11):1101-1113.

[46] E.g., see Oxlade O, Murray M. Tuberculosis and poverty: why are the poor at greater risk in India? PLoS One. 2012;7(11):e47533; Benatar SR, Upshur R. Tuberculosis and poverty: what could (and should) be done? Int J Tuberc Lung Dis. 2010 Oct;14(10):1215-21; Dye C, Lönnroth K, Jaramillo E, et al. Trends in tuberculosis incidence and their determinants in 134 countries. Bull World Health Organ 2009; 87: 683–691; Carter DJ, Glaziou P, Lönnroth K, et al. The impact of social protection and poverty elimination on global tuberculosis incidence: a statistical modelling analysis of Sustainable Development Goal 1. Lancet Glob Heal 2018; 6: e514–e522.

[47] Funding for public (vs curative) health can be less of a priority when healthcare systems are driven primarily by revenue from social health insurance rather than general taxes: see WHO, 2004. Making decisions on public health: a review of eight countries. https://apps.who.int/iris/rest/bitstreams/1280546/retrieve

[48] Jack W. The public economics of tuberculosis control. Health Policy. 2001;57(2):79-96.

associated with detection and treatment because of its contagious nature. Second, especially early on in the disease, individuals may not be very well informed about the need for diagnosis because the symptoms mirror those of other less serious health problems. Third, because full treatment requires extended drug therapy over 6–8 months, incomplete treatment is common and contributes to drug resistance. This is a form of dynamic externality. Finally, and perhaps most importantly, tuberculosis is a disease of the poor, and public intervention in its detection and treatment could represent an effective part of an anti-poverty approach to development".

C. THE POLITICAL DETERMINANTS OF DOMESTIC SPENDING ON HEALTH

The section above outlines an abundance of compelling evidence that investments in health in general, and tuberculosis control specifically, provide strong ROIs. A well-designed TB investment will be one that: (i) is pro-poor; (ii) is focused not only on curative healthcare but also on public health interventions; (iii) will yield epidemiological impact and thus savings approximately a decade in the future; and (iv) requires strong government stewardship in order to minimize negative externalities. How and why would stakeholders tend to prioritize (or deprioritize) such types of investments – particularly from a political perspective?

Spending on health is an inherently political decision; its success is contingent upon strategic political maneuvering throughout the policy process.[49] In this section, we review some of these political determinants.

Political decision-making is driven by multiple factors -- although scientific evidence is important, political decisions incorporate a complex set of economic, ideological, and personal factors.[50] Beyond the public health evidence, policymakers must take into consideration economic impact, relationships, and maintaining coalitions beyond an immediate issue; furthermore, elected officials generally have little training in public health, and health advocates do not express arguments in compelling terms, such as return on investment.[51]

One lens through which to view these processes is Kingdon's Multiple Streams Approach (MSA)[52], among the most prominent frameworks to describe policymaking. In this approach, three streams converge to create a 'window of opportunity': a problem stream, in that there is a clear public perception of a problem; a policy stream, in that a viable solution exists; and a politics stream, in that policymakers have the motive and opportunity to pursue the policy.

As emphasized in Kingdon's MSA, agenda-setting – the ability to influence topics of concern on the public agenda, typically through mass media – is crucial to influencing this process. Yet, even in countries where the environment is conducive to reform, political leaders tend to adopt incremental policy

[49] Roberts, Marc, William C. Hsiao, Peter Berman, and Michael R. Reich. 2003. Getting Health Reform Right: A Guide to Improving Performance and Equity. 1st ed. Oxford University Press, Inc.
[50] Hunter E. L. (2016). Politics and Public Health-Engaging the Third Rail. Journal of public health management and practice : JPHMP, 22(5), 436–441. https://doi.org/10.1097/PHH.0000000000000446 . See also Vélez CM, Wilson MG, Lavis JN, Abelson J, Florez ID. A framework for explaining the role of values in health policy decision-making in Latin America: a critical interpretive synthesis. Health Res Policy Syst. 2020 Sep 7;18(1):100. They point out that there are the technical values (like cost effectiveness) but also goal values (e.g., equity) and situational values (public vs private, left vs right, etc).
[51] Ibid.
[52] Kingdon, J. W., & Stano, E. (1984). Agendas, alternatives, and public policies (Vol. 45, pp. 165-169). Boston: Little, Brown.

changes, rather than comprehensive reforms, due to fragmented political institutions, resistance from concentrated interests, and fiscal constraints.[53]

Furthermore, despite growing evidence of the economic and social benefits of investing in health, governments around the world continue to underinvest specifically in the public health part of the overall health response.[54] Within democratic systems that favor shorter-term wins over long-term investment, there are a number of reasons why a public health investment is not attractive: the focus on prevention (a longer-term, abstract concept), rather than the tangible and short-term outcome of curative treatment; and the public health approach that emphasizes statistical, population-based improvements rather than individual lives. The public health community may need *"to rethink its strategies and craft political wins by building a political case for investing in public health—which extends far beyond mere economic and social arguments. These strategies need to make public health visible, account for the complexities of policymaking networks and adapt knowledge translation efforts to the appropriate policy instruments"*.[55]

In recent years, increasing attention has been paid to government health expenditure and its political determinants. For example, Potrafke[56] empirically evaluated 18 OECD countries from 1971–2004 and found that incumbents behaved opportunistically and increased the growth of public expenditures on health in election years. Meanwhile, Herwartz and Theilen[57] found that among OECD countries, if governments are in power for a sufficiently long time, right-wing governments spend less on public health than their left-wing counterparts. There is mixed evidence on whether democratic societies tend to allocate a higher share of public budgets to health, and on the importance of citizen participation for increased social spending.

Some of the political outcomes may come down to the characteristics of individuals. Moessinger[58] found that a finance minister's educational background and ideological leaning have no significant impact on a key MOF metric – the debt-to-GDP ratio. However, Dreher et al.[59] found that market-liberalizing reforms are more likely during the tenure of former entrepreneurs. Former professional scientists also promote reforms, the more so, the longer they stay in office. Meanwhile, health expenditure in dictatorships is generally greater when those dictatorships rely on popular support[60] and have longer time horizons.[61]

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[53] Oliver, T. R. (2006). The politics of public health policy. *Annu. Rev. Public Health*, *27*, 195-233. For a specific example, see the disintegration and disaggregation of the 2004 UHC law as described by: Koon AD, Hawkins B, Mayhew SH. Framing universal health coverage in Kenya: an interpretive analysis of the 2004 Bill on National Social Health Insurance. Health Policy Plan. 2021 Feb 16;35(10):1376-1384.

[54] Hoffman, S. J., Creatore, M. I., Klassen, A., Lay, A. M., & Fafard, P. (2019). Building the political case for investing in public health and public health research. Canadian Journal of Public Health, 110(3), 270-274.

[55] Ibid.

[56] Potrafke N. The growth of public health expenditures in OECD countries: do government ideology and electoral motives matter? J Health Econ. 2010 Dec;29(6):797-810.

[57] Herwartz H, Theilen B. Health care and ideology: a reconsideration of political determinants of public healthcare funding in the OECD. Health Econ. 2014 Feb;23(2):225-40.

[58] Moessinger M-D. Do the personal characteristics of finance ministers affect changes in public debt? Public Choice. 2014.

[59] Dreher, Axel; Lamla, Michael J.; Rupprecht, Sarah M.; Somogyi, Frank (2006) : The impact of political leaders' profession and education on reforms, KOF Working Papers, No. 147, ETH Zurich, KOF Swiss Economic Institute, Zurich, http://dx.doi.org/10.3929/ethz-a-005277685

[60] Yan HT, Lin YC. A Dictator's Gift: Dominant party regimes and health expenditures. Eur J Public Health. 2019 Dec 1;29(6):1172-1177.

[61] Yan HT, Lin YC. How time horizons of autocrats impact health expenditure: a mixed methods research. BMC Public Health. 2020 May 11;20(1):649.

There are many questions that remain unanswered for these political decision-making processes. In inter- and intra-sectoral allocation discussions, does it work to have a technocratic, evidence-informed approach to advocate for pro-poor investments (including those that reduce catastrophic medical costs for citizens), and for investments that address public health priorities and externalities? Do governments respond to ROI arguments and, if not, why not? How and what information, processes, and dynamics guide MoF allocation advice on such issues? Are externalities formally considered? Part 3 touches on some of these questions, via a more qualitative look at the country-level dialogue on health and the economy.

PART 3: HEALTH AND THE ECONOMY: A CRITICAL AND LONG-OVERDUE DIALOGUE

The economic impacts of the COVID-19 pandemic have emphasized the inter-relationship of health and the economy, and made it clear that dialogues between MOFs and MOHs must go well beyond their historic focus on the financing of public healthcare. An improved dialogue would cover not just the budgeting of public finances but the broader relationship between health and the economy, and not just the provision of healthcare but also how to optimize population health via all sectors. This broader perspective is needed to build a virtuous circle of improved health and economic development.

In virtually every country, the Ministry of Finance (MOF) holds overall responsibility and authority for macroeconomic and fiscal performance, and is the key decision maker in proposing resource allocation, setting economic policy, and maximizing development. The health of the country's population—generally seen as the responsibility of the Ministry of Health (MOH)—is an integral part of development.[62] The evolution in approach proposed above will require changes in the way that national finance and health leaders collaborate, which are described in the following bullets and in the corresponding sections below:

- Recognize and collaboratively address the critical interdependence of health and the economy to build a virtuous circle
- Shift the focus from finance to the economy and from healthcare to health, fostering multisectoral dialogue jointly led by health and economic leaders
- Place value for money at the center of dialogues around public investment in healthcare quality, equity, and financing
- Establish sound public policy, leadership, and regulation across health services and their implementation and financing
- Partner with donors and country stakeholders to ensure that health investments align with country needs and priorities, the burden of disease and poverty, and the drivers of economic development, guided by sound evidence

A. THE CRITICAL INTERDEPENDENCE BETWEEN HEALTH AND THE ECONOMY

As described in Part 2A, there is evidence that good macroeconomic performance brings better health ("wealthier is healthier") and that better health brings good macroeconomic performance ("healthier is wealthier"). However, this evidence has been largely technical and academic and there has been surprisingly little effort over the last 30 years to apply these concepts in any kind of practical manner to impact the day-to-day workings of relevant ministries.

Interactions between MOFs and MOHs typically take place in the context of a budget process—different in the details from country to country, but generally similar in its overall character. In a typical budget process, each Ministry looks at the budget from their own perspective and there is little constructive

[62] For example: (a) World Development Report 1993: Investing in Health. World Bank, 1993; (b) Global Health 2035: A World converging within a Generation. The Lancet, 2013; (c) Commission on Social Determinants of Health, Report by the Secretariat. World Health Organization, 2009. This literature mainly focuses on the relationship between healthcare and public finance, rather than on health and the economy more broadly, and of course does not yet account for the new urgency brought on by the COVID-19 pandemic.

dialogue. The MOF's objective is to optimize resource allocation to benefit the economy. A key part of this objective is maximization of human capital development[63]—which includes health. However, the most basic rule of all for the MoF is not to exceed the fiscal envelope no matter what each sector claims their specific fiscal needs to be – since macroeconomic stability is a necessary (though insufficient) condition to promote aspects of economic and human capital development, including health.

When creating a budget, Ministries of Finance use projections for growth, interest, and inflation rates, as well as other distinctive determinants of public revenue, to estimate the overall fiscal budget. They then subtract unavoidable spending such as debt service, mandatory transfers to the states, pensions, and public sector salaries. Remaining funds for discretionary spending are then allocated across ministries and sectors such as health, defense, and infrastructure.

Typically, the MOH is given its budget envelope and the MOF, with little visibility into and involvement in discussion of healthcare programs, has a limited ability to contribute to improvement of the health sector's effectiveness and efficiency. To discuss health-related budget issues, there are health specialists in the MOF and budget specialists in the MOH. The MOH budget specialists seek to make the case for health investments – a case that is sometimes, but not always, politically popular. Meanwhile, the health specialists in the MOF are economists by training, but by the nature of the job they become more like fiscal accountants aiming for fiscal balance. As a result, they are unlikely to consider returns on investment over the next ten years and instead focus on the current budget and whether an increase in budget can be accommodated. The MOF is also wary of taking on contingent liabilities (i.e., expenditures that are likely to require significant future budget allocations), such as ongoing financing of staff salaries after building a new public hospital or the knock-on effects of healthcare staff salaries on human resource costs in other sectors.

As a result, budgeting processes in many countries have become fraught with inertia, with no real incentive to pursue intra-sectoral efficiencies or inter-sectoral synergies. Once budgets are set, the MOH may blame stalled progress toward public health indicators on a lack of public funds, even as the MoF views certain sectors (including health) as inadequately transparent, efficient, effective, or accountable.

To improve the allocative decision-making process and to make progress on health agendas, then, the quality of communication between the MOF and the MOH must change.[64] The MOF should work actively to ensure adequate health care spending as a means to improve economic performance. But it should also seek the MOH's buy-in and support for prioritization of macroeconomic stability as a key determinant of good population health, and for investments in sectors other than health care that will have a positive impact on health. Both ministries should more actively question prior budgets, and engage in a more collaborative conversation that maximizes health outcomes and prioritizes health investments that also maximize economic outcomes.

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[63] The World Bank describes human capital as "the knowledge, skills, and health that people invest in and accumulate throughout their lives, enabling them to realize their potential as productive members of society." It goes on to say that investing in people through "…nutrition, health care, quality education, jobs and skills helps develop human capital" and that this is key to "ending extreme poverty and creating more inclusive societies." Source: World Bank Human Capital Project. Available at: https://www.worldbank.org/en/publication/human-capital/brief/about-hcp?cid=GGH_e_hcpexternal_en_ext

[64] As an example of this idea, see: Communiqué, G20 Finance Ministers and Central Bank Governors Meeting 17-18 February 2022, Jakarta, Indonesia at https://g20.org/wp-content/uploads/2022/02/G20-FMCBG-Communique-Jakarta-17-18-February-2022.pdf , which noted in part: "The G20 Joint Finance-Health Task Force will aim to develop coordination arrangements between Finance and Health Ministries."

The international community has a critical role to play here. Significant changes at the country level will not be possible unless the World Bank and the International Monetary Fund (IMF) change their policies to prioritize health and the strengthening of health systems in order to prepare for the effects of future climate and pandemic shocks. Precisely how they engage will be up to them—for example, the Independent Panel has suggested[65] that the IMF could begin explicitly considering risks relating to both the macroeconomic outlook and the health sector in its Article IV assessments. But the COVID-19 pandemic has made clear that greater value must be placed on human capital investment projects, particularly within health; without these investments, countries will continue to face the risk of health setbacks rapidly wiping out progress in macroeconomic performance.

Just as the 2009 Financial Crisis led to calls for World Bank and IMF implementation of Financial Sector Assessment Programs, with resulting domestic measures coordinated by countries' Financial Stability Boards, COVID-19 is pointing the way toward something analogous for health. Indeed, the Monti Commission[66] has called "for the establishment of a Global Health Board (GHB) under the auspices of the G20 to ensure effective coordination of health, economic and financial policies within governments and in the international area. This recommendation has been inspired by the success of the Financial Stability Board established after the global financial crisis, also by the G20. ….in broad terms we see it comprising representatives of finance and health ministries." Meanwhile, a G20 High Level Independent Panel has recommended[67] joint Health Sector Assessment Programs, led and coordinated by the WHO and the World Bank, and domestic Health Stability Boards could be added to this initiative.

TB—prior to COVID-19 the world's deadliest infectious respiratory disease[68] — should be particularly prominent in discussions on the interrelationship of health and the economy, given that TB overwhelmingly affects the poor[69] and still has devastating health and economic impacts in low-income countries where prevalence is high. The economic case for investing in TB programming is compelling (Part 2B), given its enormous and regressive impacts on labor productivity and longer-term social safety nets and dependency ratios. To translate evidence on the linkages between health and the economy into practical actions to address this critical challenge, fostering more consistent and sophisticated collaboration between MOFs and MOHs will be an essential first step.

B. SHIFTING FOCUS FROM HEALTH CARE TO HEALTH, AND FROM PUBLIC FINANCE TO THE ECONOMY

Healthcare plays a critical role in generating better health for all people, but it is far from the only factor. A multisectoral approach, with health and economic leaders convening leaders of multiple sectors, is essential to sustainably improving population health.

Health ministries must broaden their focus, looking beyond the urgent, day-to-day construction and

[65] The Independent Panel for Pandemic Preparedness and Response. 2021. COVID-19: Make it the Last Pandemic. https://theindependentpanel.org/wp-content/uploads/2021/05/COVID-19-Make-it-the-Last-Pandemic_final.pdf
[66] Pan-European Commission on Health and Sustainable Development. 2021. Drawing light from the pandemic: A new strategy for health and sustainable development. https://www.euro.who.int/__data/assets/pdf_file/0015/511701/Pan-European-Commission-health-sustainable-development-eng.pdf
[67] G20. 2021. A global deal for our pandemic age: Report of the G20 High Level Independent Panel on Financing the Global Commons for Pandemic Preparedness and Response. https://pandemic-financing.org/wp-content/uploads/2021/07/G20-HLIP-Report.pdf
[68] WHO. 2021. Global TB Report. https://www.who.int/teams/global-tuberculosis-programme/tb-reports/global-tuberculosis-report-2021
[69] Oxlade O, Murray M. Tuberculosis and poverty: why are the poor at greater risk in India? PLoS One. 2012;7(11):e47533.

operation of publicly financed healthcare facilities and services to the social determinants of health and the multiple policies and sectors that can drive improvements in population health.[70] MOFs should guide MOHs toward the necessary structural changes to roles, scopes, and organizational mandates to reflect cross-sector interdependence including the development of governance schemes that foster intersectoral collaboration to improve health.

Although every country is different, neither full cabinet meetings nor one-on-one ministry interactions are typically the optimal vehicle for this transformation. A ministerial committee can provide a setting for discussion of intersectoral budgetary strategies for improving health and the projected economic impacts of improvements in health and well-being. This approach, with a "transversal budget" across sectors and ministries, can help to directly link health as a risk to the economy. If the MOH is not prepared to take the lead in this effort, then the MOF—as steward of the full set of budget allocations and economic policies—should do so, not through a unidirectional demand for better healthcare funding allocations but rather through real, mutual collaboration in optimizing allocation of public funds to all key sectors that contribute to the social determinants of health and that can ensure strong and more equitable macroeconomic performance.

Together, MOF and MOH can act as the conductor to set the tempo—jointly advocating for better allocation and use of funding for sectors that affect health outcomes, including livelihoods, water, sanitation, girls' education, and clean energy—but other sectors and ministries must participate and collaborate to create the full health symphony. Building these new channels for open communication and joint action represents a major departure from traditional inter-ministerial relationships, requiring substantial effort to build trust and develop capabilities to build and work through a new health and economy framework.

C. PLACING VALUE FOR MONEY AT THE CENTER OF THE HEALTH DIALOGUE

For healthcare to play its critical role in the generation of better health, it is essential to maximize equity, efficiency, and value for money. This requires that MOF engagement with the health sector extend beyond short-term budget discussions and move beyond the current dynamic—in which the MOH asks for more money and the MOF asks for more checks and balances—to place value for money at the center of the discussion.

Equity and effectiveness in health care spending have been studied extensively, but insufficient efforts have been made to operationalize the findings to achieve concrete improvements in the quality, equity, and effectiveness of public health financing. Politicians love to cut ribbons at the opening of new hospitals, which builds constant pressure for more health infrastructure and new health programs, but they often focus less on reforming existing programs or improving population-level outcomes. Meanwhile, medical doctors—even those with leadership positions in the MOH—are trained to focus on the health of the individual patient rather than on the functioning of complex health systems.

In contrast, the MOF is well-positioned to participate more robustly in decisions on healthcare policy,

[70] See World Health Organization, Commission on Social Determinants of Health. Geneva: WHO; 2008. Closing the gap in a generation: Health equity through action on the social determinants of health. CSDH final report. https://www.who.int/publications/i/item/WHO-IER-CSDH-08.1; and Woolf SH, Braveman P. Where health disparities begin: The role of social and economic determinants--and why current policies may make matters worse. Health Aff (Millwood). 2011 Oct;30(10):1852-9. For some of the associated challenges, see Braveman P, Gottlieb L. The social determinants of health: It's time to consider the causes of the causes. Public Health Rep. 2014 Jan-Feb;129 Suppl 2 (Suppl 2):19-31.

resource allocation, and utilization, beyond simply guarding fiscal discipline. It should prioritize basic services with broad population impact. MOF can direct ministries to create fiscal- and performance-related targets that can be compared to achievements from previous years. It can also provide important inputs and guidance on financial management issues that impact health, including: implementation of sin taxes; introduction of more robust financial management systems (e.g., to avoid leakage of health facility user fees); reforming procurement processes; and the fair pricing of health care commodities. MOFs should demand accountability and evidence on how public healthcare spending improves specific health outcomes and equity measures. That conversation that should naturally lead to prioritization of funding for evidence-based preventive and pro-poor public health interventions, including for TB and other airborne infectious diseases.

D. ESTABLISHING SOUND PUBLIC POLICY, LEADERSHIP, AND REGULATION ACROSS HEALTH SERVICES AND THEIR IMPLEMENTATION AND FINANCING

Facing the urgency of day-to-day management, MOH often focuses its attention almost exclusively on direct healthcare service delivery by public-sector employees; the health budget is thus mostly tied up in recurrent staffing and capital costs. In such a system, decisions on public funding for healthcare are made largely on a historical basis using input-based financing, and thus public financing is seldom linked to results or to the performance of providers and the health system in general.

This contrasts with health systems where health budget negotiations are focused on balancing the funding of the system (including public financing and mandatory insurance contributions when they exist) against the expected health results – both in terms of coverage of health services and the protection against the financial consequences of sickness.

These results- and performance-centered health systems have much more potential for a productive MOF-MOH collaboration. Getting to this point requires an intersectoral reform process led by the MOF and the MOH to link public funding for healthcare to results and performance. This will typically include provider payment and governance arrangements that encompass both public and private sector health care delivery and that are more flexible, responsive, and efficient. The MOF must incentivize reforms that make health care systems more performance-based and responsive to client needs, with a strong focus on prioritizing equity concerns.

Governments also make policy and regulatory decisions that determine or substantially direct the level and distribution of funding beyond government sources, including social health insurance,[71] private health insurance, and household payments out-of-pocket. The specifics of how to fund, govern, and regulate these efforts are equally critical. This includes determining the source of funding (from general government revenue, mandatory payroll-tax, household out-of-pocket funding, or donor funding) and the choice of which organization(s) to fund (e.g. a single public insurance system – led by either the Ministry of Health or a distinct public insurance agency; financing of a mix of public and private healthcare providers; and the designation of distinct roles for mixed public and private health insurance schemes). These choices have very significant consequences, not only for health, but on labor markets, fiscal sustainability, global competitiveness, and beyond.

Based on such a dialogue, policies and regulations can shape public and private healthcare provision and

[71] Social health insurance is usually funded via labor taxation, though in low- and middle-income countries (LMICs) this is often supplemented with funds from general taxation, e.g., to support the premiums of low-income clients.

the growth and efficiency of health insurance, reduce market and governance failures, protect consumers, and determine the best use of public healthcare funding. As government arrangements become more flexible, other forms of strategic purchasing beyond the insurance framework are also important. The MOF and MOH need evidence to determine the health functions that, from a financial perspective, are best tailored to buy from public, private, and NGOs actors as appropriate. MOFs can bring important financial insights, strategies and innovations to these discussions. This is especially important in low-income countries: where fiscal space is very limited, sound public policy and regulation can make a substantial difference in health system performance and financial protection.

In decentralized federal systems, the MOF may have limited capacity to influence state-level health expenditures and institutional arrangements. The central and state or provincial levels may have overlapping or duplicative responsibilities and authorities, and state financial systems may not clearly account for federal allocations, resulting in funding leakages. Through improved collaboration, the MOF and MOH can develop and implement a suite of financial and technical regulations and safeguards that foster accountability by making arrangements between federal and state levels more coherent and transparent.

As private-sector providers are increasingly included in the landscape of publicly financed health services, it becomes more and more important that well-balanced policies—informed by the perspectives of both MOF and MOH—promote equity, so that private healthcare provision does not cater only to the wealthy and leave low-income clients dependent upon an underfunded public healthcare system.

E. PARTNERING WITH DONORS AND COUNTRY STAKEHOLDERS TO ENSURE THAT HEALTH INVESTMENTS ALIGN WITH COUNTRY NEEDS AND PRIORITIES, THE BURDEN OF DISEASE AND POVERTY, AND THE DRIVERS OF ECONOMIC DEVELOPMENT

Development assistance for health (DAH) represents only a small proportion of total health expenditures globally, but it is essential to priority disease programs in many low-income countries. The presence of this external funding influences allocation decisions across the domestic health financing landscape by incentivizing country and local authorities to shift domestic funding away from programs with external funding and toward health programs (e.g., for diabetes and hypertension) for which no DAH is available (see Part 1A). This perverse incentive has a rational basis, but it means that continued donor financing is essential for sustaining global efforts toward disease priorities. Importantly, it also hinders country ownership of priority programs, can hinder allocative efficiency, and can make the transition from donor to domestic financing more challenging.

As recipient countries' GDP per capita grows, donors find it more difficult to justify historical funding levels, even though most of the world's poor people now reside in middle-income countries. But a rushed or messy transition to domestic financing can stall or even reverse progress on key health indicators, threatening global progress in reducing the morbidity and mortality burden of infectious diseases like AIDS, malaria, and TB.

Discussions about transitioning from DAH support are typically centered in the MOH, where the challenge is often framed as a lack of financial resources for health in the national budget, thus passing responsibility to the MOF. Strengthened collaboration between MOF and MOH is needed to increase, in an iterative and rational manner, domestic fiscal resources for DAH-supported programs so that health

investments are appropriate to the burden of disease, and health programs and the country are fully prepared to graduate from external funding support.

In addition to building a structured transition from donor financing to local resources, there are issues around the equitable allocation of DAH in different health areas. This requires rationalizing two metrics: the health and resulting economic burden of a particular health area; and the amount of DAH and domestic funding committed to that health area.

F. CONCLUSION

The health and pro-poor case for prioritizing TB prevention and treatment in high burden countries is clear. In many low-income countries, TB counts for one of the largest shares of overall burden of disease; within these countries, TB impacts the poorest households the most. Despite this, TB prevention and treatment gets relatively low levels of funding per case and per DALY. This forces the governments of low-income countries and the poorest TB patients and their households to pay for a much larger share of diagnostics and treatment than for other key drivers of disease burden. An improved dialogue between MOF and MOH, using an improved economic case for investment in health and TB, is one way to improve the performance and resourcing of not only the health sector as a whole, but also of the TB response.