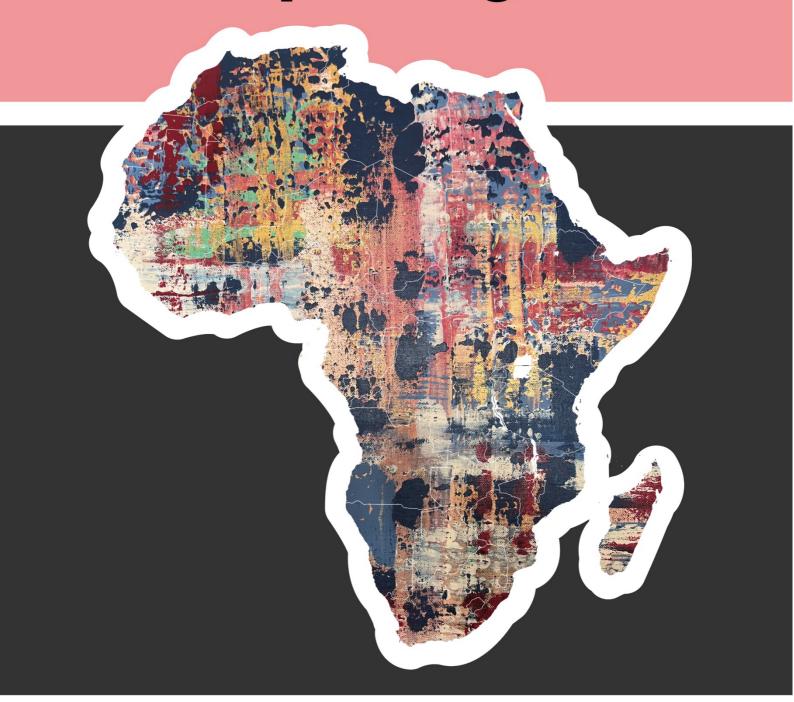
# What can a ministry of finance do to improve health spending?







#### Danielle Serebro and Tom Hart

November 2025

#### **Abstract**

Lower middle-income country governments spend only \$56 per capita on health while low-income country governments spend less than \$10 per capita.

However, budgetary space to increase these allocations is severely constrained by stagnant or low economic growth, limited capacity to mobilise revenue, and rising debt-service costs. In these circumstances, where it may be unrealistic to expect large funding increases for the health sector, what can a ministry of finance do to improve the efficiency and effectiveness of health spending?

This paper suggests 10 areas that ministries of finance, ministries of health and their partners can explore to improve the quality of health spending across three themes: improved budgeting and prioritisation of health spending; improved budget execution and procurement; and stronger public financial management frameworks for health spending.



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# Abbreviations and acronyms

CoA chart of accounts

dPFM digital PFM

FMIS financial management information systems

GDP gross domestic product HBP health benefits package HRT health-resource tracking

IFMIS integrated financial management systems

IGFT intergovernmental fiscal transfer IMF International Monetary Fund LMIC lower middle-income country MTFF medium-term fiscal framework NCD non-communicable disease

OECD Organisation of Economic Cooperation and

Development

PER Public Expenditure Review PFM public financial management

PHC primary healthcare

SIDS small island developing states SSB sugar-sweetened beverage TSA treasury single account WHO World Health Organization

#### 1 Introduction

Low- and lower middle-income countries comprise more than half the world's population, yet accounted for less than 4% of health spending in 2022.1 Domestic public spending on health is less than \$10 per capita on average in low-income countries and \$56 per capita in lower middle-income countries (WHO, 2024). Far lower than the \$2,678 per capita spent in high-income countries, or even the \$305 per capita spent in upper-middle-income countries, and the World Health Organization's (WHO's) estimates of \$90 per capita needed to make progress towards universal health coverage (WHO, 2024; Stenberg et al., 2017). In many low- and lower-middle income countries, a combination of low prioritisation of health in the budget – which averages only 5% in low-income countries and 8% in lowermiddle-income countries (WHO, 2024) – alongside low levels of tax mobilisation contributes to these relatively low levels of spending. As a result, almost half the world's population lacks access to basic healthcare services (World Bank, 2023c).

High-quality health spending supports the economy by strengthening human capital, reducing poverty and income inequality, and strengthening health security to mitigate against the macroeconomic shocks associated with epidemics and pandemics. So, while investing more in health ought to be a priority for all governments, in many countries budgetary space for health is severely constrained as governments are confronted by trade barriers, stagnant or low economic growth, limited capacity to mobilise revenue, and rising debt-service costs.

Despite widespread knowledge of this fiscal squeeze, there continue to be substantial, and potentially unrealistic, expectations from ministries of health and the broader health-financing community of how much more funding ministries of finance can or will allocate to the health sector. For example, under the 2001 Abuja Declaration, African governments set a target of spending 15% of their annual budgets in health. Yet in 2022, only six lower-income countries globally (none in Africa) and no low-income countries met this target.2

While there may be opportunities in many countries to incrementally increase the share of the budget allocated to health, in low-income countries that have historically received large volumes of

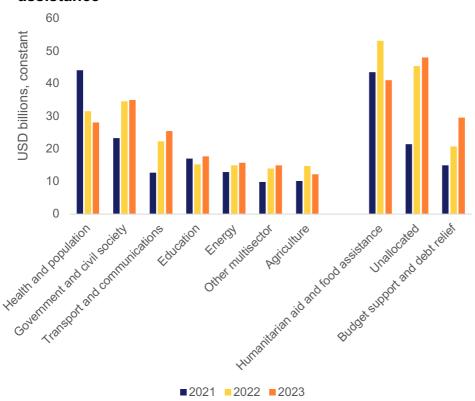
<sup>&</sup>lt;sup>1</sup> This is in line with spending trends prior to 2020 and therefore does not reflect the large differences

associated with Covid-19.

<sup>2</sup> Based on the indicator 'Domestic general government health expenditure (% of general government expenditure)' from the WHO Global Health Expenditure Database.

development assistance for health, this may require a shift in thinking on the part of the ministry of finance. Prior to the deep cuts to foreign assistance by the United States and other major bilateral donors in 2025, health was one of the highest recipients of external assistance relative to other sectors (as shown in Figure 1). In the past, this has meant that from the perspective of a fiscally constrained ministry of finance, it may not have been rational to shift funding towards the relatively well-funded health sector and away from other, competing, priorities. This stance will now need to be reassessed, but this will take place within constrained fiscal circumstances in most countries. The need for ministries of health to demonstrate that they can spend their existing resources effectively, and for ministries of finance to support them to do so, will remain. Indeed, with reduced overall resources, this only becomes more important.

Figure 1 Prior to the US's 2025 aid cuts, the health sector was one of the largest recipients of official development assistance



Note: Data is for ODA commitments. Only the seven largest sectors are shown. Non-sectoral allocations for humanitarian aid, aid not allocated to a sector and budget support and debt relief are shown for comparison.

Source: OECD DAC5: Aid (ODA) by sector and provider

In discussions on health financing, a regularly repeated mantra is that health is an investment, not a cost. But for a ministry of finance, every investment has both a benefit and a cost. What matters is the ratio between the two, and whether the ex-post benefits realised once the programmes are implemented are the same as the benefits

that were estimated ex ante. We can think of the policy options discussed below as raising the return on health spending by providing an enabling environment for health spending that supports selection of the most beneficial spending choices, and improves execution of that spending so that those benefits are realised as planned.

Based on research, country examples, etc [pleas say something on where these 10 things come from for credibility], we suggest 10 ways the ministry of finance, as the custodian of a country's public financial management (PFM) system, can collaborate with the ministry of health to improve the quality of health spending, split across three themes: improved health budgeting and prioritisation; better budget execution through cash management and procurement processes; and strengthening public financial management frameworks for health spending.

The suggested approaches and solutions have in common that they are feasible in financially and technically constrained contexts; ought to enable significant efficiency gains, typically without imposing a large financial burden; are within the primary ambit and direct influence of the ministry of finance; and respond to functional problems impeding the effectiveness of health spending in a substantial number of low- and middle-income countries.

We hope this agenda can stimulate thinking around how to help both ministries of health and finance develop stronger systems for health spending. If taken forward, this should help ensure that should any additional funding become available, it is utilised as effectively as possible; and if additional funding is not available, this should help increase the efficiency of existing spending. For ministries of health, and their external partners, this agenda could be considered a menu of 'asks' from the ministry of finance that go beyond simply requesting additional funding.

#### Improved health budgeting and prioritisation

- 1 Translating health sector planning and prioritisation into the budget. Effective health service delivery starts with evidence-based, resource-constrained planning and prioritisation. Finance ministries can help ensure that health sector prioritisation exercises are financially feasible and deliver improved population health. We suggest three ways the finance ministry can do this: (i) engaging more meaningfully with priority-setting processes; (ii) providing better information on resource availability; and (iii) facilitating inclusion of the health benefits package (HBP) into budgeting systems.
- 2 Reconciling top-down budgeting with bottom-up inputs.

  Ministries of finance need to set sectoral ceilings to reconcile aggregate resource availability with government priorities.

  However, this should not extend to meddling in the details of

health sector budgets. Ministries of health should also be able to bid against other agencies for any spare resources. The ministry of finance can balance bottom-up budget preparation with top-down budgeting by either (i) setting sectoral ceilings while delegating decisions over the details to ministry of health; or (ii) utilising a system of baseline estimates. For this to be effective, ministries of finance and health will need to build trust around the quality of their budget proposals. The ministry of finance can also support stronger economic and financial capacity to plan and budget effectively in ministries of health.

- 3 Supporting better budget development through the challenge function. Ministries of finance can create incentives for the ministry of health to improve the quality of its plans and budgets by carefully scrutinising its spending, expenditure management processes and policy choices. This may involve: (i) incorporating a policy-oriented challenge function into existing budget processes; (ii) establishing functional coordination mechanisms with the ministry of health; and (iii) ensuring that health budget officers within the ministry of finance are able to engage in policy debate with the ministry of health, rather than just focus on compliance with budget ceilings.
- 4 Undertaking collaborative spending reviews to identify inefficiencies in health spending. Budget processes are time constrained, meaning that attention typically only focuses on a narrow range of increases or decreases in ministry budgets. The effectiveness of the bulk of spending is not assessed. To provide insight into expenditure performance and identify areas where spending should be increased or reduced, ministries of finance can: (i) institutionalise spending review processes; and (ii) ensure they are undertaken collaboratively with the ministry of health to support implementation of policy recommendations.

# Better budget execution through cash management and procurement processes

- 5 Increasing budget credibility and execution through enhanced cash management. In many LMICs, health sector budgets are routinely under-executed, meaning the health sector does not receive promised resources in full or fails to use them. This section lays out health budget execution challenges and encourages the ministry of finance to: (i) strengthen cash management practices; (ii) protect the health sector from the most negative consequences of cash rationing; (iii) support more flexible spending controls; and (iv) improve management of virements.
- 6 Reviewing procurement policies and processes impeding health sector efficiency. Ministries of finance are typically the policy lead on procurement and so have a major role to play in supporting better-value procurement in the health sector. In this section, we suggest efficiency can be achieved by: (i) tailoring

procurement processes to the needs of the health sector; (ii) enabling participation in multi-country pooled procurement; (iii) supporting improvements in procurement planning and budgeting; and (iv) establishing fit-for-purpose emergency health-procurement regulations.

#### Stronger PFM frameworks for health spending

- 7 Ensuring the fiscal decentralisation system supports effective and equitable health spending. In many countries, subnational governments play a major role in the health system. As decentralisation proceeds, the ministry of finance needs to ensure close coordination between budgetary and PFM reforms and decentralisation reforms. Ministries of finance play a central role in managing the fiscal aspects of decentralised health systems. This role may include: (i) coordinating the overall financing of decentralised services; (ii) the development of the intergovernmental fiscal transfer (IGFT) system, including setting the overall framework for conditional/sector transfers, often in partnership with a fiscal commission; (iii) regulating and tailoring PFM systems to provincial and local government requirements and building on existing systems rather than simply transferring national systems to the local level; and (iv) compiling consolidated local government financial information to support policy analysis, oversight and accountability.
- 8 PFM and direct financing as enablers of greater facility financial autonomy. There is growing consensus that increasing health facilities' financial autonomy is important for improving service delivery. The PFM system and ministry of finance are often viewed as bottlenecks to this. We look at where PFM systems may frustrate facility financial autonomy and call for the ministry of finance to: (i) sensitise health stakeholders on existing PFM arrangements to ensure common understanding of what is and is not feasible in financing facilities; (ii) critically reflect, with the ministry of health, on the optimal flow of funds for facilities to minimise fragmentation and conflicting incentives; (iii) allow facilities to receive funds by becoming budget entities or cost centres by inclusion in the chart of accounts or an alternative mechanism, such as a conditional transfer system; and (iv) permit facilities to open bank accounts, either within the treasury single account or outside of it.
- 9 Leveraging digital financing innovations for improved information access and efficiency. Digital PFM (dPFM) technologies have the potential to attenuate two major health-financing challenges: inefficient fund flows and lack of accurate and granular health budget and expenditure data, integrated with non-financial performance data. This requires the ministry of finance to: (i) support a move towards a more open dPFM architecture that enables interoperability with other financial management information systems (FMISs); (ii) enable integration

- and/or interoperability with non-financial performance data; (iii) reform the data architecture to support interoperability of both financial and non-financial systems; and (iv) collaborate with the health sector to introduce electronic payment tools for facilities.
- 10 Raising revenue and reducing health spending pressures through health taxes. Taxes on health-reducing products, such as tobacco, alcohol and sugar-sweetened beverages (SSBs), are regarded as one of the most cost-effective tools to control non-communicable diseases (NCDs). Perhaps even more important than their revenue raising potential, however, is their potential to reduce health spending pressures and support reallocation of resources to the other health priorities. We highlight the role of the ministry of finance in: (i) assessing the revenue implications of introducing health taxes; (ii) providing political backing for the ministry of health; (iii) determining the structure and rates associated with health taxes; (iv) deciding whether health tax revenue should be earmarked for the health sector; and (v) ensuring health taxes are embedded within the broader tax system.

# 2 Ten ways a ministry of finance can support improved health spending

The remainder of the report develops each of the 10 ways that a ministry of finance can support improved health spending, grouped into three categories:

- improved health budgeting and prioritisation (1–4)
- better budget execution through cash management and procurement processes (5–6)
- stronger PFM frameworks for health spending (7–10).

#### 2.1 Translating health sector planning and prioritisation into the budget

Effective health service delivery and health budgeting starts with evidence-based, resource-constrained planning and prioritisation exercises. Most ministries of health have developed a health sector strategic plan to guide medium-term planning and resource allocation. Often, this includes a health benefits package (HBP), that is, a minimum set of essential health services that are to be publicly financed. Over a decade ago, more than 64 LMICs already had defined a HBP (Glassman and Chalkidou, 2012). Ideally, HBP prioritisation should be based on priority-setting criteria including clinical and cost-effectiveness evidence, disease burden, equity, and feasibility within the existing health system and budget constraints (Kaur et al., 2019).

Health plans and benefit packages that are not resource constrained cannot be implemented. There are often questions around how relevant these packages are for budgetary decision-making. 'The disconnect between aspirational health plans and actually available financial and other resources is the single most common failing of existing benefits plans in low-income countries' (Glassman, 2017). Many interventions implicitly, or even explicitly, prioritised by African ministries of health never receive funding (Essue and Kapiriri, 2018). This problem may be partly due to health plans and packages not being resource constrained by design; instead, a ministry of health may see the plan as a fund-raising tool to

attract additional funding from its own government or from development partners (Manthalu et al., 2017).

Ministries of finance can engage more closely with health planning and prioritisation exercises to make them more realistic. The potential of health sector prioritisation exercises to deliver improved population health will only be met if they are realistic and if they are linked to the budget. HBPs are a mechanism to prioritise resource allocation within the health sector. A country's budget is the mechanism to decide resource allocation for the government as a whole. Yet little attention has been paid to how these two processes should relate to each other (Archer et al., 2022; Glassman, 2017; and Soucat et al., 2023 are exceptions to this). This section suggests three ways the ministry of finance can help join these processes up: (i) engage more meaningfully with the HBP decision-making process; (ii) provide the ministry of health with better information on resource availability; and (iii) facilitate the inclusion of the HBP into budgeting systems.

Greater involvement of a ministry of finance should improve HBP design and implementation. Regular engagement with ministries of finance should help to ensure they recognise the costs of rationing care arbitrarily as well as ensuring that resource availability guides HBP design. However, such engagement seldom takes place – ministries of finance are often largely excluded from prioritisation processes. In the cases of six low- and lower middleincome countries (Afghanistan, Ethiopia, Pakistan, Somalia, Sudan and Zanzibar-Tanzania), planning and finance ministries were not consistently involved in HBP decision-making processes, including in fiscal space assessments and planning for increased funding (Alwan et al., 2023). The HBP design process can also be used as an opportunity for a ministry of health to engage the ministry of finance in output-oriented discussions on the potential to improve health conditions and equity, rather than the usual focus on inputs, such as wages, infrastructure costs and medical commodities (Soucat et al., 2023; Alwan et al., 2025).

Ministries of finance should aim to provide realistic mediumterm estimates of resource availability to support health sector planning. Ministries of health cannot ensure their plans and health packages are prioritised without an estimate of resource availability from the ministry of finance. Without this, it will be difficult for any ministry of health to effectively plan and prioritise. Ideally this estimate should provide estimates for a three- to- five-year period of the likely resources that will be available, consistent with economic forecasts, fiscal policy objectives and other spending commitments.<sup>3</sup> This does not need to be done in a complex manner. It can be

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<sup>&</sup>lt;sup>3</sup> The ministry of finance can also assist health authorities in adjusting the HBP in the face of fiscal shocks. Experience from European countries during the 2007–09 financial crisis reflected that even in high-income countries, it has been a challenge to adjust packages to match new resource constraints or to reallocate anti-cyclically to cover financing gaps (Glassman, 2017).

achieved through a 'medium-term fiscal framework' (MTFF), which projects the aggregate resources available and allocates them across spending agencies (World Bank, 2013; Allen et al., 2017).<sup>4</sup> This should be feasible in most countries (Schiavo-Campo, 2009; World Bank, 2013). With a realistic estimate of the likely volume of funds available for the health sector in the medium term, any health sector plans or health benefits package can be developed in a resource-constrained manner by showing a fully resourced baseline, then showing what could be achieved with additional financing should it be available.

A medium-term fiscal forecast is only as good as the economic forecasts that underlie it. In many countries, medium-term budget frameworks have not provided a credible guide to resource availability for the health sector, with around a third of resources projected for the health sector not realised in annual budgets (WHO, 2016). The first step in supporting health priority setting is for the ministry of finance to improve the reliability of the macroeconomic and fiscal forecasts<sup>5</sup> that underpin the MTFF.<sup>6</sup>

Implementing the HBP requires the ministry of finance's assistance to incorporate it into the budget process. In lowincome countries especially, implementing a budgeting system that directly connects budgetary resources to specific health interventions, mimicking an insurance billing system, is likely to be too technically demanding.7 Instead, the budgeting process can focus on allocation and monitoring decisions, without trying to fundamentally reform a country's line item-based budgeting system.8 The aim should be to allocate the budget across service delivery units (for example, districts, or health facilities such as clinics or district hospitals) in line with resource needs to implement the HBP (Glassman, 2017: 95). For example, Malawi is reforming the allocation of its health transfers to districts to align with its HBP (McGuire et al., 2020; Twea et al., 2020). The ministry of finance and ministry of health can also work together to select high-level indicators of HBP delivery in the budget documentation, whether this is done through a formal programme budgeting set-up, or more informally by including indicators in the narrative that typically accompanies each agency's budget. This can also contribute to institutionalising health technology assessment if ministries of finance

<sup>&</sup>lt;sup>4</sup> In addition to setting out medium-term fiscal projections, an MTFF usually includes the fiscal policies government believes will support its medium-term fiscal objectives and an analysis of fiscal risks (Battersby and Lienert, 2021).

<sup>&</sup>lt;sup>5</sup> The macroeconomic forecast covers macroeconomic variables, such as gross domestic product (GDP) and inflation. It is an input into the fiscal forecast, which estimates short- and medium-term revenue (tax and non-tax) collection and expenditure.

<sup>&</sup>lt;sup>6</sup> Accurate projections of macroeconomic variables, such as inflation and exchange rate, are also crucial for the ministry of health to determine the medium-term budgetary implications of HBP.

<sup>&</sup>lt;sup>7</sup> There are also some commonalities here with programme budgeting, which has a variety of aims, one of which is to better link budgetary allocations and results. However, it has an underwhelming record in low- and middle-income countries, with little evidence that it is improving the effectiveness of budgetary processes to better allocate and monitor resources (Schiavo-Campo, 2017; CABRI, 2019; Brumby et al., 2022).

<sup>&</sup>lt;sup>8</sup> Wildavsky (1978) explains how the traditional line-item budget survives because it is a good 'all-rounder', even though it falls short on specific functions compared to alternative budgetary systems.

require economic evaluation techniques, such as cost-effectiveness analysis, to accompany budget bids.

#### 2.2 Reconciling top-down budgeting with bottom-up inputs

The finance ministry should facilitate bottom-up inputs to the budget process as well as providing top-down resource allocations. Ministries of finance safeguard fiscal discipline through top-down resource allocation; that is, by providing guidance to sectors as to the likely resources that will be available, consistent with macroeconomic forecasts of revenue and expenditure. However, an entirely top-down process (in treasuries and health departments) can undermine the pursuit of allocative efficiency. It exacerbates information asymmetries between the ministry of finance and line ministries and facility managers and limits the opportunity for central budget policy-makers to engage with new spending proposals (Robinson, 2013). Without bottom-up proposals, policy-makers cannot sensibly allocate resources. We suggest the ministry of finance can balance bottom-up budget preparation with top-down budgeting by: (i) setting sectoral ceilings while delegating decisions over the details to the ministry of health; or by (ii) utilising a system of baseline estimates; and (iii) building trust with and supporting a stronger health ministry finance department capable of planning and budgeting effectively.

Before sectoral ceilings are set, there should be substantive engagement between the ministry of finance and the ministry of health. In many countries, available revenues are divided into sectoral ceilings. However, before these are set, the ministry of finance should have substantive engagement with the ministry of health on financing needs. This can help ensure budget ceilings are rational rather than purely incremental, and can take account of emerging cost pressures. In some countries, the adjustment of the health budget is formalised; for example, in Israel it is adjusted each year for demographic growth, technological developments and a price index. The Organisation for Economic Co-operation and Development (OECD), meanwhile, has proposed that the use of explicit criteria to adjust the health budget each year can be considered a good budgeting practice for health (Vammalle et al., 2023). Substantive engagement between ministries requires that strategic planning and budgeting start early enough to support indepth consultation on budget proposals. This should provide the ministry of health with opportunities to influence budget decisions, given that health actors traditionally struggle to exact influence on ceilings determined by the ministry of finance (Cashin et al., 2017).

A system of baseline estimates can allow line ministries to bid for additional resources. A second method for reconciling top-down fiscal limits with bottom-up spending proposals is to first calculate the overall resource envelope and then have a system of 'baseline estimates. These are estimates of the budget needed to maintain current policies. If the overall envelope is larger than the baselines, agencies can bid for the spare resources available (Robinson, 2013). Even when budgets are very tight, it is necessary for budget processes to interrogate budget pressures so that funds can be shifted between less well-performing programmes to areas with critical pressures. The level of detail that goes into developing baselines can vary, and they have been utilised in low- and middleincome countries as well as in high-income ones. Kenya introduced baselines in 2018 to enable the National Treasury to assess whether new policy proposals included in line ministries' budget submissions are realistic. Senegal and Peru use medium-term baselines to assist budget negotiations with line ministries and increase allocative efficiency (Rahim et al., 2022). The ministry of health can then propose additional spending above its baseline, setting out the health and economic benefits that would flow from this additional spending.

Effective budget processes need clear communication and a degree of trust. Both methods of combining top-down budgeting with bottom-up spending proposals require that the ministry of finance set out clear budget ceilings and clear methodologies for preparing baselines and submitting new spending proposals. The ministry of health must trust the ministry of finance to resist the temptation to get involved in the detailed budget allocations within the health sector. The ministry of finance must trust the ministry of health to make the trade-offs necessary to prioritise spending, reallocate based on evidence of programme effectiveness and accurately cost new initiatives (Schick, 1998). This trust will have to be earned over time, and whether it develops is likely to depend to a significant degree on the ministry of health's financial management capacity. To budget effectively, the ministry of health's planning and finance department must also be able to draw on costing and evaluations of programmes and interventions and assess their budgetary impact.

The ministry of finance can support a stronger financial management function in the health ministry. Despite their central importance in ensuring allocative and operational efficiency, health ministries' finance departments have been overlooked in PFM reform efforts. In many countries, ministries of finance are directly responsible for many of the staff in planning and finance functions in line ministries through their management of cross-government economist and accountant cadres. This 'deconcentrated' model where financial management is the responsibility of ministry of finance officials who are posted to line ministries (as opposed to a decentralised model, where there is full delegation to a line ministry and its staff) – is particularly common throughout Anglophone Africa (Allen et al., 2015), although its prominence is declining. While it offers less autonomy than full decentralisation to sector ministries, it may be more appropriate in instances when the line ministry finance function is underdeveloped and the ministry of finance needs greater

oversight and control.<sup>9</sup> However, the model requires trust to be built between ministry of health officials and finance officials accountable to the ministry of finance. At the same time, the ministry of finance must ensure that deployed officials are given sufficiently long postings in the health sector to gain the sector-specific expertise necessary to work effectively and to gain sector-specific skills, such as training in health economics.

#### 2.3 Supporting better health budget development through the challenge function

Ministries of finance can develop a policy-oriented challenge function to improve the quality of budget submissions. Through scrutiny and challenge, the ministry of finance can improve the quality of budgeting and spending decisions in the health sector. This involves the ministry of finance effectively exercising its 'challenge function' by: (i) incorporating a policy-oriented challenge function into existing budget processes; (ii) establishing functional coordination mechanisms with the ministry of health; and (iii) ensuring that health budget officers within the ministry of finance are able to engage in policy debate with the ministry of health, rather than just focusing on compliance with budget ceilings.

Budget processes are often reduced to incremental increases on the previous year's budget. This stems from the extraordinarily complex nature of budgeting and the impossibility of reviewing all spending each year (Schick, 1998). Health budgeting is arguably even more complex. In low- and middle-income countries, health sector budget allocations are repeatedly found to be misaligned with health sector priorities and objectives. Budget formulation discussions between the ministry of finance and line ministries are often less about determining how to achieve stated priorities and more about simply ensuring allocations are within the sector allocation (Hadley et al., 2019). Limited scrutiny of current policies contributes to a mismatch between policies and available resources (Cashin et al., 2017).

The challenge function involves the ministry of finance scrutinising health plans and budgets to improve their quality.

The ministry of finance can facilitate improved health spending by providing an effective challenge function – that is, through 'the investigation and scrutiny of the spending, expenditure management processes and policy choices of line ministries, departments and agencies' (Hadley and Welham, 2016). It is reasonable to expect that the quality of health plans and budgets, including any bids for additional resources, will improve if they are subject to proper scrutiny – rather than routinely accepted if they are within spending totals – and if the ministry of health expects such scrutiny. This

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<sup>&</sup>lt;sup>9</sup> It may also be a pragmatic response to a limited supply of specialised accounting expertise in small or low-income countries, so that these skills can be managed centrally and deployed as required. It may also draw more skilled personnel to the public sector by offering opportunities for career progression across the civil service and not just within a department.

investigation can take place across budget hearings, budget planning committees, sector working groups and ministerial committees. 10 Each of these engagements provides an opportunity for the ministry of finance to proactively engage the ministry of health, learn more about health sector needs and priorities, and interrogate the ministry of health as to how its budget choices are helping to achieve these objectives.

Ministries of finance may need to develop a policy-focused challenge function, going beyond a narrow focus on financial compliance. Too often, particularly in lower-income contexts. these policy-oriented questions are displaced by a narrow focus on financial compliance (Krause, 2025). This operational focus may be appropriate in contexts where fiscal indiscipline looms large or there is a significant threat of money 'slipping away unauthorised and unaccounted for' (Krause, 2009). It, however, means there is solely a focus on how much the ministry of health is spending and not what it is achieving with this expenditure. This issue can be addressed by the ministry of finance engaging more deeply with the health ministry on: programme objectives and policies; the economic and social impact of these policies; why and whether the ministry of health requires more resources to fulfil existing functions; anticipated outputs, outcomes and the cost-effectiveness of new spending proposals; and on why these proposals could not be delivered in alternative ways (Allen et al., 2015). Ministries of finance will need to build the capacity of their staff to draw on this kind of more complex information and evidence to scrutinise health spending.

A successful challenge function requires that the ministry of finance has strong coordination mechanisms between it and the ministry of health. Ministry of finance officials should be encouraged to strengthen their working relationships with the ministry of health and maintain regular communication. This enables the ministry of finance to develop a better understanding of the policy and spending objectives of the ministry of health. Health sector working groups, and health-financing technical working groups, may provide a useful coordination mechanism across the budget cycle. For example, in Malawi, the mandate of the health-financing technical working group is 'to provide technical input in and facilitate the development of a comprehensive but prioritised range of policy options for health system financing in Malawi for the medium and longer term' (Sakala et al., 2023).

A successful challenge function also requires skilled budget officers in the ministry of finance capable of engaging meaningfully in health policy and financing debates. Ministries of finance typically have budget officers monitoring the financial activity

basis to challenge specific spending proposals (Hadley and Welham, 2016).

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<sup>&</sup>lt;sup>10</sup> 'Budget hearings' involve line ministries presenting and defending their spending plans. 'Budget planning committees' are convened by the ministry of finance to oversee budget preparation and to make high-level trade-offs across government. 'Sector working groups' involve a broader set of government and donor stakeholders that plan expenditure. 'Ministerial committees' are usually convened on an ad hoc

of a particular line ministry. Allowing skilled staff to remain in the same post for several years supports development of the competencies required for in-depth understanding of sector policy and expenditure issues (Hadley et al., 2019). In South Africa, the National Treasury employs health professionals as budget officers overseeing the ministry of health. This has provided an invaluable connection between health policy and budget allocation and strengthened collaboration between the ministries of finance and health. Providing an effective challenge function becomes difficult when desk officers are junior, do not have the requisite skills in economics and finance, or if they have insufficient understanding of sector policies and programmes (Allen et al., 2017). In Lesotho, desk officers responsible for key social sectors are often lower ranking than the senior officials in the line ministries they are expected to challenge. This has resulted in instances where the desk officers feel unable to advise or inform the ministries to which they are assigned. This could be remedied by ensuring senior officials from the ministry of finance provide visible support to desk officers at key meetings with line ministries.

# 2.4 Undertaking collaborative spending reviews to identify inefficiencies in health spending

Spending reviews may be a useful way for the ministry of finance to exercise its challenge function and support expenditure prioritisation. Budget processes occur under severe time and information pressures, and typically only focus on the 'increment' – the small increase or decrease in a budget. This means that the bulk of public expenditure controlled by the ministry of health ('the baseline') escapes regular scrutiny (Robinson, 2014). Spending reviews aim to address this problem. They are designed to provide insight into overall or specific expenditure performance, identify areas where spending can and should be increased, or reduced, and assess the strengths and weaknesses of existing spending policies (Assi et al., 2019). In this section, we lay out how the ministry of finance can: (i) institutionalise spending review processes; and (ii) ensure these are undertaken collaboratively with the ministry of health.

Spending reviews are now common across Organisation for Economic Development (OECD) countries but remain nascent in low- and middle-income countries. Spending reviews have traditionally been seen primarily as a tool to control aggregate expenditure levels by identifying areas where budgetary savings can be made (Robinson, 2014). Recently, their focus has also been on improving spending quality though improved alignment between policy priorities and spending and increased spending efficiency (van Eden, 2023). Spending reviews have proliferated across high-income countries – all but six OECD countries now conduct spending reviews (OECD, 2019). However, perhaps because they rely on complex fiscal analysis and are highly data intensive, spending reviews

remain nascent in low- and lower-middle and even in upper middle-income countries. South Africa is the only African country to have an institutionalised spending review process. Public expenditure reviews (PERs), driven by the World Bank, are much more common in low-and lower middle-income countries (see Box 1).

#### Box 1 Public expenditure reviews versus spending reviews

PERs have been in use for more than two decades and are widely used in the health sector (see Gaudin and Yazbeck, 2021, for a recent review). They are a useful tool for examining the efficiency, effectiveness and equity of public spending. PERs have been driven by the World Bank, with few examples of countries embedding them into their policy processes and budget cycles. Unlike spending reviews, they do not primarily seek to consolidate aggregate spending levels, nor do they focus on specific business processes and aspects of efficiency. PERs often look broadly across a sector and may not make specific spending proposals that could be considered in future budgets. Spending reviews provide this additional layer of insight and reflect on how to attain efficiency savings. For example, in South Africa, health sector spending reviews have looked at the efficiency of procurement, hospital laundry and catering services, and specific programmes, such as the rollout of the human papillomavirus vaccine.

Source: Martínez, et al. (forthcoming) and Government Technical Advisory Centre (2021)

Spending reviews may be particularly useful for the health sector given growing spending pressures. Growing populations, new diseases and new health interventions all imply, at least in the short term, health spending pressures. Given this situation, spending reviews of the health sector may be particularly useful for finance ministries seeking to find savings and limit aggregate expenditure growth. The ministry of health, knowing that the health sector allocation will continue to fall short of its growing needs, should also be seeking ways to identify potential efficiency gains within its existing budgetary allocation. Spending reviews serve both these purposes. They can also protect health from across-the-board spending cuts by providing the ministry of finance with a detailed analysis of the effectiveness and efficiency of health spending and a reminder of its alignment with national policy priorities. They can also provide evidence that spending cuts are not feasible and allow the ministry of health to maintain or increase spending levels. This suggests more low- and middle-income countries could benefit from institutionalising spending review processes. South Africa offers insight into how this can be approached (see Box 2).

#### Box 2 South Africa's spending review methodology

The Government Technical Advisor Centre (GTAC), part of the National Treasury, has led the country's spending review process since 2013. GTAC has developed a methodology for spending reviews, supported by a capacity-building programme. The methodology involves:

- 1 identifying linkages between a specific policy, design and implementation and key stakeholders
- 2 logical analysis, which identifies potential improvements to the programme design or implementation
- 3 performance indicator analysis to assess programme performance and identify gaps in the indicator set
- 4 assessing spending areas based on past spending, cost drivers, performance indicators and benchmarking to determine potential savings
- 5 cost modelling to explain the fiscal implications of policy choices
- 6 report and action planning to communicate the outcomes of the review and options for decision-making.

Source: Government Technical Advisory Centre (2021)

The spending review process should also push both the ministries of finance and health to produce higher-quality spending data and include a focus on equity. For both spending reviews and PERs, data availability is a significant constraint, resulting in unreliable analyses. Many countries have tried to boost their information base to provide better quality information to spending reviews. This has included conducting more programme evaluations (Robinson, 2014). Spending reviews can also provide useful insight into equity and how the benefits of public spending are distributed (Deolalikar, 2008). However, few spending reviews or PERs have made this a key focus. A review of PERs in the education sector in Africa found that the most important under-analysed domain was in relation to equity of financing (Berryman and Caillaud, 2017).

Lower-income countries may choose initially to introduce a simplified spending review process. While spending reviews are undoubtedly a useful tool for expenditure prioritisation, they may risk overburdening low-income ministries of finance. They require detailed analysis of expenditures, policies, processes and performance information. Low-income governments can choose to review only the largest areas of expenditure or areas of consistent over- or under-spending (Doherty and Sayegh, 2022). They can also initially outsource primary responsibility for spending reviews to relevant consultancies or academia, while they develop their own capabilities. In such cases, the government will still need to play a

coordination role and ensure the relevance of policy recommendations.

Spending reviews may have most impact if they are conducted jointly by ministries of finance and ministries of health. The policy aspects of negotiating the results of a spending review and incorporating this into budgets is typically more challenging than the technical analysis. To have policy impact, spending reviews must result in policy recommendations that the ministry of health can consider in the next budget process. This requires that the ministry of finance gains the ministry of health's acceptance and facilitates its co-ownership of the process and proposed measures. A major challenge to spending review processes is that they risk being seen primarily as a ministry of finance-owned tool to advance an austerity agenda, rather than a constructive process with expenditure prioritisation at its heart. Another risk is that the ministry of finance may be reluctant to review specific areas of spending if it believes that no efficiency gains will be found, and the review will be used to strengthen line ministries' claims to additional resources. Joint reviews may be more politically palatable, optimise identification of efficiency gains, and facilitate implementation of the review findings. The International Monetary Fund (IMF) distinguishes between three institutional arrangements for conducting spending reviews: (1) line ministries review spending and propose saving actions to be reviewed centrally; (2) independent entities or central agencies, such as the ministry of finance, lead or even undertake the review; and (3) the ministry of finance and line ministries jointly conduct the review (Doherty and Sayegh, 2022). Experience shows that successful spending reviews involve public sector specialists outside the ministry of finance (Allen and Clifton, 2023).

A useful institutional set-up for jointly conducting spending reviews is to establish a spending review committee co-chaired by both the ministries of finance and health. This has been the approach in South Africa, where a steering committee is set up with National Treasury and sector officials to agree on the review's objectives, approach, analysis and to sign off on outputs (National Treasury of South Africa, 2020). Irrespective of the institutional set-up, it is crucial that the ministry of health, with its detailed sector knowledge and data, is involved in setting the objectives and saving or efficiency targets, and even in supporting the review's analysis.

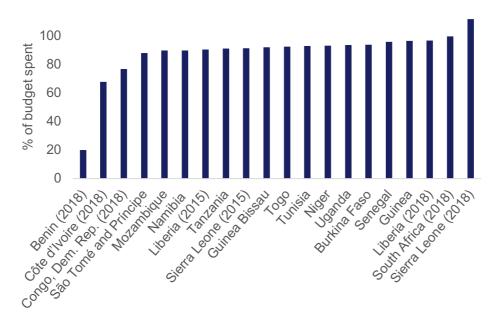
#### 2.5 Increasing budget credibility and execution through enhanced cash management

Ensuring a predictable flow of funds for health service delivery has been a recurring challenge in many countries. In-year, resources may not be available when they are needed. Moreover, even when resources are available, lengthy procedures approving spending may cause delays. This section lays out health budget execution challenges and encourages the ministry of finance to: (i)

strengthen cash management practices and protect priority health expenditures from the most negative consequences of cash rationing; and (ii) support more flexible expenditure management.

In many African countries, health sector budgets are routinely under-executed, meaning the health sector does not receive promised resources in full or fails to use them. Between 2008 and 2016, 13 of 29 African countries for which the World Health Organization (WHO) compiled data had average health budget execution rates of less than 85% (Barroy et al., 2019). However, these rates are highly variable: in 2018, execution varied from 20% in Benin to 97% in Liberia. Sierra Leone was an anomaly in exceeding its budget spending by 12%. The situation is also worsening over time – budget execution rates fell between 2010 and 2020 in lowincome countries (World Bank and WHO, 2025).

Figure 2 Health budget execution in selected African countries



Source: Boost Database, World Bank; CABRI (2020)

Notes: Figures are for central government spending on health.

Data is for 2015 unless stated; 2015 data is from the Boost Database. 2018 data is from CABRI (2020).

Budget execution challenges tend to be most severe for non-salary recurrent and capital spending. In most African countries, execution rates are higher for personnel costs such as wages and salaries and significantly lower for non-wage expenditure, especially infrastructure investment (WHO, 2016). For instance, between 2011 and 2015, the execution rate for health staff costs in the Democratic Republic of Congo was 94%, while that for non-salary expenditure was 32%. In Senegal, the average execution rate for grants between 2012 and 2015 was 99%, but 64% for administratively complex

capital expenditures (Barroy et al., 2019). These challenges for non-wage recurrent and capital expenditure, especially in health, is also evident from a larger sample of African countries, especially those with weaker budget systems and heavily reliant on external financing (de Renzio et al., 2019).

Responsibility for low execution of the budget lies with both ministries of finance and health. The key inefficiencies in the budgetary process associated with low budget credibility are summarised in Table 1, disaggregated by whether they are primarily a responsibility of the ministry of finance, the ministry of health or an issue needing coordination between the two. Country-level experiences in the Democratic Republic of Congo, Tanzania and Zambia provide examples of these factors, such as excessive use of complex off-budget procedures, limited human resources and capabilities, lack of bureaucratic motivation, rigid internal controls that limit the re-allocation of funds between line items, and complicated procedures to authorise and process payments (Le Gargasson et al., 2014; Piatti-Fünfkirchen and Schneider, 2018).

Table 1 Key drivers of low budget execution in Africa

Primarily a finance ministry responsibility	Issues needing coordination between the finance and health ministries	Primarily a ministry of health responsibility
Overestimation of revenues, so resources not available to fund the budget.	Multiple funding flows and associated planning and spending rules that are complex to manage.	Limited capacity of the ministry of health to plan and formulate spending needs.
Budget releases for health are delayed or not made in full.	Limited health facility financial autonomy and ability to re-allocate across lines. Budgets may go unspent if they cannot be adjusted to suit local needs.	Health-related procurement issues; for example, weaknesses in centrally managed procurement of drugs.
Mid-year re-allocations that make cuts to health sector budgets.	Weak links to sector performance data.	Misalignment between service delivery and financial management responsibilities; that is, facilities may not prepare their own budgets. Budgets may go unspent if they do not meet local needs.
The budget structure and rules for budget allocation and inappropriate spending controls.		

Source: Adapted from Barroy et al. (2019); World Bank and WHO (2025)

Fiscal stress can compound weaknesses in the control of expenditures in-year, resulting in 'cash rationing'. Since the 1990s, many countries in Africa have used cash rationing to keep overall spending under control (see Table 2). This limits the ceilings for authorised spending to the cash that government has available in the period ahead (typically each month or quarter). While this can help control aggregate spending to meet macroeconomic goals such as managing inflation, it often makes resources less predictable for spending agencies (Stasavage and Moyo, 2000). Budgets may be cut and permission to spend may be issued too late or in smaller tranches than needed to use resources efficiently (Hadley and Welham, 2016; Ministry of Finance and Planning, 2017).

Table 2 Use of cash rationing by African countries

Botswana	No
Burkina Faso	Yes
Cameroon	Yes
Central African Republic	Yes
Côte d'Ivoire	Yes
Eswatini	Yes
Ghana	Yes
Kenya	Yes
Lesotho	Yes
Liberia	Yes
Malawi	Yes
Mauritius	No
Nigeria	Yes
Sierra Leone	Yes
South Africa	No
Tunisia	Yes
Uganda	Yes

Source: CABRI (2020) Africa Debt Monitor

The ministry of finance can undertake several measures to mitigate the negative impacts of cash rationing on health service delivery. Effective cash management arrangements are needed with appropriate banking and cash-flow forecasting systems. Banking arrangements will centre around the treasury single account (TSA), a bank account (typically held at the central bank) or a set of linked accounts through which the government receives all revenue and makes all payments (Pattanayak and Fainboim, 2010). This supports government in reducing idle balances sitting in commercial bank accounts, mitigating unnecessary borrowing, and enhancing oversight of government's operations and cash position. Reducing cash rationing also requires the finance ministry to accurately forecast cashflows, looking weeks or months ahead. This is often a difficult task

as it requires analytical judgement based on past inflows and outflows from government accounts. It also requires the ministry of finance to coordinate effectively with multiple stakeholders, including the finance function of the health ministry, to gain access to data on spending (and revenue) forecasts (Miller and Hadley, 2016).

Addressing cash management also requires improvements in how ministries of health control spending. If agencies make commitments before funds are released, as in Malawi, this leads to the accumulation of arrears, crowding out future health spending (Piatti-Fünfkirchen et al., 2020). A similar situation occurred in Namibia, where payment arrears reached 370 million Namibian dollars (N\$) in 2021, equivalent to a third of the pharmaceuticals budget (Namibia Ministry of Finance, 2021).

Ministries of finance should review any expenditure management bottlenecks to achieving an appropriate balance between control and responsiveness. Budgeting is often done with uncertainty, and the need might arise during the implementation phase to make spending adjustments. Introducing more flexibility in expenditure management by moving away from line-item controls to give programme managers more responsibility for spending control is a long-term process. In the shorter term, countries can examine whether they have the right balance between control and flexibility in their line-item controls. The chart of accounts typically has a hierarchical structure, and countries should ensure they are not seeking to control expenditure – and requiring approvals for adjustments between line items – at an inappropriately low level. Controlling at a higher level of fewer line items can provide increased flexibility during budget execution without sacrificing aggregate control.

Ministries of finance can also examine how to better manage virements to move budgetary resources between expenditure categories or line items. This could help spending agencies better respond to shifting health priorities or demands, or adjust expenditure to unforeseen events (Saxena and Ylaoutinen, 2016). Again, a balance must be struck between flexibility and control, as excessive changes to the budget could also undermine its credibility and dilute accountability of resource allocation to the parliament. A key issue is the level at which virements can be approved: can this be done within the ministry of health (and at what level?) or must the approval of the ministry of finance or parliament be sought? For instance, virements in South Africa are subject to parliamentary approval if the amount involved exceeds 8% of the allocation for a programme. The approval of the finance minister is needed in other countries such as Ethiopia, Ghana and Malawi (CABRI, 2008).

#### 2.6 Reviewing procurement policies and processes impeding health sector efficiency

Procurement of medical supplies accounts for a significant proportion of health budgets, yet is relatively neglected in health sector reforms. Procurement of drugs and medical commodities accounts for a significant portion of the health budget – typically only second to wages and salaries. Yet, until Covid-19 highlighted the importance of procuring quickly and accountably, procurement was relatively neglected in health policy discussions (García-Altés et al., 2023). Health sector procurement in low- and middle-income countries is often found to be inefficient. For instance, one study found that prices for basic generic medicines in low- and middle-income countries can exceed wealthy-country prices by up to 20 to 30 times (Silverman et al., 2019).

Ministries of finance are typically the policy lead on procurement and so have a major role to play in supporting better-value procurement in the health sector. If current health-procurement practices are not achieving value for money, then the ministry of finance – as the procurement policy lead – and the ministry of health as the procuring entity (or supervisor of the procuring entity where this is an independent agency) will need to work together to improve procurement efficiency. In this section, we suggest efficiency can be achieved by: (i) introducing multiyear contracts and framework agreements; (ii) enabling participation in multi-country pooled procurement; (iii) supporting improvements in procurement planning and budgeting; and (iv) establishing fit-for-purpose emergency health procurement regulations.

Relying on standard procurement legislation and processes may not be appropriate for pharmaceuticals. Pharmaceutical procurement often relies on negotiations with monopoly producers<sup>11</sup> and requires multiyear contracts to get value from economies of scale. There is consequently a need for greater flexibility in health procurement and contracting than is currently provided by most national procurement policies (García-Altés et al., 2023). The challenge for ministries of finance is to tailor procurement regulations to the needs of the health sector while ensuring that sufficient safeguards against corruption and abuse are maintained.

Multiyear contracts have been shown to increase predictability of supplies and reduce costs. Procurement of a fixed volume of goods on an annual basis can result in longer lead times and stockouts (and more costly emergency procurement when stockouts happen (Silverman et al., 2019)). Multiyear contracts can reduce the transaction costs associated with frequent contract renewal for both suppliers and purchasers and result in lower prices (García-Altés et al., 2023). Multiyear contracts for supplies may not be permitted by

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<sup>&</sup>lt;sup>11</sup> There are cases in LMICS where the primary provider of certain medical supplies accounts for more than 85% of all sales (Dubois et al., 2019).

the ministry of finance as they extend beyond the fiscal year for which budgets have been appropriated. For example, in Mozambique, contracts are restricted 'to a maximum duration of a year, prolonged only one time, for an equal period' (Arney and Yadav, 2014). Just as infrastructure projects can be awarded multiyear contracts, ministries of finance should explore how ministries of health can enter into such contracts where this will increase the value for money of pharmaceutical purchases.

#### If ministries of finance are unable to accept multiyear contracts, framework agreements may be an acceptable alternative.

Framework agreements<sup>12</sup> are non-binding memoranda of understanding which specify the terms and conditions under which smaller repeat purchase orders may be issued for a defined period. They are used when the procurer is aware of recurrent need but cannot predetermine precisely when or how much will be required. Framework agreements have reduced stockouts, improved relationships with suppliers and increased transparency in Zambia. In Tanzania, meanwhile, centralised framework agreements have reduced the lead time of drugs reaching facilities, thus reducing stockouts (Arney and Yadav, 2014). Despite their potential benefits, procurement regulation in many developing countries restricts framework agreements and they continue to be underutilised in Africa (World Bank, 2021). Ministries of finance should explore how procurement and PFM regulations can allow for use of multivear framework agreements and how their use can be encouraged and supported where this will increase value for money.

Multi-country pooled procurement mechanisms can reduce prices and increase availability of pharmaceuticals and medical **commodities.** Pooled procurement aims to reduce prices through demand aggregation; strengthen procurement processes by leveraging shared technical capacity and human resources; and increase availability by incentivising suppliers and thereby increasing competition (Parmaksiz et al., 2022). Regional pooled procurement mechanisms are likely to become even more important as countries complete their donor transitions and lose access to donor-aggregated global demand (Nemzoff et al., 2019). There have been several attempts to establish regional pooled procurement mechanisms in sub-Saharan Africa, with varying degrees of success. These include the Southern African Development Community's Pooled Procurement of Essential Medicines and Health Commodities, the East Africa Pooled Procurement, the Small Island Developing States (SIDS) Pooled Procurement Programme for Medical Products, Association Africaine des Centrales d'Achats de Médicaments Essentiels and the African Union's African Medical Supply Platform.

<sup>&</sup>lt;sup>12</sup> Framework *agreements* are distinct from framework *contracts*, which are usually legally binding and include an upfront payment to suppliers, committing the purchaser to buying a minimum volume over a specified period (World Bank, 2021).

#### Procurement laws and regulations may need to be updated to support participation in multi-country pooled procurement.

National procurement regulations may directly restrict involvement in pooled procurement mechanisms. For example, Namibia's Procurement Act does not currently make provision for any third party or pooled procurement (Namibia Ministry of Finance, 2021). Alternatively, they may have clauses such as restrictions on international bidding, advance payments or multiyear contracts, which can complicate participation in pooled mechanisms. Ministries of finance may need to be prepared to adapt and harmonise national procurement regulations with regional or global mechanisms. In Mauritius, the government has decided to exempt the SIDS Pooled Procurement Programme for Medical Products from the Public Procurement Act (Government of Mauritius, 2022). While this reflects strong national commitment to pooled procurement, complete exemption may increase the risk of corruption. The East African Community has begun to harmonise such regulations across countries (Syam, 2014; Nemzoff et al., 2019).

Procurement planning is not well-integrated into the budget process. Procurement plans and cash plans are frequently misaligned. In Lesotho, officers in line ministries, including health, include unrealistic timelines in procurement plans due to planning biases and lack of sensitisation on procurement plan templates developed by the Ministry of Finance. These inaccurate procurement plans result in inaccurate expenditure plans, meaning that the Treasury cannot effectively plan cashflows. In Kenya, some counties do not have procurement plans for medical supplies and medicines in place, while in Uganda, procurement planning is not integrated with budgeting (Smoke et al., 2021). Improving the situation will need joint working between the ministries of finance and health to ensure that health sector procurement plans are accurate and feed into cashflow forecasts.

Emergency procurement regulations are essential for the health sector to respond effectively to disease outbreaks. Countries with clearly defined regulations for emergency procurement were better prepared to respond to the Covid-19 pandemic as they did not need to introduce new legislation (World Bank, 2021). Ministries of finance should see this as impetus to review legislation where processes have been shown to be lengthy and rules overly rigid, where there is lack of clarity on when emergency procurement should be activated, and, of course, where there is no provision for emergency procurement. E-procurement, often introduced as part of broader financial management information system reforms, demonstrated its benefit during Covid-19, resulting in shorter processing and contracting times.

Ministries of finance should help ensure accountability arrangements are in place for emergency procurement. The ministry of finance has an important role to play in ensuring that

streamlined procurement during health emergencies is accompanied by adequate transparency and accountability measures, such as publication of contracts, beneficial ownership registries and special audits of selective procurement contracts. In Lesotho, the internal audit function of the Ministry of Finance played an important role in highlighting irregularities in Ministry of Health's procurement during Covid-19. These included the Ministry of Health carrying out requisitions, purchase orders and contracts after services had been provided, weak verification of services delivered and lengthy delays in payment to suppliers (Ministry of Finance Lesotho, 2021).

# 2.7 Ensuring the fiscal decentralisation system supports effective and equitable health spending

In decentralised systems where provincial or local governments have responsibility for decentralised services, the ministry of finance plays a crucial role in ensuring effective service delivery. Ministries of finance play a central role in managing the fiscal aspects of decentralised health systems. To improve health service delivery at the local level, ministries of finance can: (i) improve coordination of the overall financing of decentralised services; (ii) optimise the intergovernmental fiscal transfer (IGFT) system; (iii) tailor PFM systems to decentralised government requirements, building on existing systems and capabilities; and (iv) compile consolidated local government financial information to support policy analysis, oversight and accountability.

In many countries, subnational governments play a major role in the health system. Globally, primary and secondary services are increasingly implemented by local governments. In Africa, a survey of 46 countries showed that 37 of them had decentralised health functions (Cotlear and Rosemberg, 2018). Responsibility may be given to a devolved subnational government or a deconcentrated unit of the ministry of health.<sup>13</sup> Decentralisation in the health system can increase efficiency, equity, and promote transparency and accountability. It can also pull in the opposite direction, resulting in fragmentation, inefficiency and the inequitable distribution of resources (ThinkWell and World Health Organization, 2022). This is reflected in substantial empirical evidence showing that the effects of decentralisation on health outcomes are mixed and depend on the specifics of their design, implementation, governance and accountability arrangements (Glassman and Sakuma, 2014; Channa and Faguet, 2016; Abimbola et al., 2019; Nakatani et al., 2022).

#### Weaknesses in intergovernmental and service delivery systems and PFM constraints impede subnational health spending

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<sup>&</sup>lt;sup>13</sup> There is often confusion between the concepts of decentralisation and deconcentration. 'Deconcentration' implies a transfer of responsibilities, powers and resources *within* the national government, from headquarters to local and regional field offices. 'Decentralisation' devolves or reassigns power from central government to subnational governments that are autonomous within their own geographic and functional spheres of authority (Faguet, 2014). Instead of being accountable to a higher level of government, local governments thereby become accountable primarily to local voters.

efficiency. Institutional and regulatory impediments include confusion in the assignment of functional responsibilities across levels of government; inadequate budget provision for subnational health expenditure; limitations in the design of fiscal transfer mechanisms; and underdeveloped or unsuitable PFM processes and accountability mechanisms. PFM weaknesses include multiple and conflicting lines of accountability and financing whereby many separate funds are allocated and managed differently; weaknesses in the structure and processes of subnational planning and budgeting and limited connection between them; unhelpful constraints on subnational autonomy over health service delivery decisions; and challenges in implementing subnational PFM operations, including shortages or delays in funding, weak budget execution, and data and reporting gaps (Smoke et al., 2021). As decentralisation proceeds, the ministry of finance needs to ensure close coordination between budgetary and PFM reforms and decentralisation reforms (Smoke and Fedelino, 2013).

Ministries of finance can ensure that decisions on the financing of decentralised services receive sufficient attention during budget processes. Subnational governments in low- and middleincome countries usually depend for revenues on central government (Gadenne and Singhal, 2014). As a result, the claims of subnational governments on budgetary resources need to be adequately represented during budget processes to ensure the amount of financing to local governments matches the level of responsibilities that have been decentralised. In some systems, legislation governs the processes for setting out the amounts to be allocated to national and subnational governments (for example in Kenya and South Africa, and commonly in federations). In unitary systems, this may not be the case. Here, ministries of finance can ensure that the split between central and subnational spending is discussed in annual planning and budget processes, and that proposals on central and subnational health spending are heard alongside each other in budget negotiations.

In decentralised systems, funding is typically provided through a system of IGFTs. The ministry of finance, along with the ministry of local government, is central to the design of the IGFT architecture. The ministry of finance can therefore help to ensure fair funding across decentralised health entities, at a minimum ensuring that each has the capacity to deliver a similar set of services to its population (Smith and Yip, 2016). IGFTs need to be stable and predictable and should be designed in a way that maximises simplicity and equity and minimises perverse incentives.

Where conditional grants are used, these should be easy to monitor and enforce. Multiple conditional grants can increase fragmentation and create multiple and conflicting lines of accountability (Smoke et al., 2021). Conditional grants should be reported through the standard provincial or local government system,

rather than requiring separate and additional reports. Parallel systems detract from building up the primary system and add complexity to overall local financial management (Welham and Hart, 2016).

IGFTs should be calculated using a transparent formula that considers the variables relevant for health service delivery. A key failing of many IGFT systems is when transfers are allocated purely on a historical basis, reflecting potentially unequal allocations of facilities and staffing (Dodd et al., 2019). For example, in Tanzania, allocations have been decided based on historical allocations for salaries and norm-based allocations for non-salary recurrent allocations (Lawson et al., 2022). The formula for allocating resources should reflect the package of health services that local governments have responsibility for delivering. It should also seek to reflect local variations in need for healthcare services (for example, disease burdens or poverty) included in the HBP (McGuire et al., 2018). As important as the formula is ensuring that these transfers are reliably disbursed. The precise formula used will be of little importance if the ministry of finance does not ensure that funds flow reliably (Welham and Hart, 2016).

Developing effective local government PFM capabilities is a key part of the decentralisation process. The ministry of finance, alongside the ministry of local government, plays the key role in setting standards for subnational government financial management and in providing oversight. These standards be appropriate to the capacity of local governments, including the complexity of their financial operations (which are often simpler than at the national government level) and their technological capacity (ibid.). The ministry of finance can also incentivise local governments to improve their PFM systems and develop their PFM capacity.

The ministry of finance can support the standardisation and compilation of subnational authorities' financial information.

Governments cannot monitor the impact of fiscal decentralisation on health spending, or the relative efficiency of health spending in different subnational governments, without good-quality subnational financial data for the health sector. A harmonised chart of accounts (CoA) that allows comparisons across local governments is essential. However, only 14 of 48 sub-Saharan African countries have a harmonised CoA between the national and subnational level (World Bank, 2023b). Where programme-based budgeting is in place, the finance ministry also has an important role to play in building a common system of programme budgeting. Failure to harmonise programmes across counties was a significant challenge in Kenya in the past, as discussed in Box 3. Finally, the ministry of finance can support compilation of consolidated subnational health expenditure data, which can be accessed by the health ministry to improve its decision-making.

# Box 3 Standardising county programme budgets in Kenya

Kenyan county governments were instructed to prepare programme-based budgets from FY2014/15. They were informed that they should have three to five programmes, and each programme should have clear priorities, activities, indicators and a budget allocation. However, these guidelines did not indicate what should constitute a programme or subprogramme. When, after substantial delays, programme-based budgeting was rolled out at the county level in FY2017/18, there was variation across counties in the number of programmes and their names. This limited cross-country consolidation and comparison. From FY2018/19, clearer guidance was provided recommending three programmes (preventive and promotive services, curative health services, and general administration). Standardisation since then is seen to have contributed to better oversight and alignment of planning and budgeting processes.

Source: Tsofa et al. (2021)

Comprehensive financial information is essential for policy analysis and accountability. Financial information is necessary for monitoring and policy analysis of decentralised health spending. Central government will need this information to decide on any further decentralisation of health financing, to modify resource allocation formulae, to incentivise local government performance, and to evaluate how subnational spending decisions are affecting national health policy objectives. Once financial information is available, ministries of finance and health can explore how to ensure that financial and service delivery data is interoperable, allowing more sophisticated analysis of spending delivery and spending review.

# 2.8 PFM and direct financing as enablers of greater facility financial autonomy

There is growing consensus that increasing health facilities' financial autonomy is important for improving service delivery. Financial autonomy usually implies that facilities can: (i) influence their budget allocations; (ii) receive funding directly; (iii) retain at least a portion of the funds they generate or receive; (iv) make virements (up to a reasonable threshold) when needs change; and (v) at least cover routine operational costs without overly restrictive approval and accounting processes. Increasing autonomy has been shown to enhance efficiency in the flow of funds, strengthen transparency and accountability, improve responsiveness to local needs, and result in better and more equitable health outcomes (Kuwawenaruwa et al., 2018; Barroy et al., 2019; WHO, 2022; Mwaisengela et al., 2025). However, in most low- and middle-income countries, while tertiary and even district hospitals have some control over their resources, facilities have limited autonomy. Public sector primary healthcare (PHC) facilities can retain and manage funds in less than 40% of

LMICs (Hanson et al., 2022). Local governments often have the mandate for primary healthcare and are the lowest-level spending unit.<sup>14</sup> Facilities are included within the local government budget provision and receive most resources in-kind (Piatti-Fünfkirchen et al., 2021a; Barroy et al., 2022). In this section, we look at where PFM systems may frustrate facility financial autonomy and what the ministry of finance can do about this. We call for the ministry of finance to: (i) critically reflect, with the ministry of health, on the optimal flow of funds for facilities; (ii) allow facilities to receive funds by increasing flexibility in who qualifies as a cost centre, or through a conditional transfer system; (iii) permit facilities to open bank accounts, either within the treasury single account or outside of it; and (iv) support facility financial management. The ministry of finance's role in supporting facilities through digital innovations, such as a financial management information system (FMIS) and mobile money, is discussed in Section 2.9.

The PFM system and ministry of finance are often viewed as bottlenecks to increasing facility financial autonomy. In Kenya, the change in the legislative framework for PFM, alongside major devolution reforms as part of a new constitution, have been pinpointed as a primary cause of the recentralisation of financial autonomy away from the health facility level to the new county level of government (Barasa et al., 2022). There is, however, increasing awareness that the PFM system can also be an important enabler of autonomy, supporting greater operational efficiency and accountability. The specifics of how PFM frustrates or enables facility autonomy are generally less clear. This calls for the ministry of finance to sensitise health stakeholders on existing PFM arrangements to ensure common understanding of what is and is not feasible in financing facilities.

How funds flow to facilities through levels of government will be country specific, but providing funding directly from the ministry of finance can reduce leakages and delays. For facility financial autonomy to be meaningful, facilities must be able to reliably access the financial resources budgeted for. Where funds must flow through multiple layers of government, from the ministry of finance to the ministry of health, then a regional authority, to local levels of government, and, finally, to facilities, there may be substantial delays and risk of leakage (Gauthier, 2020; Hanson et al., 2022). There will be cases where subnational authorities are capable of efficiently disbursing funds to facilities and/or the political context is such that funds cannot bypass the subnational level. However, where subnational authorities are regarded as a bottleneck to efficient and equitable disbursements to facilities, there may be value in disbursing funds directly from the ministry of finance or ministry of health to

<sup>&</sup>lt;sup>14</sup> Prior to the 2000s, facilities, like hospitals, in most LMICs, had some financial autonomy, although this was primarily only over the user fees they collected. With the widespread eradication of user fees across these countries, PHC facilities often lost this small pool of funding and the limited financial autonomy it enabled.

facilities. There is often more predictability and standardisation in how funds flow to facilities from the central level than from subnational governments, as is the case in both Ethiopia and South Africa (Smoke et al., 2021). In Tanzania, funds are transferred directly from the ministry of finance to facilities. Prior to this, funds for PHC were channelled through districts, which spent funds on behalf of health facilities with substantial inefficiencies observed (Ruhago et al., 2023). In other countries, such as Burkina Faso, funds for certain schemes flow from the ministry of finance to the ministry of health to facilities (Kiendrébéogo et al., 2022).

Providing conditional grants to facilities may provide a pragmatic route towards financing facilities directly. Many central governments in decentralised contexts use conditional grants to channel funds to frontline service delivery units. This aims to ensure funds reach the frontline and that health is adequately prioritised in subnational budget allocations. In Uganda, challenges of including facilities in the CoA have to some extent been bypassed with the conditional PHC non-wage recurrent grant to facilities (discussed in Box 4).

### Box 4 Ugandan conditional PHC non-wage recurrent grant to facilities

In Uganda, while regional hospitals have their own vote in the central budget, lower-level facilities are included within local government budgets. The PHC grant is allocated a unique line-item code in the chart of accounts as both a revenue item (when the local government receives it from central government) and expenditure item (when the local government spends the grant). It is therefore captured within the CoA on an aggregate level, but amounts allocated to facilities are made visible in budgets and plans by showing the amount of the grant that is allocated to each PHC facility. The Ugandan example is a fit-for-purpose solution. It appropriately reflects the minimal fiduciary risk associated with non-wage recurrent grants (in Uganda each facility only receives around \$12,000 annually) and has adjusted accountability requirements accordingly. While not all governments will tolerate spending and reporting outside the FMIS, this provides a lesson that flexibility can result in efficiency gains without significant accountability concerns.

Source: Authors

Autonomy requires that facilities have access to their budgeted funds. Where it is not feasible for facilities to make payments directly through a financial management information system, this will mean access to cash in a bank account. Ideally where facilities are deemed budget holders, they should be able to maintain transactional subaccounts linked to the main TSA. In many low- and middle-income countries, the existing banking system may make it impossible for facilities, particularly those in remote areas, to transact from bank

accounts within the TSA structure. The ministry of finance may need to revise its rules or allow deviations from rules preventing use of commercial bank accounts, as has happened in Benin, Togo and Uganda (Piatti-Fünfkirchen et al., 2021b). Given that fund flows to facilities are so small, the efficiency gains from facility autonomy are likely to outweigh any benefit from consolidating these account balances. If the ministry of finance requires further reassurance. spending limits on transactions conducted outside the TSA could be introduced. In Pakistan, there is a 'green corridor' for low-value transactions. In such cases, commercial banks would need to agree not to fulfil transactions higher than the threshold or budget release (Piatti-Fünfkirchen et al., 2019). Where commercial bank accounts are opened outside the TSA, new oversight structures and audit capacity may be required to ensure that funds are being used appropriately (Piatti-Fünfkirchen et al., 2021b). Whether facilities are incorporated into the TSA or not, it is also essential that facilities are given the authority to make commitments and process their own transactions.

Facility financial management capacity is likely to 'make or break' the success of facility financing initiatives. It is widely documented that facilities often lack the technical skills and administrative capacity to plan, budget, spend and account for the funds they receive (Bossert and Mitchell, 2011; Chen et al., 2021; Piatti-Fünfkirchen et al., 2021b). Facilities are also observed to be easily overburdened by accountability requirements; for example, in Kenya, an assessment revealed that staff spend 20% of their time undertaking reporting, distracting them from core health service delivery responsibilities (WHO, 2023). This limited capacity is one of the key reasons that a ministry of finance may be reluctant to support facility autonomy. But, again, even if facilities severely lack capacity, the small sums of money flowing to facilities mean that this should not be a deterrent. It does, however, necessitate that the ministry of finance tailor expenditure controls and accounting standards to the current capacity of the lowest-denominator facility.

The ministry of finance should see this as an opportunity to support financial management strengthening in facilities. The ministry of finance, ministry of health and facilities can work together to assess existing PFM capacity gaps. The ministry of finance can also strengthen PFM capacity in facilities by offering support to capacity-building programmes rolled out by the ministry of health. Finally, the ministry of finance may have a role to play in bolstering the financial management capacity of facilities by investing in accounting personnel at the regional or district level to supervise and support facility-level financial management.

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<sup>&</sup>lt;sup>15</sup> The framework suggested in Piatti-Fünfkirchen et al. (2021b) may provide a useful entry point to understand PFM bottlenecks and capacity constraints.

## 2.9 Leveraging digital financing innovations for improved information access and efficiency

Digital technologies have the potential to attenuate two major health-financing challenges: inefficient fund flows and lack of data for decision-making. In most low- and middle-income countries, financial management solutions are under the custodianship of the ministry of finance with insufficient consideration of the needs of other users (including in the health sector). As discussed in Box 5, this has affected the health-spending data available for policy-making. In most contexts, it is the ministry of finance, rather than the ministry of health, which is primarily responsible for tracking and accounting for health spending. The onus is therefore on the ministry of finance to ensure that financial management solutions support improved health financing flows and data availability, thereby enabling efficiency gains and better decision-making. This requires the ministry of finance to support a move towards a more open financial management technology architecture that allows greater coverage as well as interoperability with a wider ecosystem of data, platforms (notably health management information systems) and services (notably different types of payments for facilities)

# Box 5 Health resource tracking and the role of the finance ministry

In many LMICs, it is a challenge for decision-makers to access timely and granular information about health budgets, funding flows and expenditure at all levels of government and service delivery. This problem persists despite extensive efforts by the donor community and health ministries to introduce health-resource tracking (HRT), the approaches, tools and databases to collect and analyse the flow of health financing. There are numerous reasons for this. HRT tools typically fail to provide comprehensive subnational or provider-level data, limiting understanding and comparison of expenditure and performance below the national level. Many HRT exercises rely on manual or paper-based processes, contributing to administrative burdens and errors. FMISs should support HRT but, in most instances, they provide insufficient coverage. This can be partially attributed to the high cost of rolling out coverage to lower levels of government (for example, in terms of software licensing fees, hardware, internet connectivity and training) and because the ministry of finance has not paid sufficient attention to the needs of users beyond the finance ministry.

Source: Banks et al. (2023)

A standardised FMIS may not meet the needs of the health sector. The health sector, like the education sector, delivers services through a large network of front-line providers, all – or many – of whom require some financial autonomy, as discussed above.

Ministries of finance have tended to roll out standardised integrated financial management systems (IFMISs)<sup>16</sup> across governments, yet these systems have often been designed without fully incorporating the needs of users (Middleton et al., 2023). While Rwanda provides an example of a successful rollout of a centralised IFMIS to facilities, it is usually too costly to decentralise these top-heavy, web-based systems to remote areas with poor internet connectivity. Facility, or even lower-level hospital, managers are also unlikely to have the information technology (IT) skills necessary to use them, while purchasing hundreds or thousands of licenses can be prohibitively expensive. As a result, incorporating facilities' transactions into the FMIS may not be feasible. Ministries of health have also struggled to configure such systems to their needs, or to extract relevant information for decision-making and link data with other systems to track health performance (Banks et al., 2023). There is a widespread belief among ministries of finance and the PFM donor community that 'when an FMIS is not in place, each line ministry and agency typically utilises its own information system, resulting in loss of control and coordination by the ministry of finance, and unreliable financial reports' (Uña et al., 2019). But this need not be the case. It is how some governments, including the United Kingdom and United States, operate. Consolidated financial reporting is achieved through common standards and tools rather than a common IFMIS (Long and Gates, 2023).

A better solution may be to allow health providers to use their own systems, interoperable with the central FMIS. Some finance ministries are seeking to make their digital PFM systems more flexible by moving away from a closed and siloed technology architecture; that is, away from a single IFMIS, to a more open architecture, in which the PFM system is part of the wider ecosystem of data, platforms and services (Middleton et al., 2023). This entails unbundling digital solutions for PFM and introducing open standardised application programming interfaces (API) for data exchange between them<sup>17</sup> (Long et al., 2023). Allowing decentralised financial management systems, and sharing of data across these systems, should improve fiscal consolidation, reporting, analytics and policy decision-making (Hashim et al., 2020). Tanzania provides a useful example of a country that has extended the coverage of the PFM system to schools and health facilities (Box 6). It has done this by developing web and mobile applications for budget preparation and financial management that are interoperable with the core FMIS used by central and local governments (Mtei, 2020). However only 10% of facilities are running these systems and even fewer are using all functionalities (ibid.). This is a reminder to the ministry of finance and ministry of health that the design of PFM systems for facilities

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<sup>&</sup>lt;sup>16</sup> FMISs are digital solutions to automate PFM processes, including budget formulation, execution, accounting and reporting. When an FMIS is integrated, through a shared central database, with other IT systems – such as payroll, debt management and e-procurement – it is referred to as in an integrated FMIS (IFMIS) (World Bank, 2023a).

<sup>&</sup>lt;sup>17</sup> An API enables systems to be plugged into others to send and request information.

needs to consider the financial management capabilities of typically small facilities with limited capacity.

### Box 6 Facility financial management systems in Tanzania

When direct facility financing (DFF) was introduced in Tanzania in 2013, the existing planning, budgeting and reporting system, PlanRep, was redesigned, converted to a web-based platform, and extended to schools and health facilities. This allowed providers to develop their own plans and budgets and increased their visibility within the PFM system. Facilities align their plans and budgets with pre-defined service outputs in PlanRep. At the same time, a simple new accounting system, the Facility Financial Accounting and Reporting System (FFARS), was introduced. A mobile app was later designed to support facilities in remote areas to use the accounting system. Interoperability between FMIS, PlanRep and FFARs has been key. Plans from PlanRep are loaded into the Epicor FMIS at the district level and into FFARS for budget execution. Expenditure information is posted back into PlanRep to enable reporting against plans. This interoperability has been achieved through shared budget codes, cost centres, revenue sources, and classification of income and expenditure. It has minimised the administrative burden on service providers who otherwise would need to work with multiple systems. It also allows local government authorities, the Ministry of Health and Ministry of Finance to easily track facility expenditure. While Tanzania provides useful lessons for peer countries, of more than 5,000 public health facilities, less than 500 facilities are currently running these systems. And of the 500, some have only partially installed systems.

Source: Mtei (2020)

Ministries of finance and health need to work to establish data governance arrangements that can support the interoperability of different management information systems. For many LMICs, spending data is not linked with health data and performance indicators. Linking spending to health outputs and outcomes requires that there is a common registry of local governments or facilities to map both financial and health service delivery data to, a level of coherence in data structures that is often missing in LMICs (Long et al., 2023). This also requires the ministry of finance, or a central digital agency, to set the standards for data governance. We are, however, starting to see the emergence of services that connect multiple systems. In Tanzania, interoperability between the health management information system (HMIS) and FMIS across and between levels of government supports health facilities to manage their finances and supply chains, and increases visibility for local governments and the ministry of health, making it easier to provide oversight (Mtei, 2020). The ministry of finance needs to play a central

role in increasing integration and interoperability of financial and non-financial information systems to support the ministry of health's expenditure monitoring and policy analysis. This may require investing more in digital specialists in the ministry of finance, who have traditionally been regarded as less important than economists and policy advisers (Middleton et al., 2023).

Seamless data flow across various PFM and non-financial solutions also depends on the accompanying data architecture and effective data governance. A well-designed data architecture – how information flows and what data is collected and how it is organised, integrated and used in information systems – is a prerequisite for interoperability. The data architecture associated with the dPFM systems should allow flexible and secure data exchange and avoid disconnected databases or siloed systems. The data architecture should incorporate classifications for financial flows based on the CoA and budget classification. Incorporating facility data will also need the ministry of finance to establish shared registries of health facilities, so that different systems can communicate with each other. It should allow expanded codes needed by health actors, with either standard or connecting identifiers to allow connectivity and information sharing among them. To reduce the administrative burden on health actors, data should also be collected only once, at an adequate level of detail, and should be reused by different agencies as needed (Rivero del Paso et al., 2023). This implies that there is a single registry of facilities (and, where possible, health workers) used across payroll, financial and health information systems. There is increasing recognition of the importance of a single registry, with a toolkit on this subject recently published by the WHO and UNICEF (WHO and UNICEF, 2024)

Different payment services that meet the needs of different users can be built on top of this more open technology architecture. E-money instruments can allow transactions through internet banking, payment cards or mobile money, and generally involve maintenance of a prefunded transaction account with a payment service provider, often a nonbank (Cangiano et al., 2019). For rural facilities, the most promising e-money category may be mobile money. This digital payment platform allows receipt, storage and expenditure using a mobile phone, without requiring connection to the formal banking system or, in some instances, even the internet (Hamani et al., 2023). This would allow facilities to receive funds quickly and with low transaction costs. In many LMICs, mobile money has also been shown to meaningfully reduce leakages, improve transparency, and ensure timely receipt of salary payments and stipends (USAID, 2015). An added benefit for ministries of finance is that it is possible to create a mobile wallet within the TSA. This provides facilities with access to liquidity, without increasing the volume of idle funds sitting in commercial bank accounts disconnected from the TSA.

These payment services have the additional advantage of ensuring funds are accounted for in standardised ways. Given the challenges of including facilities in the FMIS, it is common for facilities to use a Microsoft Excel-based accounting system or keep paper-based ledgers. After expenditure is incurred and recorded manually in these ledgers, summaries of expenditure are then included in the FMIS at a higher administrative level, usually at the level of the district or region. This approach has been proposed in Zambia's Digitization Strategy for Health Service Provider Payments (Piatti-Fünfkirchen et al., 2019). While individually small in amount, this separation of expenditure and accounting processes creates opportunities for error or fraud to arise. E-payment innovations such as smart cards or mobile money can both control expenditure when credited with funds equal to petty cash advances, and ensure the integrity of facilities' expenditure through a direct interface with the FMIS to capture actual transactions, ensuring that spending and reporting are integrated and an audit trail is created. This approach has been implemented in France where the government partnered with a French bank to introduce procurement card services (ibid.). Given the proliferation of mobile money in sub-Saharan Africa, there is potential for similar approaches to be adopted there (World Bank, 2024).

## 2.10 Raising revenue and reducing health spending pressures through health taxes

Taxes on health-reducing products such as tobacco, alcohol and sugar-sweetened beverages are regarded as one of the most cost-effective tools to control non-communicable **diseases.** They both raise revenues and, by deterring consumption of harmful goods, reduce the burden of non-communicable diseases (NCDs) such as cardiovascular diseases (for example, heart attacks and stroke), cancers, chronic respiratory diseases and diabetes. easing pressure on health spending. Health tax revenue can also be targeted towards health services for the poor, further increasing their progressivity. Yet such taxes remain underutilised globally. particularly in low- and middle-income countries (Lauer et al., 2023). In this section, we highlight the role of the ministry of finance in: (i) ensuring that the ministry of health is involved in the design of health taxes; (ii) providing support for health taxes; and (iii) deciding on whether health tax revenue should be earmarked for the health sector.

Ministries of finance will lead on the introduction or revision of health taxes. Only the ministry of finance can put forward new taxes or changes to tax law, so it will play the leading role in designing health taxes. It will ultimately be responsible for designing, analysing and, to a lesser extent, administering health taxes as part of its

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<sup>&</sup>lt;sup>18</sup> Our focus here is on tax design and fiscal policy rather than administration of these taxes. In most countries, administration will be the responsibility of a separate tax agency. It also excludes issues

broader fiscal policy and PFM responsibilities. It will also be responsible for ensuring that health taxes are not isolated from the design and functioning of the general tax system and are subject to the same principles of technical and administrative efficiency, equity, transparency and tax certainty (ibid.). This means the ministry of finance will ultimately be responsible for defining the tax base, the structure of health taxes and tax rates.

While the ministry of finance leads on tax, it should proactively seek the input of the ministry of health so that health taxes are jointly designed. The ministry of health needs to determine what health effects and products to target, based on clinical evidence of deleterious health effects and externalities, and should analyse the health impact of different health tax policy options and choices. There are also health factors that may affect the choice of tax structure. Health taxes can be based on the monetary value of the product at a point along the value chain (ad valorem or value added) or by a defined unit or volume of a product or a key ingredient (ad rem or specific). There is a general trend towards ad rem or specific taxes as they can target health externalities more precisely because they focus on the quantity of the unhealthy product, which is linked to its negative health effects, rather than its value (Siu and Thow, 2022). Ad valorem taxes may lead to consumers switching to cheaper brands rather than limiting their consumption of the unhealthy product (Lauer et al., 2023). The ministry of finance, together with the ministry of health, must ensure that specific taxes are frequently revised in line with inflation to ensure that their value and effects are not eroded (World Bank, 2023d). For this reason, countries may use a mix of value-added and specific taxes if they are concerned about their ability to update specific rates for inflation.

Similarly, the ministry of health should have input into setting tax rates, so that the choice of rate is informed both by the objective of reducing consumption and of maximising revenues, both of which are determined by consumers' price elasticity of demand (Siu and Thow, 2022). In LMICs, there is significant scope for increasing these rates. Rates are usually significantly lower than those in OECD countries (Lauer et al., 2023) and in many countries, increasing health tax rates will increase tax revenues as the tax rates are not set at their tax revenue maximising point. Studies in Indonesia, Latin America and the Caribbean showed that revenue could increase by 30% by increasing tobacco excise taxes by 50% per pack (Goodchild et al., 2017). However, a revenue maximising point may not be the best rate if it does not correct for harmful health effects. Health taxes should be set at rates that maximise health and social welfare rather than tax revenues (Lauer et al., 2023).

The ministry of finance's political support will be key both before and after implementation of health taxes. Affected

concerning the impact of taxes on producers as these fall under the remit of the ministry responsible for trade and industry.

industries understandably lobby heavily against the introduction of health taxes. In Uganda, the soft-drinks industry successfully lobbied for a reduced sugar-sweetened beverages (SSB) tax rate to maintain its competitiveness in the region (Ahaibwe et al., 2021). This argument was also leveraged in Tanzania to lobby against SSB taxes (Thow et al., 2021). The public may also be concerned about potential job losses in affected industries. Ministries of finance and other economic ministries should be aware of the evidence that health taxes are associated with increased labour productivity and creation of jobs in other sectors. In Pakistan, a simulated increase in the excise tax on tobacco to 70% led to a net increase of more than 300,000 new jobs as spending shifts to other sectors (Sabir et al., 2021). The ministry of finance and ministry of health can also use the revenue from health taxes to directly support workers to shift to other industries or sectors. For example, in the Philippines in 2012, 15% of tobacco tax revenues were allocated to local governments for cash transfers to farmers (Kaiser et al., 2016). There may also be public concerns that health taxes are regressive. But while this may be the case in the short term, in the medium term they are progressive as the health effects of reduced consumption, lower medical expenses and increased labour productivity unequivocally favour people living in poverty (Fuchs and Peirola, 2022).

While health taxes represent a small share of total revenue, they may equate to a significant proportion of health expenditure. Across 32 low- and middle-income countries with available data, health tax revenues represented an average 3.3% of total tax revenues and 0.6% of GDP in 2019 (OECD, 2022). Health tax revenues, however, make up a notable share of public health expenditure. They represent 25% of domestic government health expenditure in low-income countries (LICs), 31% in LMICs and 23% in upper middle-income countries (UMICs) (Lauer et al., 2023). A 50% increase in the price of tobacco, alcohol, and sugary drinks through higher taxes could raise \$2.1 trillion for LMICs over five years – 40% of their public health spending (in addition to reducing health spending on NCDs) (Taskforce for Fiscal Policy on Health, 2024).

Earmarking can be a useful way of matching budget allocations with health sector priorities, but there are also several disadvantages. While the ministry of finance may be unlikely to agree to earmark all this revenue to the health sector, there are strong arguments for earmarking at least some of it. Earmarking for specific programmes or population groups can make health taxes more politically attractive. For example, earmarking SSB taxes for subsidies on healthy foods for low-income families would offset the short-term regressive effects of this tax and increase access to healthy foods (Lauer et al., 2023). When the budget process is weak or seen not to respond to policy objectives, an earmark could increase health financing, and where expenditure management is weak or rigid, earmarking can increase efficiency in the flow of funds to health stakeholders. An earmarked revenue source with a clear

expenditure purpose can also support accountability, as it is simpler to monitor and assess its impact against objectives. However, bypassing the regular budget process can also reduce efficiency and accountability. It can increase fragmentation of funding and increase the reporting burden. This can negatively impact equity objectives. In Gabon, for example, two earmarked taxes were introduced to fund health insurance coverage for low-income groups. These were not pooled with funds for other income groups, limiting the redistributive impact and creating duplicative processes. Earmarking can also crowd out other resources for the health sector and create sustainability challenges if the revenue from health taxes declines. Additionally, over time the earmark may have little or no impact on the aggregate resources for the health sector if the ministry of finance responds by simply reducing the resources from non-earmarked general taxation allocated to the health sector.

There are several ways the ministry of finance can leverage the advantages of earmarking while mitigating against the disadvantages. Hard earmarking requires a direct and permanent link between the revenues and specific programmes and does not allow for reallocation. Soft earmarking is associated with a broad expenditure purpose, supports more flexible reallocation and is not legally binding. Soft earmarking can overcome some of the obstacles posed by hard earmarking and is likely to be more acceptable to the ministry of finance (Lauer et al., 2023). The ministry of finance could also consider introducing earmarks with a sunset clause or periodic review to assess whether earmarks are continuing to serve their purpose. While not specific to health taxes, South African parliamentary expenditure earmarks are subject to annual review and can be revised at any point (Ozer et al., 2020). It is also essential that the ministry of finance puts in place adequate accountability mechanisms. This will include facilitating parliamentary scrutiny; incorporating earmarked resources in regular budget reviews and audits; and, where possible, channelling funds through the treasury single account (Lauer et al., 2023).

When earmarking of health taxes is under consideration, the ministry of finance must work with the ministry of health to assess the sustainability of the funding. Given that revenue from health taxes should decline over time as the consumption of unhealthy products declines, it is key to factor in the expected duration of the earmarked revenue and determine what funds will substitute for health taxes in the long term. The expected longevity should also inform how the funds are allocated. If the revenue is likely to be sustained, earmarking to recurrent needs, even covering salaries, may be possible. If due to high elasticity of demand, the revenue may reduce quickly, earmarking for discrete investment projects may be best (Dutta, 2022).

#### References

- Abdool Karim, S. et al. (2023) 'Stakeholder arguments during the adoption of a sugar sweetened beverage tax in South Africa and their influence: a content analysis' *Global Health Action* 16(1): 2152638 (https://doi.org/10.1080/16549716.2022.2152638).
- Abimbola, S., Baatiema, L. and Bigdeli, M. (2019) 'The impacts of decentralization on health system equity, efficiency and resilience: A realist synthesis of the evidence' *Health Policy and Planning* 34(8): 605–617 (https://doi.org/10.1093/heapol/czz055).
- Ahaibwe, G. et al. (2021) 'Barriers to, and facilitators of, the adoption of a sugar sweetened beverage tax to prevent non-communicable diseases in Uganda: a policy landscape analysis' *Global Health Action* 14(1): 1892307 (https://doi.org/10.1080/16549716.2021.1892307).
- Allen, R. et al. (2015) *The evolving functions and organization of finance ministries.* IMF Working Paper. IMF. https://www.imf.org/external/pubs/ft/wp/2015/wp15232.pdf
- Allen, R. et al. (2017) *Medium-term budget frameworks in selected sub-Saharan African countries*. WP/17/203. Washington DC: IMF. https://www.imf.org/en/Publications/WP/Issues/2017/09/11/Medium-Term-Budget-Frameworks-in-Sub-Saharan-African-Countries-45093
- Allen, R. and Clifton, R. (2023) 'From zero-base budgeting to spending review achievements and challenges' *Development Southern Africa*: 1–17 (https://doi.org/10.1080/0376835X.2023.2226164).
- Alwan, A. et al. (2023) 'Country readiness and prerequisites for successful design and transition to implementation of essential packages of health services: experience from six countries' *BMJ Global Health* 8(Suppl 1): e010720 (https://doi.org/10.1136/bmjgh-2022-010720).
- Alwan, A., Mirutse, M.K., Twea, P.D and Norheim, O.F. eds. (2025) Disease Control Priorities Fourth Edition Country-led Priority Setting for Health https://hdl.handle.net/10986/42766
- Archer, R. et al. (2022) 'Understanding the institutions of domestic health financing decisions: insights from immunisation services in three low- and middle-income countries'. London: ODI (https://odi.org/en/publications/understanding-the-institutions-of-domestic-health-financing-decisions-insights-from-immunisation-services-in-three-low-and-middle-income-countries/).
- Arney, L. and Yadav, P. (2014) 'Improving procurement practices in developing country health programs' (https://wdi.umich.edu/wp-content/uploads/WDI-\_Improving-Procurement-Practice-in-Developing-Country-Health-Programs Final-Report 2.pdf).
- Assi, R. et al. (2019) 'Spending reviews: a more powerful approach to ensuring value in public finances, McKinsey on government perspectives: Bridging the fiscal gap'. McKinsey and Company. https://www.mckinsey.com/industries/public-sector/our-insights/spending-reviews-a-more-powerful-approach-to-ensuring-value-in-public-finances
- Banks, C. et al. (2023) 'Use of digital public infrastructure to improve health resource tracking'. ThinkWell. https://thinkwell.global/wp-content/uploads/2023/12/dPFM-for-HRT.pdf
- Barasa, E. et al. (2022) 'The autonomy of public health facilities in decentralised contexts: insights from applying a complexity lens in Kenya' *BMJ Global Health* 7(11): e010260 (https://doi.org/10.1136/bmjgh-2022-010260).

- Barroy, H. et al. (2019) 'Leveraging public financial management for better health in Africa: key bottlenecks and opportunities for reform'. World Health Organization (https://doi.org/10.1017/CBO9781107415324.004).
- Barroy, H. et al. (2022) 'Public financial management as an enabler for health financing reform: evidence from free health care policies implemented in Burkina Faso, Burundi, and Niger' *Health Systems and Reform* 8(1): e2064731 (https://doi.org/10.1080/23288604.2022.2064731).
- Battersby and Lienert (2021) Macro-Fiscal Management Practices in Eastern and Southern Africa. IMF.

  https://www.imf.org/en/Publications/WP/Issues/2021/02/06/Macro-Fiscal-Management-Practices-in-Eastern-and-Southern-Africa-50042
- Berryman and Caillaud (2017) Education public expenditure reviews for Eastern and Southern Africa: The good, the bad and The future. World Bank. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/824771493795465502/education-public-expenditure-reviews-for-eastern-and-southern-africa-the-good-the-bad-and-the-future
- Bossert, T.J. and Mitchell, A.D. (2011) 'Health sector decentralization and local decision-making: Decision space, institutional capacities and accountability in Pakistan' *Social Science and Medicine* 72(1): 39–48 (https://doi.org/10.1016/j.socscimed.2010.10.019).
- Brumby, J. et al. (2022) 'Introducing the new PPB: pragmatic program budgeting: overcoming design obstacles to planning, management, and control'. World Bank (http://documents.worldbank.org/curated/en/601921643045774672/Introducing-the-New-PPB-Pragmatic-Program-Budgeting-Overcoming-Design-Obstacles-to-Planning-Management-and-Control).
- CABRI Collaborative Africa Budget Reform Initiative (2008) 'Budget practices and procedures in Africa 2008'. https://www.cabrisbo.org/en/publications/budget-practices-and-procedures-in-africa
- CABRI (2019) 'Programme-based budgeting: The rollout of complex reform in Africa' (www.cabri-sbo.org/uploads/files/Documents/CABRI-Policy-Brief-Programme-Based-Budgeting-ENG-FINAL.pdf).
- CABRI (2020) Africa Debt Monitor https://www.cabri-sbo.org/en/budgets-in-africa/africa-debt-monitor
- Cangiano, M., Gelb, A. and Goodwin-Groen, R. (2019) 'Public financial management and the digitalization of payments'. Center for Global Development (www.cgdev.org/sites/default/files/public-financial-management-and-digitalization-payments.pdf).
- Cashin, C. et al. (2017) 'Aligning public financial management and health financing'. WHO. https://www.who.int/publications/i/item/9789241513074
- Channa, A. and Faguet, J.-P. (2016) 'Decentralization of health and education in developing countries: a quality- adjusted review of the empirical literature' *The World Bank Research Observer* 31(2): 199–241 (https://doi.org/10.1093/wbro/lkw001).
- Chen, J. et al. (2021) 'Does decentralization of health systems translate into decentralization of authority? A decision space analysis of Ugandan healthcare facilities' *Health Policy and Planning* 36(9): 1408–1417 (https://doi.org/10.1093/heapol/czab074).
- Cotlear, D. and Rosemberg, N. (2018) Going universal in Africa: how 46 African countries reformed user fees and implemented health care priorities.

  Washington DC: World Bank Group.
- Deolalikar, A. (2008) 'Lessons from the World Bank's public expenditure reviews, 2000–2007, for improving the effectiveness of public spending'. The Brookings Institution (www.cbd.int/doc/case-studies/inc/Final-revised-Deolalikar-PER-review.pdf).
- Dodd, A., Manuel, M. and Christensen, Z. (2019) Failing to reach the poorest: subnational financing inequalities and health and education outcomes. London: ODI (https://odi.org/en/ publications/failing-to-reach-the-poorest-subnational-financing-inequalities-and-healthand-education-outcomes/).

- Doherty, L. and Sayegh, A. (2022) 'How to design and institutionalize spending reviews'. IMF (www.imf.org/en/Publications/Fiscal-Affairs-Department-How-To-Notes/Issues/2022/09/20/How-to-Design-and-Institutionalize-Spending-Reviews-523364).
- Dubois, P., Lefouili, Y. and Straub, S. (2019) Pooled Procurement of Drugs in Low and Middle Income Countries. Center for Global Development. https://www.cgdev.org/sites/default/files/pooled-procurement-drugs-low-and-middle-income-countries.pdf
- Dutta, A. (2022) 'Health policy decision-making around taxes on alcohol, tobacco, and unhealthy foods in the Covid-19 era'. Asian Development Bank (www.adb.org/sites/default/files/institutional-document/782851/ado2022bn-health-policy-decision-taxes-covid-19.pdf).
- van Eden, H. (2023) 'Are spending reviews losing their bite?' IMF PFM Blob (https://blog-pfm.imf.org/en/pfmblog/2023/08/are-spending-reviews-losing-their-bite?utm\_source=ODI+updates&utm\_campaign=81024ce824-Email\_PublicFinanceDevelopment\_roundups\_1123&utm\_medium=email&utm\_term=0\_1413423dcc-81024ce824-76673084&ct=t(Email\_PublicFinanceDevelopment\_roundups\_1123).
- Essue, B.M. and Kapiriri, L. (2018) 'The unfunded priorities: an evaluation of priority setting for noncommunicable disease control in Uganda' *Globalization and Health* 14(1): 22 (https://doi.org/10.1186/s12992-018-0324-2).
- Faguet, J.-P. (2014) 'Decentralization and governance' *World Development* 53: 2–13 (https://doi.org/10.1016/j.worlddev.2013.01.002).
- Fuchs, A. and Peirola, D. (2022) 'The distributional impacts of health taxes'. World Bank. https://openknowledge.worldbank.org/entities/publication/cbe31dc3-2503-5435-aadc-afb872de6898#:~:text=The%20main%20outcome%20of%20interest,%2C%2 0and%20(3)%20higher%20labor
- Gadenne, L. and Singhal, M. (2014) 'Decentralization in developing economies' *Annual Review of Economics* 6: 581–604 (https://doi.org/10.1146/annureveconomics-080213-040833).
- García-Altés, A. et al. (2023) 'Understanding public procurement within the health sector: a priority in a post-COVID-19 world' *Health Economics, Policy and Law* 18(2): 172–185 (https://doi.org/10.1017/S1744133122000184).
- Gaudin, S. and Yazbeck, A. (2021) 'Identifying major health-system challenges in developing countries using PERs: equity is the elephant in the room' *Health Systems and Reform* 7(2) (https://doi.org/10.1080/23288604.2021.1902671).
- Gauthier, B. (2020) 'PETS as a tool to improve accountability and transparency in public services' in *ODI Conference*, London.
- Glassman, A. (2017) 'Managing the money: fiscal and budgetary considerations for the benefits package' in A. Glassman, U. Giedion and P.C. Smith (eds) What's In, What's Out: Designing Benefits for Universal Health Coverage. Washington DC: Center for Global Development, pp. 88–104.
- Glassman, A. and Chalkidou, K. (2012) 'Priority-setting in health: building institutions for smarter public spending.' Center for Global Development (CGD) (http://www.cgdev.org/publication/priority-setting-health-building-institutions-smarter-public-spending).
- Glassman, A. and Sakuma, Y. (2014) 'Intergovernmental fiscal transfers for health: overview framework and lessons learned'. CGD (https://cgdev.org/sites/default/files/CGD-Consultation-Draft-Glassman-Sakuma-IGFT-Health.pdf).
- Goodchild, M., Sandoval, R.C. and Belausteguigoitia, I. (2017) 'Generating revenue by raising tobacco taxes in Latin America and the Caribbean' *Revista Panamericana de Salud Pública*: 1–7 (https://doi.org/10.26633/RPSP.2017.151).
- Government of Mauritius (2022) 'Highlights of cabinet decisions 09 September 2022' (https://pmo.govmu.org/CabinetDecision/2022/Highlights%20of%20Cabinet %20Decisions%2009%20September%202022.pdf).

- Hadley, S. and Welham, B. (2016) 'The ministry of finance challenge function'. London: ODI (https://odi.org/en/publications/the-ministry-of-finance-challenge-function/).
- Hadley, S., Miller, M. and Welham, B. (2019) *The role of the budget officer in controlling public spending.* ODI Working Paper 559 (https://cdn-odi-production.s3.amazonaws.com/media/documents/12693.pdf).
- Hamani, A. et al. (2023) 'Mobile Money and the importance of timely, complete payments to frontline health campaign workers in the fight to eradicate polio: pilot experience from a World Health Organization digital payment platform in Africa' *BMC Health Services Research* 23(1): 16 (https://doi.org/10.1186/s12913-022-08990-4).
- Hanson, K. et al. (2022) 'The Lancet Global Health Commission on financing primary health care: putting people at the centre' *The Lancet Global Health* 10(5): e715–e772 (https://doi.org/10.1016/S2214-109X(22)00005-5).
- Hashim, A., Farooq, K. and Piatti-Funfkirchen, M. (2020) 'Ensuring better PFM outcomes with FMIS investments'. World Bank Guidance Note (https://documents1.worldbank.org/curated/en/917121592283326885/pdf/Ensuring-Better-PFM-Outcomes-with-FMIS-Investments-An-Operational-Guidance-Note-for-FMIS-Project-Teams-Designing-and-Implementing-FMIS-Solutions.pdf).
- Kaiser, K., Bredenkamp, C. and Iglesias, R. (2016) Sin tax reform in the Philippines: transforming public finance, health, and governance for more inclusive development. Washington DC: World Bank (https://doi.org/10.1596/978-1-4648-0806-7).
- Kaur, G. et al. (2019) 'Criteria used for priority-setting for public health resource allocation in low- and middle-income countries: a systematic review' *International Journal of Technology Assessment in Health Care* 35(6): 474–483 (https://doi.org/10.1017/S0266462319000473).
- Kiendrébéogo, J.A. et al. (2022) 'The landscape of strategic health purchasing for universal health coverage in Burkina Faso: Insights from Five Major Health Financing Schemes' *Health Systems and Reform* 8(2): 2097588 (https://doi.org/10.1080/23288604.2022.2097588).
- Krause, P. (2009) 'A leaner, meaner guardian?: A qualitative comparative analysis of executive control over public spending'. Deutsches Institut für Entwicklungspolitik Discussion Paper (www.idosresearch.de/uploads/media/DP\_22.2009.pdf).
- Krause, P. (2025) From Transactional to Policy Ministries of Finance. ODI Global. https://media.odi.org/documents/From\_transactional\_to\_policy\_ministries\_of finance.pdf
- Kuwawenaruwa, A. et al. (2018) 'Bank accounts for public primary health care facilities: Reflections on implementation from three districts in Tanzania' (https://researchonline.lshtm.ac.uk/id/eprint/4656358/1/Kuwawenaruwa-etal-2018\_bank\_accounts\_for\_public\_primary.pdf).
- Lauer, J.A. et al. (2023) 'Health taxes policy and practices' in J.A. Lauer et al., *Health Taxes*. World Scientific (Europe): i–xii (https://doi.org/10.1142/9781800612396\_fmatter).
- Lawson, A., Hedvall, F. and Muikia, W. (2022) *Tanzania mainland public expenditure and financial accountability (PEFA) performance assessment report.* PEFA (www.pefa.org/sites/pefa/files/2022-11/TZ-Sep22-PFMPR-Public%20with%20PEFA%20Check.pdf).
- Le Gargasson, J.-B. et al. (2014) 'Budget process bottlenecks for immunization financing in the Democratic Republic of the Congo (DRC)' *Vaccine* 32(9): 1036–1042 (https://doi.org/10.1016/j.vaccine.2013.12.036).
- Long, C. and Gates, N. (2023) 'Bringing public finance into the digital era' (https://odi.org/en/insights/digital-public-infrastructure-platforms-and-public-finance/).
- Long, C. et al. (2023) 'Digital public financial management: an emerging paradigm'. London: ODI (https://cdn.odi.org/media/documents/DPF\_WP\_Digital\_Public\_Financial\_Ma nagement\_-\_An\_emerging\_paradigm.pdf).

- Manthalu, G. et al. (2017) 'Confronting tight fiscal, human resource, and evidence constraints, Malawi revises its benefits package' in Glassman, A. Giedion, U. and Smith, P. What's in, what's out: designing benefits for universal health coverage, pp. 247–252.
- Martínez, A., Kumar, C., Mbate, M. and Hart, T. (forthcoming) Spending Smarter: lessons for spending reviews in low- and middle-income countries. ODI Global Working paper. London: ODI Global.
- McGuire, F. et al. (2018) 'Recommendations for the development of a health sector resource allocation formula in Malawi'. University of York.
- McGuire, F. et al. (2020) 'Allocating resources to support universal health coverage: development of a geographical funding formula in Malawi' *BMJ Global Health* 5(9): 1–11 (https://doi.org/10.1136/bmjgh-2020-002763).
- Middleton, E. et al. (2023) 'Making public finance digital: challenges to the emerging digital public financial management paradigm'. London: ODI (https://cdn.odi.org/media/documents/DPF\_WP\_Making\_public\_finance\_digit al\_SYV97yj.pdf).
- Miller, M. and Hadley, S. (2016) Cash management in cash constrained environments. A public financial management introductory guide (https://odi.org/en/publications/cash-management-in-cash-constrained-environments/).
- Ministry of Finance and Planning (2017) Assessment of the public finance management systems of the central government applying the PEFA 2016 framework. Final report (www.pefa.org/node/711).
- Ministry of Finance Lesotho (2021) 'Internal audit final report on Covid-19-related expenditure for the financial years 2019/20 20/21' (http://www.finance.gov.ls/documents/Internal%20Audit/Internal%20Audit%2 0Report%20on%20Covid%20-%2019%20Related%20Expenditure.pdf).
- Mtei, G. (2020) 'Direct facility financing: Tanzania health sector experience'. WHO (www.pfm4health.net/\_files/ugd/18961e\_2a275ed65c34411aa2e1d8f d3f59dd08.pdf).
- Mwaisengela, S.M. et al. (2025) 'Direct health facility financing and its influence on quality compliance in primary healthcare: evidence from Tanzania' *Health Research Policy and Systems* 23(1): 83 (https://doi.org/10.1186/s12961-025-01361-5).
- Nakatani, R., Zhang, Q. and Garcia Valdes, I. (2022) 'Fiscal decentralization improves social outcomes when countries have good governance'. IMF. https://www.imf.org/en/Publications/WP/Issues/2022/06/03/Fiscal-Decentralization-Improves-Social-Outcomes-When-Countries-Have-Good-Governance-518882
- Namibia Ministry of Finance (2021) 'Strengthening health procurement for impact'. UNICEF (www.unicef.org/esa/media/10466/file/UNICEF-Namibia-Strengthening-Health-Procurement-Impact-2021.pdf).
- National Treasury of South Africa (2020) 'Performance and expenditure reviews' Nemzoff, K., Chalkidou, K. and Over, M. (2019) 'Aggregating demand for pharmaceuticals is appealing, but pooling is not a panacea'. CGD (www.cgdev.org/publication/aggregating-demand-pharmaceuticals-appealing-pooling-not-panacea).
- ODI (forthcoming) Better prioritising spending through expenditure reviews. ODI Global
- OECD (2019) Budgeting and public expenditures in OECD countries 2019. OECD (https://doi.org/10.1787/9789264307957-en).
- Organization for Economic Co-operation and Development (OECD) (2022) Global Revenue Statistics Database. OECD Stat. Paris: Organization for Economic Co-operation and Development.
- Ozer, C. et al. (2020) 'Health earmarks and health taxes: what do we know?' World Bank (https://documents1.worldbank.org/curated/en/415911607500858658/pdf/He alth-Earmarks-and-Health-Taxes-What-Do-We-Know.pdf).

- Parmaksiz, K. et al. (2022) 'A systematic review of pooled procurement of medicines and vaccines: identifying elements of success' *Globalization and Health* 18(1): 59 (https://doi.org/10.1186/s12992-022-00847-z).
- Pattanayak, S. and Fainboim, I. (2010) *Treasury single account: concept, design, and implementation issues*. IMF Working Paper (www.imf.org/external/pubs/ft/wp/2010/wp10143.pdf).
- Piatti-Fünfkirchen, M. and Schneider, P. (2018) 'From stumbling block to enabler: the role of public financial management in health service delivery in Tanzania and Zambia' *Health Systems and Reform* 4(4): 336–345 (https://doi.org/10.1080/23288604.2018.1513266).
- Piatti-Fünfkirchen, M., Hashim, A. and Farooq, K. (2019) 'Balancing control and flexibility in public expenditure management using banking sector innovations for improved expenditure control and effective service delivery'. World Bank.
  - https://openknowledge.worldbank.org/entities/publication/0ac7601b-b08a-542b-bc0e-c9ccc5eddbe7
- Piatti-Fünfkirchen, M., Chansa, C. and Nkhoma, D. (2020) 'Public financial management in the health sector. An assessment of the local level in Malawi' (https://documents1.worldbank.org/curated/en/241411624431388240/pdf/Pu blic-Financial-Management-in-the-Health-Sector-An-Assessment-at-the-Local-Government-Level-in-Malawi.pdf).
- Piatti-Fünfkirchen, M. et al. (2021a) 'Budget execution in health'. World Bank. https://openknowledge.worldbank.org/entities/publication/ad0715ec-3f5d-5418-96f0-7db475fff5bf
- Piatti-Fünfkirchen, M., Hadley, S. and Mathivet, B. (2021b) 'Alignment of performance-based financing in health with the government budget: a principle-based approach'. World Bank (https://documents1.worldbank.org/curated/en/935821632462316181/pdf/Ali gnment-of-Performance-Based-Financing-in-Health-with-the-Government-Budget-A-Principle-Based-Approach.pdf).
- Rahim, F., Wendling, C. and Pedastsaar, E. (2022) *How to prepare expenditure baselines*. Washington DC: International Monetary Fund: 1 (https://elibrary.imf.org/openurl?genre=journal&issn=2522-7912&volume=2022&issue=002&cid=517869-com-dsp-crossref (Accessed: 29 April 2024).
- de Renzio, P., Lakin, J. and Cho, C. (2019) 'Budget credibility across countries: how deviations are affecting spending on social priorities'. IBP (https://internationalbudget.org/publications/budget-credibility-across-countries/).
- Rivero del Paso, L. et al. (2023) 'Digital solutions guidelines for public financial management'
  - (file:///C:/Users/danielle.serebro/Downloads/TNMEA2023007.pdf).
- Robinson, M. (2013) 'Aggregate expenditure ceilings and allocative flexibility' *OECD Journal on Budgeting* 12(3): 1–19 (https://doi.org/10.1787/budget-12-5k468nqj1f7g).
- Robinson, M. (2014) 'Spending reviews' *OECD Journal on Budgeting* 13(2): 81–122 (https://doi.org/10.1787/budget-13-5jz14bz8p2hd).
- Ruhago, G.M. et al. (2023) 'Understanding the implication of direct health facility financing on health commodities availability in Tanzania' in C. Chen (ed.) *PLOS Global Public Health* 3(5): e0001867 (https://doi.org/10.1371/journal.pgph.0001867).
- Sabir, M. et al. (2021) 'Economic implications of cigarette taxation in Pakistan: an exploration through a CGE model' (https://tobacconomics.org/files/research/726/spdc-rp-cge-report-final.pdf).
- Sakala, M. et al. (2023) 'Functionality of technical working groups in enabling evidence-informed decision-making within Malawi's Ministry of Health: a cross-sectional qualitative study' *Health Research Policy and Systems* 21(1): 44 (https://doi.org/10.1186/s12961-023-00987-7).

- Saxena, S. and Ylaoutinen, S. (2016) 'Managing budgetary virements' *Technical Notes and Manuals* 16(04) (https://doi.org/10.5089/9781513509051.005).
- Schiavo-Campo, S. (2009) 'Potemkin villages: "The" medium-term expenditure framework in developing countries' *Public Budgeting and Finance* 29(2): 1–26 (https://doi.org/10.1111/j.1540-5850.2009.00926.x).
- Schiavo-Campo, S. (2017) Government budgeting and expenditure management: principles and international practice. Routledge. https://www.taylorfrancis.com/books/mono/10.4324/9781315645872/government-budgeting-expenditure-management-salvatore-schiavo-campo
- Schick, A. (1998) A contemporary approach to public expenditure management. World Bank (http://documents.worldbank.org/curated/en/739061468323718599/pdf/3511 60REV0Contemporary0PEM1book.pdf).
- Silverman, R. et al. (2019) 'Tackling the triple transition in global health procurement'. Center for Global Development (www.cgdev.org/sites/default/files/better-health-procurement-tackling-triple-transition-small.pdf.
- Siu, E. and Thow, A.M. (2022) 'Linking health and finance ministries to improve taxes on unhealthy products' *Bulletin of the World Health Organization* 100(9): 570–577 (https://doi.org/10.2471/BLT.22.288104).
- Smith, P.C. and Yip, W. (2016) 'The economics of health system design' *Oxford Review of Economic Policy* 32(1): 21–40 (https://doi.org/10.1093/oxrep/grv018).
- Smoke, P. and Fedelino, A. (2013) 'Bridging public financial management and fiscal decentralization reform in developing countries' in M. Cangiano, T. Curristine, and M. Lazare (eds) *Public Financial Management and Its Emerging Architecture*. International Monetary Fund. https://www.elibrary.imf.org/display/book/9781475531091/ch012.xml
- Smoke, P. et al. (2021) An intergovernmental perspective on managing public finances for service delivery assessing neglected challenges in the health sector and beyond. New York: NYU-Wagner.
- Soucat, A., Tandon, A. and Gonzales Pier, E. (2023) 'From Universal Health Coverage services packages to budget appropriation: the long journey to implementation' *BMJ Global Health* 8(Suppl 1): e010755 (https://doi.org/10.1136/bmigh-2022-010755).
- Government Technical Advisory Centre (2021) Government Spending Review Companion Guide. https://www.gtac.gov.za/pepa/wp-content/uploads/2021/11/20200525\_NT\_COMPANION-GUIDE.pdf
- Stasavage, D. and Moyo, D. (2000) 'Are Cash budgets a cure for excess fiscal deficits (and at what cost)?' World Development 28(12): 2105–2122 (https://doi.org/10.1016/S0305-750X(00)00073-5).
- Stenberg, K. et al. (2017) 'Financing transformative health systems towards achievement of the health Sustainable Development Goals: a model for projected resource needs in 67 low-income and middle-income countries' *The Lancet Global Health* 5(9): e875–e887 (https://doi.org/10.1016/S2214-109X(17)30263-2).
- Syam, N. (2014) 'Regional pooled procurement of medicines in the East African Community' (www.econstor.eu/handle/10419/232171).
- Taskforce for Fiscal Policy on Health (2024) Health taxes: A Compelling Policy for the Crises of Today. https://www.bloomberg.org/public-health/building-public-health-coalitions/task-force-on-fiscal-policy-for-health/#:~:text=Health%20Taxes%3A%20A%20Compelling%20Policy%20for%20the%20Crises%20of%20Today
- ThinkWell and World Health Organization (2022) 'A balancing act: health financing in devolved settings'. ThinkWell (https://thinkwell.global/wp-content/uploads/2022/06/Health-financing-in-devolved-settings-1.pdf).
- Thow, A.M. et al. (2021) 'The political economy of sugar-sweetened beverage taxation: an analysis from seven countries in sub-Saharan Africa' *Global Health Action* 14(1): 1909267 (https://doi.org/10.1080/16549716.2021.1909267).

- Tsofa, B. et al. (2021) 'Examining health sector application and utility of program-based budgeting: County level experiences in Kenya' *The International Journal of Health Planning and Management* 36(5): 1521–1532 (https://doi.org/10.1002/hpm.3174).
- Twea, P., Manthalu, G. and Mohan, S. (2020) 'Allocating resources to support universal health coverage: Policy processes and implementation in Malawi' *BMJ Global Health* 5(8): 1–5 (https://doi.org/10.1136/bmjgh-2020-002766).
- Uña, G., Allen, R. and Botton, N. (2019) 'How to design a financial management information system: a modular approach'. IMF (www.imf.org/en/Publications/Fiscal-Affairs-Department-How-To-Notes/Issues/2019/05/15/How-to-Design-a-Financial-Management-Information-System-A-Modular-Approach-46818).
- USAID US Agency for International Development (2015) 'Mobile money for health: case study compendiun'. USAID (www.hfgproject.org/wpcontent/uploads/2015/10/HFG-Mobile-Money-Compendium\_October-2015.pdf).
- Vammalle, C., Penn, C. and James, C. (2023) 'Applying good budgeting practices to health' *OECD Journal on Budgeting* 23(2) (https://doi.org/10.1787/b280297f-en).
- Welham, B. and Hart, T. (2016) 'Fiscal decentralisation: a public financial management introductory guide'. ODI (https://odi.org/en/publications/fiscal-decentralisation/).
- World Bank (2013) Beyond the annual budget. Washington D.C.: World Bank.
- World Bank (2021) 'Opportunities and challenges for public procurement in the first months of the COVID-19 pandemic: results from an experts survey EFI Insight-governance' (https://documents.worldbank.org/en/publication/documents-reports/documentdetail/565021618898683492/opportunities-and-challenges-for-public-procurement-in-the-first-months-of-the-covid-19-pandemic-results-
- World Bank (2023a) 'Financial management information systems (FMIS)' (www.worldbank.org/en/ topic/governance/brief/financial-management-information-systems-fmis').

from-an-experts-survey).

- World Bank (2023b) 'Govtech Maturity Index' (https://datacatalog.worldbank.org/search/dataset/0037889/govtech-dataset).
- World Bank (2023c) *Tracking universal health coverage. 2023 global monitoring report.* World Bank (https://openknowledge.worldbank.org/entities/publication/1ced1b12-896e-49f1-ab6f-f1a95325f39b).
- World Bank (2023d) *Unpacking the empirics behind health tax revenue*. Washington DC.: World Bank Group (http://documents.worldbank.org/curated/en/099755211022314276).
- World Bank (2024) Leveraging maturing technologies for health financing in east and southern Africa (https://openknowledge.worldbank.org/server/api/core/bitstreams/50ab35ca-eeca-4a3d-9166-fd93b2f298d3/content)
- World Bank and WHO (2025) 'Budget execution in health: from bottlenecks to solutions' (https://hdl.handle.net/10986/42930).
- WHO (2016) Public financing for health in Africa: from Abuja to the SDGs. Health financing towards UHC. WHO: 8–88 (www.afro.who.int/sites/default/files/2017-06/WHO-HIS-HGF-Tech.Report-16.2-eng.pdf).
- WHO (2022) 'Direct facility financing: concept and role for UHC'. WHO. https://www.who.int/publications/i/item/9789240043374
- WHO (2023) Report on the WHO Global Learning Event: financing facilities directly: how can it transform public budgets into services? (https://cdn.who.int/media/docs/default-source/health-financing/meeting-report---financing-facilities-directly.pdf?sfvrsn=7b5427c2 1).

- WHO (2024) Global spending on health: emerging from the pandemic. WHO (https://iris.who.int/handle/10665/379750).
- WHO and UNICEF (2024) Health facility Registry Toolkit.

  (https://www.unicef.org/digitalimpact/reports/health-facility-registry-toolkit)
  Wildavsky, A. (1978) 'A budget for all seasons? Why the traditional budget lasts' Public Administration Review 38(6): 501 (https://doi.org/10.2307/976027).