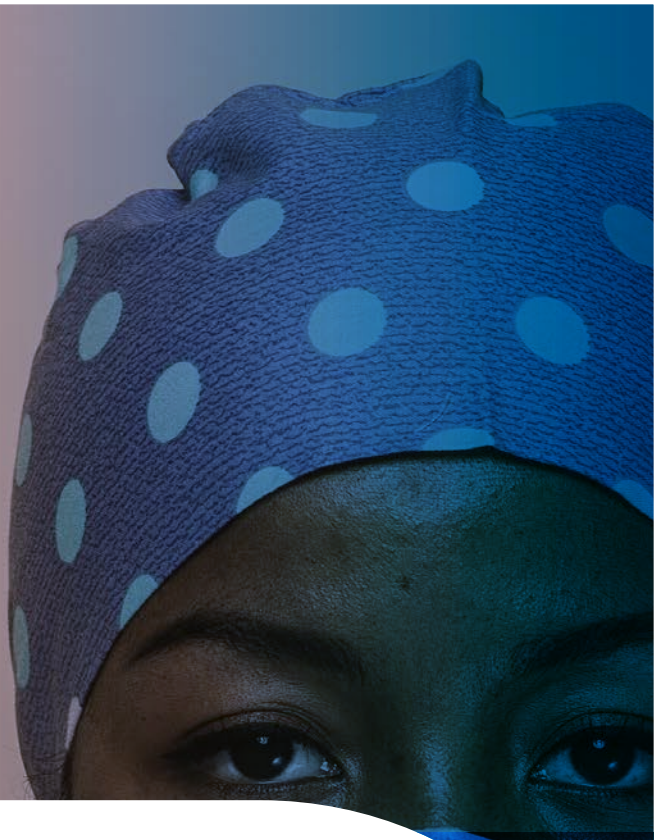
Budget Execution in Health



Concepts, Trends and Policy Issues

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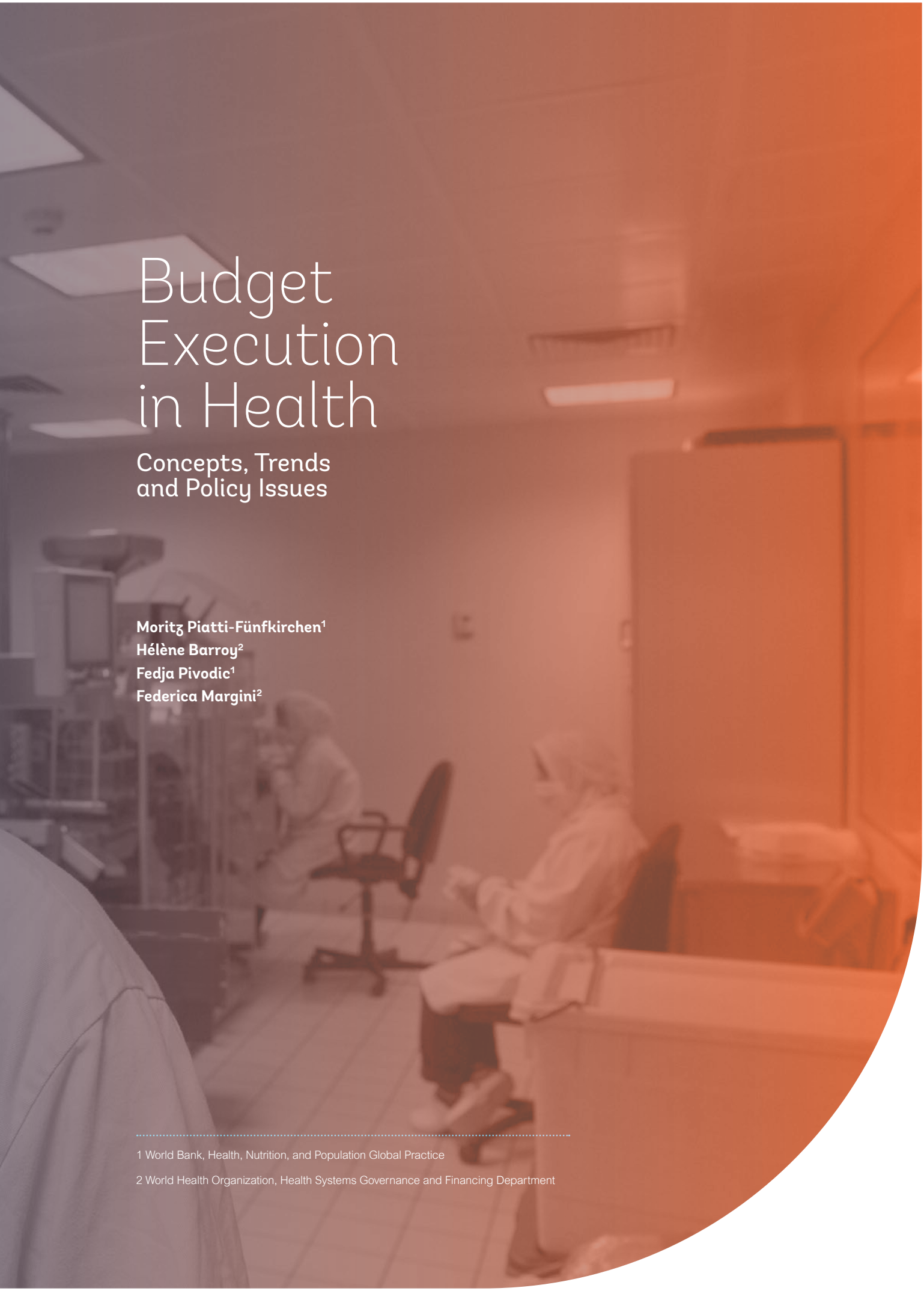

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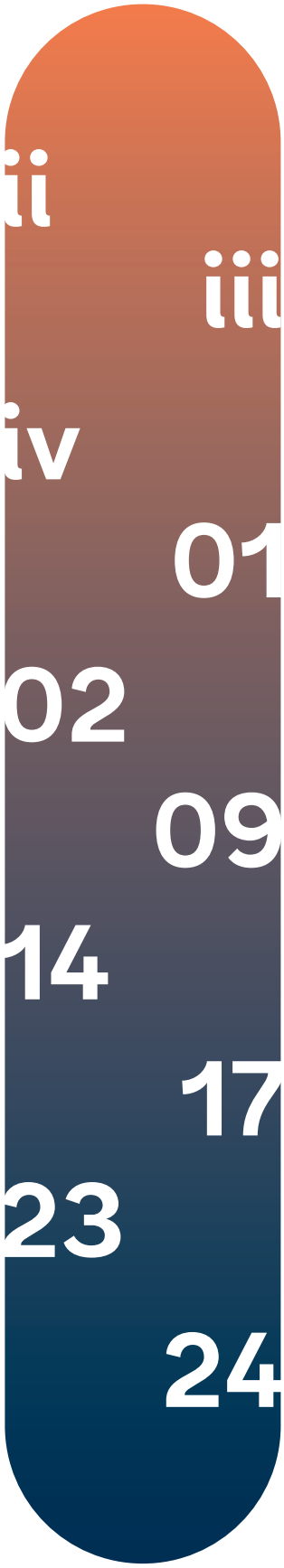

Abbreviations

CABRI	Collaborative African Budget Initiative
DAH	Development Assistance for Health
DP	Development partner
FMIS	Financial Management Information System
Gavi	Gavi, the Vaccine Alliance
GPEDC	Global Partnership for Effective Development Co-operation
MDG	Millennium Development Goals
MTEF	Medium-term expenditure framework
NGO	Nongovernmental Organization
OECD	Organisation for Economic Co-operation and Development
PIU	Project Implementation Unit
PFM	public financial management
PEFA	Public Expenditure and Financial Accountability
SAI	Supreme Audit Institution
SDG	Sustainable Development Goals
SPA	Strategic Partnership with Africa
SWAP	sectorwide approach
TSA	treasury single account
UHC	universal health coverage
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
USAID	U.S. Agency for International Development
WHO	World Health Organization

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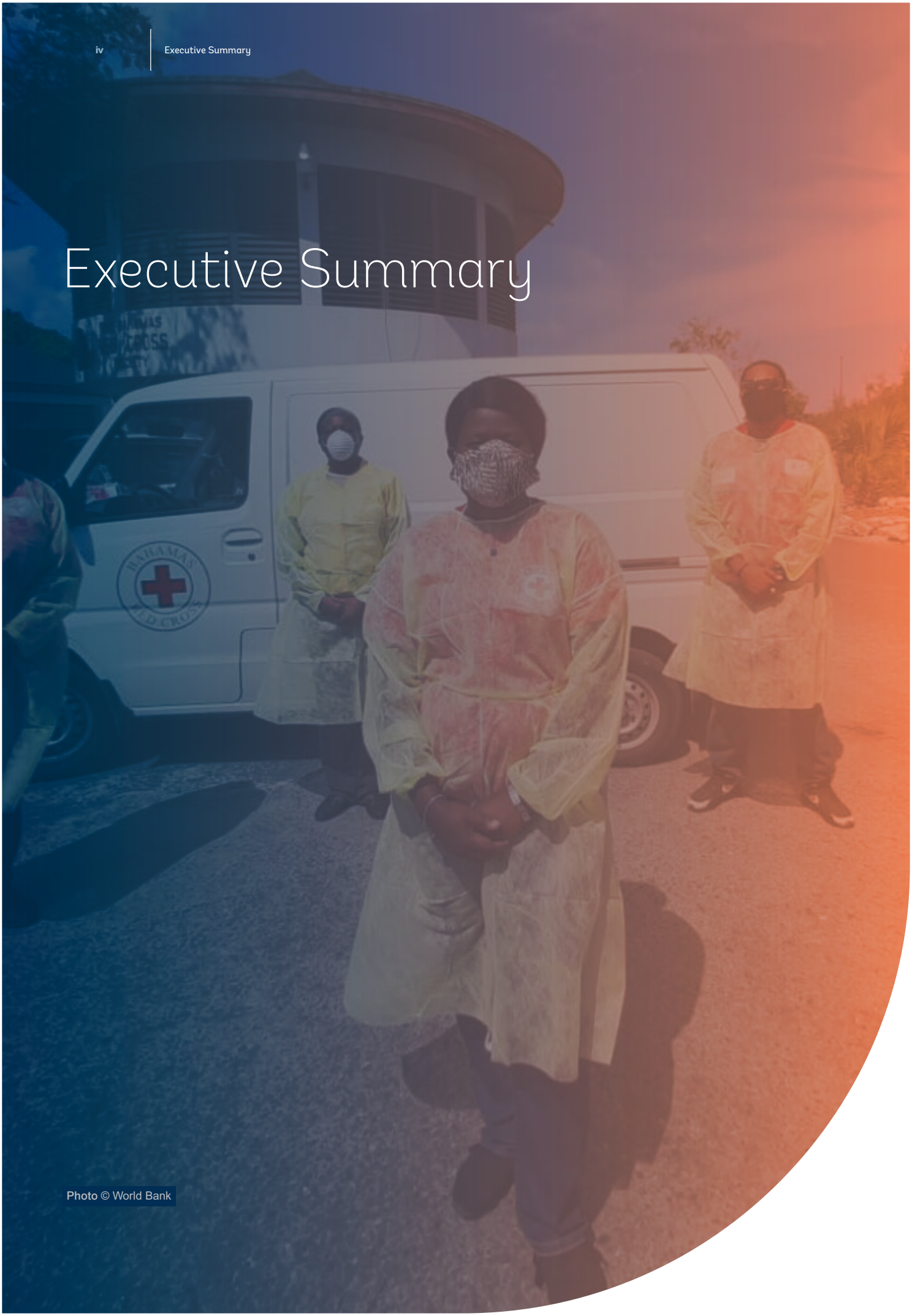
Executive Summary



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Most countries are committed to the provision of quality health services to all, without risk of financial hardship. Adequate budget provisions are an important, yet insufficient requirement in this pursuit. The budget also needs to be implemented in full and with regard to efficiency and accountability. While this is widely acknowledged, there is no systematic evidence on how well the health budget is implemented and literature remains thin on how budget execution practices relate to health financing functions and service delivery. This report is the first in a series of publications on the topic following an active World Health Organization and World Bank collaboration. It aims to define concepts, characteristics and trends in health sector budget execution.

The report first calls for clarity in use of terminology. It helps to differentiate between 'budget execution rates' and 'budget execution practices'. The former refers to the share of the budget being executed. The latter to processes on how well the budget is executed. Both aspects are equally important.

Not implementing the budget in full is a lost opportunity, efficiency and accountability concern and undermines the health sector's ability to deliver services. It also undermines prospects for increased fiscal space going forward. To identify trends and patterns in over and underspending, the report draws on previously unexplored PEFA annex and World Bank BOOST data. This reveals the following:

- Health budget execution rates are inversely related to levels of income and maturity of PFM systems.
- Health budget under-execution is particularly pervasive in LMICs where the budget is executed at around 85-90 percent. Some countries have chronic budget execution problems where the budget is executed at a rate below 85 percent across consecutive years.
- In LMICs, the health budget is systematically implemented at a lower rate than the general government budget. This means, that governments are effectively deprioritizing health during budget implementation. For Sub-Saharan Africa countries in the sample, the average health budget was 6.7 percent of the general government budget. Health spending as a share of general government spending was half a percentage point less at 6.2 percent. In some countries this is much more pronounced, where health is deprioritized by 2-3 percentage points of general government spending during implementation.
- The health budget was also implemented at a lower rate than the education budget in most countries at an average rate of 4 percentage points.
- Underspending in some categories often occurs concurrently with overspending on other expenditure items. While the wage and salary budget tend to be implemented in full, this is less so for goods and services or the capital budget. This can leave health workers without the necessary supplies or support infrastructure to provide quality services and invariably lead to inefficiencies.

Better and more granular data are urgently needed to give a fuller understanding of trends and patterns in budget execution. Publishing budget execution data by economic and functional classification would also help benchmarking and allow practitioners to draw appropriate lessons from peers.

The report recognizes that budget execution practices will differ according to flow of fund arrangements in the country. Important differences include whether the country subsidizes purchasing agencies that are situated outside the regular budget, whether there is fiscal decentralization, and whether health centers and hospitals are recognized as spending units in the budget. Countries often have a combination of these requiring a nuanced approach to assessing problems in budget execution. Consequently there are also many pathways of how budget execution challenges can affect service delivery goals. The report identifies a set of these and maps them to efficiency, equity, quality and accountability in service delivery. A brief summary is offered below.

ES Table 1: **How budget execution issues affect UHC goals**

UHC goal	How budget execution issues affect the UHC goal
Efficiency	Lacking budget credibility
	Delay in fund release
	Operational budget cuts
	Arrears
	Rigidity in spending rules
	Fragmentation in budget execution protocols
Equity	Equity considerations in budget distorted
	Increase in user fees to compensate for funding shortfalls
Quality	Poor budget credibility compromise quality
	Slow and irregular cash releases compromise service quality
Accountability	Overspending without appropriations
	Lacking accountability undermines autonomy
	Excessive financial management requirements

It is important to trace problems in budget execution back to the responsible agencies in order to take adequate mitigation measures. Root causes may be external to the health sector. For example, a poor budget execution rate may follow an over-optimistic revenue projection that does not materialize. Subsequently budgets are not released despite promises, which is beyond the control of the health sector. Other problems could be traced back to the health sector, such as issues relating to how providers are paid, delays in procurement, or coordination problems among health sector stakeholders. The delineation of root causes and associated actors would help foster a constructive dialogue and can be used to craft an appropriate policy response.

Important work remains to be done at the country level to generate additional evidence. Specifically, there is need to: (i) identify root causes of budget execution and how these relate to ministry of finance or health; (ii) identify how countries have dealt with budget execution problems and develop a set of potential policy options; and (iii) identify how budget execution affects countries with different types of health system structures, and relate root cause assessment and policy options according to health system typology.

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Introduction

> *“It doesn’t do much good to have a well-prepared and realistic budget that reflects the choices and compromises of society if it is not then implemented. It is difficult to implement well a badly formulated and unrealistic budget, but quite possible to implement badly a good budget. Good budget execution follows good budget preparation but is equally important to it.”*

(Schiavo-Campo 2017)

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Most countries are committed to universal health coverage (UHC), where everyone can access quality health services without risk of financial hardship (WHO 2010). To achieve UHC, countries must not only have an adequate amount of public resources (Kutzin 2013) but must also manage and use those resources effectively. In recent years, the impact of public financial management (PFM) processes on achieving UHC goals has received an increasing amount of interest, especially in policy research and dialogue (UHC2030 2020).

Among PFM reforms, budget formulation has received specific attention over the years, with the introduction of performance-based budgeting (Robinson 2018). Budget execution issues have remained largely undocumented and a blind spot. Available evidence from Public Expenditure and Financial Accountability (PEFA) reviews suggests that progress on budget execution falls behind other PFM reforms (Fölscher, Mkandawire, and Faragher 2012; Kristensen et al. 2019; PEFA 2021).

Despite their central role in the UHC agenda, budget execution processes have not been extensively studied in health. While budget under-execution is frequently reported across individual low-and-middle income countries (WHO 2016; Barroy, Kabaniha, Boudreaux, et al. 2019), there is a lack of systematic evidence in health. In the health sector, there is also an important gap in the understanding of budget execution systems and, often, misperceptions emerging from the relationship between budget execution principles and health system and financing arrangements. This lack of evidence and conceptual clarity may prevent the health sector from delivering on its UHC objectives. It is essential for health and finance authorities to get on the same page to support effective progress.

Against this backdrop, the paper primary addresses a health audience and intends to define and clarify key concepts around budget execution, unpack why and how budget execution matters for health and UHC, and outline trends in health budget execution rates.

The paper emerged after an extensive analysis of the UHC and PFM literature. The study process also involved an analysis of how budget execution issues were treated in health-related Public Expenditure Reviews (2012-2018), and a review of the country literature, although thin, assessing budget execution bottlenecks and their relation to health financing performance. Policy and analytical work conducted in recent years by the authors also informed the development of this paper. In addition, a quantitative analysis of budget execution rates in LMICs was undertaken drawing on two sets of data (i) overall budget and sector expenditure data collected by the BOOST initiative for 64 LMICs (2009-2018) (ii) overall budget and sector expenditure data of PEFA country assessments for 73 LMICs (2009-2016). The data sets were cross-checked against available primary country sources.

The first section of the paper defines budget execution in its key steps and stakeholders. Section 2 unpacks the relation between budget execution and the UHC goals, while section 3 maps budget execution processes and issues to most common health financing arrangements. The final section offers an overview of trends in health budget execution in LMICs.

What is budget execution?

The execution of the budget constitutes an essential stage in the budget cycle. In its most simplified form, a budget needs to be (i) formulated and approved; (ii) the approved budget needs to be executed; and (iii) evaluated to inform the next budget cycle. During the first stage, a budget proposal is developed and submitted to legislature for approval. Policy priorities in the country are transformed into the budget, which becomes legally binding for the executive. The executive then has the mandate to implement these priorities, as stated in the budget. Implementing the budget is referred to as the budget execution stage. This stage is where funds are actually spent, and activities are implemented. It is an essential stage in the budget cycle as even a carefully crafted budget with regard to equity, efficiency and quality will be meaningless if it is then not well executed (Schiavo-Campo, 2017). How funds have been spent is then carefully reviewed and evaluated against performance measures to inform subsequent budget allocation decisions (Andrews et al, 2014; Hashim, 2014; Tommasi, 2007; Schiavo-Campo and Tommasi, 2002).

Multiple steps are involved in executing a budget. Getting an understanding of each step is essential to delineate finance and health's roles in spending processes. Typically, budget execution involves authorization and apportionment, commitment, acquisition and verification, creating payment orders and making payments (Figure 1). These are further described in generic terms in Box 1[3], as they apply across all sectors and ministries, including health.

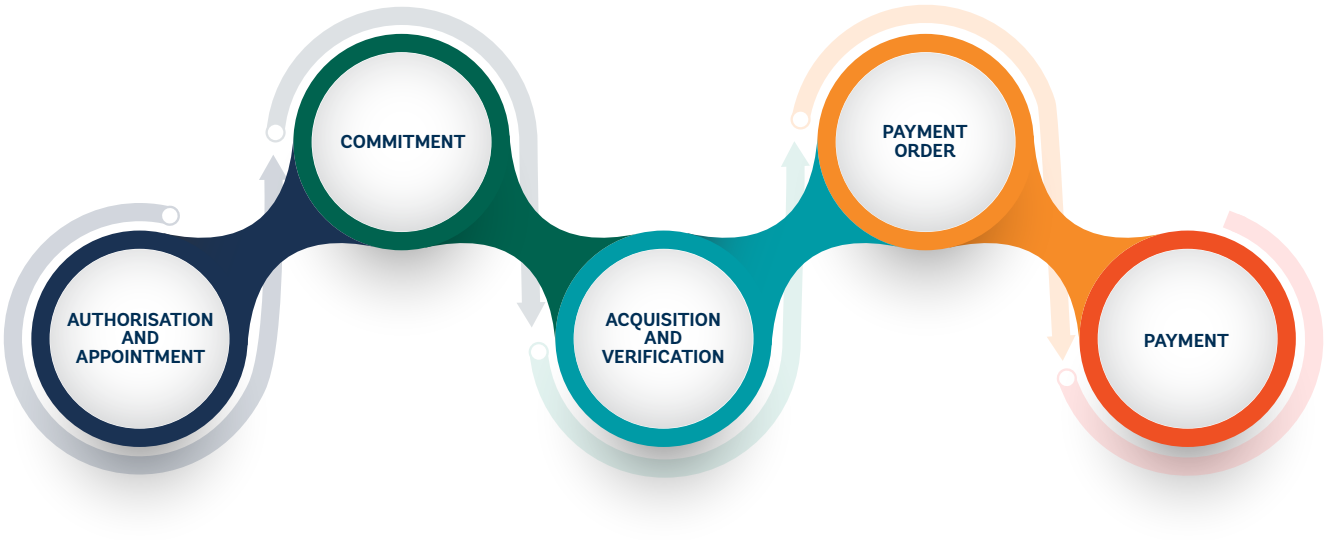

Figure 1: **Budget execution steps**

Source: authors, based on (Hashim 2014; Tommasi 2007)

3 A more detailed description of budget execution processes, including related information technology infrastructure, is provided by Hashim (2014, pp. 30-44) and Tommasi (2007).

Box 1: **Unpacking steps and roles in budget execution systems**

Authorization and apportionment.

After a budget is formulated and approved, line ministries, such as health, receive authorization to spend money. Authorization can be given annually, but it is often given for shorter periods of time, such as on a quarterly basis for goods and services. Health ministries then authorize their subordinate spending units. As soon as the budget is approved, funds should be apportioned to specific spending units. Delays in apportionment will lead to delays in the availability of funds, making it difficult for spending units to execute the budget early in the fiscal year.

Commitment.

In the commitment stage, expenditure decisions are made. This often involves a future obligation to pay, such as placing an order or awarding a contract for the delivery of specific goods or services. The commitment only becomes a liability (obligation to pay) if these goods and services are delivered as per the contract's provisions. Payment does not have to occur within the same fiscal year, which is often the case with large investment expenditures or framework contracts to procure drugs or medical supplies in bulk. Commitments should only be made if there are associated appropriations and enough budget available to cover the cost. Financial management information systems (FMIS) typically have commitment controls built in which would block a commitment unless these preconditions are met. These controls help to avoid overspending and an accumulation of arrears. For personnel expenditures that make a large portion of health spending, the commitment should correspond to the amount of compensation or contributions due. This also holds for commitments to transfers, such as transfers to health insurance funds, to local government or to hospitals directly, where they are autonomous.

Acquisition and verification.

Once goods and services are acquired and delivered, the goods or services rendered need to be verified against the original contract, ideally at the time of delivery. For some items, like personnel expenditures or transfers, there is no need for separate verification and this step is often removed.

Payment orders.

Once goods and services are delivered and verified by an authorizing officer, a payment order is forwarded to a public accountant who makes payments. At this stage there are important differences between franco-phone and anglophone budget systems. In francophone systems, there is traditionally a clear separation of duties between the authorizing officer (ordonnateur) and the public accountant, who decides whether or not to make a payment (a payment can be rejected due to irregularities). The public accountant does not report to the authorizing officer. Increasingly, however, spending authority has been delegated to line ministries in most francophone settings (Lienert 2003). In anglophone budget systems, financial control is largely assigned to line ministries, along with accountability for irregularities. The accounting officer in charge (generally the permanent secretary of a line ministry like health) has the authority to make expenditure commitments and issue payment orders. This approach is less cumbersome and gives more flexibility to the health ministry for budget execution.[4] »

4 A detailed discussion between francophone and anglophone budget systems can be found in Tommasi (2007).

» **Box 1** continued...

Payments.

Bills are paid upon receipt of a payment order, either by cash, check or an electronic funds transfer. Processing the transaction is generally done through the FMIS, as is all accounting and reporting. Reporting is done against all segments in the chart of accounts. For budget execution reports to be useful, they should be comprehensive and include all financing sources. When payments to providers are done through separate agencies (e.g. health insurance funds), they generally do not follow the budget system and are not processed through the FMIS.

Banking arrangements.

Government funds are generally banked in a treasury single account (TSA) in the central bank. Other funds available to the health sector may be banked in the TSA, in ringfenced accounts in the central bank (with end users having access to money through transfers to commercial bank accounts), in zero balance accounts in commercial banks, or in regular accounts in commercial banks. According to general guidance in the PFM literature, the TSA should be comprehensive to mitigate inefficiencies (Fainobim and Pattanayak 2010; Hasim 2014). While keeping central government funding in the TSA is important to minimize fragmentation and inefficiencies, the same may not be true for service providers who manage only small amounts of money, like, often observed in the health sector (Piatti-Fünfkirchen Ali Hashim Khuram Farooq 2019).

Budget execution is an ecosystem.

Budget execution processes mostly involve budgetary authorities and line ministries, as well as a range of other intermediate stakeholders involved in spending. Generally, sub-national levels, statal and para-statal entities, service providers are part of the execution system. The ecosystem and exact role of each stakeholder varies across countries. For instance, in some countries, district level administrations have the overall responsibility of service delivery and are the lowest level spending unit who also execute the budget on behalf of health facilities or hospitals. The lower-level health facilities or hospitals receive in-kind support from the higher-level administration. In other systems, health facilities or hospitals themselves are spending units and have the authority to engage in commitments and to account for spending directly. The role of development partners in budget execution also varies across LMICs. Spending from such sources is not systematically integrated into domestic budget execution processes and reporting, and often follow separate budget execution protocols.

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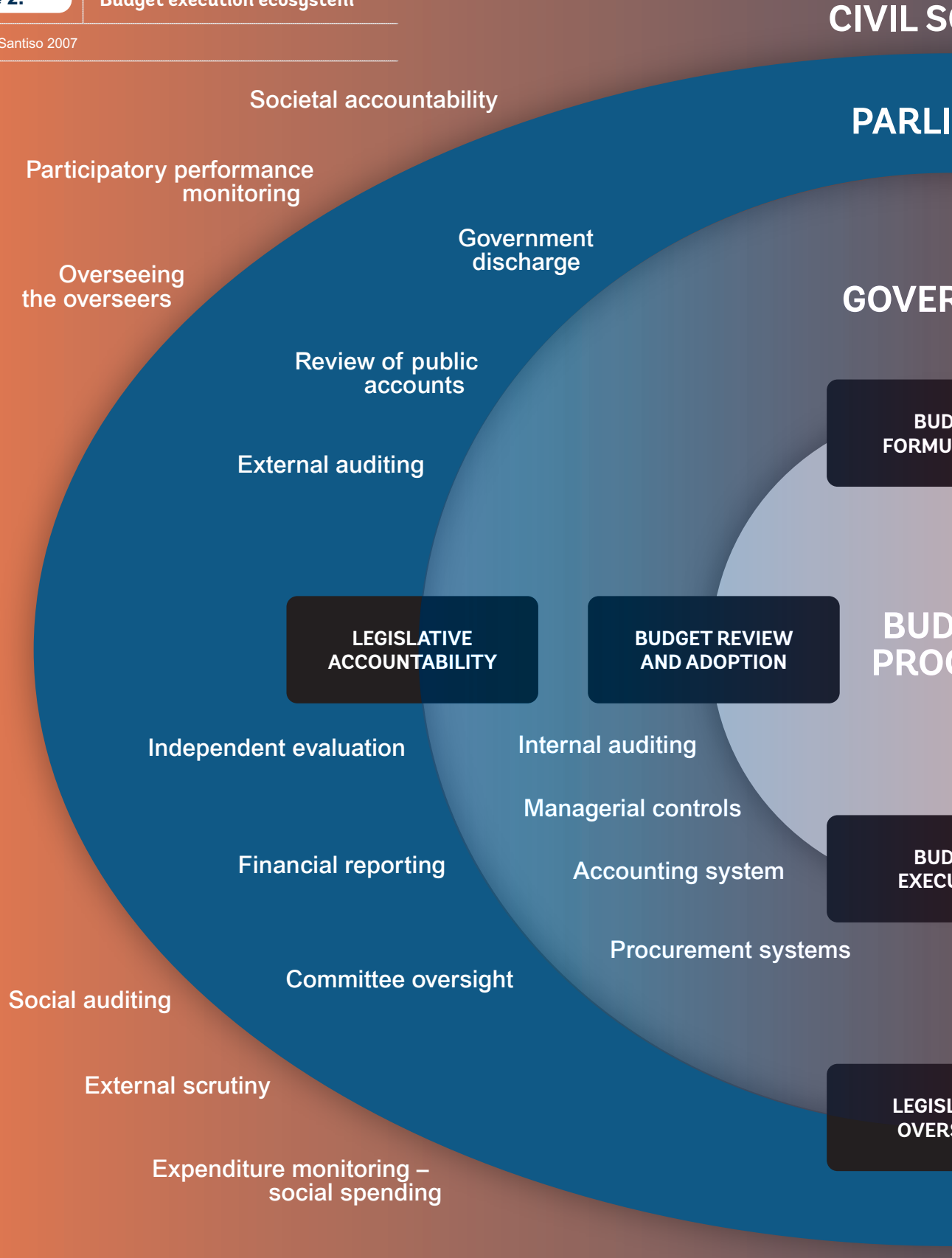
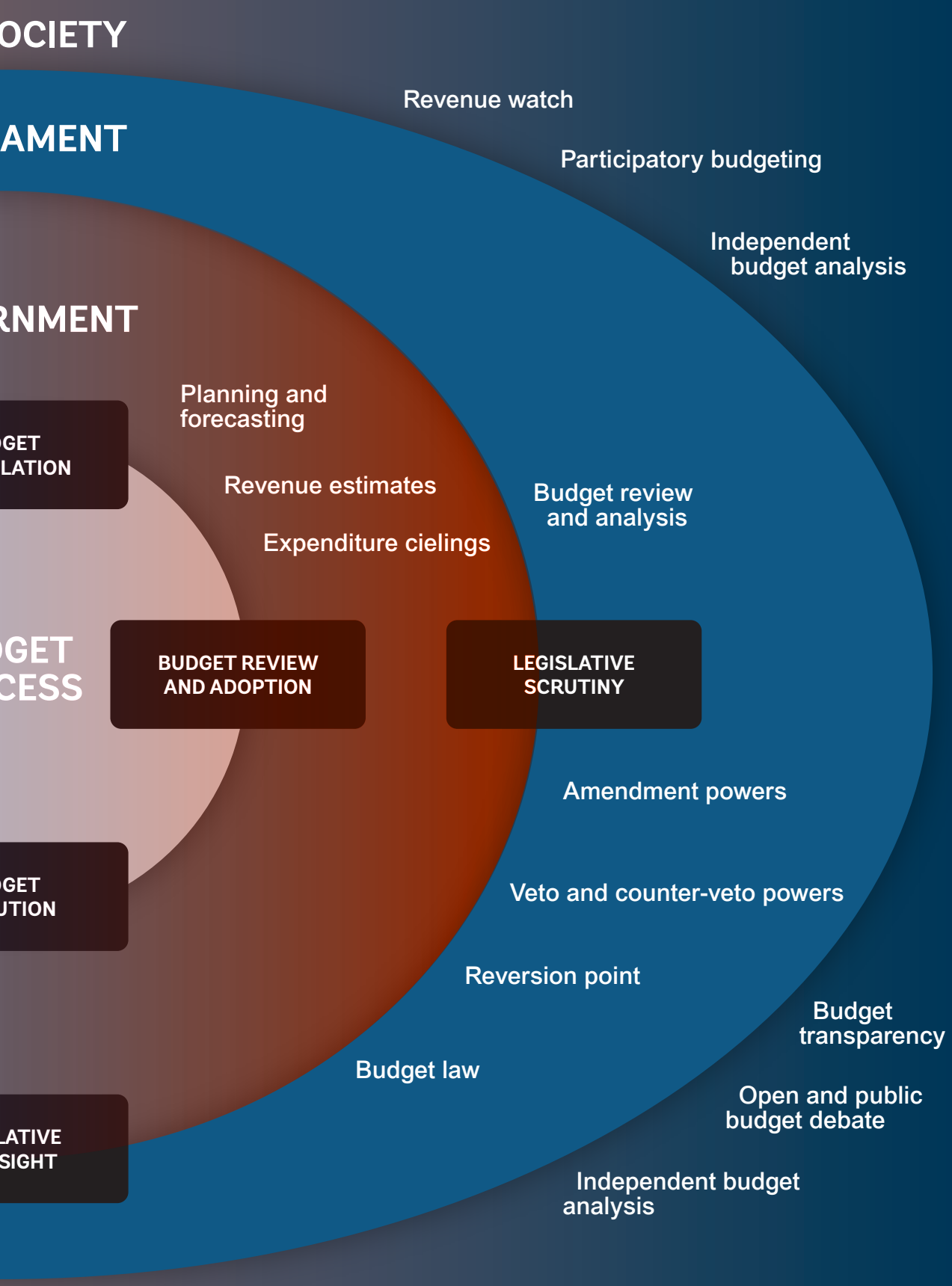
Figure 2: Budget execution ecosystem

Source: Santiso 2007

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Budget review and analysis
BUDGET REVIEW AND ADOPTION
LEGISLATIVE SCRUTINY
Amendment powers
Veto and counter-veto powers
Reversion point
Budget transparency
Budget law
Open and public budget debate
Independent budget analysis

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Budget execution practices and budget execution rates are two different things. Budget execution generally refers to the rules and processes that govern how a budget is implemented. A budget execution rate refers to the proportion of the budget that was spent. A 15% deviation from the approved budget (i.e. spending at <85% or >115% of the original budget) is considered inadequate and receives a D score in the PEFA methodology[5] (PEFA 2016). Budget execution rates are a proxy for assessing the degree to which a budget has been implemented.

Budget execution rates can mask important details. While budget execution rates provide information on the volume of spending, they do not indicate how well a budget has been implemented. For example, a low budget execution rate may indicate efficiency gains, where budgeted activities are implemented at a lower cost than anticipated. Full budget execution, on the other hand, could hide deficiencies in health spending such as excessive compliance orientation, payment delays or arrears at the facility level. It is important for these terms to be used carefully to avoid confusion and to pinpoint specific bottlenecks. Underspending and overspending frequently occur at the same time within a budget, both across and within sectors (Addison 2013).[6] For instance, if budget is spent by inputs, an unanticipated wage increase may bust the wage bill (overspending) and crowd out the operational budget (underspending). The total execution rate, however, may give the impression that the budget was fully implemented.

5 PEFA scores are on a 4-point scale from A-D. D indicates the worst outcome.

6 Addison's (2013) analysis of the quality of budget execution in 45 countries based on PEFA data finds that underspending and overspending almost always occur at the same time within a budget and that compositional deviations tend to be larger than the deviations in total net resources because of simultaneous overspending and underspending. For example, overspending some budget heads during a period of an unanticipated resource shortfall necessarily requires that the remaining budget heads be cut beyond what the shortfall would have otherwise required. For the majority of countries in the sample, most ministries were able to obtain a share of the largest windfalls and almost every ministry shared the pain of large unexpected losses.

How Does Budget Execution Affect UHC?

Budget execution processes have an impact on the ability of a health system to deliver against its UHC objectives. Spending modalities have direct implications for efficiency, equity, quality, and accountability of a health system – the key UHC intermediate goals.[7] Mapping budget execution issues to the UHC intermediate goals can help unpack the relation between spending modalities and outputs (Table.1). Here is a first systematic approach to link up budget execution processes and mechanisms with UHC.[8]

Table 1: **Mapping budget execution issues to UHC goals**

UHC goal	How budget execution issues affect the UHC goal
Efficiency	Lacking budget credibility
	Delay in fund release
	Operational budget cuts
	Arrears
	Rigidity in spending rules
	Fragmentation in budget execution protocols
Equity	Equity considerations in budget distorted
	Increase in user fees to compensate for funding shortfalls
Quality	Poor budget credibility compromise quality
	Slow and irregular cash releases compromise service quality
Accountability	Overspending without appropriations
	Lacking accountability undermines autonomy
	Excessive financial management requirements

7 Health financing frameworks define UHC intermediate outputs in terms of efficiency, equity, quality, and accountability (Kutzin 2013)..

8 Table 1 and description below lists and unpacks examples based on the available literature and country experiences, though it may not be exhaustive of all pathways.

How budget execution relates to health system efficiency

The availability of promised funds is essential for efficiency. Predictable health sector funding is essential. If resources are budgeted and but not released, this can lead to disruptions in service delivery and can diminish the ability of managers to implement their plans. If the problem is systematic, it can undermine longer-term planning and affect operational efficiency. Ad hoc and unbudgeted fund availability can also lead to opportunistic spending in health (Ally and Piatti-Fünfkirchen 2021).

Delaying the release of funds can impede service delivery and other activities. Delays in the release of funds directly impact the ability to plan and spend. If the bulk of funds becomes available towards the end of the fiscal year, daily operational costs in earlier months cannot be met. The late release of funds can also lead to unnecessarily rushed spending if the PFM system does not allow funds to be carried over into the following year. When funds are released in the final months of the fiscal year, it leaves little time for fund holders to commit and actually spend their budget before the funds have to be returned to the central treasury, giving the wrong impression that the sector was not in need of resources (Chansa et al. 2018).[9]

Operational budget cuts can lead to an imbalance of inputs. While personnel spending is often well executed given the quasi-statutory nature of the expense, operational budgets are frequently not executed fully.[10] When available funding is first used for statutory payments, an unanticipated shortfall in revenue (or overspending on other items) will have the greatest impact on operational or infrastructure spending. However, the spending on personnel and non-personnel items is complementary. For example, without adequate resources to cover operational costs, personnel are unlikely to be able to deliver health services, which consequently leads to problems with productivity and efficiency (Tideman et al. 2014).

Arrears lead to price increases. An inadequate release of funds can lead to an accumulation of arrears, putting health services at risk. When spending units miss payments to a supplier, suppliers may apply penalties such as built-in risk premiums for government contracts or an increase in prices. In several countries, it has been observed that the accumulation of arrears undermined the efficiency of health service delivery,[11] increasing the cost of health services and, in some cases, limiting drug availability—health ministries were penalized for missing payments and some suppliers refused to deliver drugs or medical supplies until outstanding payments were settled (World Bank 2019, 2016a, 2016b).

9 In Madagascar, Pivodic et al. (forthcoming) found strong seasonality in budget execution partly driven by the taux de regulation set by the Ministry of Finance, which is a quarterly release of budget credits to line ministries. This led to procurement delays in certain high-value goods that required significant upfront payments to providers since many health system institutions had to wait until midyear to accumulate a sufficient number of credits. Therefore, advocating for a timely release of the budget is critical for setting the right incentives and for the efficient use of funds.

10 Simson & Welham (2014), using data from Liberia, the United Republic of Tanzania and Uganda, find that, in terms of subcategories of types of expenditure, personnel expenditure (wages) is the category that deviates the least from the pre-set budget. This expenditure category tends to be no more than 5% above or below its budget, across government. Recurrent expenditure (goods and services) is less credible with a variation between -20% and +20%, while the capital or development category is the least credible by far, fluctuating hugely with a variance of between -60% and 80%.

11 In Zambia, by the end of 2015, an estimated US$30 million worth of drugs and pharmaceutical supplies remained unpaid due to the late release of funds by the Ministry of Finance and a diversion of funds to other purposes. The situation was made worse as arrears were denominated in US dollars, and depreciation of the Zambian kwacha made them more expensive to honour over time.

Rigidity in spending rules can undermine efficiency in spending. During budget execution, input-based budget controls limit spending on any input other than what was provided for in the approved budget. For example, commitment control requires that funds allocated for utilities are only spent on utilities and not diverted to another item such as the purchase of emergency drugs (Chakabrorty 2010). This undermines the autonomy of service providers, restricting their ability to react swiftly to changing needs and to modify the mix of inputs to deliver services most efficiently (Barroy, Blecher, and Lakin, n.d.; Piatti-Fünfkirchen and Schneider 2018). While a change in budget formulation has the potential to enhance spending flexibility within programmatic envelopes, the reform may not always enhance budget execution in practice[12] (Aboubacar et al. 2020).

Fragmentation in budget execution protocols across financing sources creates inefficiencies. Health providers, as spending units, frequently draw on different sources of financing to cover operational costs. These may include government budgets, payments from insurance schemes, user fees and various direct donations. Financing sources often have their own spending protocols. This means the execution environment for these service providers becomes fragmented. Fragmentation may mean that providers can use funds from certain sources for certain items, but it cannot make use of all funds for all items. For example, resources from performance-based financing schemes can often be used to top up salaries, but that is often not the case for funds from other sources. This makes management of resources unnecessarily complex for providers and leads to inefficient provider management (Mathauer et al. 2020; McIntyre 2008).

How budget execution affects health equity

Poor budget execution can undermine an equitable budget. In principle, budget execution per se has no impact on health equity beyond the equity effects of the approved budget. A well-executed budget only delivers on the priorities already laid out in an approved budget. As such, budget execution may either reinforce inequities or support the equitable allocation of funds depending on how the approved budget was formulated (Sabignoso et al. 2020). However, when done poorly, budget execution can undermine a budget that was equitably formulated and allocated. For example, funds may be first or only fully released to providers who are in well-connected or favoured districts, leaving those in more remote locations with delayed or limited funds. Also, certain provinces may be prioritized in the execution of central transfers, which compromises equity considerations in the original budget formula (Barroy et al. 2014).

Health service providers may resort to user fees to compensate for public budget shortfalls. Health service providers require access to drugs, medical supplies and funding for operational expenses to provide services. If there are problems during the budget execution process (e.g. funds are not released and/or made accessible to the frontlines), service providers may have to draw on alternative means, such as user fees, to deliver care. Informal payments have emerged or re-emerged in several sub-Saharan African countries, where delays in compensation mechanisms (i.e. budget transfers to facilities for exempted services) affected provider capacity to deliver services (McPake et al. 2011; James

12 In Gabon, for instance, design flaws and a lack of clarity around spending rules compromised the implementation of the reform and reduced budget execution levels in the health sector.

et al. 2006). This is highly regressive and blocks access to care. It can also cause financial hardship, especially for the poor and vulnerable.

How budget execution affects service quality

Budgets that are insufficiently funded can compromise service quality. If budget provisions are not met, the quality of services can suffer, especially if there are rigid input-based line-item controls built into the budget. For example, if the budget line for cleaning materials is not funded, this can have a serious impact on the quality of care delivered.

Slow and irregular cash releases can compromise service quality. Similar to the previous point, the quality of health care suffers if there are delays due to late or irregular cash releases. In health, delays in salary payments negatively affected staff morale, leading to higher absenteeism and moonlighting among personnel who needed additional income. Higher staff absenteeism affects the quality of services delivered and can cause delays in treatment (Chansa et al. 2018).

Rigidities in spending protocols also create service quality issues. If a provider spends on certain pre-defined items for budget compliance reasons, it may undermine the quality of services. When providers cannot choose the right mix of inputs required to deliver the needed services, quality is negatively impacted (Barroy et al. 2019).

How budget execution affects accountability in health

Spending beyond appropriations or the authorized budget creates an accountability problem. Spending beyond what has been approved in the budget undermines accountability and may crowd out appropriations for other essential spending categories. In several LMICs, the frequent use of exceptional and emergency procedures for routine spending results in spending that is largely disconnected from the approved budget (Barroy et al. 2014).[13] Multiple revisions in budget laws, limited communication and opaque or arbitrary changes to a budget throughout the year also limit accountability. A wage increase without the necessary appropriations may also crowd out service delivery in an already limited operational budget.[14]

Poor financial information systems can undermine accountability. Inadequate documentation and reporting may give the impression that a budget is under-executed when, in fact, spending has not been properly accounted for. Multiple reporting mechanisms, such as a separate reporting system for donor funds, may also make it difficult to develop a comprehensive picture of spending (Barroy, Kabaniha, Boudreaux, et al. 2019). Inadequate financial reporting systems may also complicate budget execution reforms, as finance ministries may hesitate to extend autonomy to service providers if they are unsure whether they will properly use the funds.

13 In the DRC, the Extraordinary Expenditure Procedure (EEP) is commonly used in the health sector. The EEP rolls the first three steps in the spending procedure (commitment, validation and payment order) into one

14 In Ghana and Zambia, a wage increase was instituted abruptly across the civil service, without the necessary appropriations (World Bank, 2016b). Parliamentary approval had to be given on an ex post basis to ratify a hasty decision which, among other things, also crowded out budget for operational costs.

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While financial accountability is critical, cumbersome budget execution requirements can place an unnecessary burden on medical staff. Excessive financial management and accountability requirements can pull medical personnel away from operational duties if there are not enough administrative personnel to manage the work. Too many reporting requirements and too many small transactions may inadvertently impede the efficient delivery of health services. A higher financial management workload is also sometimes associated with slower processing times, meaning that spending becomes less efficient (Pivodic, Piatti-Fünfkirchen, and Juquois, n.d.).

How does budget execution differ according to health financing arrangements?

Budget execution processes are heterogenous in health. The effect of budget execution on health spending differs according to how health financing arrangements are organized and structured. These differences are hardly unpacked and understood. It is essential to distinguish countries that rely on a provider/purchaser split[15] from countries that operate through direct service provision, because these differences largely affect how public funds flow to the sector, and thereby, how budget execution processes ultimately drive outputs. Budget execution issues are different if a separate agency exists and spends and accounts through separate spending modalities. Table 2 maps budget execution processes and rules to most common health financing arrangements, and these are further detailed below.

Table 2: **Mapping budget execution processes to health financing arrangements**

Health financing arrangements	Main execution rules and processes
No provider/purchaser split	Regular PFM rules for transfers to various budget holders, and potentially to facilities
Fiscal decentralization	Inter-governmental transfers, from central to sub-national levels
Separate purchasing agency	Transfers to purchaser(s)
NGO provision	Procurement and contract management of NGOs

Countries with no provider/purchaser split.

In many LMICs, governments directly operate and provide health services. It may happen that local bodies are delegated the role of health service provision; in which case they execute the budget on behalf of service providers who in turn have limited autonomy and ability to access and manage funds.

Execution issues typically arise as facilities receive input-based funds that do not always align with needs. If budgets are provided directly to providers, the provider becomes responsible for executing that part of the budget. Key execution issue relate to how funds are released to facilities (e.g. by inputs or through a lumpsum for operational costs) and how flexible their use is. Tertiary or secondary care hospitals are often explicit

15 The purchaser/provider split is a service delivery and financing model in which purchasers/payers (often in health, an insurance fund) are kept separate from service providers who are managed by contracts.

budget holders. This is not always the case for primary care providers. While some countries are gradually shifting away from local government budget provisions to a structure in which primary care providers are recognized as spending units (Mtei 2020; Barroy et al. forthcoming), this is rather the exception.

Countries with fiscal decentralization.

Countries with fiscal decentralization devolve authority and financing to sub-national levels. This is frequently supported through inter-governmental transfers. Sub-national levels can then prioritize amongst sectors, when transfers are not earmarked, and engage in purchasing arrangements. Budget execution issues relate to the credibility of the inter-governmental transfers originating from national government and then actual execution processes at the lower level. Financing arrangements may differ across regions/provinces in a country where some may offer transfers to health insurance agencies operating at the regional level, while other regions may make payments to providers directly or operate providers themselves.

Countries with a separate purchasing agency.

Purchasing agencies that operate outside of the budget often do not abide by general budget execution protocols (World Health Organization 2019). If they rely on large government transfers or subsidies, the release of these subsidies is still subject to regular budget execution protocols. From a budget execution standpoint, the critical element is whether transfers are timely and correspond to budget appropriations. If transfers are delayed or not paid as per expectations, this strains the financial feasibility of the purchasing agency (Figure 3, next page). As a result, the agency may have to raise funds from other sources to compensate for the shortfall or risk not reimbursing service providers adequately.[16,17] The same holds true for larger hospitals, which may be autonomous entities, that receive periodic government transfers or a global budget for the delivery of services.

Countries may use nongovernmental organizations (NGOs) to deliver a minimum benefits package. In some fragile and conflict affected countries such as Somalia or Afghanistan, governments may make use of established NGO networks to provide services in hard to reach areas. This is also the case with countries that have an extensive relationship with faith-based providers such as Lesotho, Malawi or Zambia. Here there is a contractual relationship between government and the NGO and how well contracts are set up and managed will determine the effectiveness of the engagement. This will require extensive procurement and contract management capacity that falls largely under the budget execution domain of domestic PFM.

Countries often have mixed health financing arrangements, where budget execution processes overlap. The four situations described above are not mutually exclusive. Countries may

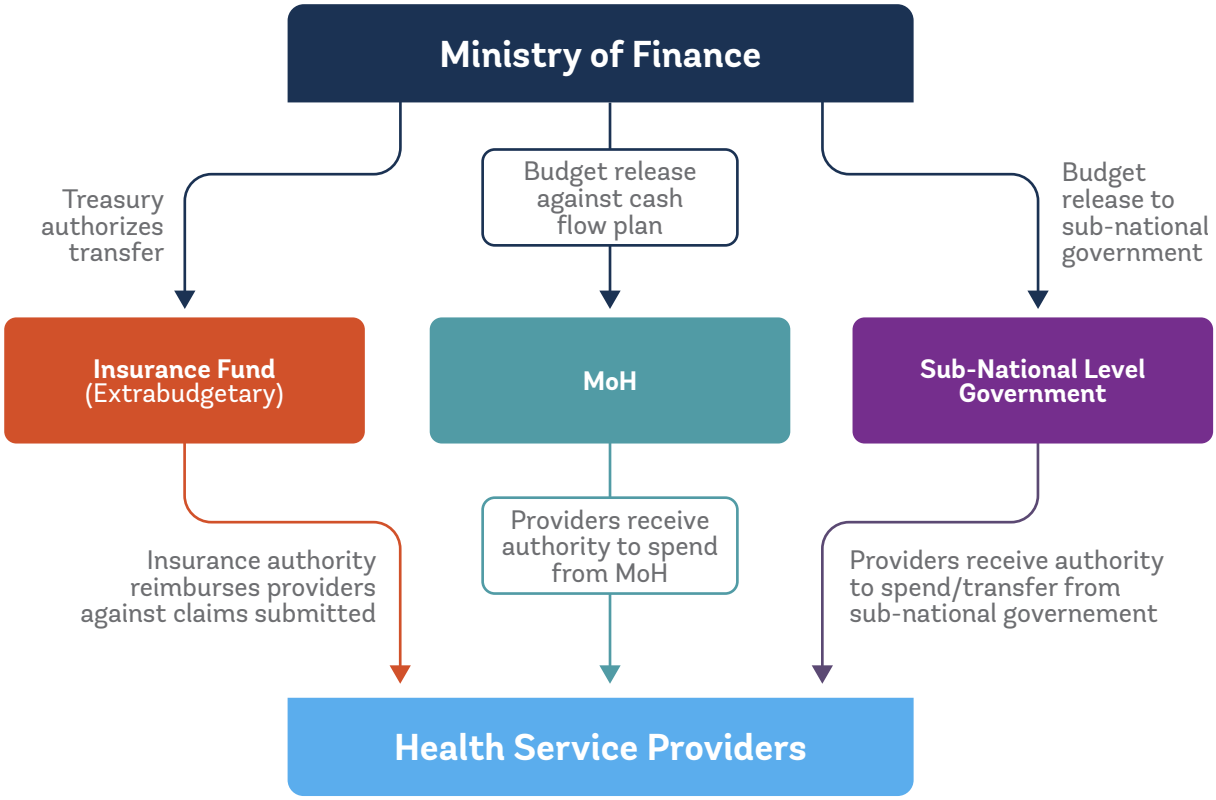
16 In Ghana for example, the Ministry of Finance pays significant subsidies to the National Health Insurance Scheme (NHIS) to provide coverage for poor segments of the population (Schieber et al. 2012). Similarly, in Rwanda, the Ministry of Finance subsidises enrolment of the community based health insurance scheme for the poorest through transfers to the Rwanda Social Security Board (RSSB) Delays and shortfalls in the release of funds have affected service delivery (World Health Organization 2021).

17 The contractual arrangement between purchasers and providers determines how purchasing agencies spend money and reimburse service providers, and how service providers use purchaser payments.

use purchasing agencies and also allocate budget directly to providers. Countries may also allocate funds to district health offices for some services and, for other services, allocate funds directly to facilities (e.g. services for women and children exempted from user fees). In some countries, the decision to allocate funds directly to a facility depends on the level of care the facility provides (e.g. hospitals receive a budget allocation but primary care providers do not). The impact of these budget execution practices on the delivery of services is ultimately determined by the relative importance of these funding flows. For example, countries that channel large transfers to a purchasing agency will have to consider the credibility of these subsidies. In these cases, the execution of the budget that remains with the health ministry for operational expenditures plays a less important role. Conversely, government budget execution practices matter much more in countries that rely chiefly on budget provisions through the government.

Figure 3: **Typical budget execution system with separate purchasing agency**

Source: Authors



What is the evidence on health budget execution level in LMICs?

In general, budget under-execution affects all government sectors in LMICs. Across PEFA assessments, the average rating for aggregate expenditure outturn over the last 10 years is equivalent to a C+, and expenditure composition outturn scored worse, averaging between C and D+[18]. This is indicative of systemic deviations between budget allocations and expenditure weaknesses across countries and sectors, that invariably affect the ability of countries to deliver services.

Measuring country budget execution has many challenges. There is no consistent way used across countries to measure budget execution. Some countries produce and provide public access to audited expenditure that can be used to estimate levels of spending. In other countries, many issues may arise that prevent access to reliable expenditure data, such as the absence of transparency policies or reliable financial information systems, or an unclear division of labour across stakeholders in compiling and publishing financial data (Open Survey 2020). Execution levels may, therefore, vary indicator by indicator (e.g. commitments, payments or audited expenses). If one uses commitments as a numerator, it is likely to generate higher budget execution ratios (Table 3). Finding the right denominator can also be challenging, when midyear budget revisions are not officially included in revised finance laws and/or made publicly available.

16 Minimum requirements for scores [A = highest; D = lowest]

A. Aggregate expenditure out-turn was between 95% and 105% of the approved aggregate budgeted expenditure in at least two of the last three years.
B. Aggregate expenditure out-turn was between 90% and 110% of the approved aggregate budgeted expenditure in at least two of the last three years.
C. Aggregate expenditure out-turn was between 85% and 115% of the approved aggregate budgeted expenditure in at least two of the last three years.
D. Performance is less than required for a C score

Table 3: **Illustration of variable execution rate by stage of expenditure, DRC**

Source: Barroy et al, 2014

	Total allocation in current CDF billions (2011-2013)	**Expenditure commitments** (% of allocations)	**Validations** (%)	**Payment orders** (%)	**Payments** (%)
Personnel	351.5	94.1	94.1	94	93.6
Goods	45.8	116	115	63.8	54.5
Services	5.5	20.9	20.2	18.3	18.1
Transfers	35.7	58.7	58.5	45.1	41.2
Equipment	597.5	14.4	14.4	14.1	13.5
Construction, rebuilding, renovations	59.9	67	49.2	59.5	39.5

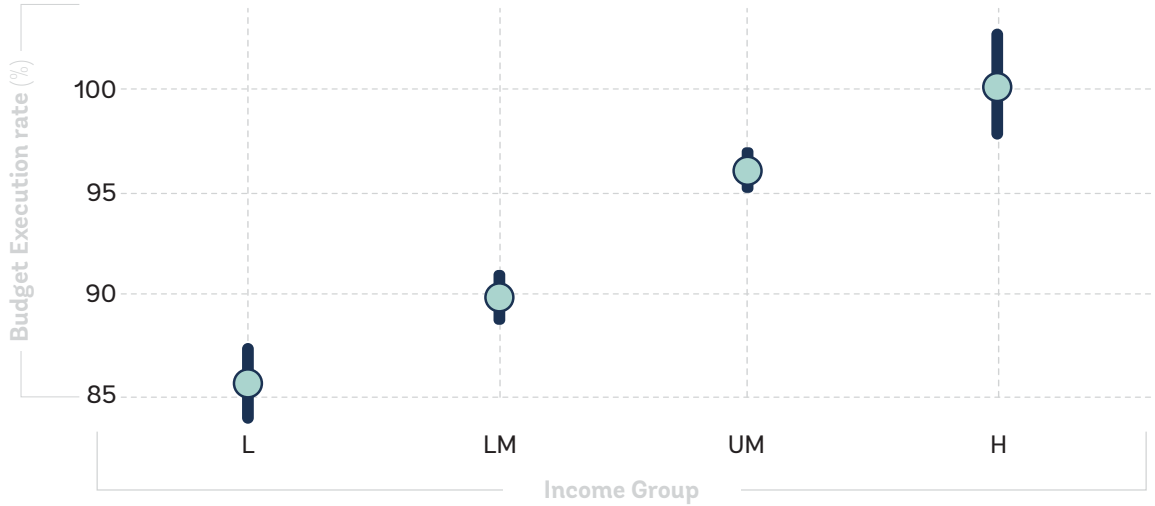
A comprehensive assessment of budget execution data in the health sector, using publicly available global datasets, shows that budget under-execution has been pervasive in health in LMICs over the past ten years. In low-income to upper-middle-income countries, the health sector budget was systematically under-executed between 2009–2018. Low-income countries (LICs) tend to under-execute their health budgets by about 14% on average, meaning budgets were executed at about 86% during this period. Unsurprisingly, budget execution rates appear to be closely associated with country income level and the maturity of the PFM systems. On average, high income countries execute their health budgets in full, with some over- and under-execution (Figure 4).[19]

19 Execution rates are calculated for each data set. The authors trimmed the distributions of computed execution rates at 30% at the lower end and 175% at the upper end to account for data quality issues. The calculations omit information on countries with populations of less than 600,000. Within each data set, the analysis is limited to those years for which data from at least 30 countries is available to achieve sufficient variation in terms of income groups among the analysed countries. For each given year, countries are grouped into income level groups based on the World Development Indicators database.

Figure 4: **Illustration of variable execution rate by stage of expenditure, DRC**

Source: BOOST data; authors' calculations.

Note: Point is mean execution rate, whiskers are +/– 1 standard error of the mean



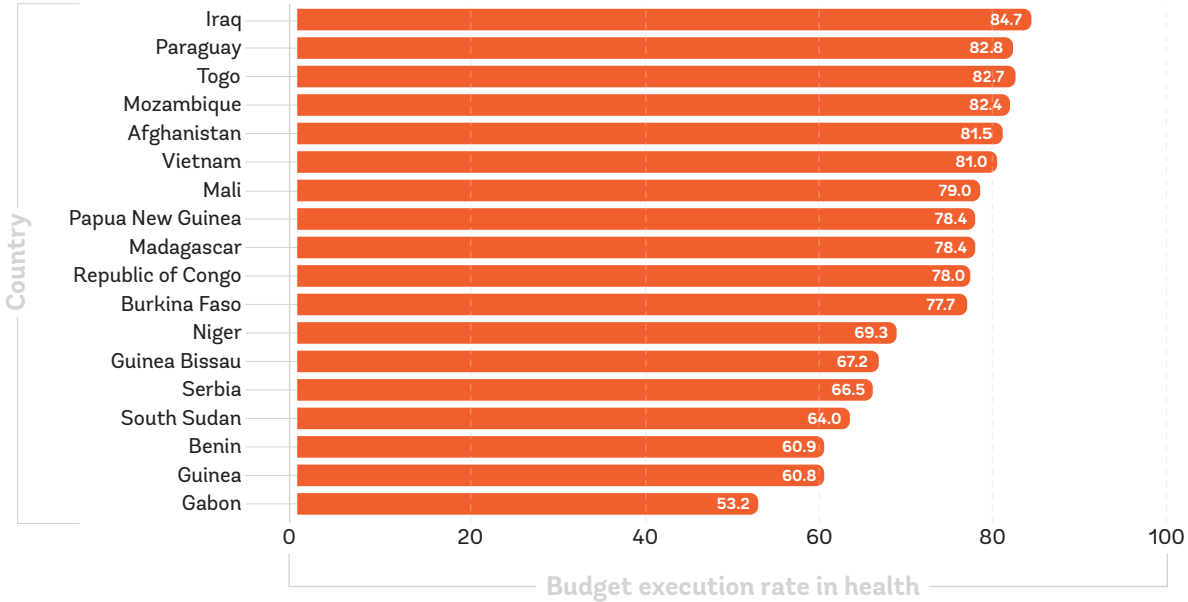
A closer look at countries with persistent under-execution in health (average below 85% over the period of 2009–2016) shows that the majority are low-income countries in Africa.

There are some higher income countries with chronically under-executed budgets, like Iraq and the Republic of the Congo which are both highly dependent on natural resources (Figure 5).

Figure 5: **Countries with persistent health budget under-execution, average 2008–2016**

Source: PEFA annex data; authors' calculations

Note: Countries with average health budget execution rates <85%



Budget execution in health is systematically worse than in other sectors. In the countries included in the analysis over the studied period, budget execution rates in the health sector were consistently worse than those in education or generally across government. In low-income countries, the difference between budget execution in health versus education was about 4% on average between 2008–2019. The relationship also holds true in low-income and upper-middle-income countries, though it is less pronounced (Figure 6). This difference is even more pronounced for the set of countries that fall under the 85% execution rate threshold in health. The mean execution rates for most of the 15 countries is significantly higher in education than in health (Figure 7).

Figure 6: **Comparing health budget execution rates to education and general government, average 2009-2016**

Legend: Education Health Other

Source: PEFA annex data; authors' calculations

Note: Bars represent group means, brackets represent standard errors of the mean

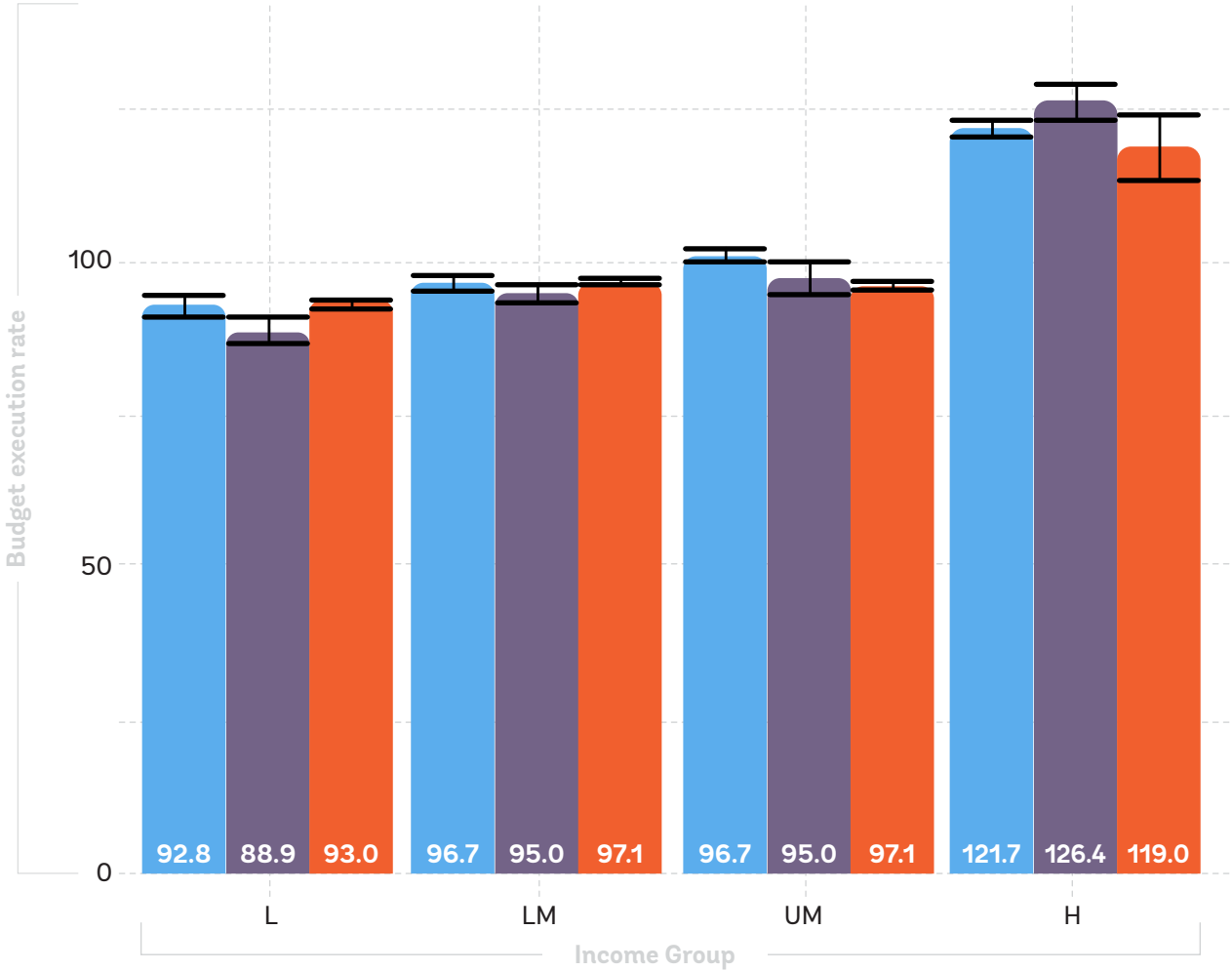
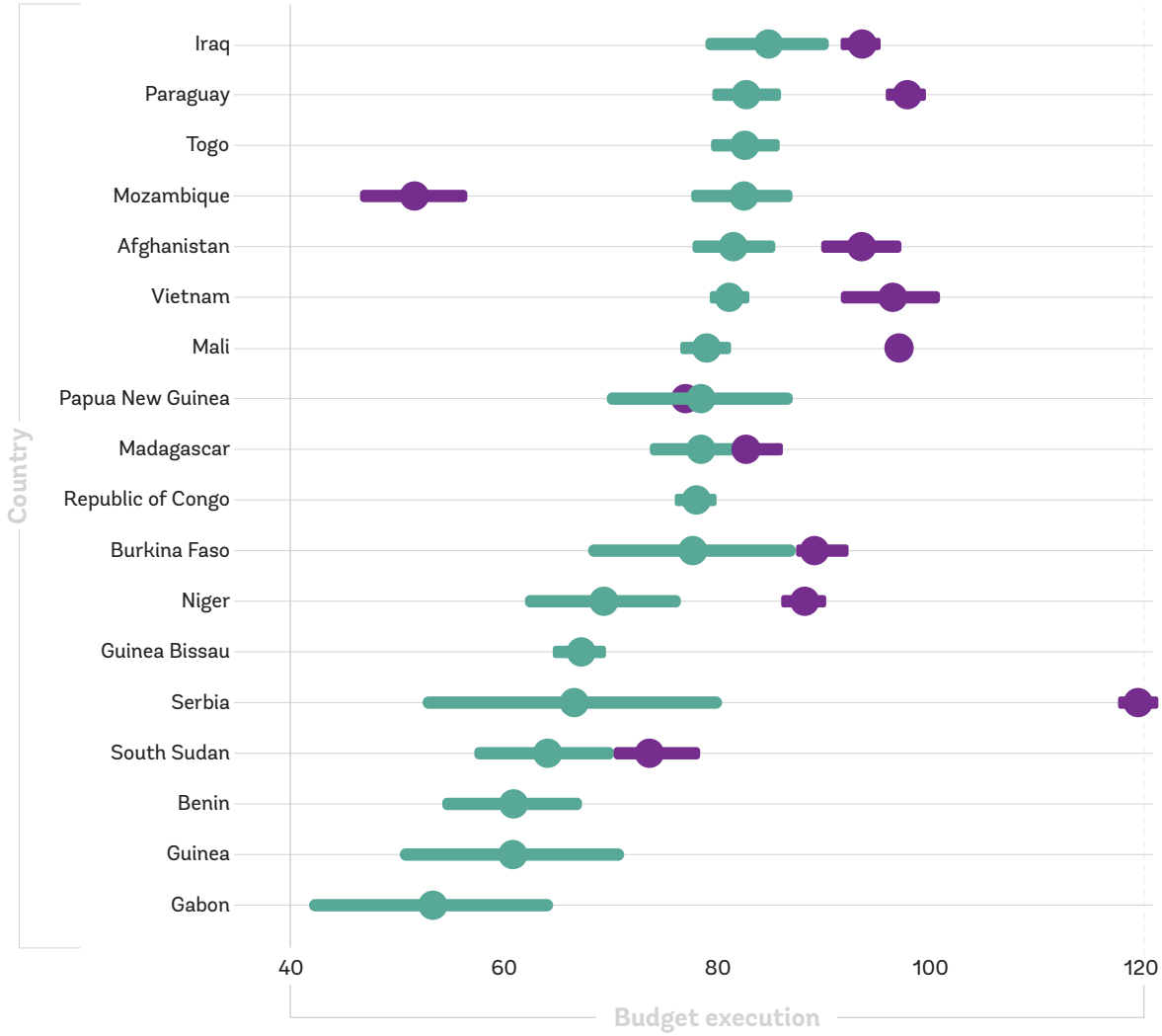


Figure 7: **Differences in budget execution rates in the health sector (purple) and education sector (green), average 2009–2016**

Legend: Education Health

Source: PEFA annex data; authors' calculations

Note: Countries with average health budget execution rates <85%; +/- 1 standard error of mean; data on budget execution in education sector not available for Benin, Gabon, Togo and Guinea-Bissau



The variation in health budget execution across different types of expenditure points to a hierarchy of expenditure priorities. Budget execution rates in health are systematically higher for wages and salaries compared to goods and services or capital expenditures (Figure 8). As health is a labour-intensive sector and a large share of spending in the health sector is wage-related, looking at the overall health sector budget execution rate hides the fact that the budget for goods and services and capital spending is systematically under-executed. In recent years there has been a concerning downward trend for capital spending in particular, and the COVID-19 epidemic has likely worsened this situation.

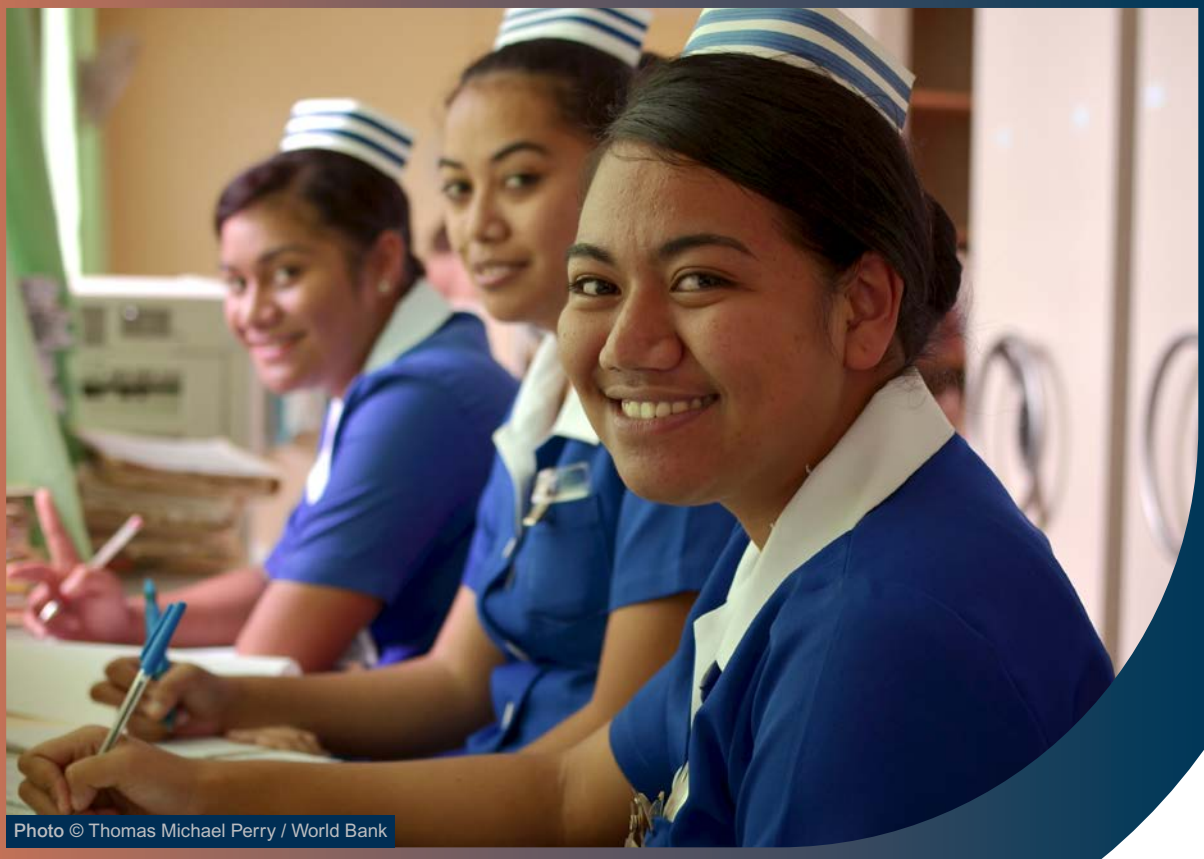
Figure 8: **Health budget execution by spending categories, average 2009-2018**

Source: BOOST data; authors' calculations

Conclusions

Despite their central role in the UHC agenda, budget execution processes have not been extensively studied in health. This paper provides a first attempt to unpack the issue to provide a shared understanding between health and finance authorities. It explains how budget execution processes can affect the achievement of the UHC goals, specifically how weaknesses, delays and rigidities in the expenditure chain drive or hinder health service outputs. The paper also demonstrates the depth of budget under-execution in health. The analysis shows how under-spending has been pervasive in low-income countries over the past ten years, the health budget execution rate being systematically lower than for other sectors.

Poor budget execution in health has multiple causes. It is often attributed to a health ministry's limited ability to absorb budgeted resources. However, generic PFM factors tend to also play a role, such as inadequate revenue forecasts, rigid budgeting and spending modalities on a wider level. Understanding and defining these root causes is necessary to identify possible policy solutions between health and finance to address systemic issues in health budget execution. Moving forward, there is a need to provide an analytical framework to support country-level assessment.



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