Health Financing Working Paper No. 5

Earmarking for Health

From Theory to Practice

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World Health Organization

RESULTS FOR DEVELOPMENT

Earmarking for health: checklist of key considerations

Countries that are considering earmarking for the health sector should address the following key questions. This checklist can guide discussions among health and finance policy-makers about when earmarking might be useful and how to structure an earmarking policy to ensure positive results and minimize distortions.

Support for the expenditure purpose

- ❑ Does the policy or programme to be funded with the earmark support the country's broader development objectives?
- ❑ Does the policy or programme to be funded with the earmark have broad-based support and commitment from politicians, policy-makers and the public?
- ❑ Were finance authorities part of the discussions from an early stage?

Definition of the expenditure purpose

- ❑ Is the policy or programme to be funded with the earmark defined narrowly enough for the earmark to be enforced and broadly enough to be flexible?
- ❑ Does the expenditure purpose help advance certain health sector priorities without detracting from others?

Alternative revenue sources

- ❑ Can revenue needs for the policy or programme be met through the existing budget process?
- ❑ Have alternative sources been explored for their revenue-raising potential?

Impact on health sector efficiency and equity

- ❑ Will the earmark improve or inhibit the government's ability to manage health expenditure, including implementing strategic purchasing approaches?
- ❑ Will the earmark facilitate pooling of health funds or introduce fragmentation and limit the ability to pool health funds across sources, leading to equity concerns?

Spending flexibility

- ❑ Are mechanisms in place to ensure efficient spending of earmarked revenues?
- ❑ Can earmarked revenues be spent flexibly within the expenditure purpose, or are restrictions in place related to line-item budgets or other PFM rules?
- ❑ Can unspent earmarked revenues be carried forward into the next fiscal year?

Time horizon

- ❑ Will the earmark be temporary or permanent?
- ❑ If the earmark is intended to be temporary, will it come with a "sunset clause," mandatory periodic reviews or a transition plan?
- ❑ Will the revenue source be sustainable relative to the intended expenditure purpose?

Revenue–expenditure link

- ❑ Does the policy or programme to be funded with the earmark have sufficiently diversified revenue sources so it will not completely depend on the earmarked revenue?
- ❑ Will a release valve or contingency option be put in place to reallocate earmarked funds if other urgent needs or priorities arise?
- ❑ Are expenditure management mechanisms in place to prevent overspending?

Fiscal and public financial management (PFM) impact

- ❑ Will the earmark improve or impede the efficiency of budget allocations?
- ❑ Will the earmark mitigate or exacerbate distortions or inefficiencies in the underlying revenue source?
- ❑ Will the earmark mitigate or exacerbate the equity impacts of the underlying revenue source?
- ❑ Have simulations and scenario testing been done to analyse:
  - ❍ impact on the health sector budget
  - ❍ impact on the total government budget
  - ❍ broader fiscal, economic and social impact
- ❑ Will the above analyses be updated periodically?

Managing earmarked funds

- ❑ Will the funds flow through the treasury or a consolidated fund into an extrabudgetary fund, or will they go directly to an implementing agency?
- ❑ Will the institution that spends the earmarked revenues be prepared for the inflow of funds?
- ❑ Will a reserve fund or contingency fund be created to manage revenues in excess of expenditure needs?

Accountability

- ❑ Have assessments been conducted at all levels of the system to ensure sufficient capacity to manage and monitor the flow of earmarked funds?
- ❑ Can earmarked revenues be accounted for at every step, from collection to expenditure?
- ❑ How will the institution that spends the earmarked revenues be accountable for results or outcomes?

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Executive Summary

Many countries are considering earmarking as a mechanism to increase fiscal space and mobilize resources for the health sector, to finance progress toward universal health coverage (UHC), or to fund other health priorities. Earmarking involves separating all or a portion of total revenue – or revenue from a tax or group of taxes – and setting it aside for a designated purpose. Earmarking has become part of the global discussion on domestic resource mobilization for health, particularly as countries transition from donor support and work to achieve health system goals as well as other targets. Earmarking is also increasingly used as an instrument of public health policy – to tax the consumption of unhealthy products such as alcohol and tobacco, for example.

The arguments for and against earmarking are numerous, but they often remain theoretical. Despite vast country experience with this policy instrument – at least 80 countries earmark for health – little empirical evidence has been introduced into the debate. Few studies have examined the characteristics of earmarking policies and which country contexts may be conducive to the beneficial use of earmarking.

This paper discusses the theoretical foundations of earmarking, and it analyses country experience with earmarking for health and its impact on health sector budgets and the broader fiscal environment. The goal is to provide useful information to health and finance authorities, and to the international partners who support them, on the practical realities of designing, adopting and implementing earmarking policies. It is not a quantitative analysis or in-depth study of any particular form of earmarking; rather, it highlights key characteristics of this tool and important factors to consider before deciding whether to implement earmarking for health.

The findings suggest that the results of earmarking for health are highly context-specific and dependent on a country's political priorities and budget process. In some cases, earmarking has been a tool to advance and sustain a national health priority. In Ghana, Estonia and the Philippines, earmarking for health has made it possible to launch or expand a national health insurance program – and in the case of South Africa, to mobilize an effective domestic response to the HIV/AIDS epidemic.

The findings also suggest, however, that in most cases earmarking is unlikely to bring a significant and sustained increase in the priority placed on health in overall government spending. Budgets are fungible, and earmarking one revenue source is likely to result in offsets through cuts in other sources. Furthermore, earmarking can introduce rigidity into the budget process, and the inefficiencies in some cases can be severe. Earmarking has been more effective when practices come closer to standard budget processes – that is, softer earmarks with broader expenditure purposes and more flexible revenue–expenditure links.

Preface

This paper was commissioned by the World Health Organization (WHO) and jointly prepared by Results for Development (R4D) and WHO's Department of Health Systems Governance and Financing. It is part of the Collaborative Agenda on Fiscal Space, Public Financial Management and Health Financing. A preliminary draft was presented at the second Collaborative Agenda meeting in April 2016, which included an in-depth learning exchange involving health and finance authorities from Ghana, Indonesia, the Philippines and South Africa.

The paper is a part of a package of resources that considers how public financial management (PFM) and health financing systems can be better aligned in support of universal health coverage (UHC).

The full package of resources includes:

- this **paper**, which reviews earmarking policies and offers practical tools based on country experience;
- a **paper** that provides a framework for aligning PFM and health financing systems, examines common challenges, and offers strategies for addressing those challenges; and
- a **process guide** that builds on the framework to help health and finance authorities engage in productive dialogue and work toward a joint policy roadmap to improve alignment between PFM and health financing.

These resources can be helpful to an array of stakeholders who are engaged in efforts to move toward UHC by bringing PFM and health financing systems into better alignment:

- **health policy-makers** who are working to ensure more efficient spending and increased allocation to priority populations, programmes and services;
- **public budget officials** who are charged with ensuring that expenditures in the health sector are transparent and accountable;
- **external partners and donors** who aim to help put more funds on budget and promote a sustainable transition to UHC; and
- **providers** who need more flexible financing arrangements so they can better align resources with population needs.

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For more information, please go to www.who.int/health_financing and www.jointlearningnetwork.org/earmarking.

Introduction

Many countries are considering earmarking as a mechanism to increase fiscal space and mobilize resources for the health sector, to finance progress toward universal health coverage (UHC), or to fund other health priorities. Earmarking involves separating all or a portion of total revenue – or revenue from a tax or group of taxes – and setting it aside for a designated purpose.[1] Earmarks can take many forms, depending on the revenue source and how funds are used.[2] (Annex 1 describes the typology of earmarking policies for health.) Earmarking has become part of the global discussion on domestic resource mobilization for health, particularly as countries transition from donor support and work to achieve health system goals as well as other targets, such as the United Nations Sustainable Development Goals. Earmarking is also increasingly used as an instrument of public health policy – to tax the consumption of unhealthy products such as alcohol and tobacco, for example.

Earmarking may have the appeal of bypassing the annual budget negotiation process and protecting a revenue stream for health, particularly in places where the budget process is weak and policy priorities and budget allocations are not aligned. But earmarking can create rigidity in budgeting, leading to inefficiency and reduced funding for other, possibly higher-priority or emergent, spending areas. Earmarking can also constrain the government's options for stabilization policies during economic downturns.

The arguments for and against earmarking are numerous, but they often remain theoretical. Despite vast country experience with this policy instrument – at least 80 countries earmark for health, as detailed in Annex 2 – little empirical evidence has been introduced into the debate. Few studies have examined the characteristics of earmarking policies and their results in practice.

Earmarking is often a political choice to signal and protect a priority. But it is also closely tied to a country's public financial management (PFM) system – the set of rules governing how budgets are formed, disbursed and accounted for. Earmarking can sometimes arise out of the failure of PFM systems to generate budget allocations that match policy priorities. In these cases, earmarking can improve the allocative efficiency of the budget (putting limited resources to their highest-value use).[3]

On the other hand, earmarking can affect the efficiency and effectiveness of PFM systems at each stage of the budget cycle and can introduce or exacerbate inefficiencies and rigidities in both PFM and health financing systems. For example, earmarking can introduce inefficiencies into the health financing system if it worsens fragmentation and limits pooling of health funds for redistribution to improve equity and financial protection.

This paper discusses the theoretical foundations of earmarking, and it analyses country experience with earmarking for health and its impact on health sector budgets and the broader fiscal environment. The goal is to provide useful information to health and finance authorities, and to the international partners who support them, on the practical realities of designing, adopting and implementing earmarking policies. It is not a quantitative analysis or in-depth

study of any particular form of earmarking; rather, it highlights key characteristics of this tool, practical country experience, and important factors to consider before deciding whether to implement earmarking for health.

This paper draws on a number of sources. One is a database of information on country experience that was assembled using a literature review. (It is shown in Annex 2 and is available at www.jointlearningnetwork.org/earmarking in an interactive format that allows users to update information on country experience.) Information on earmarking practices for health in Estonia, Ghana, Indonesia, the Philippines, South Africa and Viet Nam was gathered using a detailed questionnaire based on the earmarking typology described below and further detailed in Annex 1. (The questionnaire is included in Annex 3 and can be adapted for use by other countries in assessing their earmarking policies.)

Typology of earmarking for health

Earmarking can take one of two general forms. ***Revenue earmarking*** means ring-fencing, or protecting, all or a portion of a tax or other revenue source for a particular purpose. Revenue earmarking for health dictates what proportion of a specific revenue source should be allocated to the health sector in general or to a specific health programme, population or service. ***Expenditure earmarking*** means mandating a specific destination for a proportion of expenditure of general funds. Expenditure earmarking for health can specify the proportion of expenditure that should be allocated to the health sector in general or to a specific health programme, population or service.

The two types of earmarks can have different purposes, but their objectives often converge and overlap. Revenue earmarks are mainly used to raise additional funds through a particular source and make health a higher priority within the budget, or to protect the funds for a particular programme. Expenditure earmarks are often intended to improve accountability, help enforce priorities and make sure funds are allocated efficiently within the overall public budget and within the health budget. For instance, legislation in Indonesia mandates that 5% of the national budget be allocated to health and that districts allocate 10% of their nonsalary budgets to health. This kind of expenditure earmarking can also aim to maintain a degree of central authority over priority-setting in highly decentralized systems. This paper focuses primarily on revenue earmarking, but it analyzes country experience with both types.

Fig. 1 summarizes the full typology of earmarking used in this paper to define the characteristics, processes and results of earmarking policies for health. Table 1 provides a more detailed list of the revenue and expenditure characteristics of earmarking policies. The revenue characteristics of the earmark include the revenue source, the type of collection instrument (tax, fee or other), the tax or contribution rate, and how the revenues are collected. The expenditure characteristics of an earmark include the programme or activity that is being funded (expenditure purpose), how tightly the total amount spent on the programme or activity is linked to the revenue generated by the earmark (revenue–expenditure linkage), how tightly the benefits of the program or activity are linked to the individuals paying the tax, and the way total expenditures are managed.[4] Note that many of the general characteristics also apply to earmarking for government sectors other than health.

Fig. 1 **Basic typology of earmarking policies for health**

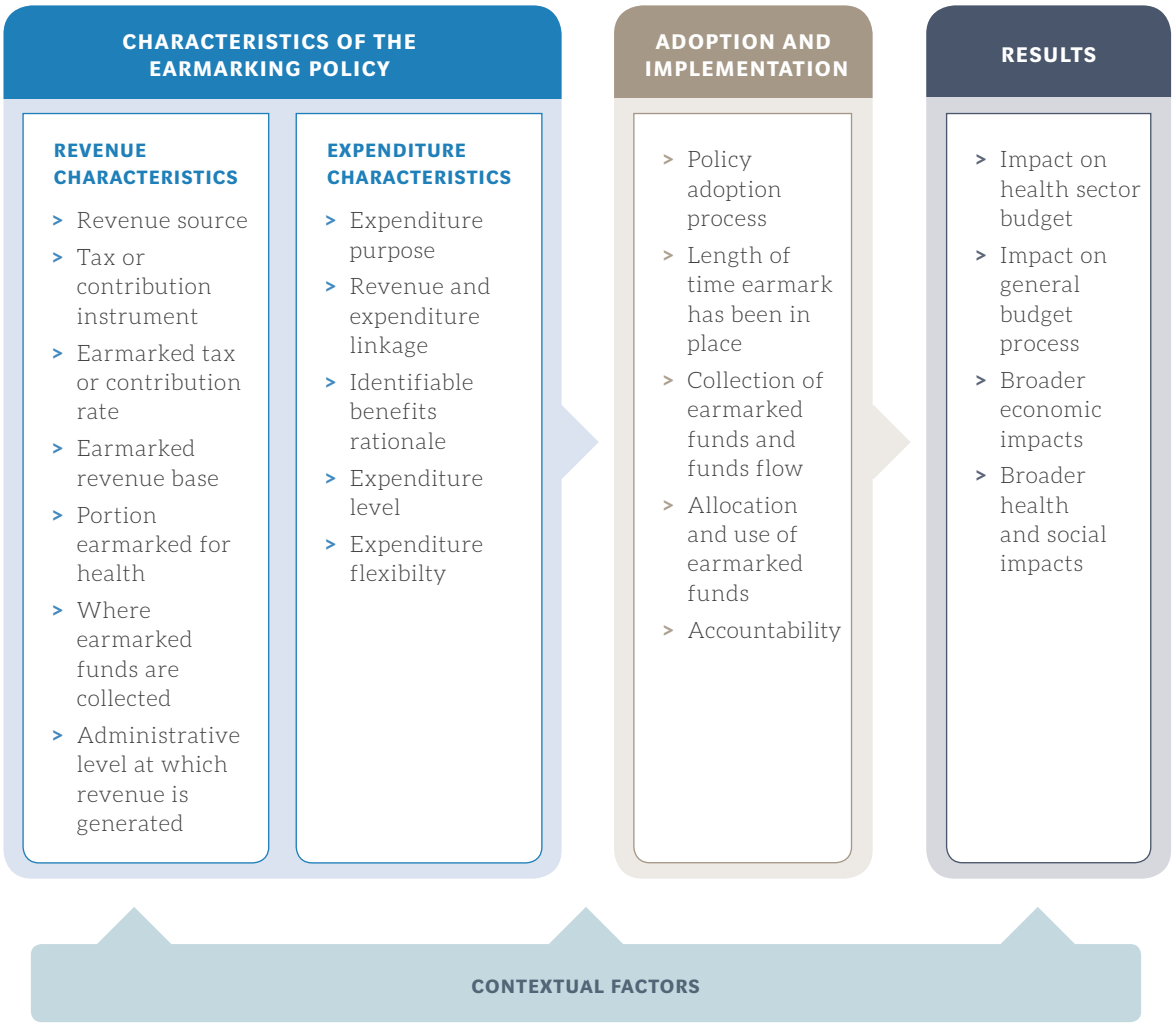


TABLE 1 **DETAILED TYPOLOGY OF EARMARKING POLICIES FOR HEALTH**

REVENUE CHARACTERISTICS	DESCRIPTION
Revenue source	
New tax or fee	Introduction of a new tax or fee or other revenue stream
Existing tax or fee	Increase in an existing tax or fee or other revenue stream
	Reallocation of a portion of revenue from an existing tax or fee
Intergovernmental fiscal transfer	Transfer of revenues from the national to the subnational level
Tax or contribution instrument	
Direct tax	Personal or corporate income tax (including payroll tax) or property tax
Indirect tax	Value-added tax
	Tobacco, alcohol or other "public health tax"
	Other consumption tax (e.g., "luxury tax," telecommunications tax)
General revenue	Specific stipulations on amount of revenue (or expenditures) going to health
External sources (official, multilateral, private aid)	Grants; bilateral, regional or multilateral aid or debt relief
Other (including sector- or activity-specific taxes or fees)	Natural resource taxes, financial transaction taxes, user fees, health insurance premium contributions, etc.
Earmarked tax or contribution rate	
Percentage	Percentage of total tax rate if a portion goes to health
Flat amount	Flat contribution from source (such as external aid)
Earmarked revenue base	
Overall resource base	Revenue stream to which the earmark is applied
Population	Population group that pays the tax
Portion of tax rate or contribution earmarked for health	Proportion of revenue collection that goes to health
Institution responsible for revenue collection	
General tax administration institution	General treasury fund (amount allocated in a budget line)
Extrabudgetary or "off-budget" fund	A fund that is outside the general budget
Revenue generation level	
Central government	Expenditure at the central government level
Subnational government	Expenditure at the state, province, district or local level
Intergovernmental fiscal transfer	
Matching requirement	In the case of intergovernmental fiscal transfers, the amount that the recipient level of government is required to match

EXPENDITURE CHARACTERISTICS	DESCRIPTION
Expenditure purpose	
General health sector	Health sector overall
Targeted: Specific programme(s)	Specific programme(s) within the health sector
Targeted: Specific population(s)	Specific population(s) within the country (such as the poor or the elderly)
Targeted: Specific population(s) within a specific health programme	Specific population(s) within a specific health programme (such as health insurance coverage for the poor or the elderly)
Multisector programme	Programme spanning multiple sectors that includes a health component (such as a school health programme)
Revenue and expenditure link	
Strong link	Revenue amount entirely determines expenditure amount, or expenditure determines revenue if the tax/contribution rate can be increased as expenditure increases
Weak link	Revenue does not determine expenditure; other revenue sources also fund the expenditure purpose, or earmarked funds can be reallocated to other purposes
Identifiable benefits rationale	
Yes	Direct connection between those who contribute revenues and those who receive benefits from expenditures
No	No direct connection between those who contribute revenues and those who receive benefits from expenditures
Expenditure level	
Central government	Expenditure at the central government level
Subnational government	Expenditure at the state, province, district or local level
Other	Expenditure by a semiautonomous organization, private entity, facilities, etc.
Expenditure flexibility	
Yes	Expenditures can be made flexibly within expenditure purpose
No	Expenditures must follow line-item or other restrictions within expenditure purpose

ANNEX 1 provides a more detailed description of the typology, including key aspects of adopting and implementing the earmark that can affect the results, such as which agency collects the revenue, how it flows through a country's PFM system to its ultimate use, and what accountability mechanisms are in place. Finally, the typology lists results of earmarking for health in terms of impact on the health sector budget, the general budget, and health and the economy in general.

Theoretical foundation and literature review

The theoretical foundation for earmarking is drawn primarily from literature on public choice and the theory of public finance. It generally assumes a direct revenue–expenditure linkage, in which the amount of revenue collected from an earmarked source completely determines the expenditure amount. However, this assumption does not always align with practice because earmarked revenue is often mixed with general revenue, creating fungibility across sources.

Most of the theory and related modelling focus on the effects of earmarking on the efficiency and level of government spending (both for the targeted programme and overall). The main question of interest is whether earmarking leads to an efficient or optimal allocation of public funds – that is, whether earmarked funds are directed toward their highest-value use. The early literature on earmarking, dating back to the 1960s, argues that the efficiency of government spending increases as the link between a tax and the resulting benefits becomes closer (the closest being user charges, as described in Box 1).[5] However, these models also predict that if the earmark remains in place without periodic evaluation as population needs change, the budget allocations resulting from the earmark could become inefficient.[6]

The theoretical literature offers no clear conclusions on whether earmarking increases government expenditure overall or spending on targeted programmes. Some empirical studies in the wider earmarking literature have found that while earmarking may increase government expenditure overall, it does not automatically increase expenditure for the target programme due to the fungibility of overall government budgets.[7,8,9,10] Furthermore, earmarking can actually decrease funding for the target programme if the earmarked revenues are more than offset by decreases in other revenue sources for the programme.[11,12] There may be other objectives for creating an earmark, such as improving the flexibility in how funds are used or simultaneously addressing a public health concern (as in the case of tobacco and alcohol taxes), but the evidence is also limited on how effectively earmarks meet these objectives.

Box 1 The benefits principle of taxation and UHC

The *benefits principle of taxation* states that the tax system is fairer if the burden of any given tax is borne by those who benefit most from the associated expenditure.[13]

For example, a greater share of admissions fees for public parks is paid by those who use parks more frequently. In line with this idea, an earmarked tax can be viewed as a user fee for a particular service. For example, a gasoline tax earmarked for road maintenance can be seen as a proxy for direct charges on highway users.[14] Payroll tax contributions that fund social health insurance for an individual are another example. The earmark imposes the cost of the benefits directly on the beneficiary and can therefore be seen as efficient.[15]

As countries work toward UHC, however, they need a financing system that collects revenue based on ability to pay and redistributes it across risk and income groups. Moving away from the benefits principle to generate revenue for UHC is critical for equity and sustainability.

Earmarking pros and cons

The debate about earmarking is a vigorous one. The main arguments for and against are summarized in Fig. 2.

Proponents of earmarking generally cite six potential advantages:

- Earmarking guarantees funding for a stated government priority that might be neglected if the link between policy and the budget process is weak. It can protect certain revenues from competing political interests and can bypass budget constraints mandated by the ministry of finance.[16]
- Earmarking can improve allocative efficiency of public expenditure by linking taxes more closely to benefits received (and thereby linking supply and demand), as in the case of collecting a user fee for a particular service. (See Box 1.) In a sense, revenue is collected from those who use a service in order to fund that service. (Examples include a gasoline tax earmarked to fund highway construction or social insurance contributions to fund individual health coverage.[17,18])
- Earmarking can reduce public resistance to taxation because of the link between a tax and a specific programme, particularly in the areas of health and education.[19] This link also makes politicians and service providers more accountable for delivering expected services.[20] As a result, people might feel more connected to the tax system.[21]
- Earmarking can help educate the public about the cost of a particular programme or service, which can be important when pursuing increases in health spending to finance health coverage expansion and overall progress toward UHC.[22]
- Earmarking can give governments greater flexibility in how they use funds, particularly if the country's PFM system is rigid and earmarked revenues are managed in an extrabudgetary fund. In the health sector, this can mean bypassing obstacles in the PFM system to implementing pooling and purchasing arrangements.[23]
- Earmarking can both improve public health (through negative financial incentives such as a tobacco tax) and direct resources from those engaged in unhealthy activities to fund the health sector that serves them, including health promotion or prevention programs.

Opponents of earmarking generally cite seven potential disadvantages:

- Earmarking introduces rigidities into the budget process. Those who believe that public spending should be determined by policy decisions and not by the amount of revenue raised by an earmarked tax[24] argue that earmarks can lead to inefficient, or even ineffective, allocation of resources. Within the programme funded by the earmark, this could mean that there is no spending cap and all of the money collected is spent without any going into reserve, or that the programme is underfunded (the earmark becomes a revenue ceiling rather than a revenue floor).
- Earmarked taxes can lead to distortions in the overall economy. In particular, earmarked payroll taxes can influence decisions people make about joining the formal labor force, which can lead to distortions in the labor market and contribute to increased informal employment.[25]
- Earmarked revenues are inherently procyclical – that is, they increase during times of economic expansion and decrease during economic downturns – and the rigidities they impose are more susceptible than other revenue sources to booms and busts.[26] They can also limit the government's ability to deal with economic cycles by adjusting spending in times of economic downturns (*economic stabilization*).[27] Depending on how the earmark is set, however, it might actually be intended to buttress the sector against government spending reductions. France, Hungary and Croatia all introduced new sources of earmarked revenues during the recent economic crisis as a way to generate resources for the health sector during fiscal downturns.[28]

- Earmarking can increase fragmentation in the budget process. In the case of health financing, having separate revenue sources for health can fragment pooling, and separating health from other areas of public spending can prevent integration of health policies with policies in other sectors that are also crucial to improving public health.[29]
- Earmarking can decrease the feeling of shared responsibility for financing public services by defining each individual's share of or eligibility for a particular service or sector based on revenues contributed.[30] This is pertinent when considering contributions for national health insurance, where need is not linked to ability to pay.
- Earmarked revenues can be susceptible to the influence of interest groups and professional lobbies that might work to obtain resources for their own benefit or for their own priorities without considering the broader effects.[31]
- Earmarked funds might not be additional to existing funds because they can be diverted to other activities or be offset by reductions in funding from other sources, such as general revenue.[32]

FIG. 2 **EARMARKING PROS AND CONS**

ARGUMENTS FOR	ARGUMENTS AGAINST
Revenue protection Earmarking can protect funding for a specific programme or service by ring-fencing it from competing political interests and bypassing budgetary constraints.	**Budget rigidity** Earmarking creates rigidities in the budget that can lead to inefficient allocation of resources.
Efficiency Linking taxation more closely to benefits can increase the efficiency of public expenditure.	**Economic distortion** Earmarking can lead to distortions in the overall economy.
Public support Linking taxation more closely to benefits can soften public resistance to taxation.	**Procyclicality** Earmarked revenues are inherently pro-cyclical and therefore susceptible to booms and busts. They can reduce government flexibility in managing economic downturns.
Accountability Linking taxation more closely to benefits can increase accountability.	**Fragmentation** In the case of health financing, separating health care from other areas of public spending can limit coordination across social sectors.
Cost awareness Earmarking can help educate the public about the cost of a particular programme or service.	**Decreased equity** Equity may decrease if what is paid by individuals narrowly defines their access to benefits, with no cross-subsidies.
Flexibility Earmarking can allow funds to be used more flexibly (for example, by keeping the funds off-budget and thereby avoiding restrictions that limit pooling and purchasing arrangements).	**Susceptibility to special interests** Earmarked revenues can be particularly susceptible to the influence of health groups and professional lobbies.

The arguments for and against earmarking apply to any sector, not just health, and their relevance depends on the type of earmark and the programme being funded.[33] For instance, the use of tobacco tax revenues for anti-tobacco public education programmes might be more politically acceptable than an earmarked payroll tax to fund national health insurance. In the first case, smokers are funding a specific programme aimed at curbing smoking, which can also have positive spillover effects for the rest of the population. In the second case, the link between the level of contribution and the benefits received is less direct, due to variations in health care needs and use. Furthermore, these arguments apply specifically to the practice of earmarking – not to the country's tax system as a whole or to the various revenue sources themselves, which can be affected positively or negatively by earmarking. (See Box 2 .)

Box 2 **Efficiency and equity of revenue sources for earmarking**

All potential revenue sources for the health sector come with tradeoffs for the broader economy. For instance, almost all taxes impose some inefficiency on the economy because they cause people to change their behavior. Taxes can also impose unequal burdens on households of different income levels. In general, a tax improves equity if it is progressive – that is, if it imposes a proportionately higher burden on wealthier households. A tax worsens equity if it is regressive – that is, if it puts a disproportionate burden on poorer households. The net efficiency and equity effects of taxes result from the burden of the tax and any distortions they create in the economy combined with the equity and efficiency effects of the benefits they finance.[34]

Earmarking can add to the tax burden if it is related to a new tax, or it can exacerbate or mitigate underlying issues in the system. For example, if a tax is regressive, earmarking a portion of the revenue from that tax may make the tax itself more or less regressive depending on which population groups benefit from the earmark expenditures. (This is known as *net incidence impact*.) In the case of earmarked tobacco taxes, the tax itself may put a disproportionate burden on the poor, who spend a larger share of their income on cigarettes than the wealthy. That regressive effect might be mitigated, however, if the earmarked revenue from the tobacco tax is directed toward a programme that disproportionately benefits the poor and/or disproportionately reduces their future health risks. As with all government health spending, additional revenue collected through earmarked sources can have a positive influence by helping to decrease out-of-pocket spending, which contributes to economic distortions, inequity and possibly impoverishment.[35]

Empirical evidence on earmarking for health

Countries that earmark revenues for health typically do so with the expectation that total funding levels for the health sector, or programmes and services within the sector, will increase in absolute terms beyond what would be derived from overall government budget growth rates. There is a related expectation that the relative priority placed on health within the budget will increase and that it will be protected from funding cuts. From the scant empirical evidence available, it is difficult to determine whether this objective is typically achieved and which design features, implementation arrangements or contextual factors play a key role. There is also little evidence regarding inefficiencies, distortions or rigidities that have resulted from earmarking for health.

Japan-World Bank Partnership Program on UHC study

A study of 11 countries working toward UHC – the Japan-World Bank Partnership Program on UHC study – examined whether political commitments to UHC were accompanied by specific financial commitments in the form of earmarks and whether the earmarks helped generate revenue for UHC. The study did not find a strong relationship between earmarking, revenue generation for the health sector and achievement of UHC goals.[36]

In Brazil, for example, evidence shows that earmarking a share of national and subnational government expenditure for health did not bring the intended funding increase for the health sector. While this expenditure earmarking did not identify a new source of revenue, it was meant to protect expenditures for the health sector in the face of decentralization. As part of 1996 legislation transferring much of the responsibility for managing and financing health care to states and municipal governments, minimum health spending thresholds were set. States are required to allocate at least 12% of their total budget to health, and municipal governments are required to allocate 15%. For the federal government, the previous fiscal year's allocation must be maintained, adjusted by the nominal change in the gross domestic product (GDP). Although municipalities consistently meet or exceed their health earmark requirements, spending has not kept up at the state and federal levels. At the state level in particular, a broad interpretation of health spending has reduced the available resources for the Unified Health System.[37] In Thailand, by contrast, the lack of specific financial commitments to UHC through earmarks has not been an impediment to achieving and sustaining universal coverage.

The study also found that although many countries continue to use earmarked payroll taxes to raise money for the health sector, globally the overall importance of earmarked payroll taxes as a share of total health sector revenue has been declining. There are many reasons for this, including the distortions that these taxes have caused in the labor market and the narrow revenue base they provide in many countries due to large informal sectors.[38] France and Japan, for example, are seeking to reduce overreliance on earmarked payroll taxes to fund the health sector because payroll taxes not only have led to labor market distortions but also no longer generate enough revenue to cover health needs due to aging populations no longer participating in the labor force.[39] Countries with a large informal sector, such as Thailand, have also found it difficult to expand coverage through payroll taxes alone and have expanded their allocation to health through general revenues.[40]

WHO tobacco tax earmarking case studies

WHO produced a series of case studies on earmarking tobacco tax revenues in Botswana, Egypt, Iceland, Romania, Poland, the Philippines, Viet Nam, Thailand and Panama.[41] These case studies examine the political factors and legislative processes involved, the revenue-generating potential of the earmark, and the overall effect of the earmark on the budget and on public health. (The findings are presented in more detail in Annex 4.)

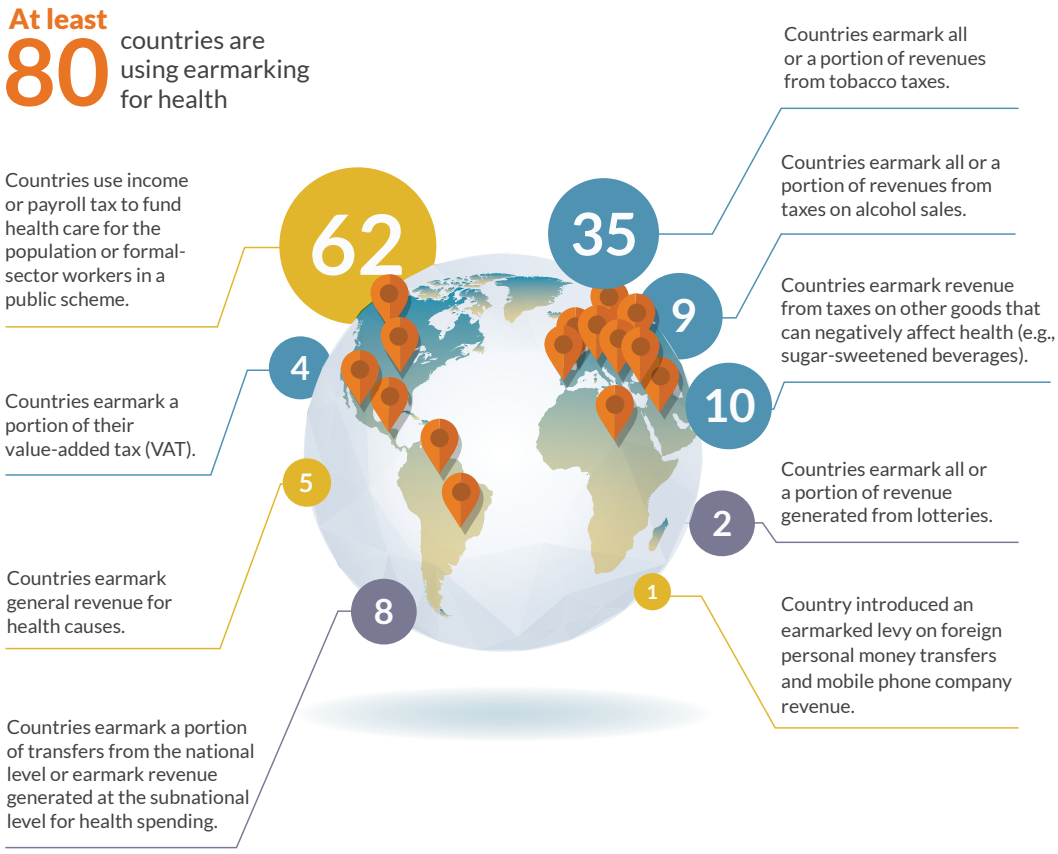
Tobacco taxes have the potential to increase government revenues, but the amount of money they raise is generally small in relation to the overall government health budget. Among the countries studied, funds from earmarked tobacco taxes as a percentage of general government expenditure on health ranged from 0.001% in Poland to 1.3% in Panama in 2013. While no data were available for the Philippines and Botswana, in the Philippines other evidence has shown that newly introduced taxes on tobacco products have generated significant revenues.[42] (See the Philippines case study.) The case studies also reveal issues with translating those tax revenues into increased funds for the health sector. Even in the Philippines, where incremental revenues from tobacco and alcohol tax revenues are earmarked to finance UHC, the funds are not automatically released to the Department of Health. The Department of Budget and Management has some discretion over the size and timing of allocations for health, particularly in instances when the Department of Health is not able to fully spend the previous year's budget for health. In Botswana, earmarked tobacco funds do not always reach the health sector because of PFM issues; there have been instances where funds have been left in an account for more than a year because no mechanism was available to channel them to the Ministry of Health.

Importantly, in the case of earmarked tobacco taxes, the case study findings belie the assumption that finance and health authorities have opposing views on earmarking. Their respective positions are driven by important contextual factors that are not captured in the largely theoretical debate. There is some evidence that in places where revenues are channeled directly into an autonomous or semiautonomous fund dedicated to specific public health or prevention activities, those revenues are able to add funding for health. Hard earmarking (where the earmark is the main or only revenue source for a particular service or programme and the revenue cannot be allocated to any other purpose) with a direct benefits rationale can lead to greater accountability in the use of funds for their intended purpose. The case studies highlight the need for more in-depth country studies to better understand the potential impact of earmarking on health budgets.

Earmarking policies for health

A review of journal articles, gray (informal) literature, government policy documents, news outlets and websites for this paper identified at least 80 countries as having documented policies that earmark revenues or expenditures for health.[43] (See Fig. 3.)

Fig. 3 **How countries use earmarking for health**

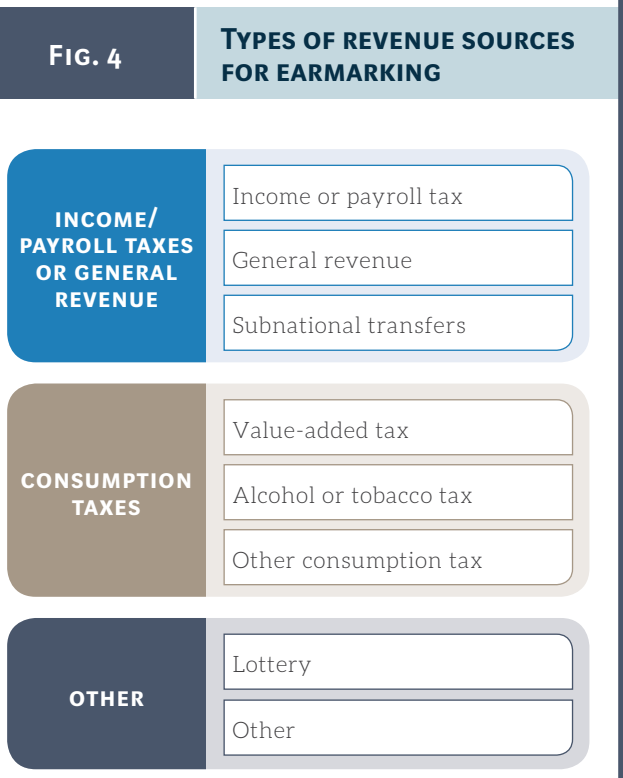


Source: www.jointlearningnetwork.org/earmarking

The review collected as much detail on the policies as possible, using the earmarking typology.[44] The results of the review are presented in more detail in Annex 2 and are available in database form on the Joint Learning Network (JLN) portal (www.jointlearningnetwork.org/earmarking); the database is continually updated as other earmarking policies are identified.

The revenue sources related to earmarking for health that are captured in the database fall into three general categories, as depicted in Fig. 4.

Fig. 4 Types of revenue sources for earmarking



Income/payroll taxes or general revenue

The most widely used earmarking instrument for health is an earmarked payroll or income tax to fund social health insurance. The review identified more than 60 countries that earmark payroll or income tax revenues for health. Earmarked payroll taxes are typically levied on both employers and employees and go toward coverage of formal-sector workers in a social health insurance scheme. The earmarked revenues are typically combined with general tax transfers to reach priority populations, such as the poor or the elderly.

Some countries earmark broader-based income taxes to fund health insurance coverage. In Denmark, a national 8% income tax is earmarked for health by the central government and then redistributed to five regions and 98 municipalities through a risk-adjusted capitation formula and some activity-based payments.[45] France's national health insurance system was funded almost exclusively by an earmarked payroll tax until 1998, when the funding source shifted to a more general earmarked income tax (the General Social Contribution), which is levied not only on wage income but also on income from financial assets and investments, pensions, unemployment benefits, disability benefits and gambling.[46] In Zimbabwe, a 3% personal and corporate income tax funds the Zimbabwe National AIDS Trust Fund.[47,48]

Three countries – Brazil, Indonesia and Viet Nam – earmark expenditure generally for health by specifying the share of total government spending that should be allocated to the health sector. Bolivia also earmarks general revenue for immunization. A government resolution in Viet Nam mandates that increases in total government health spending cannot be less than the increase in total government spending; this ensures that the health sector's share of total government spending cannot decrease.[49,50,51] India, Indonesia, Uganda, and four countries in Latin America – Bolivia, Brazil, Colombia and Mexico – earmark a portion of transfers from the national government to subnational governments for spending on health. South Africa earmarks expenditure within the health budget to specific activities, such as HIV/AIDS.

Consumption taxes

Earmarking all or a portion of consumption taxes is a common practice, particularly in countries with a large informal labor force or other obstacles to collecting direct taxes.[52] Four countries earmark a portion of the value-added tax (VAT) for the health sector. Chile earmarks 1% of the VAT to finance a set of guaranteed services (known as AUGE). Ghana earmarks 2.5 percentage points of the total 17.5% VAT to fund the National Health Insurance Scheme (NHIS). Iran earmarks 1% of the VAT for health as a way to finance its Health Sector Evolution Plan.[53] In Italy, 38.5% of the VAT is earmarked for a national equalization fund to help regions that cannot raise sufficient resources provide the core health benefit package.[54]

Taxes on goods that adversely affect health, most notably tobacco and alcohol, are widely used. (These are also known as "sin taxes" or public health taxes.) More than 30 countries earmark all or a portion of revenues from tobacco taxes for health. Nine countries earmark tax revenue from sales of alcohol for health, and 10 others earmark taxes on other goods that can negatively affect health (such as sugar-sweetened beverages). In some of the countries that earmark sin taxes, the revenue is directed toward health promotion or prevention efforts, which are considered underfunded relative to personal health services. In Thailand, the Thai Health Promotion Foundation is funded directly through a 2% earmarked tax on alcohol and tobacco.[55] In Viet Nam, the Vietnam Tobacco Control Fund is financed by a 1% earmark of the tobacco tax revenues; the amount will increase to 2% by 2019. In Nepal, all revenues from the tobacco tax are earmarked for cancer control.[56]

Several countries – including Egypt, France, the Philippines and Turkey – use earmarked tobacco tax revenue to fund part of their national health insurance programme. Egypt uses earmarked tobacco tax revenue to subsidize insurance for students. In 2012, Philippines passed the Sin Tax Reform Bill, which increased tobacco and alcohol excise taxes. The additional revenues are earmarked for the health sector to pay for expanding coverage for the poor in the national social health insurance fund (PhilHealth) and to scale up noncommunicable disease prevention services within primary health care.[57] Alcohol taxes are earmarked for the general health sector budget in Colombia, Guatemala and Mexico.

Other revenue sources

Countries earmark other revenue sources for health. Gabon imposes a levy on foreign personal money transfers and mobile phone company revenues, earmarking the revenue for health coverage for the poor. Bolivia and Ghana have earmarked a share of savings from debt relief for the health sector. Bhutan has the world's longest-running health trust fund, which covers the cost of some immunizations and essential medicines.

Design, implementation and results of earmarking in six focus countries

The experiences of six countries explored in depth for this paper – Ghana, Estonia, Indonesia, the Philippines, South Africa and Viet Nam – offer insights into the design, implementation and results of earmarking. (See Table 2.) These countries were selected because they represent experience with a range of earmarking instruments. All of the countries use earmarks for relatively broad expenditure purposes except Viet Nam, which earmarks a portion of the tobacco tax to fund a tobacco control programme. A key objective of the earmark in Ghana, Estonia, Indonesia and the Philippines has been to advance progress toward UHC or specific health goals.

Information about how each earmark was adopted, how it was designed, the implementation arrangements, and results for health sector budgets and broader fiscal consequences was collected via three sources:

- A review of the published literature and government documents.
- A questionnaire completed in writing or through interviews with health and finance stakeholders in the country, such as representatives from the ministry of health, the health programme funded by the earmark, the ministry of finance and revenue authorities. (See Annex 3.)
- A facilitated workshop at which health and finance stakeholders from Ghana, Indonesia and South Africa shared their experiences with earmarking.

Table 2 **Earmarking for health in six focus countries**

Country	Earmarking policy	Revenue source	Expenditure purpose	Implementation arrangements	Results
Estonia	Earmarked payroll tax to fund health insurance coverage	Health and pension contributions at 13% and 20%, respectively, of employee wages and self-employed earnings	Estonian Health Insurance Fund	Collected as part of mandatory social tax. In practice, employers contribute on behalf of employees; self-employed workers pay fixed premiums to obtain coverage.	Provides more than 90% of Estonian Health Insurance Fund budget and has helped advance priorities. In 2016, for the first time, payroll tax contributions did not cover expenses, but the shortfall was covered by reserves. No ability to increase contribution rate.
Ghana	Revenue earmarks to fund the National Health Insurance Scheme	2.5 percentage points of the 17.5% VAT; 2.5 percentage points of the social security contribution (SSNIT)	National Health Insurance Scheme; 10% of earmarked revenue allocated to the MOH for emerging priorities	Funds collected by Ghana Revenue Authority and SSNIT; the MOF allocates all funds directly to the National Health Insurance Fund.	Provides 90% of NHIS budget, but overruns have occurred; earmark largely credited with making the NHIS financially feasible given other budget rigidities.

TABLE 2 **EARMARKING FOR HEALTH IN SIX FOCUS COUNTRIES** (CONT'D)

COUNTRY	EARMARKING POLICY	REVENUE SOURCE	EXPENDITURE PURPOSE	IMPLEMENTATION ARRANGEMENTS	RESULTS
Indonesia	Payroll tax to fund health insurance coverage; general revenue and expenditure earmarking to ensure adequate funds for health at the national and subnational levels	Payroll (5% of formal-sector salaries, with 3% employer contribution and 2% employee contribution), general revenue (5% national, 10% district), tobacco (10% provincial, 2% central excise tax)	Payroll tax: national health insurance scheme (Jaminan Kesehatan Nasional, or JKN) Expenditure earmarks: general health sector	Depending on source, funds are collected and disbursed by central, provincial or district authorities. Tobacco tax revenue is allocated at a differential rate based on whether an area is tobacco producing.	Expenditure earmarks are difficult to track at the subnational level; little idea at the central level of how funds are spent throughout the system and poor understanding throughout the system of how they can be spent.
Philippines	Earmarked public health tax to help achieve UHC through subsidized insurance coverage for the poor	100% of incremental alcohol tax revenues and about 85% of incremental tobacco tax revenues	80% to PhilHealth, 20% to the Department of Health for other programmes	Despite legislation, this is a soft earmark with allocation determined annually by the Department of Finance and the Department of Budget and Management.	Led to a large increase in revenue for health (revenue tripled between 2012 and 2016), increased PhilHealth coverage and led to a decline in tobacco consumption.
South Africa	Limited revenue earmarking; expenditure earmarking to advance national priorities such as HIV/AIDS response	20% of health funds come through earmarked conditional grants	Expenditure earmarked for specific health sector priorities, including HIV/AIDS conditional grants to provinces	Expenditure earmarks undergo regular amendment and update; revenue earmarks do not.	Expenditure earmarks have improved accountability in a highly decentralized system, but priorities are changing. Revenue earmarks have caused rigidities.
Viet Nam	Earmarked public health tax to generate sustainable funding for tobacco control following ratification of the WHO Framework Convention on Tobacco Control	Compulsory contribution by tobacco industry of 1% of factory prices of all cigarettes produced locally or imported; fund is also open to voluntary contributions from national and international organizations and individuals	Tobacco control	The national Vietnam Tobacco Control Fund is directly under the management of the MOH with oversight from a management board and is subject to regular financial management regulations established by the MOF. Receives compulsory contributions as a separate financing stream.	Provides regular, predictable funding for tobacco control.

Adopting earmarks for health

The political context at the time an earmark is proposed affects whether it will be feasible and accepted by finance officials and other stakeholders. The six countries had these conditions in common:

The earmarks were adopted at a time when the health and finance authorities had aligned objectives. This alignment helped garner political support for a high-priority health initiative and enabled a needed increase in government revenue. Aligning objectives has been especially helpful in leading finance authorities to accept the fiscal consequences of earmarking. Nearly all of the finance authorities in the focus countries said that earmarking is generally not a preferred policy due to the inflexibility it introduces into the budgeting and planning process. But when the expenditure purpose is a high national priority, they have been willing to work with health authorities to develop and adopt earmarking policies.

In some cases, dedicating new revenue to a popular health initiative has made a tax increase that was desired by finance authorities politically acceptable. In Ghana, attempts by the Ministry of Finance to increase the VAT were politically unpopular until that increase was tied to funding the National Health Insurance Scheme. The incoming government built popular support for the VAT increase on a platform of removing the old "cash-and-carry" health system, which was funded largely through out-of-pocket payments. In the Philippines, support for an increase in the tobacco tax depended to a large extent on dedicating the additional revenues to expanding national health insurance coverage for the poor.

The political viability of the earmark depended in large part on the revenue source. The level of public and government support can hinge on whether the source is a tobacco tax, another indirect consumption tax or a payroll tax. In the Philippines and Viet Nam, having the source of funds be a tobacco tax was crucial to garnering public support, despite opposition from industry groups. In Ghana, earmarking the VAT was politically acceptable because the tax was not regressive at the time – the poorest households were not participating in the formal economy. That could change as Ghana continues its rapid economic development. Indonesia's recent efforts to create a mandatory national social health insurance scheme that integrates existing schemes (one of which is funded by a formal-sector payroll tax) were hampered by difficulties in raising revenue because each scheme has its own revenue source and set of rules and operating principles.[58] Whether the earmark represents a new source of revenue or an existing source also has implications for public support.

Designing and implementing earmarks for health

How earmarks for health are designed and implemented contributes to how effectively they can advance or protect a health sector priority and how much rigidity and inefficiency they introduce into the budget process. Countries that have used earmarking effectively have carefully weighed the following design considerations and have been most effective when they avoid extremes.

An expenditure purpose that is not too broad or too narrow. In Ghana, Estonia, Viet Nam, the Philippines and South Africa, where earmarks have helped advance a health sector priority without introducing excessive inefficiency or economic distortions, the expenditure purpose of the earmark has been narrow enough to be enforceable and to link funding clearly to activities and results but not so narrow as to exacerbate rigidity. National health insurance coverage (Ghana, Estonia and the Philippines) and HIV/AIDS response (South Africa) are clear expenditure purposes and the results of spending can be tracked, but spending on priorities within those programmes can be adjusted. When the expenditure purpose is too broadly defined (as in the case of subnational transfers in Indonesia earmarked broadly for health), the potential for fungibility increases and the earmark is more difficult to enforce and account for. This can be particularly true in complex, decentralized settings or where public financial management systems are weak.

A strong but flexible revenue–expenditure link. Countries that have had more positive experiences with earmarking for health have found an appropriate link between the earmarked revenues and expenditure for the targeted priority or programme. Their experience suggests that countries should avoid the extremes of having revenue completely drive expenditure (possibly leading to inefficiencies or underfunding of the programme) or having expenditure drive revenue (leading to increases in the tax or contribution rate).

In Ghana, the revenue from the earmarked VAT and social security contributions accounts for about 90% of revenues for the NHIS. (See Table 2 and Annex 5.) The direct link between revenues from earmarked sources and actual expenditures, combined with no explicit expenditure cap or other expenditure control measures, has led to deficit problems for the NHIS because revenues have not grown as rapidly as expenditures. The reserve fund for the NHIS was depleted and then the NHIS went into arrears, requiring a government bailout in 2015 to save the scheme from collapse. In Estonia, the payroll tax earmark has effectively become a revenue ceiling rather than a revenue floor for the national health insurance system. Revenue from payroll tax contributions has not been sufficient to cover expenses since 2013. As a result, policy-makers are working to broaden the revenue base to address the structural deficit.

Some flexibility to reallocate funds to emerging priorities. The countries that have managed earmarks most effectively have "release valves" that allow the revenue to be reallocated to other purposes if new priorities arise. Estonia maintains a reserve fund for the Estonian Health Insurance Fund consisting of accumulated earmarked revenues, and during the 2009 economic crisis it tapped these funds to pay for health sector priorities as a way to help maintain overall fiscal balance in the country. In Ghana, 10% of the earmarked revenues from the VAT for the NHIS are directed to the Ministry of Health to fund emerging priorities. In the past, the funds were used to develop primary care infrastructure, and recently they were allocated to fund vaccines as part of the transition from Gavi Alliance support. In the Philippines, the alcohol and tobacco tax earmark is a "soft" earmark that can be reallocated to other priorities, but by law they must be related to health.

Strong PFM and governance systems. The time it takes for funds to flow to the expenditure purpose and whether they are put to use depends on the strength and governance of PFM systems, the use of mechanisms such as extra-budgetary funds and the absorptive capacity of the spending agencies. In the Philippines, increases in tobacco and alcohol excise tax revenues exceeded projections, and the Philippines Health Insurance Corporation (PhilHealth), which received most of the funds, initially had more premium payments for the indigent population (covered by the earmark) than payouts in benefits. The legislation requires PhilHealth to maintain a reserve fund, and the excess premium revenue contributed by the earmark initially exceeded the legal limit of the reserves. Expenditures on benefits have since caught up to premium revenues.

In Indonesia, district governments that receive allocations for health from the central government have not always spent all of the earmarked funds, due to lack of specificity and direction. The country has experienced significant challenges with monitoring expenditure compliance at the district level, with little clarity on what districts are allowed to spend funds on and generally limited PFM capacity to monitor and implement use of the funds. Central-level indicators track only the disbursement of funds, so the only way to verify actual expenditures is through external government audits.

In Ghana, on the other hand, the earmarked VAT revenues are carefully managed through the PFM system up to the point of release to the National Health Insurance Fund (NHIF), where funds can be managed flexibly to pay health care providers delivering services under the NHIS. The revenues appear in the annual consolidated government budget and flow through the Ghana Revenue Authority account and into the NHIF, an extrabudgetary fund that allows for more spending flexibility, particularly for strategic payment methods, such as capitation and case-based payment, to health care providers. Up to this point, the funds are under the direct oversight of the controller and the Accounts General Department. Nonetheless, there can be delays of up to two months during the transfer process; sometimes the full amount of expected funds is not available because Ministry of Finance revenue projections have not been met, and at other times the scheme receives more funds than requested.

Use of earmarks to improve transparency and accountability measures. While earmarking can reduce transparency and accountability, some countries make sure that earmarking helps improve transparency and accountability, as in South Africa, where it has led to improved reporting systems. The HIV conditional grants are managed through a careful accounting system that districts and provinces must use to report how the funds are used in support of HIV efforts. Indonesia has tried something similar through a subnational expenditure earmarking policy, but it has had difficulty monitoring results; this indicates that absorbing or accounting for additional funds outside of the regular PFM system can be challenging in complex or decentralized environments. In Ghana, Estonia and the Philippines, earmarks are tied to the delivery of a specific benefits package, so service usage can be tracked. This provides more accountability than health funding through line-item budgets, which makes it difficult to link funding to actual services provided. The challenge of setting the right level of accountability metrics applies to the entire health sector, not just to earmarking policies.

A clear time horizon for the earmark. The duration of the earmarking policy – the period after which it should be reviewed and subject to reapproval – may be important for its efficiency and effectiveness. In South Africa, revenue earmarks are not subject to regular review, but expenditure earmarks undergo regular amendment and updates, with parliamentary earmarks subject to review each year; treasury earmarks included in the three-year medium-term expenditure framework can be revised at any time. During review, about 80% of earmarks are carried over in their existing form, and 20% are revised. Time limits or mandatory periodic reviews would technically allow the government to reassess policy priorities and whether the earmark is still needed to advance stated priorities. However, there are indications in South Africa that the inability to reallocate away from HIV-specific expenditures toward more broad-based health system strengthening activities is increasingly an issue for provincial, district and facility managers.

In Estonia, about 95% of the population is insured, and expanding coverage to the remaining "gap" population is difficult because these people are generally unemployed despite being of working age. The earmark is strict, with limited ability to increase the payroll tax contribution rate. The government is currently considering options to broaden the revenue base for health insurance, including having pensioners begin making contributions.

Results of earmarks for health

It is difficult to generalize about the results of earmarking, but a number of results have been observed in the six focus countries.

Potential for short-term increases in fiscal space for health. Earmarking has created fiscal space for health in some circumstances. In the Philippines, a large increase in the tobacco tax translated into a large increase in revenue for the health sector. In Ghana, a marginal increase in the VAT increased general government revenues and revenues for health. In South Africa, the HIV conditional grant has raised additional funding for HIV. It is unclear how stable, sustainable and sufficient these revenues will be over the long term and whether the higher priority in budget allocations can be sustained. In Ghana, even though additional revenues have been generated by the earmark, there is some indication of fungibility in the Ministry of Health budget that funds some programmes, such as immunization, and some operational costs of public providers. The total allocation to health as a share of government expenditure has returned to pre-earmark levels, so the earmark for the NHIS has effectively led to a reprioritization *within* the health sector rather than between health and other sectors. In Estonia, a reform is underway that will decrease the share of earmarked payroll taxes to fund the health insurance fund and increase reliance on general revenue allocations. This experience is observed in other countries as well. According to budget figures in Gabon, the initially increased funds for the health sector as a result of the new earmarked tax on mobile phone company revenues have been washed out, with overall health sector budget resources returning to the levels before the earmark was introduced.[59]

Opportunities for increased efficiency in the use of health funds. Much of the rhetoric around earmarking focuses on the rigidities and inefficiencies it introduces into the overall budget process, but in some instances it actually allows for greater flexibility in how funds are allocated and used by the health sector. Estonia, Ghana and the Philippines channel earmarked funds to an extrabudgetary fund rather than directly through the ministry of health's line-item budget, which has led to greater flexibility in how the health sector can use those funds. Earmarks managed in this way can facilitate certain approaches getting more value for money and managing cost escalation such as output-based provider payment methods and other strategic purchasing mechanisms. Furthermore, earmarked revenue managed in an extrabudgetary fund typically can be carried over from year to year, which can help manage the unpredictability of health expenditures and allow any savings from improved efficiency to be retained in the health sector.

This flexibility must be balanced with strong accountability measures. In all three countries, the earmarked funds are consolidated in the overall government budget until the point of transfer to the spending agency, where more flexibility is allowed, along with accountability measures. Clear lines of responsibility and tracking of funds flows provide a counterweight to the increased flexibility made possible through the extrabudgetary funding approach.

Unclear impact on equity and efficiency of the revenue source. Earmarking can either enhance or mitigate equity and efficiency impacts of the underlying revenue source. The VAT in Ghana is mildly progressive, and targeting the earmark to NHIS coverage for the poor makes it more so. However, wealthier households tend to use NHIS services more than the poor, so the net impact on equity is unclear.[60] In Estonia, the payroll tax is regressive and creates some distortions in the labor market, and subsidies from general revenues are intended to generate additional revenues for the EHIF and not to improve equity of coverage.

Some evidence of impact on health system goals. The experience with earmarking in the six focus countries reflects government commitment to health goals and progress toward UHC, but it is difficult to find a correlation between earmarking policies and outcomes because many factors affect outcomes. The Philippines has reported progress on reducing smoking prevalence related to the increase in the tobacco tax and earmark. In the Philippines and Ghana, health insurance coverage has increased as a result of the earmarked revenues. In both countries, access to health services, particularly for the poor, has increased.[61,62] Whether these results could have been achieved without earmarks is unknown, but in the case of Ghana there is broad consensus that the NHIS could not have been established or sustained without the earmark, in part due to rigidities in the budget.

Findings and conclusions

The results of earmarking for health are highly context specific and dependent on a country's political priorities and budget process. In some cases, earmarking has been a tool to advance and sustain a national health priority. In Ghana, Estonia, the Philippines and South Africa, earmarking for health has made it possible to launch or expand a national health insurance programme and make progress toward UHC – and in the case of South Africa, to mobilize an effective domestic response to the HIV/AIDS epidemic.

The conditions in these countries are unique, however, and in each case broad political and popular support for the programme funded by the earmark and a close partnership between the ministry of health and the ministry of finance have been crucial enabling factors. The earmarking policies in these countries define a focused but relatively broad expenditure purposes (such as funding national health insurance coverage) and allow some flexibility to reallocate earmarked funds if other urgent priorities emerge. In all cases, the budget rigidity introduced by the earmark was not considered "effective rigidity" (in that government officials felt constrained in their allocation and spending decisions due to the earmark) because the expenditure purpose of the earmark was a high national priority and/or helped the ministry of finance achieve broader fiscal goals.

The findings are less clear on whether earmarking for health can bring a sustained increase in government revenues allocated to the health sector, particularly as a relative share of total government spending, because it is impossible to know the counterfactual scenario in which earmarking policies have not been pursued. Budgets are fungible, and earmarking one revenue source is likely to be offset by cuts in other sources. Furthermore, rigidity in the budget process due to earmarks might increase over time, and the inefficiencies in some cases can be severe. The narrower the expenditure purpose of the earmark (such as a narrowly defined programme within the health sector), the greater the rigidity and potential inefficiencies.

The experiences of the six focus countries suggest that the time horizon for earmarking to be effective might be limited because priorities change, the likelihood of offsets in other parts of the health budget increases over time, and budget rigidities can lead to inefficiency. In South Africa, priorities have changed since the HIV/AIDS response has become institutionalized and routinely operational, so the government is considering ending the earmark and folding funds for the programme into general financing for primary health care at the provincial level. In Ghana, after 13 years of earmarking to fund the NHIS, offsets in other parts of the health sector budget are leading to reprioritization *within* the health sector, with possible implications for allocative efficiency. Concerns are emerging that other health priorities, such as immunization, may be suffering. In Estonia, the budget rigidity introduced by the earmarked payroll tax is preventing achievement of full universal coverage because of the perception among the population of a tight link between contributions and benefits. As a result, increases in general revenue financing have not been a policy priority.

The findings overall suggest that earmarking is not a panacea; rather, it can be a useful tool in some countries that are seeking to mobilize resources for a particular policy priority without working through the overall government budgeting process, particularly when the link between budgeting and policy is weak or when other external pressures interfere with effective priority-setting. Earmarking can also be a politically expedient choice to demonstrate visible commitment to a popular policy or programme and make an otherwise difficult tax increase more feasible.

Many remaining questions related to earmarking for health were outside the scope of this review. (See Box 3 .) In general, however, it is apparent that earmarking practices that come closer to standard budget processes (that is, softer earmarks with broader expenditure purposes and more flexible revenue–expenditure links) are more

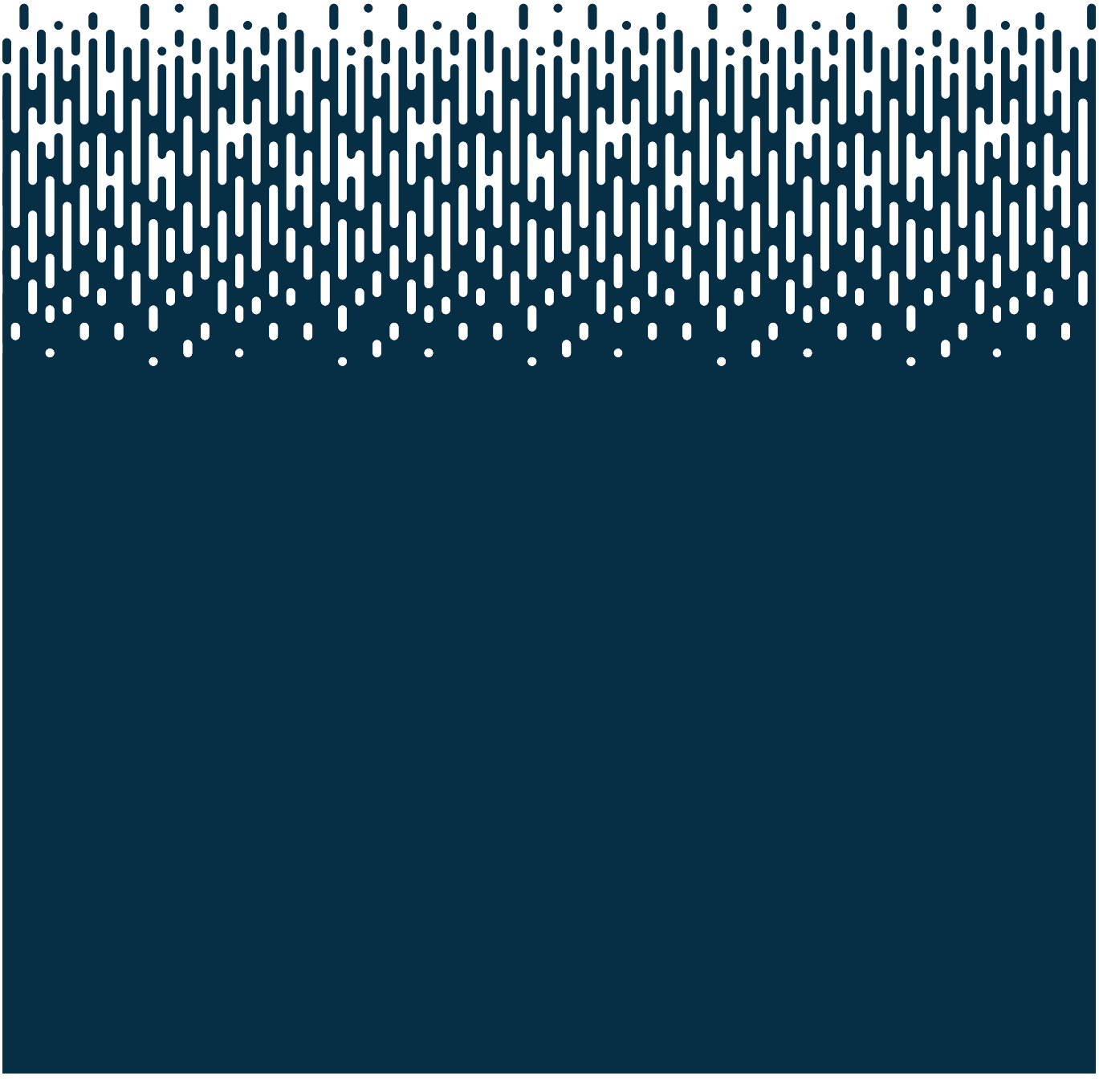
effective. But this raises the question of whether an earmark is needed in the first place. Even when domestic public resources or the system through which existing funds flow are constrained, general budget funds are still most likely to be effectively governed by existing budget controls, integrated into the health financing architecture and used flexibly to meet programme needs. Domestic public resources, particularly general revenues, are by nature more predictable, equitable, efficient and sustainable than new, parallel sources. Better budget analysis and advocacy to create stronger links between policy priorities and budget allocations can play an important role in improving the level, prioritization and stability of general revenue flows to health. As PFM systems are transformed and flexibility for output-based health provider payment and other pooling and purchasing policies increases, the benefit of collecting revenue in extrabudgetary funds that often accompany earmarks may also diminish. Improving these health sector functions also can help ensure that future increases in the budget are used effectively and efficiently. Beyond the health sector, improving overall tax administration and increasing fiscal capacity is a more fundamental way to increase budgets for all sectors, including health. Nonetheless, country experience shows that earmarking is considered a viable health financing policy tool in many cases – whether for political, fiscal or public health reasons.

Box 3 **Areas for future research**

A number of potential areas for research were raised as a result of this review. Other researchers can explore these questions and add to the global evidence base on earmarking for health:

- experience of countries that explored but did not adopt earmarks or countries that had earmarks in place but removed them;
- pros and cons (especially in terms of regressivity) of earmarking VAT and consumption taxes in countries with large informal sectors as a replacement for earmarking of income and payroll taxes for social health insurance programmes;
- the role that earmarking plays in channeling sector- and disease-specific funds from donors that already fund vertical programmes (such as Gavi; The Global Fund to Fight AIDS, Tuberculosis and Malaria; and PEPFAR), and how this function will shift as donors transition away from supporting these vertical programmes in country;
- minimum thresholds for earmark size relative to total health expenditure, percentage of public health expenditure or national revenues overall;
- tools that can help countries quantify the social benefits of different types of health spending and when those benefits might drop below the Marginal Cost of Public Funds (whether there is a loss to society in raising revenues to finance government spending);
- case studies that quantify efficient spending on particular health programmes; and
- how earmarking for health compares with earmarking for other social sectors in terms of practices and outcomes.

Country Case Studies



Estonia: an earmarked payroll tax to fund social health insurance

Almost two-thirds of Estonia's total health expenditure is financed by a mandatory payroll tax. The tax covers both health and pension contributions (13% and 20%, respectively, of employee wages and self-employed workers' earnings). In practice, employers collect contributions on behalf of employees, so employees do not contribute directly to health insurance.

In 2015, about 50% of the insured were contributing employees, 47% were insured without contributing (cross-subsidized by contributing members) and 3% were covered due to other circumstances (such as through state subsidies for some population groups). About 5% of the overall population is uninsured, and 11% of the working-age population has unstable coverage due to employment insecurity. All health insurance revenues are pooled into one budget under the Estonian Health Insurance Fund (EHIF), and the actual source of revenue does not determine or influence the planning of expenditures. The EHIF receives a fixed proportion of the state budget, which is negotiated annually based on payroll tax revenues.

Loosening the revenue–expenditure link

More than 90% of the EHIF's budget comes from payroll tax contributions. The government is exploring ways to increase the EHIF's overall revenue base. In 2015, the parliament approved reducing the social insurance contribution rate from 33% to 32%. The 1% decrease was entirely focused on the health portion of the overall social insurance contribution, which would have effectively fallen from 13% to 12%. This policy was criticized for being revenue neutral, particularly in light of concerns about the sustainability of the EHIF, an aging population and budget deficits.

The policy was overturned in 2016 when a new government came to power. The government is currently exploring ways to increase the EHIF's overall revenue base, including potential contributions from pensioners instead of an increase in general revenue contributions.

Procyclicality and the earmark release valve

The EHIF is required to maintain reserves to ensure solvency. Although it maintained reserves exceeding the legally mandated 8% of the budget, the 2009 economic crisis revealed that these reserve funds were not independent; they were considered part of the general state budget approved by Parliament and were used virtually by the government to maintain the country's overall fiscal balance. Although they were earmarked for the EHIF and remained in the EHIF account, the EHIF did not have complete discretion over their allocation and use. This situation has reduced the EHIF's incentive to improve efficiency and accumulate large reserves in good years to reallocate in financially challenging years.

Ghana: earmarking to fund national health insurance

Ghana has more than a decade of experience with earmarking to fund its National Health Insurance Scheme (NHIS). The National Health Insurance Act of 2003 established a managing body called the National Health Insurance Authority (NHIA), a statutory fund called the National Health Insurance Fund (NHIF) and a "health insurance levy" through which 2.5 percentage points of the total 17.5% VAT is earmarked for the NHIS. Other sources of funding include an earmarked 2.5 percentage points of the total 17.5% contribution to the Social Security and National Insurance Trust (SSNIT) by formal-sector workers; investment income; and premiums paid by nonexempt individuals (such as self-employed and informal-sector workers). The earmarked VAT and SSNIT revenues contribute 90% of the growing funding base for the NHIS.

Adoption

Various suggestions for how to fund the NHIS were raised before its inception in 2003, and the Ministry of Finance and the Economic Management Team focused on the VAT. Many voices inside government were in favor of raising the VAT, but previous governments had failed to do so due to vehement public opposition. Tying an increase in the tax to funding the popular NHIS made it politically possible to pass the earmark legislation.

Implementation

The revenue from the earmarks is entirely protected, with 90% going to the NHIS and the other 10% to the Ministry of Health for special programmes (most recently to purchase vaccines). The earmarked funds are entirely ring-fenced from the point of collection to the final recipient (the NHIA). This is considered critical to the implementation of the NHIS because nearly all of the funding for the NHIS comes from the VAT and SSNIT earmarks – until 2009, that is, when NHIS expenditures began to exceed revenues.

Results

The earmarked revenues have provided a stable and growing revenue stream for the NHIS. Revenues have increased steadily in nominal terms, reaching more than 1 billion Ghanaian cedi in 2014. But expenditure growth – to pay claims for health services in the NHIS benefits package – have outpaced revenue growth, and the sustainability of the NHIS is in question. In addition, the earmarked revenue has been offset by cuts in the overall health sector budget, with financing responsibility for the health sector implicitly being shifted to the NHIS. Some of the expenditure–revenue misalignment has been attributed to weak expenditure management controls and inefficiencies in the operations of the scheme. But the main source of unchecked expenditure growth is the open-ended provider payment systems that allow providers to bill for an almost unlimited number of services and medicines.

In terms of fiscal consequences, health and finance officials agree that the rigidity introduced by earmarks into the government budget are not "effective rigidities" because the NHIS is a top priority and would have to be funded anyway. The consensus is that the NHIS would not have been created without the earmarks. The most important next step is to ensure the long-term sustainability of the NHIS by managing expenditures with more effective provider payment systems and other strategic purchasing approaches. The government and the public will have to decide whether the overall priority given to health in the government budget reflects political commitment to the NHIS, its growing responsibility for funding health services, and the resources required to achieve health sector goals.

For more information, see Annex 5, which includes the Ghana-specific study sponsored by USAID on which this case study was based.

Indonesia: an array of earmarking policies for health

Indonesia has made a series of major health reforms over the past decade, including full decentralization of responsibility for health service delivery to local governments and the consolidation of multiple public health insurance schemes into one unified national social health insurance programme, Jaminan Kesehatan Nasional (JKN). The government's goal is for JKN to cover the entire population of Indonesia by 2019.

Health spending in Indonesia is among the lowest in the world, however, at only 2.8% of GDP in 2014. Within total health spending, the government's share is also low, and almost half of health spending is directly out of pocket. Indonesia's low government health spending is considered a key obstacle to achieving the country's UHC goals. Both revenue and expenditure earmarking have been used to boost government health spending at the national and subnational levels.

Indonesia uses various forms of revenue and expenditure earmarking for health: 1) an earmarked payroll tax for social health insurance coverage for formal-sector workers, 2) legislated allocations for central- and district-level expenditures for health, 3) earmarked intergovernmental fiscal transfers, and 4) a small tobacco tax earmark as part of an intergovernmental revenue-sharing plan. For the tobacco earmark and other earmarked intergovernmental fiscal transfers, it is difficult for the government to track whether earmarked funds are spent on their intended purpose, and districts do not get clear direction on how they can spend the earmarked funds. Better monitoring is needed, along with guidelines, general accountability and more specific direction on the intended purpose of the earmark.

Payroll tax. By presidential decree, all formal-sector workers in Indonesia contribute the equivalent of 5% of their salary (up to a ceiling of 8 million rupiah) to national social health insurance. Of this, 3% is paid by employers and 2% is paid by employees. Despite recent efforts to create a harmonized, mandatory national social health insurance system under JKN,[63] raising revenue is difficult because each original insurance scheme has its own rules and operating principles. The main strategies used to increase revenue are to raise premiums and to raise the salary ceiling to which the earmarked payroll tax is applied because by law the rate itself cannot be adjusted.

Central and district earmarking. Indonesia uses a mix of revenue and expenditure earmarking. The health law mandates that the Ministry of Finance allocate 10% of national and 5% of subnational budgets toward health. The earmarks have not always been fulfilled, and health spending has historically been a low share of central government spending (only 1.5% in 2014). At the national level, the Ministry of Health remains optimistic; 2016 marks the first time the national expenditure earmark was fulfilled. Other challenges at the subnational level make the actual share of spending on health highly variable because of the interpretation of what constitutes health spending. The earmarked subnational transfers are not channeled directly to the Ministry of Health or health offices at the subnational level, and the expenditure purpose for the earmark is broadly defined. The Ministry of Finance considers health spending to also include expenditure by a range of nonhealth sectors, including the Ministry of Public Works for water and sanitation and the Ministry of Social Welfare. So although aggregate district-level spending shows that on average the 10% health earmark is met, a rapid assessment of 44 districts showed that the share of district budgets for health varied from 3% to more than 18% in 2013. This translated into significant variations in per capita terms.

The intensive decentralization effort since 2000 has created significant challenges to monitoring expenditure compliance at the district level, with little clarity on what districts are allowed to spend earmarked funds on and generally low PFM capacity to monitor and implement budgets. Central-level indicators track only the disbursement of funds, limiting the ability (outside of formal government audits) to verify actual expenditures. While the Ministry of Health has put effort into systematic tracking of expenditures on health at the subnational level through protocol guidelines for district health accounts, less than 5% of the 550 districts are providing an estimate of expenditures using this system.

Tobacco tax earmark. The law on local taxation calls for half of the 10% cigarette excise tax to be earmarked for health and distributed to all districts based on proportion of the total population in the region. This tax is in addition to the 2% of cigarette excise taxes collected at the central level that are transferred to tobacco-producing regions. The allocation of earmarked funds to provinces depends on whether an area produces tobacco. In nonproducing areas, the province then distributes the funds to districts based on their contribution to tobacco excise revenue. These funds can be used for "social environment improvement," which includes creating smoke-free environments or strengthening health services.[64]

Revenue from tobacco excise taxes increased from 66.2 trillion rupiah in 2010 to 139.5 trillion in 2015. In 2014, it represented 1.2% of GDP (up from 1% in 2010) and 11.3% of total tax revenue (up from 9.3% in 2010). However, these earmarks have also come with challenges. They were introduced with little advanced planning, so it is difficult to monitor how the earmarked funds are spent and whether they actually go to the intended purpose, which is broadly defined. For tax revenues collected at the local level and then earmarked for health, only the share of local revenue collected is reported to the central level, with no reporting on the expenditure side. In the case of both intergovernmental transfers and tobacco tax earmarks, regulations specify that unspent earmarked funds are retained at the subnational level and must be used for the designated sector in the following year. Compliance with this regulation among districts is difficult to monitor, however, and it is unclear how much of the earmarked funds are actually spent on health at the district level.

The Philippines: earmarking public health tax revenues for UHC

A tax reform effort in 2012 led the government to begin earmarking additional revenues generated through tobacco and alcohol taxes to the health sector. Broadly speaking, these additional funds were to go toward UHC efforts by providing subsidized insurance coverage for the poor. Specifically, 100% of additional alcohol tax revenues and 85% of additional tobacco tax revenues were allocated to health and then split according to the following ratio[65]: 80% for the national health insurance programme, progress toward the country's millennium development goals, and health awareness programmes; and 20% for medical assistance and the health enhancement facilities programme.[66]

Adoption

The framing of the 2012 reform as a health measure paved the way for the significant tax increases.[67] The dual objective of reducing tobacco and alcohol consumption and using the revenues for health coverage expansion was critical to the measure's passage. The Department of Finance was willing to take on the rigidities associated with earmarking as a tradeoff for the potential fiscal expansion and to support a public health measure. A time-bound earmark of alcohol and tobacco tax revenues for health, and specifically for health insurance coverage, had been in place since 2005, but the 2012 reform increased the share of tobacco tax revenues going to health and made this earmarking permanent unless otherwise amended.[68]

Implementation

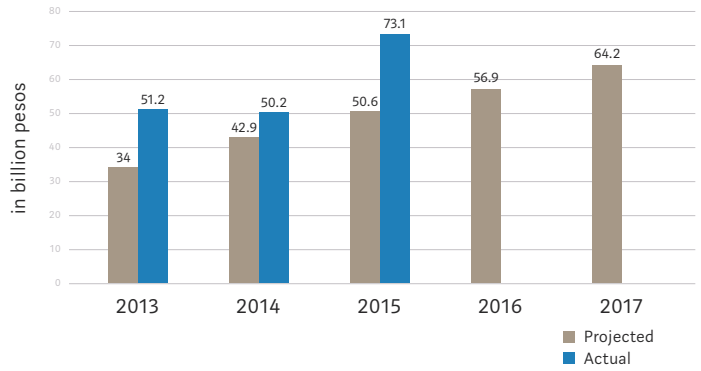
The earmarked revenues are allocated to the Philippine Health Insurance Corporation (PhilHealth), the semiautonomous agency within the Department of Health that is responsible for national health insurance coverage. The additional revenues from the earmark are used to provide coverage to the indigent population and to provide mandatory coverage for all Filipinos over age 60 who are not indigent, not sponsored members or have no qualifying contributions. Despite the strong legislation behind the earmark, it is actually an entirely soft earmark in that the Department of Budget and Management determines the annual health sector budget through the General Appropriations Act, including allocation of the earmarked revenues. PhilHealth is required to report to the Department of Finance on both expenditures and the number of people covered as a result of additional revenues in order to receive future allocations. Earmarked revenues can be reallocated to other priorities, but the law requires that they be related to health.

Results

The additional funding for the health sector has been sizeable. Just before the 2012 reform was passed, tobacco and alcohol excise tax revenues were 0.5% of GDP; by 2015, they had reached 1.1% of GDP. Actual tax revenues have far exceeded projections, and in 2015 new revenues from the tobacco and alcohol excise tax were 44% higher than projected, as shown in Fig. 5.[69] The Department of Health budget tripled in size between 2012 and 2016.

The increased revenues were channeled by the Department of Health to increase PhilHealth coverage, which grew from 75% of the population in 2012 to 88% by the end of 2015.[70] This coverage expansion was largely driven by the increase in the number of families with coverage sponsored by the national government (made possible by the earmarked revenues), from 5.2 million indigent families in 2013 to 14.7 million in 2014.[71] The tax reform legislation itself appears to have contributed to a decline in tobacco consumption.[72]

Fig. 5 **Projected vs. actual incremental sin-tax revenues**



Source: Philippines Bureau of Internal Revenue and Philippine Statistics Authority (2017)

The tobacco and alcohol tax earmark has not come without challenges. The sudden increase in the budget for UHC exacerbated existing absorptive capacity issues for the Department of Health. And without underlying structural reforms in the organization of the Department of Health or in the health service delivery systems, it remains unclear how effectively the increased coverage is being translated into better access to quality health services for all Filipinos.

South Africa: revenue and expenditure earmarking

With the largest HIV/AIDS epidemic in the world, South Africa mobilizes a large domestic response that is primarily funded by the national government. What is not widely known is that expenditure earmarking plays a large role in driving this response: almost 90% of the National Strategic Plan on HIV/AIDS, sexually transmitted infections and tuberculosis is funded through a conditional grant for HIV/AIDS that goes to provinces, with only 10% allocated directly from national and provincial discretionary funds.[73]

Revenue earmarking

There is some revenue earmarking in South Africa, with about 14% of the consolidated budget earmarked; this figure will likely increase as South Africa moves to implement a comprehensive social security system. A number of social security funds in South Africa (such as the Unemployment Insurance Fund and the Road Accident Fund) use both revenue and expenditure earmarking. These funds have challenges due to their inability to reallocate money to meet evolving needs.

Expenditure earmarking

Expenditure earmarking is a regular and official part of the South African budget system. The country uses expenditure earmarking as a way to advance national priorities and exercise central control in an otherwise decentralized system, in which provinces have significant autonomy with respect to planning and budgeting. The federal system can make it difficult for the central government to ensure that funds are being spent on their intended purpose. Expenditure earmarks in South Africa undergo regular amendment and updates, with parliamentary earmarks subject to review each year; treasury earmarks included in the three-year medium-term expenditure framework (MTEF) can be revised at any time. About 80% of earmarks are carried over, while 20% are revised.

Earmarking for health

Many line items in the Department of Health budget are earmarked for expenditures, with as much as 20% of health spending done through conditional grants to the provinces and other allocations also earmarked.[74] The largest and most influential conditional grant (earmark) is for HIV, and more recently for selected tuberculosis case finding and treatment programmes. The Department of Health plays a role in planning, policy and monitoring and also provides procurement support as needed. However, all programme implementation occurs through the earmarked conditional grant for HIV/AIDS at the province, district and subdistrict levels. Following years of underbudgeting, in 2003 the South African government introduced the HIV/AIDS conditional grant as a way to increase and protect funding for the HIV/AIDS programme throughout the entire health system. This grant has been universally hailed as crucial to the country's fight against AIDS. Provinces receive the conditional grants, both for HIV and other purposes,

in addition to the "equitable share" contributions that can be allocated at the discretion of provincial departments of health. Initially, the HIV/AIDS conditional grant was not necessarily seen as introducing effective rigidities because the needs, and therefore provincial spending, were greater than the available resources (and thus did not change allocations at the margin). But in recent years – and as HIV has increasingly become a chronic condition that is often accompanied by multiple other conditions (co-morbidities) – a broader, more systems-based approach to financing has gained favor, with the government now considering folding the HIV/AIDS grants into primary health care financing and service delivery.

More recently, the South African government has proposed to implement a tax on sugary beverages in 2017–2018. The revenue will not be earmarked for health, but there is strong government commitment to increasing investments for health promotion that target noncommunicable diseases alongside the implementation of the tax (including for diabetes screening and nutrition education). This strategy requires close collaboration between the national treasury and relevant line departments to ensure alignment of budgets for the proposed interventions.

Viet Nam: tobacco tax earmarking

The government of Viet Nam signed on to the WHO Framework Convention on Tobacco Control (FCTC) in 2004. Three years later, a tobacco control law was proposed; it was approved by the National Assembly in 2012. Aimed at providing sustainable funding for the tobacco control programme in Viet Nam, the Vietnam Tobacco Control Fund (VNTCF) is funded by tobacco manufacturers and importers, who are required to contribute 1% of factory prices of all cigarette packs produced locally or imported to Viet Nam. The tax began in May 2013 and increased to 1.5% in May 2016; it will increase to 2% in May 2019. The 2% target is based on the Thailand Health Promotion Foundation (ThaiHealth) model, in which 2% of a surcharge tax on tobacco and alcohol in Thailand is collected for ThaiHealth.

Adoption

Viet Nam's Ministry of Health (and particularly the ministry's Viet Nam Steering Committee on Smoking and Health) and the Department of Legislation spearheaded the adoption of the law. Its passage was made possible by a partnership between government and nongovernment agencies in the health and fiscal sectors, leading to the establishment of the VNTCF. The strategic partnership between the Ministry of Health and the Ministry of Finance was instrumental in developing the proposal for a fund based on an earmarked tax and its eventual approval.

Implementation

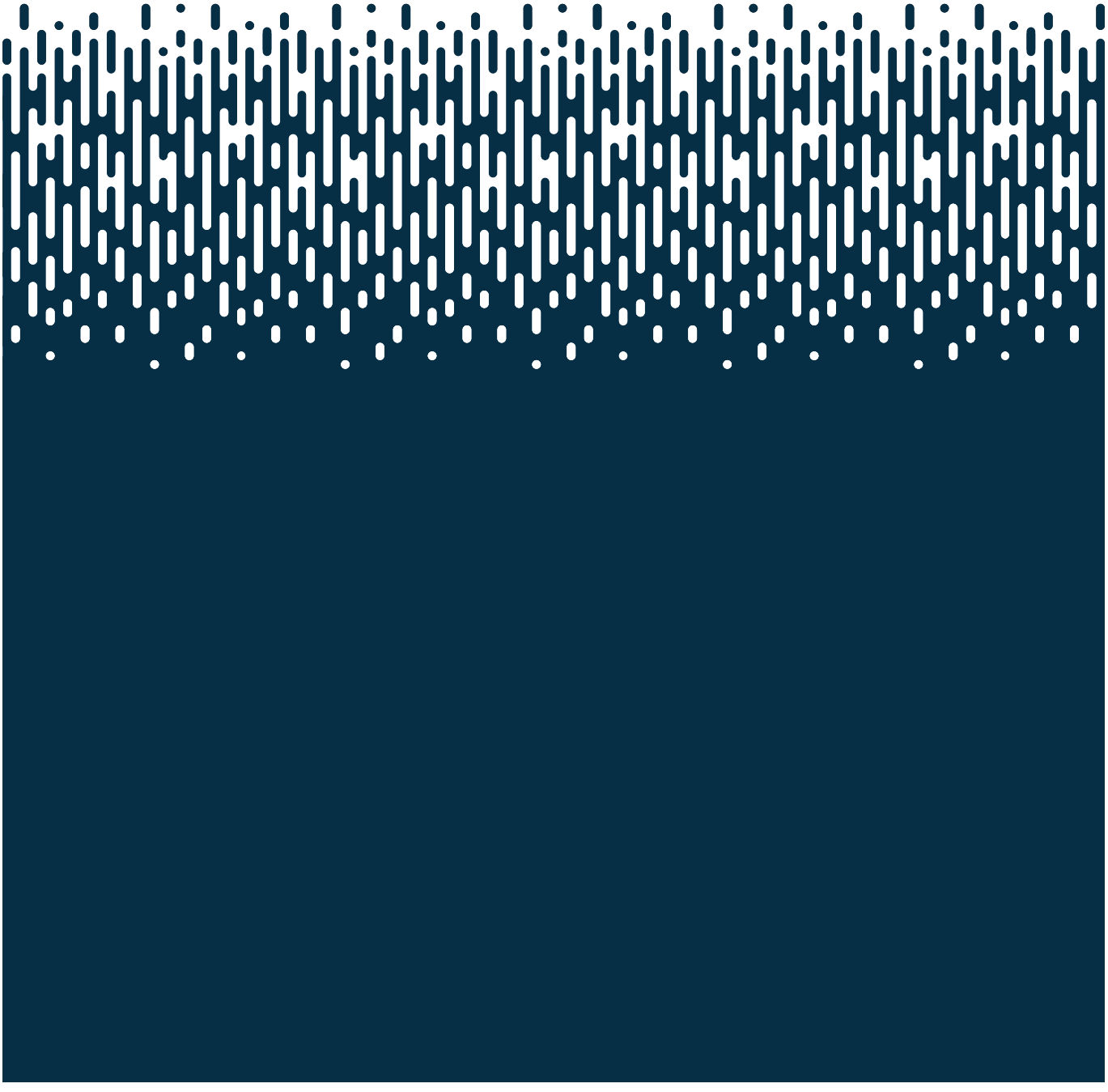
The VNTCF is a state financial organization (under the Ministry of Health) controlled by the Ministry of Finance. Tobacco manufacturers and importers pay the compulsory contribution to the VNTCF monthly, when they pay the tobacco excise tax to the General Department of Taxation. The 1% contribution is a separate tobacco control financing stream that does not include conventional funding from the government. In other words, funding for the VNTCF does not offset any part of the government budget.

The earmarked revenue is used to support tobacco control programmes, with the aim of strengthening implementation of the tobacco control law. VNTCF functions as a semiautonomous entity, but it was designed to have flexibility in fund disbursement. Grantees can request additional funding to support unplanned activities by revising their original proposal and resubmitting it to the VNTCF for consideration. The intersectoral Management Board, which convenes twice a year, has sole authority to grant final approval for any adjustments.

Results

The VNTCF has contributed to health promotion efforts, especially in the areas of capacity building, disseminating health information, promoting smoke-free models, monitoring and evaluation, research, and tobacco cessation efforts. The annual budget of the VNTCF in the first year was estimated to be 299 billion Vietnamese dong (US$ 13.91 million) – equivalent to 0.5% of the national health budget in 2014.[75] Challenges have included changes in leadership, competing time priorities for members of the Management Board, Board of Controllers and Board of Advisory, and the need for better-trained staff. Grantees also need better operations and project management skills.[76]

Annexes



Annex 1
Earmarking for health typology

The earmarking typology frames the categories of earmarking policies for health, the features that characterize an earmarking policy, aspects of the process of implementing earmarks, and categories of possible results. The typology organizes information collected from country experience so it can be analyzed and compared and lead to better understanding of which aspects of design and implementation matter most for results.

Revenue characteristics

The revenue characteristics of the earmark include the revenue source, the type of collection instrument (tax, fee or other), the tax or contribution rate, and how the revenues are collected.

Revenue source. The revenue source is distinguished by whether it is new or existing, which can affect the potential of earmarked funds to add revenue to the health sector. A new revenue source may be a new tax or fee, or it may be derived from an increase in an existing tax or fee that is or is not already dedicated to health. If revenues are derived from either an entirely new tax or an increase in existing tax rates, those paying the tax will be aware of the increased resources for a particular purpose due to the additional tax burden. More broadly, the efficiency and equity of the underlying tax instrument might be a concern if a new source of revenue is introduced (as with tobacco taxes, which are typically regressive). If a portion of revenues derived from an existing tax is reallocated to a specific expenditure purpose, policy-makers might not be held accountable for the intended expenditure purpose if taxpayers are not entirely aware of the change in funding priorities.

Tax or contribution instrument. A number of instruments can be used to raise earmarked revenues, and the type of instrument can have important consequences beyond raising revenue. A broad-based tax, such as earmarking all or a portion of an income/payroll tax, can allow for redistribution of resources across a population and be more progressive. This breaks the link between the tax being paid and the benefits received, which may improve equity but reduce taxpayer support. A consumption tax on a specific good or service, which is usually indirect in that an intermediary between the payer and the government collects the tax, raises different considerations. This type of tax instrument can include a value-added tax (VAT) or a public health tax on tobacco and alcohol products, among others. The link between revenues and benefits might be more direct, as with tobacco tax revenues earmarked for public health.[77]

All taxes tend to introduce some inefficiency because of their effect on individual behavior. Taxes that are the least distorting tend to be those with the broadest base and the lowest rates because they have the least impact on both behavior and economic choices.[78] Governments can evaluate and select revenue sources based on their effect on efficiency (whether they create economic distortions), equity (progressivity vs. regressivity) and administrative simplicity and transparency. These characteristics do not necessarily have a direct bearing on the revenue impact of earmarking, but they are important to consider when evaluating potential sources of earmarked revenue.

Sin taxes not only offer a potential revenue source for the health sector, but they also serve as a public health instrument that reduces consumption of goods with bad health effects. Taxes on alcohol and tobacco can also be justified on efficiency grounds because the consumption of those goods generates costs for society beyond those for the individuals consuming them. Even if sin taxes are not earmarked for health, they can discourage consumption, reduce negative health consequences and possibly reduce demand for health services, all of which benefit society.[79]

Countries have used a number of instruments to dedicate revenues to the health sector. One is a direct payment for the programme or service, such as a user fee in a public health facility or a flat-rate premium payment for public health insurance coverage (as in China and Switzerland). Another is a consumption tax on a specific item (such as a mobile phone or a financial transaction). Outside of domestic revenues, earmarked funds from external donors or organizations that specify how their contributions are to be spent by the government or other implementers are an important source of additional revenue for health. Conditions set by external funders can also influence ministry of health funding patterns and priorities by shifting other revenue streams away from these designated areas of expenditure.

Earmarked tax or contribution rate. The overall tax rate or contribution level from which earmarked revenues are derived directly determines how much funding is available for a specified purpose. For instance, whether a country places a small or large excise tax on tobacco products has important implications for its revenue-generating capacity. A government must also accurately set a payroll tax rate to ensure that adequate funding is available to fund social health insurance. A tax rate might determine earmarked funding availability, or the earmarked revenue base might be in the form of a flat amount or contribution. In the case of external financing for health, earmarked revenues are derived from a flat contribution source.

Earmarked tax or contribution base. Another issue to consider is the population base or source of earmarked revenues – in particular, what share of a given population pays the tax from which earmarked revenues are derived. In the case of tobacco or alcohol taxes, the tax base is the users of these products. The funds can cross-subsidize activities related to anti-smoking initiatives. A payroll tax base, on the other hand, might be all formally employed individuals in a country. The funding base has important political implications, particularly when the link between the tax revenue and the benefit are weak. For example, it may be far more politically palatable to increase the tax on cigarettes than to increase the VAT or income tax rate. But these political considerations might also affect the revenue-generating power of these instruments if the revenue base is small.

Portion earmarked for health. Another characteristic of the revenue source is what portion of revenues from a given tax or contribution is apportioned to the health sector. Ghana takes 2.5 percentage points from the 17.5% VAT to dedicate to the National Health Insurance Scheme (NHIS).

Which institution collects the tax. Earmarked revenues can be collected by the general tax administration institution of a country and then earmarked through a line item or programme in the budget during the budget process. Or, earmarked revenues can be collected in an extrabudgetary fund (such as a national health insurance fund) and managed and accounted for outside of the overall government budget. Extrabudgetary funds often have separate banking and institutional arrangements that are not included in the budget law or budget process.[80]

Revenue collection level. Earmarked revenues can be collected at the central government level or the subnational level. This has implications for pooling of the earmarked revenues. If earmarked revenues are collected at the subnational level, mechanisms are often lacking for redistribution across administrative units.[81] In the case of health revenue, lack of redistributive mechanisms can lead to inequity and a mismatch between funding levels and need.

Intergovernmental fiscal transfers. In some places, such as Indonesia, subnational governments are required to generate earmarked revenues to match allocations from the central government. These intergovernmental fiscal and matching mechanisms are a form of earmarking, in that those responsible for matching must generate or dedicate sufficient revenues to meet the requirements.

Expenditure characteristics

The expenditure characteristics of an earmark include the programme or activity that will be funded (expenditure purpose), how tightly the total amount spent on the programme or activity is linked to the revenue generated by the earmark, how tightly the benefits of the programme or activity are linked to the individuals paying the tax, and the way total expenditures are managed.

Expenditure purpose. Earmarked revenues can be channeled to the general health sector or dedicated to a specific programme (such as national health insurance) or specific diseases, interventions or populations. The expenditure purpose can affect whether earmarked funds can be tracked, monitored, evaluated and spent effectively; their budget contribution; and ultimately their impact on health system objectives. If the expenditure purpose is broadly defined, general revenue support will likely be needed to complement the earmarked revenues. Earmarked revenues can also be dedicated to cross-sector programmes that include agencies beyond the ministry of health. For example, programmes to support HIV-positive mothers might include income support, job training and education programmes in addition to health-related services and interventions that flow through nongovernmental organizations or other entities.

Link between revenue and expenditure. A central feature of earmarking is the link between revenues and expenditures. An earmark is "hard" if it is the main or only revenue source for the particular service or programme and none of the earmarked revenue can be allocated to any other purpose. In some cases, expenditure determines revenue. For example, some social insurance systems are funded mostly or entirely by an earmarked payroll tax, and the social insurance fund has the authority to raise the tax or contribution rate as expenditures increase.

An earmark is "soft" if tax revenues are designated for a particular service but do not determine the amount spent – there is no hard expenditure ceiling and transfers to and from general funds are possible. General revenue is often used to supplement earmarked revenues for health; this can be due to limited revenue-raising capacity of specific taxes, equity considerations or to compensate for shortfalls, particularly in economic downturns since earmarks tend to by procyclical (susceptible to economic booms and busts). Soft earmarks have been referred to as "symbolic" because funds from other general revenue sources are fungible and can be allocated to supplement revenues from the earmark.[82]

Benefits rationale. Another expenditure characteristic is whether the earmark has an identifiable benefits rationale. In its strongest form, earmarking adheres to the *benefits principle of taxation*, which argues that taxes should be borne by those who benefit most from the associated expenditure.[83] In this way, an earmarked tax becomes a type of user charge for a given service. It might help offset costs to the health system resulting from certain behaviors, as in the case of an earmarked tobacco tax.[84] But this type of earmarking does not contribute to equity, especially in the context of UHC, in which payment for coverage should be based on ability to pay rather than on need.

Expenditure level. Earmarked revenues can be channeled for expenditure by different levels of government or by nongovernmental entities. This characteristic is distinct from the level of government at which revenues are collected. Even centrally collected funds can be earmarked for expenditure by lower levels, such as the province or district. This type of earmark might specify how the lower-level entities can spend the revenues. Funds can also be earmarked for expenditure by facilities, private entities or semiautonomous organizations. Earmarking expenditures by subnational governments has additional PFM implications, with systems needed to transfer funds to various levels of government, along with accountability mechanisms to track and monitor funding flows.

Expenditure flexibility. Whether earmarked revenues can be allocated and spent flexibly is crucial to whether benefits can be achieved through efficiency gains. In many cases, earmarked revenue is collected by or transferred to an autonomous or extrabudgetary fund, which might allow expenditure that is flexible rather than dictated by the treasury or budget law. In health insurance or purchasing agencies, this flexibility allows for strategies to improve efficiency. The earmarked VAT that funds Ghana's NHIS, for example, receives earmarked revenue in an autonomous fund that allows expenditure flexibility. The NHIS can thus use strategic provider payment systems, such as case-based hospital payment and capitation payment for primary care, to achieve efficiency gains in service delivery.

Adoption and implementation arrangements

Earmarking policies are also characterized by the political processes through which they were adopted, how long the policies have been in effect, and the arrangements in place to implement and account for them. Each of these factors may affect the results of earmarking policies.

- **Adoption of the earmarking policy.** The motivation for the earmarking policy and who the early champions and opponents are can influence how the earmark affects the health sector budget. If, for example, the earmark is proposed by legislators or other politicians, the longer-term effects on the health sector budget might be different than if the earmark is proposed by the ministry of health.
- **Length of time the earmark has been in place**. The effects of earmarks on the health sector budget and broader fiscal consequences are likely to change over time. In the short term, the earmark might generate additional resources for the health sector or result in a relatively larger allocation for health in the general budget, but this effect can erode over time due to fungibility and offsets. The rigidity that earmarks add to the general budget process can also become more or less pronounced over time.
- **Allocation and use of earmarked funds**. The impact of the earmark on the health sector budget and the budgeting process in general is affected by which programmes are funded by the earmarked revenues, which agencies have authority to make decisions about their use and how stakeholders interact to make these decisions.
- **Accountability mechanisms.** The accountability mechanisms in place can be crucial to determining whether earmarked transfers are made in full and on time to the target agency or agencies and whether the funds are used for the intended purpose and bring the intended results.

Results

The results of earmarking policies are assessed in terms of impact on the health sector budget, the general budget and budget process, the overall economy and health in general.

- **Impact on the health sector budget**. A key measure is the impact of earmarking on the absolute level of the health sector budget (government spending on all health system components at the national and subnational levels, including social health insurance) and the relative share for health in the overall government budget. Earmarking can also affect the stability and predictability of health revenues, as well as the flexibility with which the revenues can be used (for example, for the purchaser to pay for outputs). It may not be possible to definitively attribute changes in the level of the health budget to an earmarking policy, however, because nominal government spending tends to increase over time and other factors behind health budget trends may be difficult to disentangle from the earmarking policy.
- **Impact on the general budget.** An earmark for health may increase the overall government budget if it is a new tax or other revenue source or if it represents an increase in an existing tax.
- **Impact on the general budget process**. Earmarking affects the flexibility and efficiency of the budget process – specifically, the ability of finance authorities to allocate funds to policy priorities and effectively manage spending during economic downturns.
- **Broader economic impacts**. The broader economic and fiscal impacts of earmarking include effects on the equity of the tax burden, labor market distortions, and so forth.
- **Broader health or social impacts**. Earmarking has effects on health service utilization, health status, financial protection and poverty.

Annex 2
Global Database of Earmarking for Health

R4D and WHO have collected and synthesized qualitative information on country experience with using earmarks to mobilize revenue for the health sector. This information is captured in a living database housed on the JLN website that can be dynamically updated as more examples of earmarking for health are uncovered. So far, at least 80 countries have been identified as having documented policies that earmark revenues or expenditures for health. The database can be accessed at www.jointlearningnetwork.org/earmarking.

Global Database of Earmarking for Health

	Revenue Source								
	Income/Payroll Taxes or General Revenue			Consumption Taxes				Other Instruments	
Country	Income or Payroll	General Revenue	Subnational Transfers	VAT	Tobacco	Alcohol	Other Consumption	Lottery	Other
Albania	●								
Algeria	●								
Argentina	●								
Australia	●				●				
Austria	●								
Barbados							●		
Belgium	●								
Bhutan									●
Bolivia	●	●	●						●
Bosnia & Herzegovina	●								
Botswana					●				
Brazil		●	●						
Bulgaria	●				●				
Chile	●			●					
China	●								
Colombia	●		●		●	●			
Costa Rica	●						●	●	
Croatia	●								
Czech Republic	●								
Denmark	●				●				
Djibouti					●				
Dominica							●		
Egypt					●				
Estonia	●				●				
Finland	●				●				
France	●				●		●		
French Polynesia							●		

Global database of earmarking for health

Country	Revenue Source								
	Income/Payroll Taxes or General Revenue			Consumption Taxes				Other Instruments	
	Income or Payroll	General Revenue	Subnational Transfers	VAT	Tobacco	Alcohol	Other Consumption	Lottery	Other
Gabon	●								●
Germany	●								
Ghana	●			●					●
Greece	●				●				
Guatemala					●	●			
Guinea	●								
Honduras	●								
Hungary	●						●		
Iceland	●				●				
India			●		●	●			
Indonesia	●	●	●		●				
Iran				●					
Ireland	●				●				
Israel	●								
Italy	●			●					●
Jamaica	●				●	●	●		
Japan	●								
Kazakhstan	●								
Kenya	●								
Laos	●								
Latvia					●				
Lithuania	●								
Luxembourg	●								
Macedonia (FYROM)	●								
Malta	●								
Mexico	●		●		●	●	●		
Mongolia	●				●				
Nepal					●				
Netherlands	●								
New Zealand						●			
Nigeria	●								
Norway	●								
Panama					●				
Peru	●				●				
Philippines	●				●	●			
Poland	●				●				
Portugal	●				●				
Qatar					●				
Republic of Korea	●				●				
Romania	●				●				
Russian Federation	●								
Serbia					●				
Singapore	●								
Slovakia	●								

Global database of earmarking for health

Country	Revenue Source								
	Income/Payroll Taxes or General Revenue			Consumption Taxes				Other Instruments	
	Income or Payroll	General Revenue	Subnational Transfers	VAT	Tobacco	Alcohol	Other Consumption	Lottery	Other
Slovenia	●				●				
South Africa		●	●						
Switzerland	●								
Tanzania	●								
Thailand	●				●	●			
Turkey	●								
Uganda			●						
United Kingdom					●		●	●	
United States of America	●				●	●	●		
Uruguay	●								
Viet Nam	●				●				
Zimbabwe	●								

Annex 3
Case study questionnaire

This questionnaire, which is based on the typology presented in Annex 1, was used to collect information on country experience with earmarking for health and can be adapted and used by other countries to review and assess their earmarking policies.

I. Description Please describe the main characteristics of the policy instrument(s) for earmarking of revenues for health.	
1.1 Overall description	Please describe any earmarking of tax or other revenues for the health sector in your country.
1.2 Earmarking instruments	Which revenue sources are earmarked for health in your country? (Check all that apply.) ❑ Income (personal or corporate) ❑ General consumption (VAT, sales tax) ❑ Sales of alcohol ❑ Sales of tobacco ❑ Sales of other specific consumption goods Specify: ❑ Central level transfers to the subnational level ❑ Development aid or other external sources ❑ Other Specify:
Revenue	
1.3 New or existing revenue source	Was a new tax or other revenue source introduced or an existing tax increased to earmark for health, or was a portion of an existing tax newly allocated to health? ❑ New tax ❑ Portion of existing tax ❑ Other Specify:
1.4 Tax rate	What is the total tax rate and/or flat amount of revenue collected?
	What proportion of that amount is earmarked for health?
1.5 Administrative level	At what level is the earmark collected? (Check all that apply.) ❑ Central level ❑ Subnational level (state, province, district, etc.) Specify: ❑ Other Specify:

Expenditure	
1.6 Administrative level	At what level are decisions made about how the earmark is spent? (Check all that apply.) ❑ Central level ❑ Subnational level (state, province, district, etc.) Specify: ❑ Other Specify:
	At what level are the earmarked funds used? (Check all that apply.) ❑ Central level ❑ Subnational level (state, province, district, etc.) Specify: ❑ Other Specify:
1.7 Expenditure purpose	Which programme(s) are the earmarked revenues designated for? (Check all that apply.) ❑ Health sector in general ❑ Government-sponsored health insurance ❑ Other specific health project, programme or service (e.g., health promotion or a disease-specific area) Specify: ❑ A specific population (e.g., the poor) Specify: ❑ Multisector programme that includes health Specify: ❑ Other Specify:
1.8 Composition of expenditure	What share of the total expenditure for health is funded from the earmark?
	What other revenue sources fund health? (Specify proportion of total funding from each.)

II. Adoption of the earmark

Please describe how the earmark for health was adopted, the stakeholders involved, the rationale and main arguments in favor of the earmark, and any opposition and compromises.

2.1 What year was the earmark adopted? Who drove the final decision?
2.2 How long after adoption did the earmark take full effect? What decision, action or event signified full adoption?

2.3 What other key milestones occurred during the adoption process?

2.4 Where did the idea originate? Which stakeholder group(s) initially proposed the earmark? What specific arguments were put forward against the earmark?

2.5 What were the main rationale and arguments in favor of the earmark (e.g., revenue mobilization, garnering political support)? If political, what specific arguments were put forward?

2.6 Were any of these objectives stated explicitly? (Check all that apply.)

- ❑ Increasing revenue for health
- ❑ Achieving a public health objective
- ❑ Reducing financial burden on the population
- ❑ Making revenue for health more stable
- ❑ Making it possible to use revenue for health more flexibly
- ❑ Achieving a nonfinancial policy goal
- ❑ Other
  Specify:

2.7 Did any stakeholder group(s) oppose the earmark? If yes, describe them.

2.8 What were the main arguments against the earmark?

2.9 How was agreement reached? Describe the negotiation process and the compromises made.

2.10 How were the instruments and rates decided on?

2.11 Was the earmark adopted as part of a formal legislative process? If yes, please describe.

2.12 What were the specific roles of the MOH, MOF and other stakeholders in the process? Describe any key points or lessons learned in this negotiation.
2.13 What other key factors affected the negotiation and adoption process (e.g., elections, political ideology, macro-fiscal context, pressure from civil society or donors, etc.)
2.14 Have any adjustments been made in the tax rate or the share of the tax earmarked for health since the earmark was adopted? (For instance, have any exemptions or other adjustments to the tax base been made?) If yes, what adjustments, when were they made and why?

III. Funds flow

Please describe how earmarked funds flow from the point of revenue collection to the point of expenditure on the targeted purpose.

Process and management
3.1 Which agency collects earmarked funds?
3.2 Where are these funds deposited (e.g., an extrabudgetary fund)? Into what account are they collected? Where are funds sent after they are collected?
3.3 Are the earmarked revenues channeled through the budget or do they go directly to the recipient institution(s)?
3.4 Are earmarked revenues pooled with general revenues? If yes, at which stage?
3.5 What is the process for making transfers to the health sector? Which institutions are involved?

3.6 What factors facilitate the transfer of earmarked funds to the health sector?

3.7 What challenges have occurred with the transfer of earmarked funds to the health sector?

3.8 Do revenue authorities or health authorities (or both) decide on the final allocation to the health sector?

3.9 What is the process for deciding on the allocation? Which stakeholders are involved? Does the process follow a set of rules, and can it be verified?

3.10 How do health authorities interact and communicate with revenue authorities on allocation and transfer of earmarked revenues?

3.11 Are transfers made on time and in full? If there are reductions or delays in transfers, what are the typical reasons?

3.12 Do any agencies other than the health authorities make decisions about expenditure of earmarked funds for health? If yes, which decisions?

Relationship between earmarked revenues and expenditure needs

3.13 What factors determine spending levels for the programme funded by the earmark? (Check all that apply.)

- ❑ Spending needs and budget estimates
- ❑ Historical spending trends
- ❑ Available earmarked revenue
- ❑ Other

  Specify:

3.14 Do transfers fluctuate significantly from year to year? If so, are the fluctuations predictable/expected? Are they compensated for in any way?

3.15 Do spending needs typically match available revenue from the earmark? What happens if revenue does not meet expenditure needs in a given year?
3.16 Is there a legal requirement for health authorities to manage expenditure to match available revenue? Or political pressure?
3.17 If there are gaps in funding, what mechanisms are used to fill these gaps? Are they filled based on ad hoc discretionary decisions by the government, or by a regularized process?
3.18 Do intergovernmental fiscal transfers occur to make up for any shortfalls? If yes, which mechanisms are used?
3.19 What happens if revenue is greater than expenditure needs in a given year? Can revenues be carried over to the next year? If yes, what mechanism (e.g., reserve fund) is used, and what are the rules governing reserves?
3.20 What other mechanisms are available to manage expenditure to match available revenue?

IV. Accountability

Please describe the accountability mechanisms in place to monitor the collection, allocation and use of earmarked funds.

4.1 How are earmarked revenues accounted for in the general budget? In the health sector budget?
4.2 How are earmarked revenues accounted for in budget projections?
4.3 What kind of reporting is required of the health sector, and to which authorities?

4.4 What accountability measures are in place to ensure that earmarked funds are properly used?
4.5 What measures are in place to ensure that earmarked funds are achieving the desired results?
4.6 How often are internal audits conducted?
4.7 How often are external audits conducted? By which agency or institution?
4.8 How has administrative efficiency been affected by the earmark?
4.9 Have any concerns been raised about the proper or effective use of earmarked funds? If yes, by which agency or stakeholder group(s), and what are the concerns?

V. Results

Describe the main results (positive and negative) of earmarking for health in your country.

Overall results

5.1 What have the overall results (both positive and negative) of the earmark been in terms of finances or other policy areas ? Note any significant external factors or policy decisions that may have contributed to these results.

Results for the health sector budget

5.2 Understanding that a multitude of factors govern spending dynamics, do you think the earmarks have led to an increase in the absolute allocation of funds to the health sector as a whole? If yes, by approximately how much?

5.3 Has the earmark led to a percentage increase in the relative share for health (including the MOH or any other health programme or entity) in the total government annual expenditure? If yes, by approximately how much?
If yes:
5.4 Did that budget increase translate to an increase in expenditure? If yes, by how much? If no, why not?
5.5 How long did it take for the increase in health expenditure to occur?
5.6 Were the absolute increase in health revenue and the expenditure of that revenue sustained over time?
5.7 Was the relative increase in the share of the total budget allocated to health sustained over time?
5.8 What factors made it possible to increase funds for the health sector and avoid offsets or cuts in other parts of the health budget?
If no:
5.9 What factors kept the earmark from leading to an absolute increase in funds for the health sector or prevented the increase from being sustained?
5.10 What factors kept the earmark from leading to a relative increase in the share of the budget allocated to the health sector or prevented the increase from being sustained?

Results for the government budgeting process
5.11 Has the earmark created any challenges for the MOH's budgeting process and/or government-wide budgeting?
5.12 Has the share of the budget that is discretionary decreased since the earmark was adopted? If yes, by how much?
5.13 Have policy-makers or stakeholders representing other sectors complained that their priorities have received less funding because of the earmark for health? Does this influence decision-making about the earmark for health?
Overall assessment
5.14 Do you think the earmark has generally been an effective tool for helping to meet health sector objectives? Why or why not?
5.15 Would another tool or approach have been feasible and potentially more successful than earmarking? Moving forward, what suggestions do you have for improving the efficiency, equity, administrability, procyclicality and sustainability of the earmark?

Annex 4
WHO tobacco tax earmarking case studies

WHO produced a series of case studies on earmarking tobacco tax revenues in Botswana, Egypt, Iceland, Romania, Poland, the Philippines, Viet Nam, Thailand and Panama. The case studies examine the political factors and legislative processes involved, the revenue-generating potential of the earmarks, and the overall effect of the earmarks on the budget and on public health. This table summarizes the characteristics of the earmarking policies.

Summary of earmark characteristics in nine countries (2014)

	Botswana	Egypt	Iceland
When the earmarked tobacco tax was established	2014	1992	1972 1977 (suspended) 1985 (reintroduced) 1996 (amended) 2001 (amended)
Funding source	30% of production cost of tobacco products	10 piastres on each pack of 20 cigarettes	0.2% of gross tobacco sales value (1972); 0.7% of gross tobacco sales value (1996); 0.9% of gross tobacco sales value (2001)
Annual funds from tobacco earmarked tax as percentage of general government expenditure on health (2013)	N/A	1.086%	0.083%
Fund manager	Ministry of Health (MOH)	General Authority of Health Insurance Revenue	Directorate of Health (DH)
Expenditure	Funds are yet to be spent; will be used to fund health promotion activities, including tobacco cessation, rehabilitation and public education	Preventive health and rehabilitation services for primary and secondary students	At least 0.9% of gross tobacco sales allocated to tobacco control starting in 2011 (estimates): > 20% of total funds spent on specific tobacco control activities > 80% of total spent on general health promotion activities > 65% of funds allocated to programmes run by or in conjunction with the Directorate of Health > 35% of funds granted to specific projects by setting (such as schools, communities)

Summary of earmark characteristics in nine countries (2014) (cont'd)

	Panama	Philippines	Poland
When the earmarked tobacco tax was established	2009	1997 and 2004 (RA 9334); 2012 tobacco and alcohol excise tax ("sin tax") reform in 2012	2000 (terminated in 2015)
Funding source	50% of selective consumption tax on cigarettes and other tobacco products; selective consumption tax was 32.5% of price declared by wholesaler/ importer in 1995 and increased to 50% in September 2009 and 100% in November 2009	85% of incremental revenue from excise on tobacco and alcohol products	State budget (0.5% of the value of the excise tax on tobacco products)
Annual funds from tobacco earmarked tax as percentage of general government expenditure on health (2013)	1.322%	N/A	0.001%
Fund manager	MOH	Department of Health (DOH)	N/A*
Expenditure	100% to tobacco control activities (including 50% to National Cancer Institute for patient treatment and facility improvements) In 2010–2011, the MOH spent 70% to promote health, identify smokers and support smoking cessation.	85% to health programmes, including: > universal health care under the National Health Insurance Program > efforts to achieve health-related Millennium Development Goals > health awareness programmes > medical assistance > health enhancement facilities > 15% to alternative livelihood programmes for tobacco farmers (plus economic projects in tobacco-growing provinces)	N/A*

*Poland does not transfer revenues to a specific fund.

Summary of earmark characteristics in nine countries (2014) (cont'd)

	Romania	Thailand	Viet Nam
When the earmarked tobacco tax was established	2005	2001	2012
Funding source	Earmarked tax on tobacco and alcohol: 10€/1 000 cigarettes, 10€/1 000 cigars, cigarillos and other tobacco products for smoking, 13€/kg of smoking tobacco	2% surcharge tax on tobacco and alcohol	Compulsory contribution by tobacco manufacturers and importers to Vietnam Tobacco Control Fund (VNTCF): 1% of factory price effective 1 May 2013, 1.5% from 1 May 2016 and 2% from 1 May 2019
Annual funds from tobacco earmarked tax as percentage of general government expenditure on health (2013)	0.004%	0.932%	0.335%
Fund manager	MOH	Thai Health Promotion Foundation (ThaiHealth)	MOH/VNTCF
Expenditure	10€/1 000 cigarettes and 13€/kg of loose tobacco dedicated to health; additional 1% of budget from excise on cigarettes used to finance sports The MOH spends on: > health system infrastructure > national public health programmes (including tobacco control) and other health-related services such as the emergency system	In accordance with ThaiHealth's strategic plans in 14 areas: > 90% spent on the 14 action plans, with 36% of funding within the plans spent on main health risks (tobacco and alcohol consumption, unsafe driving) and to increase physical activity and healthy eating > 5% for administrative overhead	In 2015, about 47% allocated for raising awareness among policy-makers and the public on tobacco harms and tobacco control law; 36% for disseminating smoke-free models in state agencies and localities; 6% for tobacco cessation and consultancy service in all health settings; 2% for building capacity of tobacco control network and VNTCF executive board; 2% for research on tobacco harms, intervention programmes and socioeconomic impacts; 3% for building capacity of tobacco control inspector network and monitoring and enforcement; 4% for administration and monitoring performance of VNTCF

Source: WHO, A Global Analysis of Earmarked Tobacco Taxes and Lessons Learned from Nine Countries (2016)

Annex 5
Policy Note on Earmarking in Ghana*

Earmarking Revenues for the NHIS in Ghana: Practical Experience, Results, and Policy Implications

Introduction

One way countries look to increase fiscal space and resource mobilization for the health sector is through earmarked revenues. These resources can be generated by taxes or contributions whose revenues are designated to be spent on a particular program or use. There are many arguments for and against earmarking, but they often remain theoretical. In spite of the vast country experience using this policy instrument (more than 80 countries earmark revenues for health), very little empirical evidence has been applied to the debate. Furthermore, the literature is scant on the characteristics of earmarking instruments and contextual factors that are more likely to help bring the potential benefits of earmarking (such as increased revenues for health), while minimizing the potential negative consequences (such as reducing flexibility in the budget process and taking resources away from other priorities).

Ghana has more than ten years of experience with earmarking to fund its National Health Insurance Scheme (NHIS). The National Health Insurance Act (Act 650) of 2003 established a National Health Insurance Authority (NHIA--the managing body) and a National Health Insurance Fund (NHIF--a statutory fund), as well as the "health insurance levy," through which 2.5 percentage points of the value-added tax (VAT) is earmarked for the NHIS. Other sources of funding include an earmarked 2.5 percentage points of the total 17.5 percent contribution to the Social Security and National Insurance Trust (SSNIT) by formal sector workers, as well as investment income, and premiums paid by non-exempt individuals such as self-employed and informal sector workers. The earmarked VAT and SSNIT revenues contribute 90 percent of the growing funding base for the NHIS.

This policy note examines Ghana's experience with earmarking revenues to fund the NHIS from the perspective of 10 stakeholders from health agencies (Ministry of Health and NHIA) and finance agencies (Ministry of Finance, Ghana Revenue Authority, SSNIT and the Controller and Account General Department). The purpose was to better understand:

- Whether the earmarking has been effective in securing adequate, stable, and flexible resources for the NHIS;
- Whether the earmarking has resulted in any negative fiscal consequences, such as greater budget rigidity, offsets or cuts in other areas of the budget, etc.;
- Any bottlenecks or challenges with the flow of funds, transfers to the NHIF, or other operational aspects of the earmarks.

Key Messages

- The earmarks were vital for operationalizing a national priority, the NHIS, which is highly popular and has widespread political support.
- Although revenue from the earmarks has been robust, rapidly growing NHIS expenditures are threatening sustainability.
- The earmarks are not considered to have introduced rigidity into the overall budget because they fund a high national priority.
- The earmarks also have not introduced rigidity because the revenue has been offset by cuts in the MOH budget, with the NHIS absorbing more financing responsibility in the health sector.
- Thus, over time the earmarks have effectively shifted priorities *within* the government health spending envelope, but not between health and other sectors.
- The budget offsets may, however, create an opportunity to reduce fragmentation and improve pooling, as well as streamline provider incentives. But transparency is needed to explicitly define which services and cost items the NHIS covers.
- The earmarks for the NHIS are likely here to stay. The most important next step is to more effectively manage expenditures with purchasing and provider payment strategies to ensure the sustainability of the NHIS

*This document from the USAID Health Finance and Governance (HFG) project is reproduced as published.

Adoption of the Earmarks

Before Act 650 was passed, the question of how to fund the NHIS came to the forefront. Various suggestions for mobilizing resources were raised, and the Ministry of Finance and the Economic Management Team focused on the VAT. Although there were many voices inside government in favor of raising the VAT, previous governments had failed due to vehement population opposition. Tying the increase in the tax to fund the highly popular NHIS created a political "win-win." Thus, there was mutual interest on both the health and finance sides, which made it possible to pass the earmark.

> *''Previous governments had proposed an increment of the VAT…but [this] was opposed vehemently by the opposition parties…The new government decided that one way to both meet IMF obligations and achieve a political goal was to use the money for a very popular measure like the NHIS… This was a politically safer way to increase the VAT and it turned out that no one opposed it.''*
>
> *~Respondent-Stakeholder*

The earmarking of SSNIT contributions was more contentious and required a compromise.

> *As a result of [claims that the pension fund was not sustainable and could not cover the earmark], the government made a fatal commitment to guarantee the pension fund in its entirety against any shortfall.*
>
> *~Respondent--Health*

After wide stakeholder consultations across the country, the policy framework for the NHIS and its financing was developed and approved by the cabinet in 2002. The Attorney General Department in consultation with the technical committee and other stakeholders formulated the legislation, which was passed by Parliament in 2003. The collection of earmarked funds began before the NHIS became operational to allow a reserve fund to accumulate. This is also perceived, however, as creating a false sense of revenue-generating potential of the reserve fund, which brought in an average of 10 percent of the total revenue for the NHIS until about 2009.

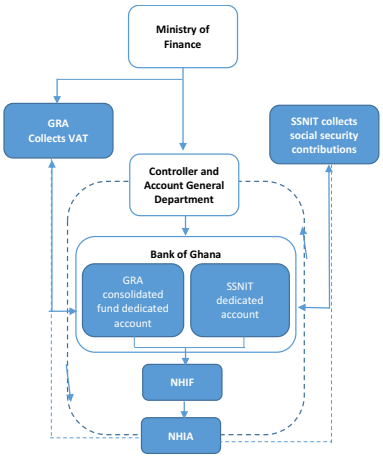
Implementation of the Earmarks

The revenue from the earmarks is entirely protected for the health sector, with 90 percent going to the NHIS and the other 10 percent to the MOH for special programs (most recently to purchase vaccines). The flow of earmarked funds was designed to ring-fence them entirely from the point of collection to the final recipient, the NHIA (Figure 1). This is considered by stakeholders to be critical in the implementation of the entire NHIS.

Five main agencies are involved:

- *Ghana Revenue Authority (GRA*): collects all government revenues, including the NHIL;
- *SSNIT*: collects the 2.5% of member contributions;
- *MOF*: allocates revenues collected by GRA to government agencies and expenditure items
- *NHIA*: implements the NHIS
- *Controller and Account General Department (CAGD):* provides overall oversight, and reports on the use of funds to Parliament.

Figure 1. Earmarked Funds Flow



Each year the NHIA makes a funding request based on an allocation formula, which takes into account projections of revenue from the earmarks, and the request is approved by parliament.

''GRA collections are deposited at the commercial banks who then transfer them to the Bank of Ghana (consolidated account) into the GRA revenue account. GRA then advises the NHIA about the amount available for the NHIF. The NHIA then writes to the Controller and Accountant General Department (CAGD) to request the amount. The CAGD confirms the requested amount from the Bank before authorizing transfer to the NHIA''.
~Respondent – Finance

Although the situation has greatly improved recently, there can be delays of up to two months in the transfer process. Sometimes the NHIA does not receive the full amount of expected funds because MOF revenue projections were not met, and at other times the NHIA receives funds in excess of the request.

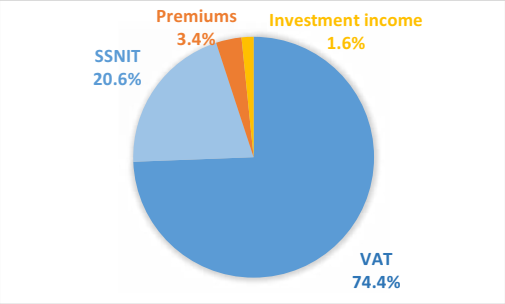
Some years back, I would say transfers sometimes were not made on time and also not in full. However, for the past two years, [transfers] have been on time and in full and the Authority can testify to that. In 2015 for instance, the MOF front-loaded funds to the NHIA to be able to undertake its expenditures and pay for the some of the deficits in claims.
~Respondent--Finance

Results for Funding the Health Sector

The earmarked revenues have provided a stable and growing resource base for the NHIS. Revenues have increased steadily in nominal terms, reaching over 1 billion Ghc in 2014, and they now make up more than 90 percent of total funding of the NHIS. In addition to the earmarked revenue, the NHIS is funded by a small amount of premium payments by the non-exempt population and investment income from the reserve fund (Figure 2).

Challenges have emerged, however, as expenditure growth to pay claims for health services in the NHIS benefits package has outpaced the revenue growth, and the NHIS is now facing serious sustainability challenges. In addition, there has been off-setting in the overall health sector budget, with cuts in the MOH budget and financing responsibility for the health sector increasingly being shifted to the NHIS.

Figure 2. Revenue Sources for the NHIS

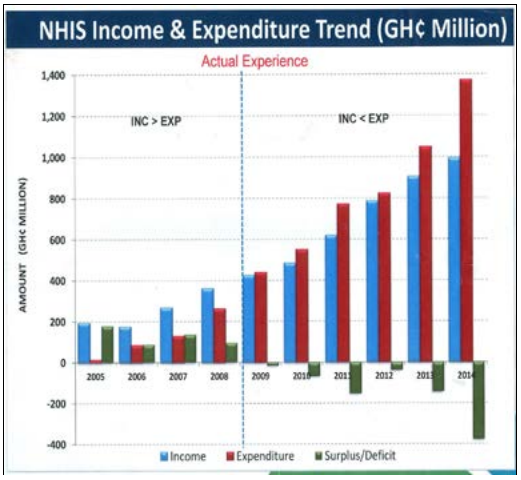


Revenue-Expenditure Linkage

As nearly all of the funding for the NHIS comes from the VAT and SSNIT earmarks, and 90 percent of the earmarked revenue is allocated to the NHIS, the earmark revenue almost entirely drove expenditure, with a small amount of surplus added to the reserve fund. That is until 2009 when the expenditures of the NHIS began to exceed its revenue (Figure 3).

The gap was initially closed by the reserve fund, but this has been nearly depleted. The deficits have meant delays in payments to providers, and at some points the NHIA has had to resort to high-interest loans from private financial institutions. In 2015 the government stepped in to bail out the Scheme from claim payment arrears.

Figure 3. NHIS Revenue vs. Expenditure



[Funding gaps] are filled by ad hoc decisions of the government of Ghana. Currently external donor support has been introduced into the funding mix.

~Respondent—Finance

Some of the expenditure-revenue misalignment has been attributed to weak expenditure management controls and some inefficiencies in the operations of the Scheme.

Gaps in revenue are not only driven by lack of funds from the earmark. Earmark revenue has been steadily increasing since it has been put in place - but expenditure has been exceeding available revenue. Budgeting is on an accrual basis- for instance, income from 2010 was used to pay for expenses in 2009 - so you don't see the impact of any delays, or where delays are coming from.

~Respondent – Health

The main source of unchecked expenditure growth, however, is the outflow created by open-ended provider payment systems that allow providers to bill, and expect to be paid, for an almost unlimited number of services and medicines. The NHIA has taken steps to improve payment systems and get more value for money in the Scheme. The G-DRG payment system, which bundles payment for each hospital admission by diagnostic category, was an important step away from fee-for-service. Capitation payment for primary care, which pays a fixed amount per enrolled person per month, is another step to gain control over claims while promoting efficiency and more responsive care for NHIS members. These steps have been important, but stakeholders agree they must now go further to bring claims growth under control.

Offsetting in the Health Sector Budget

When the earmarks were first introduced in 2003, the share of total government spending allocated to health increased substantially (from 11 to 14 percent). In recent years, however, the share has returned to pre-earmark levels, or even lower. The offsetting of the budget was universally noted by stakeholders on the health and finance sides alike.

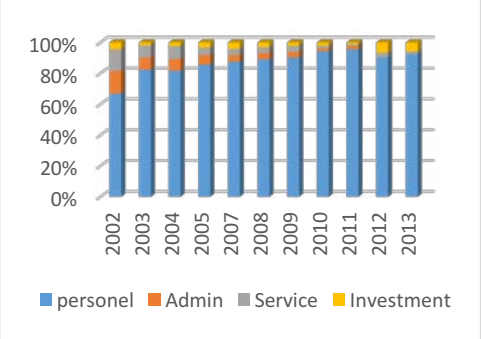
Budget allocation to the health sector as a whole has been dwindling in terms of goods and services. The reduction is about GHC 29 million from the 2015 allocation. Earmarked funds have increased, but the discretionary budget for the health sector was cut and continues to be cut each year.

~Respondent—Finance

Some respondents from the Ministry of Finance noted that the reductions in the health budget are largely a result of constraints in the overall resource envelope and not because of the earmarks. And in fact, budget reductions for the health sector may have been more severe in the absence of the earmark during the recent economic downturn.

Nonetheless, there has been a shift in the composition of the health sector budget. After the NHIS was introduced, the discretionary health sector budget was intended to continue to cover public sector salaries, investment, and some cost items for service delivery in public facilities. The remaining budget is now almost entirely consumed by salaries, with the NHIS funds covering more service delivery costs by default (Figure 4).

Figure 4. Change in MOH Budget Allocation Since the Earmark was Introduced



The trend in the health sector budget allocations may be partially explained by the origins of the earmark. The MOF intended the increase in the VAT and accompanying earmark as on overall revenue enhancement measure, not to increase revenue specifically for the health sector. Thus, over time the earmark has effectively shifted priorities *within* the government health spending envelope, but not between health and other sectors.

Fiscal Consequences

One of the main arguments against earmarking in general is that it limits the flexibility in overall government budgeting, and other higher priority

spending areas may suffer. Some respondents believe that the NHIS earmarks are crowding out other expenditures.

The MOF has had some concerns primarily on the principle of earmarking funds to programs. In the 2016 budget alone, the NHIF is getting close to GHC 1.5 billion, whereas the total amount due for non-wage recurrent expenditure for all MMDAs in the entire country is about GHC 2.5 billion. With the huge overruns in terms of compensation payment and debt servicing, the fiscal space left for the government to run is very limited. As such earmarking ties the hands of government.

~Respondent—Finance

On the other hand, several respondents from both the health and finance sides noted that these are not effective rigidities in that the NHIS is a top priority and would have to be funded in any case.

*It would not have been possible to have money for the NHIS without the earmark, so it isn't really adding rigidity…. If it [*the NHIS*] is a priority, there is no difference between earmarking and making a general budget line available for it. If it is a priority the government has to make the money available. The real issue is whether it is a priority.*

~Respondent—Finance

The earmarking came with rigidities but the ministry is happy to sacrifice for those rigidities since health is a priority sector.

~Respondent-Finance

The view was widely expressed that earmarking has been vital for funding this national priority given the other rigidities in the budget and the small share that remains discretionary.

For now, earmarking has been effective in terms of finances in the context of the challenges the country faces with our huge compensation, debt servicing and budget overruns. As in terms of the policy I think there needs to be a review in some expenditure lines of the NHIA.

~Respondent--Finance

For now, earmarking has been effective in terms of finances in the context of the challenges the country faces with our huge compensation, debt servicing and budget overruns.

~Respondent – Health

Conclusions and Policy Implications

There is clear consensus across stakeholders from both health and finance agencies in Ghana that the NHIS is one of the country's most important social policies and that it would not have been possible without the earmarking of the VAT and SSNIT contributions. The objectives for which the earmarks were adopted are considered to have been achieved. The NHIS was successfully launched and continues to bring significant social benefit more than 10 years after it was introduced.

Policy wise, I think it's one of the best policies we can ever have because we have the NHIS and the revenue base is tax based. So then each individual in one way or the other contributes to the fund.

~Respondent—Health

None of the respondents recommended taking away the earmark, although one suggested that in other contexts earmarking for health may be better as a short-term way to operationalize priorities than a long-term financing solution.

For other countries, [earmarking] should not be long term but a temporary solution. Situations change and earmarked funds cannot change that easily. Eventually it should be the national budget that finances national priorities. Earmarking can lead to unrealistic expectations.

~Respondent--Health

The main question in Ghana at the moment is how to ensure sustainability of the NHIS going forward, and whether that can be done within the funding base the earmarks provide.

Several stakeholders pointed to the need to get claims growth in check before considering additional funding for the Scheme. There is tremendous opportunity for tighter use of earmarked funds in the NHIS by better leveraging provider payment systems and other strategic purchasing strategies. It is critical at this stage to put safeguards in place to ensure that claims liabilities do not regularly exceed available revenue, and that expenditures are

directed to high-quality services delivered in an efficient and responsive way.

The offsetting of the MOH budget is one of the underlying reasons that NHIS claims have increased dramatically. As their budgets have been cut, providers need to earn more money to cover costs previously paid through the budget. This can be seen as a challenge or an opportunity. Paying a greater share of health service costs through the NHIS creates the opportunity to reduce fragmentation of health funds and create one streamlined set of incentives for providers. The funds that flow to providers through the NHIS can be used flexibly, both by the NHIA as a purchaser and by the providers they pay. Unlike the more rigid line item budgets, this creates opportunities to introduce incentives for efficiency and quality in health service delivery. But it needs to be made explicit which services and cost items NHIS payments to providers are meant to cover, and the opportunity to leverage purchasing power must be taken.

The earmarks for the NHIS are likely here to stay. They are universally supported by stakeholders from both health and finance agencies in Ghana. They are widely recognized as being essential for operationalizing a national priority and ensuring that it continues to serve the population, expand and improve. The earmark is also credited with protecting funding for the NHIS during the recent economic downturn, and as such helping maintain allocative efficiency in the budget—protecting an allocation to a high-priority policy.

The most important next step is to ensure the long-term sustainability of the NHIS by more effectively managing expenditures and better leveraging purchasing and provider payment strategies.

The government together with the population of Ghana will have to decide whether the overall priority given to health in the government budget reflects political commitment to the NHIS, its growing financial responsibility in the health sector, and the resources required to achieve health sector goals.

What Has Made Earmarking for the NHIS a Success?

Stakeholders in Ghana from both the health and finance sides view the earmarking to fund the NHIS as a success. What factors have been most important for this success?

- ✓ Joint support from the Ministry of Health and Ministry of Finance—opportunity for a political "win-win."
- ✓ Funding linked to a highly popular social program with wide political support.
- ✓ Careful design of funds flow that ring-fences the earmarked revenue from the point of collection to the final receiving agency.
- ✓ Clear accountability mechanisms governing the funds flow.

But challenges remain with expenditure management and ensuring earmarked funds bring value for money in the NHIS.

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