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FISCAL SPACE FOR HEALTH

A REVIEW OF THE LITERATURE

WORKING PAPER 1

December 2012

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This paper has been funded by UK aid from the UK Government, however the views expressed do not necessarily reflect the UK Government's official policies

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Executive Summary

Countries the world over are faced with the challenge of finding adequate resources to finance their health system. Increasing attention is thus being given to the question of how to increase financial resources to health – and specifically how to expand fiscal space for health. Fiscal space for health refers to the capacity of government to provide "additional budgetary resources for [health] without any prejudice to the sustainability of its financial position."

There are typically five ways to generate fiscal space in health: 1) conducive macroeconomic conditions, in particular GDP growth and tax revenue; 2) prioritisation of health within the government budget; 3) earmarked taxes for health; 4) external grants for health; and 5) efficiency improvements in the health sector. As is clear from these pillars, while fiscal space may be a relatively new concept, the substance underpinning it concerns issues that policymakers have had to grapple with for decades.

This paper surveys the literature on fiscal space for health. One body of literature contains papers and reports that use the language of fiscal space. The second relates directly to the five ways of generating fiscal space for health without necessarily using the terminology of fiscal space. This literature is so wide-ranging that it is difficult to review. For this reason attention is given to specific themes: 1) ways to increase tax revenue and efficiency in tax collection; 2) how health ministries can make the case for increased government budget allocations to health; 3) the role of absorptive capacity in expanding fiscal space; and 4) the extent to which external aid influences how much governments spend on health. Other recurring themes in the literature are also discussed and comparisons with the education sector are made.

A number of key findings are highlighted. First, few studies scratch below the surface to examine *how* countries have expanded fiscal space for health. Current knowledge on this question is summarised under each of the four focal themes in the main body of the paper. At a basic level, many countries lack the data to build an accurate picture of the sources of financial resources for health over time. This is a prerequisite for understanding what policies, measures, or decisions have been successful (or unsuccessful) in generating greater fiscal space. Empirical work at the country level has tended to be forward-looking assessments of potential ways to increase fiscal space rather than rigorous examinations of how a particular country has increased fiscal space.

Second, much of the literature on fiscal space has tilted towards improving our conceptual understanding of fiscal space. Useful advances have been made in conceptualising what fiscal space means for the health sector and, in particular, how it can provide a framework to assess how to increase financial resources for health. But this often raises more questions than it answers. For example, how does a government increase GDP growth and tax revenues? What factors lead a government to give more priority to health? What is the feasibility and effectiveness of implementing different earmarked taxes for health? Attempts to use improved conceptual understanding to undertake rigorous empirical work remains in its infancy.

Third, the literature frames fiscal space either as a macroeconomic issue or with specific reference to the health sector. There is very limited analysis of fiscal space in other sectors, such as education (see Section 4). It appears that the health sector has been quickest in realising the relevance of fiscal space, perhaps because there is an impression (justified or not) that health spending has historically been lower than required in developing countries.

Despite the challenges of conducting a literature review of this nature, a number of knowledge gaps and future avenues for research emerge. These include: 1) country experiences with innovative domestic financing tools for health; 2) in-depth study of how a country has achieved sustainable increases in health spending; 3) cross-country analysis of the main sources of growth in health financing; 4) country level analysis of the main sources of growth in health financing; and 5) a cross-country analysis of how responsive government health spending is to the macroeconomic environment.

1 Introduction

Countries the world over are faced with the challenge of finding adequate resources to finance their health system. The problem is most acute in low-income countries where the burden of disease is highest and resource needs are greatest. It is well established that there exists a large financing gap to provide the most basic package of health services in these countries (Taskforce on Innovative International Financing for Health Systems, 2009). Increasing attention is thus being given to the question of how to increase financial resources to health – and specifically how to expand fiscal space for health.

Fiscal space for health refers to the capacity of government to provide "additional budgetary resources for [health] without any prejudice to the sustainability of its financial position" (Heller, 2006). The focus on government is warranted for several reasons. First, the government is a major source of health financing, even in countries dominated by private health providers. Second, more than anyone else, it has the ability to ensure financial protection and influence efficiency and equity through its use of policy. Fiscal space is essentially a framework with which to explore how a government can expand the resource envelope for health in a sustainable manner. The debate has at times been heated, pitching those in favour of more liberal spending policies against those who argue that fiscal constraints must be respected (Ooms and Schrecker, 2005; Sarbib and Heller, 2005).

It is interesting to note that the language of fiscal space has been enthusiastically adopted in certain circles, and less so elsewhere. The World Bank frequently uses the term in its publications and has invested in country assessments of fiscal space for health. Similarly, the IMF makes much of the concept, although mostly when discussing macroeconomic issues (Ostry *et al.*, 2010). In contrast, fiscal space appears not once in the World Health Report 2010 on universal coverage despite the fact that its focus is on health system financing (WHO, 2010).

The purpose of this paper is to survey the literature on fiscal space for health. Because it is a wide-ranging subject we purposively selected the following themes: 1) ways to increase tax revenue and efficiency in tax collection; 2) how health ministries can make the case for increased government budget allocations to health; 3) the role of absorptive capacity in expanding fiscal space; and 4) the extent to which external aid influences how much governments spend on health. Other recurring themes in the literature are also discussed. Given the similarities between education and health, a further objective was to explore how the concept of fiscal space has been used in the education sector.

The paper is structured as follows. Section 2 defines fiscal space and presents basic data on health spending in countries grouped by level of income. Section 3 summarises the evidence from the literature on fiscal space for health, giving particular attention to the four focal themes. Section 4 examines whether and how the concept of fiscal space has been used in the education sector. Section 5 discusses the gaps in the literature and lays out potential areas of future research. Section 6 concludes.

2 Basic Concepts and Facts

2.1 Definition

Fiscal space can be defined as "the availability of budgetary room that allows a government to provide resources for a given desired purpose without any prejudice to the sustainability of a government's financial position" (Heller, 2005; Heller, 2006). By creating fiscal space, further resources can be made available to increase government spending or reduce taxation on an activity deemed important. Fiscal space is closely linked to the issue of fiscal sustainability – which concerns the capacity of government to finance government spending, meet its debt service obligations and ensure its overall solvency. When applied to the health sector, the intention is to increase financial resources for health over the short to medium term in a way that is consistent with a country's macroeconomic fundamentals such that the long-term solvency of the government and its economic potential is not jeopardised (Adam and Bevan, 2005). It is also presumed that any increase in health spending does not crowd-out other priority sectors.

While this definition of fiscal space is fairly intuitive, it is worth noting other definitions are used. In the macroeconomic literature, fiscal space has taken on a rather different, altogether more technical meaning. When countries have high debt levels, above their historical track record, debt sustainability is at risk. If the debt limit is the point at which a country's solvency is called into question, fiscal space refers to the difference between current debt and this limit (Ostry *et al.*, 2010). Amongst civil society, less of an emphasis is placed on the need for macroeconomic stability – specifically, the need to meet IMF macroeconomic conditions (ActionAid, 2007)

The fiscal framework, first developed by Heller (2006) and further adapted by Tandon et al (2010), refers to the following five ways of generating fiscal space in health: 1) conducive macroeconomic conditions, in particular GDP growth and tax revenue; 2) prioritisation of health within the government budget; 3) earmarked taxes for health; 4) external grants for health; and 5) efficiency improvements in the health sector. Heller (2006) also mentions borrowing (from both domestic and foreign lenders) and the printing of money, but these are unlikely to be viable long term sources as they threaten macroeconomic stability. The first three "pillars" above are typically regarded as being outside the (sole) preserve of the health sector, while the latter two are more easily influenced by actors in the health sector. The five pillars should not be regarded as independent of each other. Interactions are possible – for example, external grants for health may encourage a government to spend less of its own resources on health.

In assessing the potential for a country to increase fiscal space for health, Tandon et al (2010) suggest three elements to a basic approach. First, there needs to be a discussion of the need for fiscal space in health and the factors that are driving the requirement for increased resources. Second, there needs to be a systematic analysis of the potential of the five pillars to create fiscal space. Third, there needs to be a discussion of the feasibility of various options to increase fiscal space, including the ways of addressing obstacles. A simple assessment of fiscal space in health provides a useful benchmark of what might be attainable in low income countries (Williams and Hay, 2005). Historical data shows that governments have rarely spent more than 4.5 to 5 percent of GDP on health. This upper limit would imply, for example, a fivefold increase in government health spending per capita in India and a threefold increase in Cambodia (Tandon and Cashin, 2010).

It is important not to view the creation of fiscal space as an end in itself. How additional resources are spent – and whether they are able to be spent – is critical if the opening up of fiscal space is to generate improvements in health. Indeed, greater efficiency in how money translates into health improvements can itself generate fiscal space, as shown in the above framework.

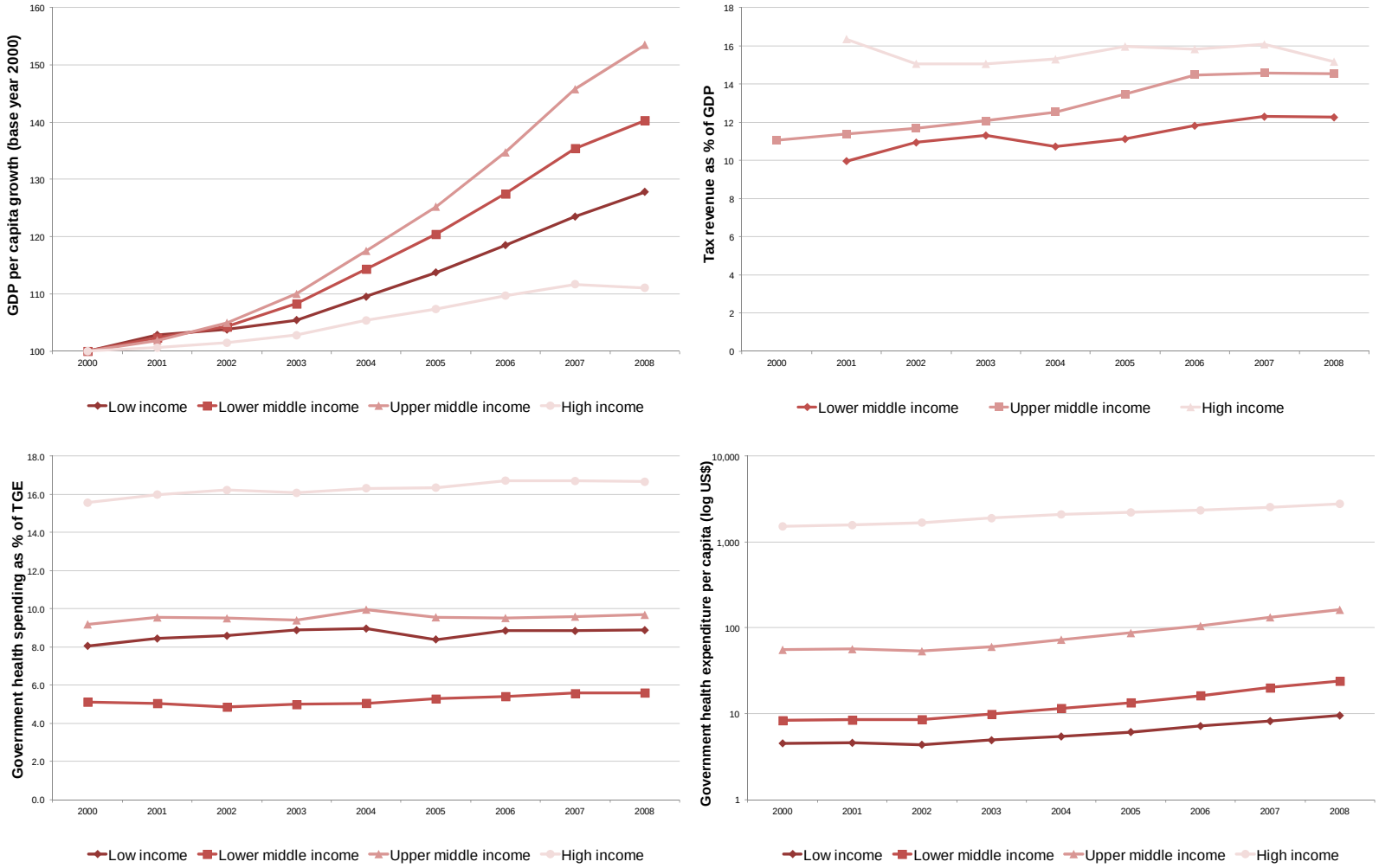
2.2 Basic facts

This section sheds light on some basic facts concerning economic performance and health spending in countries around the world. Specifically, Figure 1 shows trends in GDP per capita growth (top left), tax revenue as a proportion of GDP (top right), government health spending as a proportion of total government spending (bottom left) and government health spending per capita in US$ (bottom right). Countries are grouped according to World Bank income categories. These key indicators relate closely to a country's ability to increase fiscal space in health.

As shown in Figure 1, GDP per capita has grown in all income groups between 2000 and 2008. The best economic performance has been in upper middle and lower middle income countries. Trends in tax revenue as a proportion of GDP suggest that government authorities in lower middle and upper middle countries have been able to improve their tax revenue capacity. The level in high income countries has remained flat, although consistently higher than any other country grouping (data are missing for low income countries). Government prioritisation of health, as demonstrated by the graph in the bottom left, has improved over time in all income groups. Observe also that societies' preference for more public financing of health increases with income. Finally, the graph in the bottom right shows that government health spending per capita has risen in all income groups but remains low in the poorest countries. Growth in government health spending has been greatest in lower middle income countries, where it has more than tripled between 2000 and 2008.

Figure 1 shows encouraging signs of a trend towards greater fiscal space in the health sector for the average country in each income group. Naturally, these data provide only an incomplete picture, one that could be improved through further examination of country level data (eg. WHO's National Health Accounts database) over time. However, such information will have its limits in explaining *how* countries have generated greater fiscal space.

Figure 1: Economic and health spending indicators by country income categories



Sources: World Development Indicators (World Bank) and National Health Accounts (World Health Organisation)

3 Evidence from the Literature

3.1 Overview

Fiscal space as a concept is relatively new but the ideas that underpin it are by no means novel and have been discussed for decades. In this respect, it is important to distinguish between two bodies of literature. There are journal papers and reports that use the language of fiscal space. This literature is manageable, for the terminology defines the boundaries of the search. For example, a search in two large academic databases identified few articles of interest. In PubMed, a search for "fiscal AND space AND health" produced 17 hits, of which 3 were relevant. In EconLit, a search for "fiscal AND space AND health" produced 18 hits, of which 4 were relevant. The literature review was not based solely on this search, but it is illustrative of the extent of what we might call the explicit fiscal space literature.

Then there is the literature that does not use the fiscal space terminology but is nonetheless about fiscal space because it concerns one or more of the five pillars discussed above. These topics are so wide-ranging it is difficult to conduct a comprehensive literature review. However, it is at this level that we dig deeper into the question of how to increase resources for health. For example, GDP is an important determinant of health spending but the evidence on how to increase economic output is so large and complex it is not easily summarised. This observation poses a real challenge to a literature review of this nature.

In this overview of the literature, a number of further points are noteworthy. First, the literature does not contain many peer-reviewed articles. Given the predominance of grey literature, it is not surprising that many of the papers are of a practical nature, firmly targeted towards practitioners working in government or development agencies. The literature is in many cases an introduction to fiscal space, designed to raise awareness of the topic for the benefit of policymakers.

The World Bank, for example, has provided detailed guidance on how to assess fiscal space in health, an exercise that is forward looking in the sense that it seeks to help countries increase resources for health (Okwero *et al.*, 2010; Tandon and Cashin, 2010). Such empirical work takes the form of country case studies but these fail to scratch below the surface to provide an in-depth analysis of how countries have been successful in expanding the health resource envelope while maintaining macroeconomic stability. They cannot be regarded as research studies in the sense that they do not use standard empirical research methods, whether quantitative or qualitative.

Second, the literature frames fiscal space either as a macroeconomic issue or with specific reference to the health sector. There is very limited analysis of fiscal space in other sectors, such as education (see Section 4). It appears that the health sector has been quickest in realising the relevance of fiscal space, perhaps because there is an impression (justified or not) that health spending has historically been lower than required in developing countries.

Third, the more academic literature is tilted towards improving our theoretical understanding of fiscal space. Useful advances have been made in conceptualising what fiscal space means for the health sector and, in particular, how it can provide a framework to assess how to increase financial resources for health. Attempts to use improved conceptual understanding to undertake rigorous empirical work remains in its infancy.

In the remainder of this section, a critical review of the literature is provided under each of the four themes identified as relevant at the beginning of this project. Because the scope of the literature on the five pillars that underpin fiscal space is much wider than these distinct areas, a brief attempt is made to appraise other recurring themes. It should be noted, however, that the boundaries of fiscal space as an area of research are not well defined, and any attempt to consider all the relevant literature will invariably be incomplete.

3.2 Fiscal space and tax administration

To varying degrees, health systems around the world are reliant on government financing of health. The main source of government financing is tax revenue, thus making the tax system – and the complex issues surrounding taxation – an important component of any effort to expand fiscal space. Universal tax financed health systems such as Britain's National Health Services are clearly heavily reliant on the government's ability to tax its citizens.[1]

The relevant literature on taxation is concerned with three main themes: 1) raising tax revenue levels; 2) improving efficiency in tax revenue collection; and 3) examining the potential of earmarked taxes for health. Actors in the health sector are unlikely to contribute to policy development in the area of taxation but, at the same time, they should be deeply concerned with the main issues. Earmarked taxes for health are of direct interest to health policymakers, even if ultimate decision making is exercised by policymakers at the highest level of government. We deal with each theme in turn.

Level of tax revenue: Econometric analysis shows that low income countries could raise their tax ratios by as much as 4 percent of GDP (IMF, 2011). The Commission for Macroeconomics projected that low income countries would be able to increase revenue to GDP ratios by 2 percent between 2000 and 2015. The Millennium Project was more optimistic, suggesting that revenue as a proportion of GDP could rise by 4 percentage points. However, experience in African countries suggests that it takes years to raise tax ratios to GDP by several percentage points. In other words, it is not something that is easily done – it either requires improvements in tax administration or increases in taxes or reductions in politically popular exemptions (Heller, 2006). Improving revenue collection may be particularly problematic for many low-income countries with large informal sectors (Gordon and Li, 2009).

[1] The relative merits of tax based health financing are beyond the scope of this literature review. Savedoff (2004) provides a comprehensive review of this literature.

In raising the level of tax revenue, policies can crudely be categorised according to domestic and international. The two sets of policies are by no means contradictory – indeed they can be complementary although the speed at which policy can change is likely to be much slower at the international level. On the domestic front, the IMF is the repository of specialist knowledge and its policy position is outlined in detail in a recent publication (IMF, 2011). It emphasises the need for broad-basing – that is, the importance of not giving large tax exemptions, for example to the rich and foreign investors. It argues that experience shows progress can be made in raising revenue when the political will is present. Strong political will is required because administrative reforms typically encounter swift opposition.

Box 1: Challenges and progress in tax reform (IMF, 2011)

- In terms of administrative reforms, most progress has been made on basic organisational structures and less so in developing risk-management
- Governance problems remain pervasive
- VAT has more revenue potential than most other instruments. Effective use of VAT requires expanding the base rather than increasing rates
- Revenue lost from trade liberalisation requires more policy attention because these tax revenues, while important to developing countries, are declining
- Corporate income tax revenue continues to be undermined, for example by free trade zones, and is likely to come under continued pressure from globalisation. Profit-shifting by multinationals is a growing issue but there are not likely to be easy solutions in the absence of changes in tax policy at the international level
- High-income individuals can be taxed more effectively by removing opportunities for avoidance and strengthening detection and enforcement
- Revenues from personal income tax are low and stagnant in developing countries but schedular systems can offer improvement
- Establishing streamlined tax regimes for small businesses may not yield large short-term revenue gains but is important for the longer-term development and perceived legitimacy of the tax system
- Country-level capacity in tax policy analysis is often very weak, and a significant hindrance to better design and ownership
- Greater transparency and consultation on tax matters—not least, improving the effectiveness and visibility of public spending it finances—can promote the trust on which voluntary tax compliance rests
- Political commitment from the highest level is key to reform, which then must be sustained to guard against backsliding.

In addition to a range of technical strategies recommended by the IMF and others, several further points are emphasised. First, while revenue mobilisation is an important objective of a tax system, it can have other consequences, both positive and negative, and is therefore not the sole concern. It can worsen distortions and inequalities, yet also bring structural gains that over the long run outweigh short term falls in revenue (eg. by reducing trade taxes) and generate wider improvements in governance (eg. by creating less corrupt tax systems). Second, the fairness of a tax system should not be analysed in isolation of how tax revenue is spent. The distributional impact of tax reforms need also to consider the progressivity of the spending they finance. A starting point for such an analysis is to consider the distributional consequences of changes to both taxes and welfare benefits. But incorporating benefits from government services becomes much more difficult.

Third, with increased trade liberalisation there will be pressure to lower trade taxes. This puts considerable downward pressure on tax revenues because trade taxes have traditionally been important sources of revenue in developing countries. For example, in Sub-Saharan Africa trade taxes account for one-quarter of total tax revenue. Alternatives may need to be considered. The most promising avenue to increase tax revenue lies in improving compliance and reducing preferential treatment of elites and high income earners.

Box 2: IMF case studies of three countries that have successfully raised levels of tax revenue

El Salvador: The country instituted a whole series of reforms of base-broadening that included 1) restricting VAT zero rates on exports; 2) eliminating exemptions on interest earned in banks licensed abroad and on income from interest and capital gains of individuals; 3) introducing a tax on registration of new vehicles; 4) broadening the income tax withholding base for non-residents; 5) introducing a mixed system of excises on tobacco and alcoholic and non-alcoholic beverages, replacing the previous system of ad valorem rates to ensure that reasonable tax is paid even on the cheapest products; 7) eliminating subsidies on exports; and 8) raising the tax on lottery prizes.

Tanzania: The country focused on strengthening capacity of the revenue authority. It did this by: integrating its operations, introducing taxpayer segmentation, and making better use of IT. Key reforms included: 1) the introduction of a common taxpayer identification number (TIN) for all taxes; 2) creation of a Large Taxpayers Department and consolidation of VAT; and 3) income tax administration into a single, functionally-structured Domestic Revenue Department. Registration compliance was improved by such measures as allocating geographical groups of taxpayers to a specific team with clear performance targets, and improving assistance to small taxpayers in understanding and complying with their obligations. A new income tax law (2004) introduced self-assessment and rationalized small taxpayer administration. A rise in the VAT threshold focused the revenue authority's operations on high-yield taxpayers.

Vietnam: The tax policy regime has been considerably improved. Corporation income tax has been strengthened by unifying the rate structure (at 25 percent, rather than 28 and 15); removing some incentives; permitting deductions for reasonable expenses; and transferring unincorporated businesses to the personal income tax. The VAT has been improved by restricting zero-rating to exports, eliminating the discrimination between domestic and imported products and reducing exemptions. The personal income tax has also undergone comprehensive change. Capital income has been brought into tax; the 30 percent surcharge was eliminated; the tax brackets were significantly broadened; the top marginal rate has been lowered (from 40 percent to 35 percent); and tax allowances for dependents have been introduced. Tax administration has also undergone significant transformation and strengthening. A new Law on Tax Administration, enacted in 2006, combined in a single law all administrative procedures common to each substantive tax law and considerably broadened the powers of the General Department of Taxation (GDT) to administer the tax system. The GDT's headquarters and its network of tax offices were re-organized into functionally-based units. The traditional system of administrative assessments was replaced by a modern self-assessment system, and a supporting set of tax administration procedures has been introduced. All tax offices are now connected via a computer network and a broad range of IT applications has been developed to support core tax administration functions. Steps have also been taken to upgrade staff skills, which has been supported by the creation of a tax college within the GDT.

The position paper by the IMF (2011) provides a detailed discussion of the challenges and progress in non-resource taxation, based on wide-ranging experiences across countries. The key lessons are summarised in Box 1. The issue of taxing natural resources are given detailed attention by Daniel et al (2010). The IMF (2011) has also provided case studies of countries that are deemed to have been successful in reforming tax systems and increasing levels of tax revenue – in El Salvador, Tanzania and Vietnam. The three case studies are summarised in Box 2.

As detailed in Box 2, El Salvador has implemented well-designed measures to broaden the tax base and simplify the tax system to reduce the burden on tax administration. These reforms increased tax revenue from 10.9 percent to 13.4 percent of GDP over a six-year period. Tanzania has strengthened the capacity of the revenue authority which has led to an increase from 9 percent to 15.3 percent of GDP over a nine-year period. Finally, Vietnam has brought in sweeping reforms and rationalised the tax system resulting in a 4 percentage point increase in revenue as a share of GDP in recent years.

At the international level, there are calls from organisations such as Tax Justice Network, Action Aid, and Christian Aid etc for action against large transfers to low tax jurisdictions and tax havens. The Tax Justice Network (www.taxjustice.net) estimates that $11.5 trillion is held offshore by individuals, an amount that results in a loss of income of $250 billion per year. Lost revenue in developed countries is reported as being "far greater than annual aid flows." The G20 has provided leadership at the international level in recent years, but due to the need for coordinated action progress is generally slow.

Efficiency of collection: This refers to the cost of collecting tax relative to the amount of revenue collected by the government. Improving the efficiency of tax revenue collection is a specialised area that has no direct connection with health. Moreover, efficiency improvements are likely to have only a marginal impact on total revenue. Taking the example of Ghana, where revenue administration is legislatively mandated at 3 percent of total collections (IMF, 2011), it is easy to see that the scope for increased revenue through efficiency gains is limited. The efficiency of different types of taxes can be expected to vary. Broadly speaking, VAT is regarded as a relatively efficient instrument, as is real estate taxation due to its location-specific attributes.

Earmarked taxes: Countries have used earmarked taxes to open up fiscal space in health (Doetinchem, 2010).[2] Earmarked taxes can take various forms, including specific taxes on goods, a payroll tax for social health insurance, and setting aside a fixed share of revenues to the health sector. Tandon and Cashin (2010) provide a number of examples from developing countries – cigarette tax is earmarked for cancer control in Nepal, earmarked tax on alcohol and cigarettes funds a health promotion foundation in Thailand, the national health insurance programme in Ghana is funded by an earmarked tax from VAT (Witter and Garshong, 2009),[3] and in Zimbabwe a tax on personal and corporate income funds HIV-related activities. Further examples of innovative domestic financing options are provided in the World Health Report (WHO, 2010) and an accompanying working paper (Stenberg *et al.*, 2010). These include enhanced taxation of large corporations, excise taxes on products harmful to health, levies on financial transactions and instruments, and other targeted levies on mobile phones and remittances. More detail is given in Box 3.

[2] The earmarking of donor aid, for example through global health initiatives, is distinct from earmarked taxes that are concerned primarily, although not exclusively, with domestic policy.

[3] Ghana, for example, meets 70–75% of funding needs for its National Health Insurance Scheme with general tax funding, notably through a 2.5% national health insurance levy on VAT, which stands at 12.5%. The rest of the funding comes from other public funds and development partners, while premiums, the traditional revenue source for insurance, account for only 3% of total income. The VAT-based National Health Insurance Scheme has been able to support an increase in total health expenditure through domestically generated pooled funds. At the same time it has lessened the system's dependence on direct payments such as user fees as a source of finance (Witter 2009).

Box 3: Earmarked taxes (Stenberg et al, 2010)

- **VAT with a share earmarked for health sector.** Ghana's national health insurance scheme is financed in part through national health insurance levy that uses the existing VAT system.
- **Sector-specific taxes.** Counties may look to tax lucrative sectors or large corporations. Australia has been preparing to introduce a levy on mining companies. Lao PDR has generated new revenue through hydropower. Gabon has introduced a tax on mobile phone companies.
- **Tobacco excise taxes.** Some countries have earmarked all revenue from tobacco taxes (Guatemala, Djibouti), while others have set a proportion (2% in Mongolia, Thailand and Qatar, 1% in Bulgaria).
- **Alcohol excise taxes.** Currently excise tax represents about 20% of the retail price of alcohol, with the highest rates in high-income countries. If rates were increased to 40%, revenues would increase by approximately 80% taking into account the reduction in consumption and an increase in the illegal / untaxed consumption. In low-income countries, additional receipts would account for 38% of total health spending.
- **Excise tax on "unhealthy" food.** So called "fat taxes" increase the price of unhealthy food with a view to reducing consumption, improving health and increasing revenue. Such taxes have been introduced in several high-income countries. The evidence needs to be strengthened and is an area which warrants further policy research.
- **Currency transaction levies.** This tax in increasingly being advocated – a 0.005% levy on currency exchange markets. It is estimated it could raise US$ 3 billion per year on the basis of the four major currencies.
- **Other financial transaction-related taxes.** Bank debit taxes have been implemented in Latin American countries. For example, Brazil placed a tax of 0.38% on certain bank withdrawals, raising up to US$ 20 billion per year and using the money largely for public health. Zambia has introduced a levy on gross interest earned in saving accounts to fund HIV treatment, raising US$ 3.9 million in 2009.
- **Diaspora bonds.** These are issued by a few countries with large diaspora populations. Israel has raised US$ 25 billion since 1951 and India has raised a total of US$ 11 billion. They can provide a stable source of financing for long-term investments.
- **Tax related to international tourists' spending.** Revenue could be generated from a currency exchange tax applied to tourists upon arrival in the country. It has the potential to raise sizeable revenue in countries with a large tourism industry.
- **Tax related to number of visitors / country / year.** An entry tax applied to foreign visitors could raise revenue but may also reduce economic activity.
- **Luxury taxes.** Countries implement a variety of luxury taxes, often through existing tax mechanisms. China has a luxury tax on yachts, imported watches etc, the US has a "Cadillac tax" on expensive health insurance plans.
- **Franchising products.** The Red Product initiative has raised US$ 150 million for the Global Fund. It raises the profile of products through branding and raises additional revenue for health.

The political argument in favour of earmarked taxes contends that such a tax can increase and sustain resources by insulating health spending from competing demands, particularly when government health spending is low and volatile. Furthermore, citizens may be more willing to pay earmarked taxes because they can identify its use with a highly valued service. In other words, there is a perceived responsiveness of the tax system to the preferences of the taxpayer (Teja, 1991).

From an economic perspective, earmarking taxes creates inflexibility by constraining how revenue can be spent, thereby reducing allocative efficiency. They are further undermined if governments offset earmarked increases with a reduction in the health allocation from general tax revenue such that the net effect is neutral and when they are used for purposes other than those intended, for which there are numerous examples (Savedoff, 2004). From a health perspective, earmarked "sin" taxes can be used as a tool to influence behaviours that are known to adversely affect health, such as smoking and alcohol consumption (Prakongsai *et al.*, 2008). However, there is often a tension within government in how the revenue from sin taxes should be used – ie. whether or not they should go to the health sector.

The argument for sin taxes is all the more persuasive when the behaviours they target have negative externalities. But the distributional consequences of the taxes should not be overlooked. Since it is common for the poorest sections of society to smoke and drink more, such taxes can be highly regressive. Advocates for sin taxes would argue, however, that the health benefits also fall disproportionately on the poor because they are most incentivised towards healthier behaviours.

Innovative financing mechanisms have been used specifically in health promotion because these activities find it hard to compete for funding with the more visible curative services Tangcharoensathien et al (2008) conducted a review of experiences of innovative financing of health promotion, finding that there is no standard model in low-income countries. They conclude that achieving success in effective financing of health promotion requires legislation to endorse a fund, and often an independent agency with flexibility in the organization and management of funding health promotion projects. This further compartmentalisation of revenue use echoes the higher level problem of earmarking for health in general.

Social health insurance represents a key reform that has the potential to increase fiscal space by raising revenue through mandated payroll taxes. Universal coverage through social health insurance has been achieved in 27 countries worldwide (Carin and James, 2005). A wave of social health insurance schemes has swept Africa, Latin America and Asia in recent years. The complexities of designing and implementing a social health insurance initiative are described in detail elsewhere (Hsiao and Shaw, 2007). In terms of the enabling environment, the most important factors relate to characteristics of the economy, such as the level of salaries and wages, the size of the formal sector, poverty levels, and the dependency ratio. The share of work force in formal employment is likely to be the most critical factor in generating fiscal space, since informal sector workers are difficult to tax for administrative reasons and the least able to afford to pay premiums for social health insurance.

3.3 Making the case for health

A key determinant of fiscal space for health that is directly under the control of government decision makers is the proportion of the budget allocated to the health sector. The data suggest wide variation in this indicator across countries, even those with a similar income. In other words, the priority attached to health by country governments varies enormously. For example, Pakistan spent only 3.3 percent of the government budget on health while the corresponding figure is 20 percent for Rwanda (WHO, 2011).[4]

The implication is that many countries around the world could increase health spending by giving greater priority in the government budget to health. It has been estimated that low-income countries could raise (at least) an additional $15 billion dollars per year for health from domestic sources if they increased the share of health in total government spending (net of external aid inflows) to 15 percent. Over the period 2009-2015, this would have resulted in increased funding of roughly $87 billion (WHO, 2010).

What are the factors that determine the priority a country's government gives to health through the budget process? The most commonly observed pattern is that on average wealthier countries allocate a greater proportion of the government budget to health. However, this average hides important variation between countries of different income. For example, 22 low-income countries allocated more than 10 percent of their budget to health while 11 high-income countries allocated less than 10 percent (WHO, 2011).

On a technical level, it is widely observed that health ministries could do more to present a convincing case to finance ministries why the health sector needs more government resources. Developing credible and comprehensive sector plans is likely to be a key element of this process and, indeed, donor agencies have spent considerable time and effort in supporting Ministries of Health in this regard. For introduction of new interventions or scaling-up of existing interventions, this may involve costing of additional resource inputs such as human resources and equipment. Toolkits such as the WB/UNICEF's Marginal Budgeting for Bottlenecks (MBBs) model or the WHO's Choosing Interventions that are Cost-Effective (CHOICE) may be useful. For provision of insurance coverage for the poor, this may entail resource projections based on actuarial analyses.

The bargaining power of a ministry of health may also be improved if it has a good past and present public expenditure management performance; a good reputation regarding governance in the sector; and a high absorption capacity as indicated by implementation rates. It is often remarked that health ministries need to learn the language of economists (WHO, 2010). Without the language and requisite skills there is likely to be an asymmetry of information between the ministry of finance and line ministries that limits advocacy efforts, for example in the context of debt relief (Kaddar and Furrer, 2008). The ministry of finance is well informed as to the potential of debt relief to create fiscal space but line ministries have no information on the issue.

[4] In WHO's national health accounts database, government expenditure includes health resources from external sources and therefore may exaggerate government commitment to health. In Thailand, the government spends 13 percent of the government budget on health and receives virtually no donor aid. This is probably more illustrative of the upper limit of government commitment to health.

In the context of whether governments should invest in health, there has been debate as to whether health improves economic growth. This debate came to the fore when the WHO Commission for Macroeconomics and Health made the business case for investing more in health (Bloom and Canning, 2000; WHO, 2001). It gave health ministries the evidence to argue that spending more on health was not only good for health but also the economy. More recently, this evidence has been challenged. By exploiting the international epidemiological transition to isolate plausibly exogenous changes in health conditions across countries, Acemoglu and Johnson (2007) find no causal relationship between increases in life expectancy and increases in income per capita.

There might be scope for better reprioritisation of government spending from unproductive sectors to more important purposes. This is likely to be most appropriate for countries with high spending to GDP ratios. But if much of the government spending is non-discretionary (eg. high interest and wage bills) this might prove difficult (Heller, 2006). Additionally there are likely to be political difficulties in reprioritising spending, as least in the short term. There needs to be recognition that there are multiple competitors for fiscal space. Some attach importance to health while others argue for spending to increase growth. Ultimately budget negotiations are a political process. Also it may be the case that higher spending on the health sector can have repercussions for other sectors – eg. an increase in salaries for health workers might create pressure for wage increases in other sectors of the civil service (Heller, 2006).

3.4 Fiscal space and absorptive capacity

In a strict sense absorptive capacity does not impinge on fiscal space which is determined by availability of resources (Williams and Hay, 2005). However, absorptive capacity is relevant for two reasons. First, it will affect whether governments and donors allocate resources to health. If absorptive capacity is low, additional resources may not be forthcoming. Second, by definition, it will affect whether resources allocated to health get used. An expansion of fiscal space for health can hardly be considered effective if a large proportion of the government's health budget is returned to the Ministry of Finance as unspent.

Absorptive capacity has come to mean various things, including availability of managerial staff, availability of required manpower to deliver services, governance capacity to use resources well, and strength of public expenditure management systems (Heller, 2006). These various interpretations give some indication of the reasons why some countries may have difficulty absorbing substantial increases in financial resources for health.

Absorptive capacity is unlikely to be independent of the source of finance. It is well known that donors contribute to the administrative burden placed on recipient governments. Not only do they require monitoring systems to be in place,[5] they can actively undermine the capacity of government institutions by drawing away the most talented and experienced government officials (Clemens and Radelet, 2003). When there are many donors present, each with their own cumbersome procedures, what may appear as low absorptive capacity is in fact the result of poor coordination on the part of donors.

Large increases in financial resources generate higher demand for other resources that are in short supply yet essential for the delivery of services. This applies particularly to human resources. In many low-income countries, appropriately qualified staff at each level of the health system are scarce. Moreover, the supply of such labour is fairly unresponsive to increases in demand, at least in the short-term. If well targeted, new resources can of course relieve these bottlenecks rather than exacerbating the situation. For example, training of staff and the introduction of IT systems will strengthen the capacity of government to use funds effectively. Ultimately, absorptive capacity will be highly context specific requiring solutions that are tailored to the local situation.

Country examples of problems in absorbing health resources abound. In Kenya, spending on social health protection fell far below what was allocated between 2001 and 2004 (Government of Kenya, 2005). In India, the Ministry of Health routinely under-spends and must return some of its budget allocation to the treasury (Government of India, 2005). Again in India, staff absenteeism constrains the delivery of health services and implicitly the spending of available financial resources (Banerjee *et al.*, 2004).

3.5 Fungibility of foreign aid

Development assistance for health is likely to be for many resource-poor countries the most feasible channel through which they are able to create more fiscal space in the health sector. Given the time it takes to improve tax administration, this is likely to be particularly the case in the short term. Fungibility is an issue because when donors give money for a particular cause or to a specific sector, they expect their money to be additional – ie. total resources for the sector increase.[6] But if recipient governments re-allocate their own money in response to the behaviour of donors, the risk is that donor aid simply displaces government spending.

[5] Rwanda, for example, has to report annually on 890 indicators to various donors who support the health sector (WHO 2010).

[6] Donors funding specific diseases have been particularly concerned over the issue of fungibility, leading to whole programme of work to measure aid additionality.

The debate on fungibility tends to grapple with two questions – one normative and one positive. First, should governments shift resources away from an activity that donors fund? Second, do governments shift resources away from an activity that donors fund? On the former, it is an accepted reality that governments have the ability to circumvent the intentions of donors by re-allocating the government budget in response to donors' priorities. As has been pointed out, "while most economists assume that aid is fungible, most aid donors act as if it is not" (van de Walle and Mu, 2007). There are good reasons why governments may want to shift resources away from an activity that donors are heavily supporting. In low-income countries, governments are faced with many competing demands and it may be entirely reasonable – not to say efficient and democratic – to shift its own resources to other priority sectors that will improve the condition of its population.

On the second question, there have been few attempts to provide rigorous evidence on whether it happens in practice. Anecdotes dominate the debate. Three cross-country studies have examined the issue of fungibility with application to the health sector in developing countries.[7] The first, by Gottret et al (2008), used data on health spending from a panel of countries to show that a $1 increase in off-budget funding for health was associated with a $1.65 decrease in government health spending. In a second paper, Farag et al (2009) use a similar approach to show that a 1 percent increase in donor funding for health was associated with a 0.14 percent decrease in government funding for health in low-income countries. Or equivalently, a $1 increase in donor funding leads to a $0.27 decrease in government funding.

Finally, the most recent study by Lu et al (2010), found that for every US$1 of development assistance for health to government, government health expenditures from domestic resources were reduced by $0·43. However, development assistance for health to the non-governmental sector had a positive and significant effect on domestic government health spending, a finding which the authors provide no theoretical basis to explain. Overall the weight of evidence suggests that in the health sector aid is indeed fungible. However, the perennial challenge in this type of research is establishing what would have happened to government allocations in the absence of aid. These studies are not wholly convincing in their attempt to generate a credible counterfactual. Also by focusing solely on the health sector, these studies implicitly assume that no other sector has the same priority as health. Country case studies offer an alternative approach to study the issue of aid fungibility. See for example a study in Vietnam (Dodd *et al.*, 2010).

One area in which the fungibility of donor aid has been little discussed is in the context of universal coverage. This may be because traditionally donors have not funded activities in support of achieving universal coverage (eg. social health insurance, tax subsidised health care). However, increasingly donors are providing direct financial assistance in the support of "free care" policies. If such aid is fungible, this poses several risks. First, given the short attention span of donors, it is not clear aid can support the achievement of such a long term goal. Second, aid volatility suggests that health systems which rely too heavily on external support to finance the recurrent costs of core government services may face catastrophic consequences if donors pull out of a country.

[7] We focus here on cross-country studies but note that there a number of country studies, most notably one on the fungibility of external aid for health in Vietnam (Dodd et al 2010).

3.6 Other topics addressed in the literature

There are a number of other topics addressed in the literature on fiscal space for health. These are briefly discussed below. Efficiency of health spending is one area in which fiscal space can be expanded. A recent World Health Report estimates that a staggering 20-40 percent of health resources are wasted (WHO, 2010). A key policy area that will impact on drives towards efficiency is purchasing, about which there is a burgeoning literature. More fundamentally, efficiency is incredibly difficult to measure, as a recent debate on the English NHS demonstrates (Black, 2012).

In certain countries, the quality of governance and corruption are also likely to be key determinants of efficiency, although again there are considerable challenges in both measuring the problem and identifying solutions. On the donor side, greater efficiency through closer alignment and reduced transaction costs can also create fiscal space. But there may also be disincentives for improving domestic revenue mobilisation associated with donor funding – a kind of moral hazard issue. Thus, even if aid increases fiscal space in the short term, it may in fact hamper long term prospects for raising health resources.

The literature contains various country-level assessments of fiscal space for health (Tandon and Cashin, 2010). These studies seek to examine the prospects for increasing health spending and range from simple back-of-the-envelope calculations to complex analyses relying on dynamic computable general equilibrium models (Gottschalk, 2009). Simple projections of fiscal space in 30 low-income countries under even the most positive scenario produce findings that suggest the majority would not reach the $34 per capita that the Commission on Macroeconomics and Health considered the minimum cost of an essential package of health care (Williams and Hay, 2005).

Additional issues which we do not elaborate on include the implications of aid volatility on efforts to expand fiscal space, debt and debt cancellation, what type of health spending (eg. recurrent or investment expenditure) absorbs fiscal space in the short-term versus the long-term, and the need to consider the distributional consequences of expanding fiscal space through benefit incidence analysis.

4 Education Sector

In exploring fiscal space, it is perhaps interesting to make the comparison between health and education. In important ways the two sectors are similar. Both are concerned with human capital formation. The government plays a central role in the provision of health and education services in most countries. Policy debates related to health and education are often high on the political agenda. However, there are also key differences. Most notably, education has always been considered a key determinant of economic growth such that spending on education is considered an investment. In contrast, health has and continues to be regarded as an unproductive sector.

Two Millennium Development Goals concern education. Goal 2 is to achieve universal primary education by 2015. Goal 3 is to promote gender equality and empower women with the target of eliminating gender disparity in primary and secondary education. To help countries meet these goals, the Education for All – Fast Track Initiative was launched in 2002. This then became the Global Partnership for Education after disillusionment with original initiative (UNESCO, 2010). It is a multilateral partnership comprising 46 developing countries, and over 30 donor organisations. It has spent over $2 billion since 2003 and claims to have increased domestic financing to education by 6 percent annually (www.educationfasttrack.org/).

In what follows we address three questions. First, are data on education spending available? The National Health Accounts framework is an established system for health accounting. However, no such framework exists for education. It is therefore not surprising that the quality of internationally comparable data on education spending lags far behind health. In reference to public expenditure data on education, the Education for All Report 2008 notes that “there are considerable limitations to the data” (UNESCO, 2008). The report has little to say about private expenditure on education.

UNESCO Institute for Statistics (UIS) is the main repository of data on education spending. For 2005, they have data on public education expenditure as a proportion of total government expenditure for 107 countries only. Nevertheless, regional and income-group averages are available for various education spending indicators, which makes a comparison with the health sector possible. The Institute of Statistics reports that government education spending as a proportion of total government spending is 18.5 percent and 16.9 percent in low- and lower-middle income countries respectively in 2009. This compares with 8.9 percent and 5.6 percent on health in the two groups of countries in 2008. These data suggest that government spending on education is considerably higher than that on health in the world’s poorest countries. Note that the Institute of Statistics does not report on private or external sources of education financing. Estimates of donor spending on education come from the OECD database Official Development Assistance.

Second, are there estimates of the cost of achieving education goals? The Education for All Report 2010 estimates that low-income countries could mobilise an additional $7 billion per year for education (UNESCO, 2010). But even with this increase, it estimates a funding gap of $16 billion per year in low-income countries – which presumably must be filled by donors. The $16 billion funding gap far exceeds the $12 billion that is estimated to be currently (in 2007) spent on education in these countries. An important caveat is that there is likely to be considerable uncertainty in this $12 billion estimate given the state of international sources of data on education spending.

Third, to what extent is the framework of fiscal space used in education? The general impression from the literature is that fiscal space for education has received limited attention. Mobilising resources for education is high on the agenda of the Global Partnership for Education, but this is rarely analysed using the language of fiscal space. A background paper to the Education for All Report 2010 examines the impact of the global financial crisis on fiscal space for education (Martin and Kyrili, 2009). Despite the objective of the report, the analysis of fiscal space is not education specific but rather conducted in isolation of its attempt to understand trends in financial resources for education.

There may be a host of reasons why fiscal space as an analytical framework has not caught on in education as it has in health. One likely contender is that education sectors in developing countries are less resource-constrained than health, which means less attention has been given to the question of how to increase education resources. Because education is considered a productive sector, finance ministries may be more persuaded by the argument that education is an investment, able to deliver handsome returns in the form of economic growth. Traditionally health ministries have always struggled to argue the case for investing in health. A second reason relates to the role of donors. International aid to health far exceeds that given to education and, as previously mentioned, fiscal space is a concept that has been promoted largely by aid organisations.

5 Gaps and the Way Forward

Rather than thinking of fiscal space for health as an area of research, it is perhaps more instructive to view it as a framework with which to conduct research on how countries can increase financial resources for health. In other words, as a concept it can help pinpoint specific research questions that will aid understanding of how to increase the volume and efficiency of health resources.

5.1 Knowledge gaps

The type of literature found on fiscal space suggests that interest in the topic has largely been generated by multilateral and bilateral aid agencies. Few publications on fiscal space were found in academic journals, probably because the topic has not appealed to researchers and journal editors alike. This done not mean, however, that there are no avenues for future research on the fiscal space.

At a very basic level, few low-income countries have conducted descriptive analyses of how the health system is funded. Public expenditure reviews may play such a role but they rely heavily on the availability of data coming from National Health Accounts. There has been a concerted effort to institutionalise NHAs, but they remain infrequent exercises reliant on technical assistance. Annual financial data on the health system are a prerequisite for conducting research on fiscal space for health.

Most strikingly, there is little empirical evidence on what are the most effective and sustainable ways of increasing fiscal space. The fiscal space framework provides a good starting point to examine health resources but ultimately it generates more questions than answers. How does a government increase GDP growth and tax revenues? What factors lead a government to give more priority to health? What is the feasibility and effectiveness of implementing different earmarked taxes for health? How does a government attract external aid for health? What policy reforms are most effective in generating efficiency improvements in the health system? And of course there are many more questions.

Each of these questions is a research agenda in itself and certainly no literature review can easily summarise the evidence on even one of these questions. This list of questions is simply to demonstrate that, while fiscal space may be a relatively novel concept, the substance underpinning it concerns issues that policymakers have had to grapple with for decades. Putting aside the question of GDP growth, it is fair to speculate that there is probably little evidence on the remaining questions, beyond what has been summarised in this review. A particular challenge going forward will be to define appropriate research questions – that is, questions that are both useful for policymakers and amenable to research.

5.2 Future avenues of research

The academic literature on issues relating to fiscal space for health is its infancy which means there are a number of future avenues for research. RESYST will need to assess the extent to which it has an interest or comparative advantage in undertaking any of these suggested research activities. No research questions relating to tax administration are outlined below. While important for fiscal space, tax administration is an incredibly technical area that partner organisations in RESYST are assumed to have little desire or expertise to investigate.

Country experiences with innovative domestic financing for health

This study would expand on a background paper to the World Health Report 2010 (Stenberg *et al.*, 2010) to examine country experiences in using innovative domestic financing tools. This would seek to shed light on the revenue generating capacity of different taxes, the policy processes that led to their adoption, the technical challenges surrounding implementation and the potential for distorting behaviour in unintended ways. A range of research methods could be employed, although qualitative methods are likely to offer the most potential.

In-depth study of how a country has achieved sustainable increases in health spending

This study would provide an in-depth examination of how a specific country has managed to achieve large and sustainable increases in health spending. The framework for expanding fiscal space (ie. the five pillars) would provide the basis with which to investigate this question. To be insightful, the study would need to identify the key actors, processes, and policies that led to an expansion in fiscal space, as well as the political context in which they all operate. This study will be most amenable to qualitative research methods, although a quantitative understanding of the financing picture is likely to be a prerequisite.

What are the main sources of growth in health spending? An international perspective

This study would provide an introduction to the main sources of health financing that have spurred growth in health spending in developing countries. Using international data on health spending by source of finance it would seek to describe at a basic level how some countries have managed to increase health spending over the last one or two decades. One approach might be to separate countries into three categories: strong growth in health spending; weak growth in health spending; volatile growth in health spending. The descriptive analysis would then examine trends in health spending by financing source in each category to understand the relative performance of different countries.

What are the main sources of growth in health spending? A country perspective

This study would provide a detailed, descriptive picture of the sources of health financing in a particular country that has managed to achieve large and sustainable increases in health spending over the last one or two decades. The exercise would be largely quantitative. It would begin by examining the macroeconomic environment and then focus on the health sector, by mapping over time the contribution of each health financing source to the overall pie. A natural starting point is the National Health Accounts framework, which suggests this exercise would be feasible only in countries that have conducted NHAs at multiple points in time. An extension of the analysis would be to try and establish a link between health spending trends (by source) and specific policy initiatives or macroeconomic performance.

Responsiveness of government health spending to the macroeconomic environment

This study would use international data to conduct an econometric analysis of how responsive government health spending is to changes in GDP and general government revenue. Specifically, it would provide estimates of the elasticity of government health spending to GDP and government revenue. Health spending and macroeconomic data on a panel of countries across the world would provide the basis for the analysis. To address issues of confounding, the analysis could exploit a natural experiment generated by the G8 debt cancellation initiative in 2005.

6 Concluding Remarks

This paper set out to review the literature on fiscal space for health. It distinguished between two bodies of relevant literature. The first contains papers and reports that use the language of fiscal space. These tend to focus on improving our conceptual understanding of fiscal space or providing country assessments of fiscal space. The second body of literature relates directly to the five ways of generating fiscal space for health – namely GDP growth and tax revenue, reprioritisation, earmarked taxes, external grants, and efficiency gains. Because this literature is wide-ranging and rarely identified with the use of the fiscal space terminology, it is difficult to attempt to provide a comprehensive summary of such evidence.

For this reason we purposively selected four themes we believe to be important in discussions on fiscal space. We find that few studies scratch below the surface to examine *how* countries have expanded fiscal space for health. At a very basic level, many countries lack the data to build an accurate picture of the sources of financial resources for health over time. This is surely a prerequisite for understanding what policies, measures, or decisions have been successful (or unsuccessful) in generating greater fiscal space. Empirical work at the country level has tended to be forward-looking assessments of potential ways to increase fiscal space rather than rigorous examinations of how a particular country has increased fiscal space.

Despite the challenges of conducting a literature review of this nature, a number of knowledge gaps and future avenues for research emerge. These include: 1) country experiences with innovative domestic financing tools for health; 2) in-depth study of how a country has achieved sustainable increases in health spending; 3) cross-country analysis of the main sources of growth in health financing; 4) country level analysis of the main sources of growth in health financing; and 5) a cross-country analysis of how responsive government health spending is to the macroeconomic environment.

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