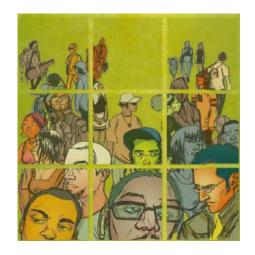
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General budget support – has it benefited the health sector?

World Health Report (2010) Background Paper, No14

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A. Introduction

Ministries of Health in low- and middle-income countries have traditionally relied on project support as the main aid modality to support their development needs. Some major development partners and donors, such as the World Bank, the United Kingdom and the European Union, have provided increased assistance through an alternative aid modality since the late 1990s: general budget support (GBS). Even before, multilateral agencies such as the International Monetary Fund (IMF) and the development banks provided budget support in the form of concessional credits and grants, although these were labelled as balance of payments support or structural adjustment programmes. What has changed over the last decade is the implementation and design of budget support¹.

Whilst general budget support has numerous definitions, a common feature is that funds are channelled through the national treasury and are managed according to national budgetary procedures. In the last decade, provision of GBS in low-income countries has typically been linked to implementation of a national Poverty Reduction Strategy (PRS). Still, various forms of aid have been labelled as GBS, including grants, loans, debt relief initiatives or other structural adjustment facilities. In our analysis we used the stringent definition of the Development Co-operation Directorate of the Organisation for Economic Co-operation and Development (OECD-DAC), which includes grants and loans channelled through the national treasury which are not tied to a particular sector, but excludes debt relief initiatives. Funding related to Sector Wide Approaches (SWAps) for health (or other sectors) are not included because they are specifically intended for the specified sector.

This paper first assesses the main expected impacts of GBS on the health sector. The potential benefits and weaknesses of GBS are briefly outlined, along with a description of recent trends. This is followed by an empirical analysis of the impact of GBS on health expenditure in low- and middle-income countries, using cross-country panel data.

B. General budget support: expected impacts, evidence and recent trends

Recent trends

Many of the recent publications describing patterns in external aid have been based on the data on commitments that bilateral and multilateral sources report to the OECD-DAC^{2,3}. While commitments might represent donor intentions at the time a promise is made, they are not always intended to be disbursed in the year the commitment is made, and they may never be fully disbursed for a variety of reasons. Accordingly, disbursements rather than commitments are likely to be the driver of recipient country behaviour when allocating their own budgets to different sectors and priorities. There has been a series on disbursements reported by OECD-DAC since 2002, which shows that disbursements of GBS reached the equivalent of US\$4.36 billion in 2008, more than double the value in 2002.

The largest reported contributors over the period as a whole were the European Union (24%), the United Kingdom (20%) and the USA (15%). France contributed around 8% of all disbursements, although it more than doubled its contributions from 2007 and 2008, accounting for more than 16% of all such disbursements during 2008 (Source: OECD-CRS). The World Bank is also sometimes believed to be an important contributor to GBS. However, it classifies its contributions as sectoral support which falls outside the OECD definition of budget support. These payments are therefore not included in our econometric analysis as they are specific to a designated sector.

The proportion of GBS in total official development assistance (ODA) has always been, however, relatively small: in 2002 it comprised only 3.6% of total ODA (when debt relief funding is included in total ODA), or 4.1% of ODA excluding debt relief. In comparison, disbursements specifically for health, population and reproductive health accounted for over 8% of ODA excluding debt relief, 2.3 times the size of GBS. In addition, GBS subsequently grew less rapidly than most other forms of aid (see Figure 1). Traditional project assistance to health, population and reproductive health more than tripled between 2002 and 2008, as did disbursements for water and sanitation. By 2008, therefore, GBS accounted for only 3.6% of all disbursements (excluding debt relief), and disbursements earmarked specifically for health, population and reproductive health were over 3.6 times the size of disbursements for GBS.

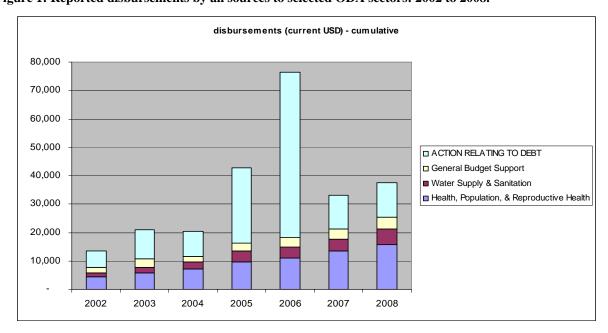


Figure 1: Reported disbursements by all sources to selected ODA sectors: 2002 to 2008.

Source: OECD CRS database, accessed on 2 November 2009; Official Development Assistance only. http://stats.oecd.org/Index.aspx?DatasetCode=CRSNEW

Expected impacts of GBS

General budget support has been promoted by some development partners as a response to the perceived failings of classical project support⁴. Projects are often seen as suffering from slow implementation, high transaction costs and limited sustainability. Projects may also undermine state structures and ownership of development agendas: for example, donors allocate funding to donor priorities and not necessarily the priorities of the recipient countries; the projects they fund hire public sector staff at higher salaries than they can gain in the public sector depleting public administrations of their best staff; and projects often rely heavily on external technical assistance so do not help to build national capacities^{4,5,6,7}.

These criticisms were an important motivation behind the Paris Declaration on Aid Effectiveness which recommended that donors consider reducing project funding in favour of providing GBS or sector support in accordance with recipient country priorities. Well implemented GBS should contribute to:

- Scaling-up of resources, increasing predictability of funding and reducing transaction costs associated with project aid;
- *Country ownership*, by promoting country leadership in the formulation of national development strategies and priorities;
- Alignment, by linking budget support objectives and conditions to national priorities and strategies; strengthening country systems in using national institutions and management procedures for disbursement of funds and delivery of results; aligning to national budget

- cycles; promoting and strengthening national public financial management and procurement systems; and by untying aid;
- *Harmonization*, by promoting common, simplified planning and reporting procedures and building on comparative advantages with a subsequent division of labour between development partners;
- Managing for results and improving decision-making by adopting national monitoring and evaluation frameworks and by linking country allocation of resources to results and performance;
- *Mutual accountability*, by building on active policy-dialogue and broad partnership throughout the lifespan of budget support programmes.

GBS is no longer seen, therefore, as merely a way of reducing budget deficits or maintaining macroeconomic stability. Instead, the paradigm for the negotiation of GBS programmes has over the last decade moved to policy-dialogue for supporting national ownership and priority setting emphasising propoor policies and good governance⁶.

At the same time, a number of concerns with GBS have been raised. Perhaps the most important is fiduciary risk. This includes the use of resources for non-priority sectors, inadequate accounting and suboptimal performance. It is of particular concern in countries with weak financial management systems and where government accountability is unclear^{8,9}. Still, it is difficult to find any evidence that classical project-based funding has been less prone to resource leakage or inefficiency¹⁰.

Another key concern relates to the challenges for recipient countries in the negotiation, preparation, implementation, monitoring and evaluation of GBS. These require substantial skills and an increased commitment to reforms in governance and public financial management. Transaction costs may, therefore, actually rise, at least in the short term. Further, for health (and other sector-specific) ministries, GBS may be seen as the sole responsibility of finance ministries. Less engagement in the GBS process increases the risk that a health ministry receives an insufficient share of resources as national budgets increase. However, this has not always been observed and some reports suggest a positive effect of GBS on national social budgets and MDGs^{11,12}.

The conflicting possibilities mean that donor countries are divided on the relative strengths and weaknesses of GBS¹³. Moreover, line ministries in recipient countries, such as those for health and education, are more likely to prefer sector-specific support, while ministries of finance are more likely to prefer the greater flexibility that GBS gives them.

Existing Evidence

While development partners have long been concerned about the potential impact of GBS on the various dimensions of development, including pro-poor growth, good governance, service delivery and sectoral policies, hard evidence has been more difficult to find. An evaluation of GBS from 1994-2004 was conducted by a team of academics, consultants, representatives of seven recipient governments, and staff of bilateral and multilateral aid agencies¹. Individual reviews have also been conducted by multilateral agencies such as the World Bank⁴ and the IMF¹⁴. Bilateral development partners have also commissioned and published assessments of their own experience with aid instruments including GBS^{13,15,16}.

None of these evaluations were specific to health. The clearest benefits were in terms of improved capacity in public finance management probably because of the links between GBS and good governance conditionalities, and better country ownership of development programmes. Conversely, transaction costs were often found to have remained constant or even to have increased, for both donors and host governments. Nor were there any clear improvements in terms of reduced aid volatility.

These studies suggested that GBS was associated with increases in pro-poor 'priority expenditures' (as defined by country-specific PRS papers, which typically included health). Whilst a positive finding, there was no rigorous statistical analysis which accounted for confounding factors such as growth in GDP and government revenues, making it difficult to ascertain the specific contribution of GBS to increases in propoor spending. In addition, the studies did not systematically compare GBS to other aid approaches, nor did they analyse actual impacts on poverty alleviation. Most reviews of GBS have been cautious in drawing definitive conclusions about the general desirability of GBS, stressing the importance of agreement being reached on domestic policies and budget priorities as a condition for successful GBS programmes¹.

In 2009, the European Court of Auditors evaluated European Commission (EC) development assistance to health in Sub-Saharan Africa, including GBS¹⁷. It found that GBS supported by the European Union in this context was not associated with an increase in government spending on health in recipient countries. The report noted that in some cases beneficiary countries used much of GBS funds to reduce fiscal deficits. However, although critical of the EC's use of GBS, it does not conclude that GBS is less desirable than other aid modalities for health, stressing (as with other evaluations) the importance of country context.

The conclusions are not, therefore, clear-cut. While GBS linked to good governance and poverty reduction conditionalities has apparently improved financial management practices, it is not clear if

apparent increases in pro-poor spending were a result of the GBS or of other factors such as growth in GDP and government revenues from domestic sources. This is the focus of the next section.

C. The empirical relationship between general budget support and domestic health expenditure

Methodology

A growing body of literature has focussed on the impact of external aid specifically designated for health on government health expenditure from domestic sources, suggesting that recipient governments choose to reallocate some of their domestic revenues away from health to other sectors when external project support is received 18,19,20,21. On the other hand, the impact of general budget support on domestic government health spending has not been evaluated rigorously. That is the purpose of this section.

The Model

Theory

In theory, the arrival of GBS in a country could be associated with an increase or decrease in total health expenditures passing through government channels in the recipient country, or it could have no impact at all. Total health expenditures passing through government channels - generally called gghe (general government health expenditure) by national health accountants - includes funds obtained from both domestic and external sources. GGHE would fall subsequent to the arrival of GBS if there is a fall in government health spending from domestic sources (here called $gghe_0$) that offsets any increase in health spending funded from the GBS and other external sources. GGHE would remain constant if any fall in $gghe_0$ was exactly equal to the increase in health expenditure from external sources passing through government, while gghe would rise otherwise.

There are a number of other factors that also influence the decision by governments about $gghe_0$ in addition to the arrival of GBS. For example, the ability of government to spend, determined by the availability of funds from domestic and external sources and by macroeconomic policy about fiscal space, determines total government expenditure for all sectors combined (called gge - general government expenditure). More narrowly, the size of domestically sourced gge - or gge_0 - will influence $gghe_0$. External funding from sources other than GBS will also have an influence on gge, and through it, gghe, while external funding for health from sources other than GBS will directly influence gghe.

A complicating factor is that the amount of revenue a government can raise is directly affected by the size of the domestic economy (Gross Domestic Product or GDP). In addition, GDP per capita has been used

to classify countries into low-, middle- and high-income groupings, something that influences the amount of external assistance a country is offered. In other words, GDP per capita influences gge, gge_0 , GBS, and other types of external funding for health (called ext0). This must be taken in to account when choosing the functional form of the relationship used to explain gghe and $gghe_0$, discussed subsequently.

Dependent variables

Ideally the dependent variable should be government health expenditure in the recipient country derived from domestic sources gghe0. This is frequently impossible to obtain because many governments do not separate out the sources of funding when reporting on their expenditures because of fund fungibility. Accordingly we use gghe as well as an estimate of gghe0.

Government health expenditure (gghe). Government health spending includes spending from all levels of government as well as from compulsory social health insurance. The data reported by WHO, the only available data base covering all countries (that are members of that Organization) show government as agent rather than source, so these data include funding from tax revenue, other government revenue, compulsory social insurance funds and external funds channelled through government or public health facilities. As we explained earlier, gghe could increase, fall or remain constant with an inflow of GBS depending on decisions governments make about gghe0.

Government health expenditure from domestic sources (gghe0). Accurate information on this exists for some countries and some years, particularly those that have undertaken full national health account studies. For the other countries and years, we estimate it by subtracting external health funding known to have arrived in the country, out-of-pocket domestic expenditure and private domestic expenditures of other forms from a country's total health expenditure. External funds arriving in the country are provided in the WHO database, but typically no information is available on whether the funds were allocated to the public or private sectors. In many countries, most donor funding has, until recently, passed through government channels, in which case this estimate would be accurate. It would underestimate government expenditure from domestic sources where a substantial amount of external funding is channelled through the non-government sector.

Independent variables

General budget support (gbs). GBS data are the disbursements reported in the OECD DAC database.

Health specific aid (ext0). Total external funds estimated to have been spent on health in the country are taken from the WHO national health accounts database as reported above. We net out the external funding estimated to have been provided through GBS by country NHA studies, or by assuming that the GBS reported by OECD DAC is allocated to different sectors in proportion to overall government health

expenditures. So *ext0* is total external health expenditure derived from traditional project and sectoral support.

General government expenditure (gge) and general government expenditure from domestic sources (gge0). gge0 was obtained by subtracting total GBS (i.e. all GBS rather than GBS for health alone) from gge.

Regression Models

Our dataset is an unbalanced panel - some countries have many years of data and some countries less. Accordingly, each observation for countries with multiple years of data cannot be assumed to be independent - e.g. serial correlation exists. We used dynamic panel techniques, and specifically the model developed by Arellano/Bond and Blundell/Bond to estimate unbiased coefficients in the presence of serial correlation^{22,23}. The general model takes the form:

$$y_{it} = \sum\nolimits_{j=1}^{2} \lambda_{j} y_{i(t-j)} + \beta(x_{it}) + \eta_{i} + \varepsilon_{it}$$

In this equation, each i represents one country and each t represents one year; y_{it} is government health expenditure; λ is a scalar of coefficients for j lags (j=1, 2) of the dependent variable, which are used as regressors; β is a scalar of coefficients for a vector of covariates x_{it} ; η_i is a country-specific scalar; and ε_{it} is the random error.

We used the two different specifications of government health expenditure (y_{it}) in separate regressions to see if the results were consistent. We also considered per capita government health expenditure rather than total expenditure. In addition, we used US dollars at official exchange rates as well as international dollars in different specifications. In all specifications, two lags of dependent variable (i.e. $y_{i(t-1)}$ and $y_{i(t-2)}$) were used as regressors as these may be related to y_{it} .

The covariates, x_{it} , were per capita GBS, per capita general government expenditure as well as per capita health-specific aid. The covariates were also tested in formulations using the official exchange rate and in terms of international dollars. The logarithmic transformation is used for both dependent and independent variables which used the absolute currency terms because of their skewed nature in distribution as well as the convenience of the resulting regression coefficients being elasticities.

The model can account for unobserved variables that may be correlated with both dependant and independent variables. In this case, GDP per capita is treated as a confounder, as outlined in the theory

section. This endogeneity is overcome by designating GDP per capita as an additional instrument in the regressions. Table 1 presents the summary statistics for the dataset.

Table 1. Variables of interest

		Std. Dev.				
Variable Mean		overall	between	within		
capita gghe_x	21.840	26.332	34.393	5.709		
capita gghe0_x	19.011	27.369	37.664	5.012		
capita gge0_x	256.093	344.647	379.776	74.871		
capita ext0_x	4.871	5.091	4.483	2.672		
capita capgbs_x	3.644	6.088	4.857	3.637		
capita gghe_i	50.170	54.005	75.902	8.658		
capita gghe0_ i	43.605	57.708	83.837	8.157		
capita gge0_i	585.151	661.306	795.830	109.462		
capita ext0_i	11.708	10.604	9.418	5.512		
capita capgbs_i	8.536	12.228	10.320	6.986		

Note: variable names end with $_x$ are in exchange rate dollars; with $_i$ are in international dollars. All data is in per capita terms.

Data

We used panel data from 79 low and low-middle income countries where health specific aid and general budget support coexisted during the period 2002 to 2007. The data on domestic health expenditures and external health funding reaching the country are from the WHO NHA dataset (http://who.int/nha/en/), while the general budget support data are from the OECD DAC database of disbursements (http://oecd.org/dataoecd/50/17/5037721.htm). Data on GDP, *gge* are derived from the variables reported in the WHO NHA database.

Results

Government health expenditure from domestic sources (gghe0)

Results from all specifications for this model show that gbs does not have a significant impact on gghe0 (Table 2). Health specific aid (ext0), on the other hand, is negatively associated with gghe0 and the coefficients from all specifications are significant at the 5% level. The coefficient for ext0 is -0.157 (using US dollars), which implies that a one percent increase in ext0 is associated with 0.157% reduction

in government spending on health from domestic sources (*gghe0*). When *gge0* increases, *gghe0* increases by more than the percentage increase in *gge0*.

Total government health expenditure (gghe)

The coefficient of gbs was positive for all specifications of the equation. However, the relationship was only statistically significant in the regression where domestic values were translated into US dollars at the official exchange rate. Increases in gge0 are associated with increases in gghe and the relationship is statistically significant. Similarly, increases in health specific aid (ext0) have a statistically significant, positive impact on total government health expenditures. This is consistent with the results of the regressions using gghe0. They showed that although gghe0 declined following an increase in ext0, the decline in gghe0 was less than the increase in ext0, meaning that total health expenditure channelled through government (gghe) would increase.

Table 2. Result from the regressions

Dependent variable	Domestic government expenditure (gge0)		•	Health specific aid (ext0)		General budget support (<i>gbs</i>)			
	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.			
Domestic government expenditure on health (gghe0)									
gghe0_x ^a	1.282***	0.121	-0.157**	0.068	0.025	0.019			
gghe0_i ^b	1.401***	0.128	-0.243***	0.065	0.007	0.025			
Total government expenditure on health (gghe)									
gghe_x ^a	0.697***	0.055	0.121***	0.024	0.018	0.006**			
gghe_i ^b	0.439***	0.086	0.125***	0.024	0.016	0.009*			

Note: a, in exchange rate dollars; b, in international dollars.

Discussion

The most important result is that GBS does not seem to have an impact, positive or negative, on government health spending from domestic sources, unlike external project assistance that seems to result in a decline in government health expenditure from domestic sources (gghe0). However, because the data series for gghe0 will sometimes underestimate the true value, we also explored the impact of GBS on total gghe from all sources. The results were consistent. An increase in GBS resulted in an increase in total gghe - i.e. some of the GBS funds were used to finance health expenditures - although the relationship was statistically significant only in the regression where domestic expenditures are translated into US dollars at the official exchange rate.

^{***} p < 0.001, ** p < 0.05, * p < 0.1

The elasticity, however, was low. A 1% increase in GBS resulted in a 0.018 % increase in health spending by government. This implies that the share of GBS going to health is much lower than the share of health in the government budget net of GBS, which is typically in the range of 4% and 19% (http://who.int/nha/en/).

The low share might be because GBS is frequently linked to conditionalities that focus on macroeconomic priorities such as the reduction of government debt reduction or exchange rate stabilization or because the monitoring of social policies in the overall framework of GBS negotiations may simply be overlooked. However, it is somewhat surprising given that many GBS programmes are linked to poverty reduction strategies that require increased social sector spending.

The second unexpected finding is that an increase in total government expenditure from domestic sources leads to a substantial increase in government health expenditures. The elasticity of gghe0 with respect to gge0 is greater than 1 - meaning a 1% increase in domestic government revenues is reflected in an increase in government health expenditures from domestic sources of more than 1%.

D. Conclusions

As designs of GBS programmes vary broadly and are rarely the only source of aid in recipient countries, it is a major challenge to evaluate their impact on governance and sectoral policies. But the major constraint for their evaluation comes from the nature of this instrument: as funds are fungible it is not possible to infer causal effects from eventual correlations between GBS flows, public expenditure and policy outcomes.

Recent evaluations of GBS programmes produced mixed results. Improvements in public finance management and country ownership of development programmes were offset by higher transaction costs. Evidence from these evaluations on the impact of GBS on actual health expenditures varied markedly, and was constrained by the lack of controls for other factors that determine government health expenditure.

In this paper, empirical analysis of cross-country panel data found evidence that GBS had no apparent impact on government health expenditures derived from domestic sources, whilst increasing total government health expenditure. The proportion of each additional dollar of GBS used for health was, however, very small. In contrast, \$1 in health specific aid, although leading to a decline in expenditures from domestic sources, still increases total government health expenditure by a greater amount than \$1 of GBS.

However, GBS is playing an increasing role in today's aid environment. Ministries of health need to understand how it works, and how to influence decisions about the allocation of the resources it brings as they should do for all aid instruments. Early participation of health sector policymakers in PRS discussions and GBS negotiations is an important prerequisite for ministries of finance to release additional funds to health priorities⁵. It will also ensure that any reforms initiated as part of conditions agreed in GBS programmes are realistic and non-damaging for the health sector. To play this role, health ministries may need to develop skills in public administration, financial management and policy-dialogue. It will also require that they address governance issues within the health sector. The cost of developing such capacities may be significant, but it can help ensure that some of GBS funds filter through to health, as well as improve health service delivery.

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