Social Science & Medicine 159 (2016) 161–169

Contents lists available at ScienceDirect

Social Science & Medicine

journal homepage: www.elsevier.com/locate/socscimed

Is Development Assistance for Health fungible? Findings from a mixed methods case study in Tanzania

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ARTICLE INFO

Article history:
Received 14 August 2015
Received in revised form
4 May 2016
Accepted 5 May 2016
Available online 6 May 2016

Keywords:
Tanzania
Fungibility
Aid effectiveness
Development Assistance for Health
Substitution
DAH
Mixed methods

ABSTRACT

The amount of Development Assistance for Health (DAH) available to low- and middle-income countries has increased exponentially over the past decade. However, there are concerns that DAH increases have not resulted in increased spending on health at the country level. This is because DAH may be fungible, resulting from the recipient government decreasing its contribution to the health sector as a result of external funding. The aim of this research is to assess whether DAH funds in Tanzania are fungible, by exploring government substitution of its own resources across sectors and within the health sector.

A database containing 28140 projects of DAH expenditure between 2000 and 2010 was compiled from the Organisation for Economic Co-operation and Development's Creditor Reporting System (OECD-CRS) and AidData databases. Government health expenditure data for the same period were obtained from the Government of Tanzania, World Bank, public expenditure reviews and budget speeches and analysed to assess the degree of government substitution. 22 semi-structured interviews were conducted with Development Partners (DPs), government and non-government stakeholders between April and June 2012 to explore stakeholder perceptions of fungibility.

We found some evidence of substitution of government funds at the health sector and sub-sector levels and two mechanisms through which it takes place: the resource allocation process and macro-economic factors. We found fungibility of external funds may not necessarily be detrimental to Tanzania's development (as evidence suggests the funds displaced may be reallocated to education) and the mechanisms used by DPs to prevent substitution were largely ineffective.

We recommend DPs engage more effectively in the priority-setting process, not just with the Ministry of Health and Social Welfare (MoHSW), but also with the Ministry of Finance, to agree on priorities and mutual funding responsibilities at a macroeconomic level. We also call for more qualitative research on fungibility.

1. Introduction

The amount of Development Assistance for Health (DAH) available to low- and middle-income countries has more than doubled from $15.3 billion in 2004 to $35.9 billion in 2014 (Dieleman et al., 2013). This substantial increase has led some to explore whether DAH is fungible (capable of being substituted) or additive to the overall allocation to the health sector within countries (Dieleman and Hanlon, 2013; Pack and Pack, 1993). While some may argue fungibility is a rational response of countries faced with sub-optimal external aid allocations (McGillivray and Morrissey, 2000), others see it as a threat to meeting global targets on investment in health (Lu et al., 2010). In this latter respect, the current emphasis on achieving universal health coverage and financing the Sustainable Development Goals have focussed attention on domestic contributions to the health sector (United Nations, 2015), and several Development Partners (DPs) are working on co-financing agreements before DAH is provided (The Global Fund to fight AIDS Tuberculosis and Malaria, 2013). Exploring the extent to which DAH is fungible is therefore timely, as is the need to understand its causes and why it arises, both to assist those trying

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http://dx.doi.org/10.1016/j.socscimed.2016.05.006

to reduce it, and to assist into the enquiry of whether fungibility is a rational response to increases in DAH.

There have been various attempts to study DAH fungibility, both from the sector (Dieleman and Hanlon, 2013; Farag et al., 2009; Lu et al., 2010) and sub-sector levels (Harper, 2012; Shiffman, 2008). In the health literature fungibility is typically defined as the non-additionality of DAH, where DAH is spent in the health sector, but the recipient government substitutes its own resources to other priorities (Morrissey, 2006). However, there is no consensus on a measure of fungibility, or a threshold beyond which DAH is considered fungible. Many studies have assessed the degree of DAH fungibility by asking the question: does an extra dollar of DAH result in an extra dollar of health expenditure by the government? To answer this question, most studies have used multi-country data, running regressions to assess the relationship between DAH and government health expenditure across different time points (Dieleman and Hanlon, 2013; Farag et al., 2009; Lu et al., 2010; Stuckler, Basu and McKee, 2011; Van de Sijpe, 2013). These studies generally conclude DAH is fungible, although the magnitude of the effect varies between a US$0.27-US$1.65 decrease in domestic expenditure on health per dollar of DAH. There has been some debate as to the validity of these studies due to concerns about the accuracy and completeness of the data they are based on, their methodological approaches, including their handling of missing data and regression models, as well as the risk of endogeneity and ambiguity as to the direction of causality (Ooms et al., 2010; Roodman, 2012; Sridhar and Woods, 2010). Although some of the authors have responded to these criticisms (Dieleman et al., 2013), doubts remain on whether cross-country studies can disprove the null hypothesis (that DAH is not fungible). Further, these studies highlight the heterogeneity of results across countries (Jones, 2005; Ooms et al., 2010), but, generally do not examine the drivers of these differences. There is therefore a need to go beyond cross-country analyses and investigate DAH fungibility from the perspective of a recipient country, and explore the mechanisms behind the broader econometric findings using quantitative and qualitative methods.

There has been one country case study of DAH fungibility in Vietnam, which analysed the effect of two World Bank health projects on government expenditure, and found DAH was not fungible between sectors, but was fungible within the health sector across provinces (Wagstaff, 2011). However, this study did not explore the reasons that led to fungibility. Further, three case studies examining the additionality of HIV development expenditures in Honduras, Rwanda and Thailand found no evidence of government substitution, but did find DPs substituted their HIV funding to other priorities as a response of increased HIV funding from the Global Fund to Fight Aids, TB and Malaria (Garg et al., 2012). There is therefore a dearth of data on country level factors that may lead to fungibility, the mechanisms through which it occurs and the implications it has for health policy; although these are recognized to be essential to understand fungibility (Harper, 2012). Addressing this gap can help those designing strategies to deal with fungibility, including changing the channel and mechanisms of DAH disbursement or co-financing arrangements (Leiderer, 2012; The Global Fund to fight AIDS Tuberculosis and Malaria, 2013).

This study intends to address some of these knowledge gaps by using the Tanzanian health sector as a case study. We first use a mix of quantitative and qualitative methods to assess whether trends on domestic and external expenditures in Tanzania are consistent with DAH fungibility. We then explore qualitatively the perceptions of stakeholders on the processes that may lead to substitution of government funds.

2. Study setting

Tanzania (mainland) was selected as the case study country because it is one of the top recipients of DAH globally and is heavily dependent on external health funding, which accounted for 30–48% of total health expenditure between 2003 and 2013 (Wolrd Health Organisation, 2015).

A multitude of actors are active in the Tanzanian health sector. These include DPs: bi-lateral and multi-lateral agencies, and private foundations; all levels of government: Ministry of Finance, Prime Minister's Office Regional Administration and Local Government (PMO-RALG), Ministry of Health and Social Welfare (MoHSW) and regional and council health management teams; and non-government agencies, including faith-based organisations, civil society organisations, non-government organisations (NGOs) and the private, for profit sector.

The Tanzanian health sector is funded from a mix of domestic and external funds. Domestic funds are mainly generated through taxation. DPs funding the health sector directly do so using three different modalities. The first is the basket fund, which was established in 1999 and is earmarked pooled health sector funding allocated to the MoHSW, PMO-RALG and regional and local authorities. In addition, DPs provide funding for vertical projects directly to the MoHSW, regions and districts; and off-budget funds channelled through non-government agencies. Finally, from 2001 DPs have been providing unmarked General Budget Support (GBS) to the Ministry of Finance.

DPs and the government have worked under a Sector Wide Approach (SWAP) in the health sector since 1998, with the aim of alignment in support of the government's health and financing policies, using harmonised procedures and country public financial management systems (Hobbs, 2001). The Tanzanian health sector underwent a decentralisation reform in 1994, known as "Decentralisation by Devolution" that decentralised financial and budgeting to the district level (Ministry of Health and Social Welfare, 2008).

3. Methods

3.1. Methodological approach

Given the lack of sufficient historical data on domestic and external health financing and difficulty in controlling confounders, we did not seek to quantitatively establish a causal relationship on whether DAH results in substitution. Instead, we first provide a descriptive (primarily correlative) account of domestic and external health expenditure trends as sources and agents, where we compare trends in total domestic and external health expenditure and the relative shares each represent to give an indication of how they change in relation to each other and as an overall priority to DPs and government. Although descriptive in nature, these analyses allow for the exploration of potential substitution across sectors and sub-sectors. This is complemented through in-depth interviews exploring possible explanations for the trends, and mechanisms of possible causality, including a focus on stakeholders' perceptions on whether fungibility is taking place in the Tanzanian health sector. This is used to develop an in-depth exploration of the potential mechanisms and governmental processes that may lead to DAH fungibility in an effort to unpack the potential causal pathway.

We used a modified sequential transformative strategy to combine quantitative and qualitative methods, as described by Creswell (2003). This strategy involves carrying out the two methods in sequential stages of data collection (quantitative followed by qualitative), and provides a degree of flexibility to