

Whole of government approaches to accelerate adolescent success: efficiency and financing considerations

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Accepted on 30 November 2023

Abstract

The multiple domains of development covered by the Sustainable Development Goals (SDGs) present a practical challenge for governments. This is particularly acute in highly resource-constrained settings which use a sector-by-sector approach to structure financing and prioritization. One potentially under-prioritized solution is to implement interventions with the potential to simultaneously improve multiple outcomes across sectors, what United Nations Development Programme refer to as development 'accelerators'. An increasing number of accelerators are being identified in the literature. There are, however, challenges associated with the evaluation and implementation of accelerators. First, as accelerators ators have multiple benefits, possibly in different sectors, they will be undervalued if the priority setting is conducted sector-by-sector. Second, even if their value is recognized, accelerators may not be adopted if doing so clashes with any of the multiple competing interests policymakers consider, of which efficiency/social desirability is but one. To illustrate the first challenge, and outline a possible solution, we conduct a cost-effectiveness analysis comparing the implementation of three sector-specific interventions to an accelerator, first using a sector-by-sector planning perspective, then a whole of government approach. The case study demonstrates how evaluating the cost-effectiveness of interventions sector-by-sector can lead to suboptimal efficiency rankings and overlook interventions that are efficient from a whole of government perspective. We then examine why recommendations based on a whole of government approach to evaluation are unlikely to be heeded. To overcome this second challenge, we outline a menu of existing and novel financing mechanisms that aim to address the mismatch between political incentives and logistical constraints in the priority setting and the economic evaluation evidence for cost-effective accelerators. These approaches to financing accelerators have the potential to improve efficiency, and in doing so, progress towards the SDGs, by aligning political incentives more closely with recommendations based on efficiency rankings.

Keywords: Development financing, accelerators, economic evaluation, decision-making, resource allocation, policy evaluation, research to policy

Introduction

The Sustainable Development Goals (SDGs) embody a fuller view of development than their predecessors, the Millennium Development Goals (MDGs). The 17 SDGs, as opposed to the eight MDGs, seek to cover the economic, social and ecological domains of development. While the value of this broader view of development is hard to dispute, it presents practical challenges for governments, especially in highly resource-constrained settings. Each implementing sector, such as health or education, must compete for scarce funds to meet the multiple targets for which it is responsible. The COVID-19 pandemic, an outbreak of coronavirus 2 (SARS-CoV-2) in

2019, has aggravated this dynamic by hindering the realization of many of the goals, reversing positive progress on others and increasing demands on resources (United Nations, 2021). Against this backdrop, it is essential that countries use their resources efficiently to maximize their chances of meeting the SDGs and recovering from the socio-economic consequences of COVID-19.

A promising approach to improving efficiency while maintaining a focus on a fuller view of development is to implement interventions that have the potential to improve multiple outcomes simultaneously, what United Nations Development Programme (UNDP) refer to as 'accelerators' (2017).

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Key messages

- Interventions that have the potential to improve multiple outcomes across sectors are key to achieving the Sustainable Development Goals but are systematically undervalued when the priority setting is undertaken sector-by-sector. These interventions may often require a whole of government approach to identify, fund and implement.
- We propose an approach to economic evaluation that accommodates multiple cross-sectorial outcomes.
- We offer a menu of financing mechanisms to support the adoption of interventions with benefits across sectors.
 The choice between these depends on what the contextspecific political and logistical constraints that hinder the implementation of interventions requiring a whole of government perspective are.

Accelerator interventions include policy changes, new programmes or adaptations to existing activities. They can be single initiatives such as a cash grant scheme or involve a package of integrated services such as a cash grant plus a parenting support programme. The critical feature of accelerators is that they improve multiple SDG outcomes at once. We focus on accelerators for adolescents in Africa as the potential benefits of an accelerator approach for this group are significant (Cluver et al., 2019; Sherr et al., 2020; 2022; Du Toit et al., 2022; Mebrahtu et al., 2022). While success during the MDGs has resulted in a large youth population across countries in Africa, millions of young people remain at risk of multiple negative outcomes (UNICEF, 2017). Interventions to improve outcomes related to HIV, education, sexual and reproductive health, employment, violence prevention and mental health have been highlighted as a priority for the future social and economic success of the region (Patton et al., 2016).

There is a growing body of evidence pointing to possible accelerators for adolescents in Africa. Candidate accelerators include government social protection 'cash plus care' programmes that have the potential to improve multiple adolescent outcomes across sexual and reproductive health and behaviours, violence, HIV, mental health, education and labour (Cluver et al., 2019; Ismavilova and Karimli, 2020; Tanzania Adolescent Cash Plus Evaluation Team, 2021). For example, a cohort study in South Africa showed that the child support grant, combined with a parenting support and safe schools intervention, was associated with lower rates of violence against children (SDG 16.2), community violence victimization and perpetration (SDG 16.1) and high-risk sex (SDG 5.6), along with greater retention in HIV care (SDG 3.8), better mental health outcomes (SDG 3.4) and school progression (SDG 4.4) (Cluver et al., 2019). Other identified accelerators include combinations of cash transfers and sexual health and reproductive rights education, which were associated with better sexual and reproductive health outcomes and behaviours, nutrition, income, earnings and education and lower rates of violence and early marriage (Dunbar et al., 2014; Bandiera et al., 2019; Rudgard et al., 2022; Waidler et al., 2022; Orkin et al., 2023). For example, an Randomized Control Trial of such an intervention in Zimbabwe was found to reduce physical and sexual violence victimization (SDG 16.2), transactional sex (SDG 16.1) and food insecurity (SDG 2.1) and increase income (SDG 8.6) and condom use (SDG 3.7) (Dunbar et al., 2014).

Realizing the benefits of accelerators requires sustainable large-scale delivery, which is best achieved through government provision. There are, however, two challenges that must be addressed for this to happen. First, accelerators must be correctly valued through a whole of government approach. As accelerators have multiple benefits, possibly in different sectors, they are undervalued if the priority setting is conducted sector-by-sector. Second, mechanisms must be in place to encourage the implementation of accelerators. This is because even if the value of accelerators is recognized, they may not be adopted if doing so clashes with the competing interests priority setters must reconcile. In this paper, we ask how we can address both challenges. It is critical to consider the two challenges simultaneously as the responses need to complement each other.

Co-financing, a ground-breaking approach promoted by UNDP, addresses the first challenge. Co-financing avoids the undervaluation of interventions with multiple cross-sectoral benefits as it allows the calculation of the share of the cost of an intervention each sector should be willing to cover given the benefits which will accrue in that sector. For example, if a cash transfer improves health and welfare outcomes, one calculates the appropriate distribution of the costs of the intervention between the Ministries of Health and Welfare, based on the outcomes in each sector, respectively. If the combined value of these shares is more than the cost, the intervention should be implemented. In practice, co-financing has rarely been implemented by governments as it does not overcome the second challenge. Typically, co-financing concludes that one ministry should transfer funds to another ministry, where priority setters in the transferring ministry are unwilling to do as it may clash with their desire to grow their ministry or increase its visibility for political gain (Remme et al., 2015).

We offer a modified version of the co-financing approach to address the challenge of the sector-by-sector evaluation of such interventions. We illustrate the benefits of our evaluative approach with a case study comparing a sector-by-sector planning perspective with our recommended whole of government approach. The aim of this case study is to demonstrate the usefulness of the whole of government perspective in identifying potential efficiency gains associated with accelerators, rather than advocating for the particular accelerator intervention used in the case study. We then consider the second challenge: how the uptake of appropriately evaluated accelerators could be hindered by political and logistical constraints in the priority setting. We suggest that these constraints might be weakened through the introduction of innovative financing mechanisms, which can shift political incentives given that the priority setting is ultimately a political process (Goddard et al., 2006; Hauck et al., 2015; Kieslich et al., 2016). To this end, we put forward a menu of financial mechanisms suitable for uptake in a variety of contexts.

Methods

To identify the potential benefits of accelerators, we build on the co-financing approach proposed by Remme *et al.* (2015), wherein the value of interventions with cross-sector benefits is estimated based on the amount each sector is currently willing to pay for their target outcome, multiplied by how much that outcome will improve as a result of the intervention. The combined willingness-to-pay value is then compared to the cost of implementation to determine the net benefit. The intervention with the highest net benefit is the most socially desirable. This

approach has high data needs, including hard to obtain estimates of what each sector currently pays at the margin, for their target outcome. This is needed as the expenditure at the margin reflects the maximum a sector is willing to pay for a given outcome. Given that these data are rarely available and hard to estimate, we adapt the approach.

We use the Average Cost-Effectiveness Ratio (ACER) of interventions which target each of the outcomes improved by the accelerator, rather than the marginal expenditure on each outcome. If an accelerator improves three outcomes, we identify a comparator intervention for each outcome, ideally one already implemented. The ACER of each presents a lower bound estimate of the willingness to pay of each sector for the targeted outcome. When we cannot identify a currently implemented comparator intervention, we select the most cost-effective intervention available for each outcome. This cannot be interpreted as an estimate of each sectors' willingness to pay and so does not allow a direct determination of social desirability; however it does allow for the examination of the relative efficiency of an accelerator compared to the best available alternatives.

We use a case study to highlight the implications of our adapted co-financing method compared to the sectorby-sector priority setting conducted using cost-effectiveness analysis. The results provide the backdrop for our discussion of the extent to which priority setting based on a whole of government perspective is likely to clash with priorities based on other motives policymakers might have and what might be done about it.

The case study considers what interventions should be prioritized for a hypothetical cohort of 1 million 17 year olds in South Africa at risk of three negative outcomes, each with the responsibility of a single government sector: experience of sexual or physical violence, Social Development; school dropout, Education; and HIV acquisition, Health. Baseline risks are reported in Table 1. We model the impact of an accelerator intervention for which there is growing evidence: a cash transfer for families below the poverty line with children under 18 years of age, plus a group-based parenting programme for 20% of households receiving the cash transfer selected based on vulnerability (Cluver et al., 2015; 2018; 2019; Redfern et al., 2019; Ismayilova and Karimli, 2020). The cash transfer is modelled on South Africa's child support grant but draws on evidence from this and other cash transfers, including conditional transfers. We then evaluate the efficiency of this accelerator intervention relative to three single-outcome sector-specific interventions selected based on their comparatively low cost per outcome targeted by the accelerator. We assume for the purposes of this case study that the comparator interventions influence only their target outcome (Sarkar et al., 2019; Wils et al., 2019; Gibbs et al., 2020). To reduce cases of violence, we identified a group-based life skills programme (Gibbs et al., 2020). For school dropout, we identified a set of nine interventions to strengthen the school system (Wils et al., 2019). For HIV reduction, the costs and effects are based on a Voluntary Medical Male Circumcision (VMMC) programme to prevent HIV, which protects men directly and their sexual partners indirectly (Sarkar et al., 2019). For a full description of the interventions included in the case study, see Supplementary Table 1. The selection of the comparator interventions was guided by a review of the literature. For HIV reduction, our search was aided by a systematic review of costeffectiveness results, which clearly showed VMMC to be the

Table 1. Population characteristics—cohort of age 17 year in South Africa

Cohort size Risk of experiencing violence in a year	1 000 000 0.25
Risk of school dropout within a year	0.12
Risk of HIV acquisition within a year	0.01

most cost-effective option (Sarkar *et al.*, 2019). For school dropout and exposure to violence, we struggled to find interventions which had been shown to be effective and for which cost data were available. The two selected were the most cost effective, i.e. lowest cost per outcome, interventions we could find, but were selected from a small pool. The comparator intervention for HIV, VMMC, is currently implemented by the South African Department of Health; however, the other two comparators are not currently implemented in South Africa in the form included here. As such, the analysis provides an assessment of the relative efficiency of the accelerator relative to the comparators, rather than a determination of social desirability, which requires an estimate of the willingness to pay.

The cost and effectiveness of the accelerator are compiled from the literature on cash transfers and parenting programmes. Given that there is uncertainty on their impact, we include two estimates of effectiveness: an upper bound estimate of effectiveness and a more conservative lower bound estimate of effectiveness. Moreover, we model only additive effects and assume no synergies between the cash transfer and parenting programme. The impacts from the parenting intervention are therefore based on evidence from stand-alone parenting programmes and similarly the impacts of cash transfers on evidence on stand-alone cash transfers. A full description of the interventions, data sources and assumptions is provided in the Supplementary Material.

To identify and compare which interventions will be prioritized using the sector-by-sector approach vs our whole of government approach, we estimate the impact on the three outcomes of allocating a US\$15 million budget under two scenarios. In the first scenario, the US\$15 million budget is divided evenly across the three sectors and each sector allocates its share to the most cost-effective intervention for their outcome. This provides us with an estimate of the impact of sector-by-sector planning. In the second scenario, the US\$15 million budget is allocated to the accelerator. We then apply our whole of government approach to determine if this allocation is an improvement on the sector-by-sector planning. It is considered an improvement if all outcomes are better or if the net value of the difference in outcomes when the entire budget is allocated to the accelerator is positive. The value of the outcomes is the cost to produce them using the identified single-outcome interventions. We selected US\$15 million so that our case study reflected a meaningful scale, but as we do not model the impacts of scale, the conclusions would be unchanged with a different budget. We divided the budget in Scenario 1 evenly for ease of interpretation. We discuss the implications of alternative distributions.

Results

A summary of the cost-effectiveness ratios of the singleoutcome interventions and the accelerator is provided in Table 2.

Table 2. Cost per negative outcome averted, by intervention (US Dollars)^a

Intervention	Cost per case of violence averted	Cost per school dropout averted	Cost per HIV infection averted
Life skills programme	5653		
School system strengthening		3667	
VMMC			2600
Accelerator: cash grant for entire cohort + parenting for 20% (base effectiveness/conservation effectiveness)	9256/14 677	10 181/14 253	5100 /5865

^aData sources and assumptions listed in the annexe

Table 3. Case reductions: comparing one-third budget allocations to comparator interventions vs entire budget allocated to the accelerator

Cases avoided	Scenario 1: sector budget allocated to single-outcome interventions	Scenario 2: entire budget allocated to accelerator		
		Base	Conservative	
Violence	884	1621 (+83%)	1022 (+15%)	
School dropout	1364	1473 (+8%)	1052 (-22%)	
HIV	1923	2941 (+53%)	2558 (+32%)	

The results shown in Table 2 suggest that the cost per case of violence, school dropout and HIV infection avoided is higher for the accelerator than for each of the relevant single-outcome interventions taken alone. Consequently, if the sector responsible for improving that outcome were to select the most cost-effective intervention as per scenario 1, they would not prioritize the accelerator. Table 3 presents the impact of this allocation, noting the cases avoided if allocating a third of the budget to each of the single-outcome interventions. This will avoid 884, 1364 and 1923 cases of violence, school dropout and HIV, respectively.

Table 3 also presents the impact of allocating the entire US\$15 million budget to the accelerator. Implementing the accelerator, under the base scenario, will lead to the avoidance of 1621 cases of violence, 1473 school dropouts and 2941 HIV infections. This represents an 83%, 8% and 53% improvement, respectively, compared to the impacts of allocating the budget across the three single-outcome interventions. Therefore, if a whole of government perspective is taken, the accelerator should be prioritized.

Under the conservative assumptions, the accelerator does not perform better on all outcomes, and therefore, we need to determine if the net value of the accelerator is positive or negative. Based on the conservative assumptions, implementing the accelerator will lead to 138 fewer cases of violence and 634 fewer HIV infections, but fail to prevent 311 cases of school dropout compared to the single-outcome interventions. To determine the net value of these differences, we value the outcomes according to what it would cost each sector to generate them with the selected single-outcome comparator interventions. This leads to an estimated gain of US\$2.4 million (138 cases violence × US\$5653 + 634 cases of HIV × US\$2600) and an estimated loss of US\$1.3 million (311 cases × US\$3667), resulting in a net value of US\$1.1 million. As the gains are worth more than the losses, the losses could be compensated

for, at least in theory. According to the whole of government approach, the accelerator is still the superior choice. However, it is worth noting that the larger the budget share allocated to education, the smaller the accelerator gain. If a government's primary interest is improving school enrolment, they would do better to implement the interventions targeting individual outcomes.

Discussion

The case study results suggest that from a whole of government perspective, the accelerator intervention cash transfers plus a parenting intervention is more cost effective at reducing HIV acquisition, experience of violence and school dropout for adolescences than targeting each outcome with a single sector-specific interventions. The analysis has several limitations. The evidence on cash plus care interventions is still preliminary, and the results can only be interpreted as promising. We assumed that the sector-specific single-outcome interventions had no impact on other outcomes, if this is not the case they are undervalued here. We assumed an even distribution of the budget, which similarly may not be the case that matters when we compare the accelerator to individual interventions using conservative assumptions. The cash plus intervention under these assumptions performs worse in terms of school dropout, and therefore, the greater the allocation to education (i.e. the more priority that is accorded to school dropout relative to the other outcomes), the less desirable is the accelerator. Moreover, while the selection of the HIV comparator intervention was based on a systematic review, the selection of the other two sector-specific interventions was not. If there are more cost-effective interventions, then the accelerator may not have been shown to be superior in either scenario. It is important to note that this case study does not aim to evaluate this particular accelerator intervention; rather, it highlights the important role of the perspective taken in the evaluation of interventions for the priority setting.

The case study shows that evaluating the cost-effectiveness of interventions based on sector-specific outcomes alone can result in suboptimal rankings and the selection of less efficient interventions. Interventions are undervalued in proportion to the spillover benefits outside the evaluating sector. Conversely, the greater the benefits outside of the sector, the greater the opportunity to realize efficiency gains through a whole of government approach.

Our method compares the candidate accelerator to the most cost-effective interventions we were able to identify for each targeted outcome. Remme *et al.* valued the outcomes based on the marginal expenditure on each as this provides an indication of the highest willingness to pay

(Remme et al., 2015). The original co-financing approach is theoretically superior, but the data to facilitate the required comparison are rarely available. If all the comparator interventions are currently being implemented, our approach provides a conservative estimate of the willingness to pay, and we can therefore still interpret the results as determining social desirability. However, if they are not currently being implemented, it is possible that the interventions identified from the literature as comparators are too costly per outcome for the sector to consider implementing. Therefore, when the comparators are not currently being implemented, the results should be interpreted as an assessment of relative efficiency rather than social desirability of the interventions.

The case study shows how evaluations can be adapted to appropriately value interventions with benefits across sectors, but economic evaluation results are only one among many considerations within priority setting processes. The political and logistical context of implementation can limit the uptake of such evidence, which ultimately means that less effective, more costly interventions are implemented in places with limited resources and many needs (Glassman *et al.*, 2012). We consider, with reference to the literature on the priority setting, the factors which may limit the uptake of identified accelerators. This paves the way for the critically important discussion of how governments can limit the constraints on the adoption of accelerators, which would improve efficiency.

Three influences are key to understanding policy decisions: ideologies, beliefs that underlie political positions and actions; interests, motivations for stakeholders to pursue advantages and institutions, the structures guiding policy processes (Buse et al., 2022). We focus here on the interests and institutions of legitimate governance, within which policymakers rationalize resource allocations that may not be welfare maximizing; what Hauck and Smith call 'realistic politics' (Hauck et al., 2015). Much of the literature on constraints to the uptake of rankings based on economic evaluations focuses on the health sector; we consider the findings in relation to all sectors.

The interests and associated goals of actors and the extent of their influence on priority setting processes are context specific but have common themes. Elected officials may seek to appeal to voters' sensibilities to ensure re-election (Goddard et al., 2006; Hauck et al., 2016). While not as concerned with garnering votes, bureaucrats may have motives such as seeking enterprise growth rather than efficiency in pursuit of greater power and renumeration (Goddard et al., 2006; Hauck et al., 2016). This issue may be of particular concern when considering interventions with multiple cross-sectoral outcomes such as accelerators if they lead to resources moving out of the sector. Competing interest groups can seek to push policy in the direction of their own goals, reducing overall benefits; indeed, groups focused on small specific issues are easier and less costly to organize than broad and varied public interests (Goddard et al., 2006; Hauck et al., 2016). Furthermore, individuals and groups may engage in rentseeking behaviour and seek to maximize their own benefits by commandeering gains from government activities (Hauck et al., 2016). Each of these interests may be at odds with the recommendations of economic evaluation.

The institutions that shape the process of policy-making are also context specific. In countries where sectors are decentralized, the multiple levels of governance determine the priority setting process; which can both encourage and prevent welfare maximization (Hauck *et al.*, 2016). For example,

trying to satisfy the parameters of welfare maximization and political interests at the local level, using national budget, can lead to overspending (Hauck et al., 2016). In contrast, where government is centralized, local needs can be overlooked. Where there is a strong executive, a concentration of power can lead to both more singular decision-making and a greater risk aversion to introducing novel or controversial policy (Hauck et al., 2015). Where there is a separation of powers, interest groups can hold greater sway over policy directions and multiple competing interests can stagnate the policy process (Hauck et al., 2015). For the most part, political institutions do not inherently promote or prevent welfare maximization; rather, they determine the rules of the game by which those wishing to implement cost-effective interventions must play.

Constraints to the uptake of economic evaluation evidence within a single sector are exacerbated when the most costeffective intervention requires cross-sectoral collaboration to implement. In many contexts, there is a lack of political interest in establishing cross-sectoral goals, let alone collaboration to realize these goals (Buse et al., 2022). Buse cites several hinderances to cross-sectoral collaboration including 'inadequate leadership and links across sectors [...] Organisational and institutional constraints [...] Narrow specialisation [which] may not value collaboration and cooperation nor foster mindsets and skillsets amenable to working with other sectors, as well as encouraging inaccessible, specialist language' (2022). Work with policymakers suggests that much of this reluctance to fund activities across sectors stems from political concerns about the visibility of ministries and their need to justify their budgets, both of which are frustrated if funds are diverted to another ministry, fear of corruption and general loss of control (Remme et al., 2017). In addition to the lack of political will, there are institutional financing barriers to cross-sectoral work, such as 'separate funding streams, organizational budget silos, a lack of flexibility in funding arrangements and restrictions on the use of funds' (McDaid and Park, 2016).

Given that sectors rarely want to fund activities implemented by other sectors or undertake interventions expressly to benefit other sectors, even if doing so also furthers their own aims, the motivation to develop and utilize appropriate cross-sectoral systems is limited and, as outlined in the case study, accelerators remain under- or unfunded. McDaid and Park propose that 'well designed financing mechanisms may overcome some of these barriers to intersectoral collaboration' (McDaid and Park, 2016). While introducing novel funding mechanisms is challenging as Public Financial Management systems take time, effort and political will to change, such initiatives have been undertaken in some countries and we suggest that further innovation is possible.

Potential financing solutions for encouraging the implementation of accelerators

Several approaches to financing interventions with multisectoral impacts have been proposed and, in some cases, adopted, with varying degrees of success. We highlight two common financing mechanisms, both of which are technically possible, but do not always reach their full potential because of political constraints. We then describe three additional existing approaches which may be helped by the addition of

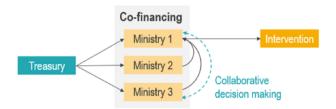


Figure 1. Co-financing accelerators

what we refer to as an 'accelerator fund'. We outline alternative approaches, but do not rank them, as the right approach will vary by context, the full delineation of which falls outside the scope of this paper.

Co-financing

Co-financing has been proposed as an approach to address the under-provision associated with sector-by-sector planning (Remme *et al.*, 2015). Here, the appropriate share of funds, which should be covered by each sector, is calculated, based on the benefits that will accrue to that sector (McDaid and Park, 2016). The intervention can then be implemented by transferring funds across sectors, pooling funds or jointly funding an external provider—Figure 1 (McGuire *et al.*, 2019). In our case study, this would involve one sector delivering the accelerator, most likely the department of social development. However, the intervention would be funded by each of the three benefiting sectors, including health and education based on the number of HIV infections and school dropouts avoided.

Intersectoral co-financing is an opportunity to leverage greater funds from funding partners than they might otherwise commit (McDaid and Park, 2016). If implemented, this approach would go a long way to addressing the efficiency losses of sector-specific planning and facilitate the adoption of accelerators. However, while technically elegant, this approach is logistically and politically challenging. McGuire et al. found that when co-financing models were implemented, they were most often used to fund crosssectoral integrated services for 'defined target populations' (McGuire et al., 2019). They also suggest that central to co-financing implementation is the organizational capacity to implement changes in accounting processes and financial services (McGuire et al., 2019). Examples of barriers to co-financing uptake include ring-fencing of existing budgets, risk aversion and conservatism in the adoption of new approaches with limited funds and an unwillingness to go against current budgeting practices given vested interests in the status quo (McGuire et al., 2019). Such barriers highlight how limited financial resources can be both an impetus for and against co-funding. Enablers of co-financing include positive historical partnerships between sectors, successful co-financing pilots and instituted inter-agency performance targets (McGuire et al., 2019).

Constituency development funds

Another example of a financing mechanism to address cross-sectoral planning challenges is Constituency Development Funds (CDFs). These are government budget allocation mechanisms that distribute national-level public funds from central

government directly to constituencies via members of parliament or elected officials, who in turn use the funds to address localized needs through development projects (Tshangana, 2010; Van Zyl, 2010; Tsubura, 2013; Wiltshire and Batlev. 2018). CDFs are widespread among developing countries, including Pakistan, Malaysia, Uganda, Kenya and Tanzania. The Kenyan Constituencies Development Fund, e.g. came into being in 2003 with the aim of supporting local poverty alleviation projects at the constituency level (Harris and Posner, 2019). It receives a minimum of 2.5% of annual government revenue, which is then distributed to the electoral constituencies (Harris and Posner, 2019). The funds are managed by the constituency-level CDF Committee headed by the elected member of parliament. Constituency members apply to this committee for project funding (Harris and Posner, 2019). CDFs are adopted primarily as a means of improving social development by empowering elected officials to directly address the most pressing needs at a local community level, without having to coordinate sectors or pass through multiple cascades of bureaucracy. This is encouraging as it suggests that the need to address the limitations of silo planning is well recognized. However, key to the character of CDFs is that elected officials have a significant influence over how funds are spent. As such, the spending scheme is suspectable to misuse as it conflates the executive and implementation roles of government and can be used as a means of influencing the electorates (Tshangana, 2010; Van Zyl, 2010; Tsubura, 2013; Wiltshire and Batley, 2018). Moreover, is the localized nature of CDFs can limit the possibilities of nationwide interventions, which may benefit from economies of scale.

An addition: the SDG accelerator fund

We propose that an SDG Accelerator Fund administered by ministries of finance or equivalent centralized government body may facilitate the adoption of efficiency enhancing interventions, such as accelerators, in contexts where co-financing may be difficult. We examine three approaches to managing such a fund. Each approach draws on existing examples, but, we argue, can be better supported by the establishment of an SDG Accelerator Fund. Budget would be allocated to this fund at the national level alongside sector-specific budgets. The funds could be new or reallocated; however, if reallocated, the fund would have to grow gradually to avoid push back. Some countries may not be able to finance such a fund from their domestic resources. In these cases, the fund could be supported through development assistance, or the fund could be held outside, and the applications made to the holder, be it a bi- or multilateral funder. Where the capacity to undertake the analysis to identify and evaluate accelerators is not available, technical assistance to sectors will be critical. Similarly, the approach rests on the Public Finance Management system, which in many cases may require strengthening—for this or any other initiative.

Central planning

Central planning can overcome the unwillingness of sectors to transfer funds to other sectors or broaden their mandate. A ministry of finance or planning or the executive could evaluate accelerator opportunities and re-direct resources from one ministry to another to reach the SDGs. For example,

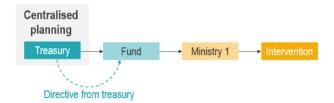


Figure 2. Central planning to finance accelerators

they could identify that progress towards realizing the SDGs, including health-related SDGs, would be faster if a portion of the funds allocated to health were allocated to investments in water and sanitation. To realize the identified efficiency, funds would be moved from health to water and sanitation. Recent efforts to model the integrated nature of SDGs, such as the Millennium Institute's iSDG model, can support such efforts (Millennium Institute, 2021). However, central planning can be politically challenging as ministries are likely, for the reasons discussed earlier, to resist the reallocation of funds between even if it would further their social goals. Adding an accelerator fund into a central planning approach would allow the executive to direct the fund to allocate resources to implementing ministries so that they could implement, modify or expand the provision of accelerators, even if the benefit of so doing would occur in another sector—Figure 2. They may still face discontent from other ministries by what they may see as scope creep of the funded ministry, but that is not likely to be as intense as when funds are moved from one ministry to another. In our case study, the ministry of finance, having identified the potential efficiency gains associated with the cash plus care intervention, could allocate funding from the accelerator fund to the department of social development's budget, which the department would then combine with its existing funding for violence reduction to cover the cost of the intervention. While the allocation from the fund would be based on the value of the HIV and school dropout reductions, it would not involve taking money from the health or education sectors.

While central planning would be more politically palatable if conducted via an accelerator fund, limitations remain. The data needs for central planning are high, and the opportunity to involve ministry employees working on delivery in identifying accelerators is constrained. Ministry staff may feel side-lined and resent being directed to preordained interventions. One way to address this would be through the establishment of an agency with a mandate related to a specific group or area where the central authorities have identified the possibility, but not the specifics, of accelerator-related gains in efficiency. The agency can then work to identify specific accelerators and with implementing ministries. Examples of this include Chile's Crece Contigo (ChCC) programme that provides 'a universal platform to support early child development for all [under-fives] and for all pregnant women' (de Andrade et al., 2015) through both targeted and universal benefits (Torres et al., 2018). The key ministries involved in ChCC are health, education and social development, with The Ministry of Social Development (MDS) as the co-ordinating body (Torres et al., 2018). The ChCC is entirely publicly funded through a stable budget established by law; 'the budget for ChCC implementation is allocated to the MDS, which then



Figure 3. Bid-based SDG accelerator awards

transfers funds to the sectoral ministries that ultimately provide the services that reach children and their families' (Torres et al., 2018). Funds transfer agreements govern this process and 'cover not only budgetary and coverage aspects but also the technical standards that must be met by the institutions, which, in practice, turn the funds transfer agreements into an important mechanism for intersectoral management' (Torres et al., 2018).

Bid-based planning

An alternative approach that can be used alongside or in place of co-financing is for sectors to bid for funds. Like central planning, a bid-based system leading to the allocation of accelerator awards requires an Accelerator Fund, but rather than the executive setting priorities, sectors would make bids to the fund—Figure 3. Sector bids will be required to demonstrate that the funds will be used to fund new, expanded or adapted services, which would also promote outcomes in other sectors i.e. fund a shift to an accelerator intervention which the implementing sector would not otherwise have considered. When an accelerator effect arises from synergistic interactions across sectors, then a joint application would be appropriate, but joint applications need not be a requirement. This approach recognizes that sectors seek to maximize their budgets and visibility and that efficiency gains do not always require intersectoral collaboration. It also recognizes that ministry staff may be better placed then central planners to identify potential accelerators, and thus, the potential for innovation is enhanced by opening the process of intervention identification. Co-financing approaches can be used to evaluate bids and determine the appropriate level of funding (Remme, 2018). A number of countries have earmarked funds and make them accessible via bids, provided that the bids come from two or more sectors working together (McDaid and Park, 2016). This approach has the potential to address the problem of under-provision and has been implemented with some success. However, in the case of SDG accelerators, often all that is required is for one sector to consider the benefits of other sectors; they do not necessarily have to work together. In our case study, the department of social development would submit a bid outlining how a shift from a life skills programme to a cash plus care intervention would be worthwhile based on not only the reductions in violence but also the reductions in HIV and school dropout and associated intervention costs from a whole of government perspective.

A similar system to the proposed SDG Accelerator Fund, the Wellbeing Budget, has been adopted in New Zealand (Anderson and Mossialos, 2018; Treasury New Zealand, 2019; Mintrom, 2022). The Wellbeing Budget was established to focus on five priority areas: mental health, with a

special focus on under 24-year-olds; child well-being, including addressing child poverty and family violence; Māori and Pasifika Aspirations, including a focus on incomes, skills and opportunities; building a productive nation, which focuses on innovation and transforming the economy, including environmental concerns. Sectors must make bids, showing their expected impact on the well-being priority areas. Intersectoral bids are encouraged. All bids are then evaluated by cabinet committees before final allocations are determined. The Wellbeing Budget appears to have been positively received since its establishment in 2019, with participation across sectors.

Performance incentives

A possible alternative to the bid-based system is to use a performance-based financing approach. Under this programme, Ministries which exceeded targets for women and girls received incentive payments. The same approach for accelerators would reward sectors that demonstrate how the adoption of an accelerator intervention has led to gains beyond the sector. A difficulty would be that the implementing sector would bear the burden of risk, and given that shifting to a new model of provision, as may be required for an accelerator, is a greater risk than investing to exceed existing targets, as envisaged in the gender budget, the approach may not always be appropriate here. Performance based financing. supported by an Accelerator Fund, may, however, be appropriate when there is a realtively low-cost change which would generate greater benefits in other sectors, such as small design changes

to existing proframmes. This approach requires defined performance criteria, making it clear which cross-sectoral outcomes are considered relevant and how these will be monitored and rewarded. An example of such an approach is Nigeria's Gender Budgeting Initiative (O'Donnel *et al.*, 2016).

Selecting an approach

We have outlined and discussed several approaches to funding accelerators. Throughout, we have emphasized that there is not one best way for all contexts. Each approach requires overcoming challenges. The question is which challenges are most easily overcome in a particular setting. For example, a school health programme implemented by nurses and social workers in schools may be identified as an accelerator with education, health and child protection benefits. A co-financing approach could be applied, but perhaps the ministries involved refuse to work together. In this case, a bidbased system to one ministry could be implemented. But this would require the implementing ministry to manage a category of staff they are not familiar with, and they may find that difficult. The other two ministries may complain about scope creep. An agency could be mandated and funded through central planning to deliver the services, but this would require a new player to manage three large ministries, who may not be open to what they see as interference. If a policymaker wishes to see the benefits of a school health programme, they must determine which of the challenges can be overcome in their setting. Table 4 provides a summary of the approaches and the strengths and weaknesses of each.

Table 4. Selecting the right funding mechanism

	The SDG accelerator fund				
Accelerator fund administration	Ministry of finance or equivalent centralized government body				
Accelerator fund management mechanism	Central planning	Bid-based planning	Performance incentives		
Defining the parameters of cross-sectoral collaboration and benefits	Central body	Central body	Central body		
Identification of accelerators	Central body	Implementing sectors	Implementing sectors		
Allocation of funds	Directive by central body via the fund	Application to fund by imple- menting sector or multiple sectors	Directive to fund by central body based on individual sector performance		
Implementation of accelerators	Single or multiple sectors	Single or multiple sectors	Single sector		
Benefits	Potential for a mandated cen- tral body to administer the fund	Balance between sector-driven innovation and central guidance	Potential for low-cost changes in implementing sector to generate greater benefits in other sectors Encourage sector-driven innovation		
Barriers	High data needs Resistance and resentment from implementing sectors Resentment from non- implementing sectors as a result of perceived scope creep	Reliant on sector initiative Resentment from non- implementing sectors as a result of perceived scope creep Challenges to intersectoral collaboration for joint bids	Implementing sector carries the burden of risk Requires clear performance appraisal criteria which may be difficult to define		
Contextual considera- tions (where this could work best)	Strong executive control and clear opportunities for accelerators	Strong ministries and need for innovative approaches to accelerators	Strong executive control and need for innovative approaches to accelerators		

Conclusion

If we are to realize the potential efficiency gains associated with accelerators, we must ensure that the search strategy we employ to identify candidate interventions is broad enough to recognize those with multiple benefits across sectors. Through identified accelerators, we can target common causes to improving multiple outcomes, over and above targeting specific mechanisms to influence single outcomes. To recognize their value, we must evaluate the cost of the identified accelerators relative to their full range of benefits across sectors. To ensure uptake of economic evidence, we must develop mechanisms which encourage decision-makers to take advantage of the potential gains associated with implementing accelerators. Arguably improving our ability to evaluate and incentivize the adoption of accelerators will stimulate further interest in identifying them.

The case study highlighted how economic evaluation based on a whole of government perspective can aid the identification opportunities to improve efficiency that would be missed in a sector-by-sector approach. The approaches we propose to finance accelerators have the potential to improve the uptake of such opportunities by aligning political incentives more closely with recommendations based on whole of government efficiency rankings. However, not only will they need to be selected and tailored for a given country context, but also their implementation will require astute political leadership to navigate unfolding challenges and new crises. It will require leaders who are able to appreciate which of the challenges are most easily dealt with in their context. This may lead to co-financing in contexts where collaboration across sectors is manageable or bid systems where scope creep is not a concern. The key is to find the best fit and realize the potential of accelerators to realize SDGs and to help prepare for and respond to future challenges.

While there are often common causes for adolescent outcomes, ways to address these may differ in important particularities between contexts. As does the technical capacity to identify accelerators, plan for their implementation and fund their provision at scale. Without political will, there is little chance that the opportunities of accelerators to improve efficiency and reduce inequality will be realized. The gains are there to be had for those who are willing to adapt priority setting processes to identify, evaluate and implement the accelerators and in so doing advance efforts to reach the SDGs.

Supplementary data

Supplementary data is available at *Heath Policy and Planning Journal* online.

Funding

UK Research and Innovation Global Challenges Research Fund Accelerate Hub (ES/S008101/1).

Acknowledgements

The authors thank Henriques Andela, Sopuruchukwu Obiesie, Hernando Grueso Hurtado and Agnes Erzse for their contributions to the thinking around this paper.

Data availability

The data underlying this article were derived from sources in the public domain. The data sources are provided in the supplementary material.

Author contributions

All authors were involved in the conceptualization of the work. C.D. designed the work, undertook data analysis and interpretation. C.D and K.W. drafted the initial manuscript. All authors critically reviewed and approved the final manuscript.

Reflexivity statement

The authors represent a collaboration between a team of researchers based in South Africa and the UK, representing different disciplines and levels of seniority. Three authors are female and two are male. The lead author is from South Africa, the site of the illustrative case study. All authors have experience working in the Global South.

Ethical approval. Ethical approval for this type of study is not required by our institute.

Conflict of interest statement. None declared.

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