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Intergovernmental fiscal transfers, equity and service delivery

Lessons from Uganda

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Public finance and service delivery

Key messages

Uganda has made progress on the equity of its intergovernmental fiscal transfers system in recent years. Nevertheless, large disparities in per capita allocations to local governments persist.

Per capita grants are higher in urban local governments, local governments with smaller populations, and local governments with relatively more service delivery staff and facilities per population. As a result allocations tend to be less favourable to poorer areas in per capita terms.

The overall provision for the mandates of local governments and prior policy commitments is inadequate. This constrains the space for reforms that increase equity. Despite increases in financing and recent progress on allocation practices, policy-makers are often attracted to inputbased and place-based spending decisions. The shift towards needs-based allocation remains incipient in Uganda.

Focusing on the most effective investments to improve service delivery, and improving the quality and availability of data on other sources of local government financing, are two prerequisites for taking the kind of holistic perspective that is necessary for improving the equity of intergovernmental fiscal transfers.

Deeper understanding of frontline service delivery and drivers of performance and inequity, alongside the identification of widely salient policy objectives, could help to build a broader coalition of support for equity-increasing reforms of intergovernmental fiscal transfers systems in similar contexts.



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Contents

Acknowledgements / i

Display items / iii

Acronyms / v

1 Introduction / 1

2 An overview of Uganda's intergovernmental fiscal transfer system /4

3 Understanding the drivers of financing inequalities / 13

- 3.1 Different types of local government / 13
- 3.2 Different sizes of local government / 20
- 3.3 Different staffing levels across local governments / 27
- 3.4 Different facility levels across local governments / 36
- 4 Reforms to improve the equity of intergovernmental transfers / 45
 - 4.1 Changing the grant structure / 45
 - 4.2 Changing the allocation formula / 47
 - 4.3 Improving adequacy / 52

5 Other barriers and enablers for equitable allocation / 55

- 5.1 Own-source revenues / 55
- 5.2 Subventions / 56
- 5.3 Releases, actual expenditures and spending quality $\,/\,$ 57
- 5.4 The legislature / 58
- 5.5 Digitalisation / 58

6 Discussion and conclusions / 59

- 6.1 Urbanisation matters / 59
- 6.2 Equity is difficult to improve comprehensively even with more resources / 59
- 6.3 Support for a more citizen-focused perspective on equity is crucial / 60
- 6.4 Staff deployment is a key determinant of equity / 60
- 6.5 Generating or acquiring trustworthy information is key to furthering a more holistic agenda on equity / 61

References / 62

Annex – determinants of total per capita intergovernmental fiscal transfers / 67

Display items

Boxes

Box 1 Grant structures / 10
Box 2 Uganda's Discretionary Development Equalisation Grant / 15
Box 3 Local government proliferation / 25

Tables

Table 1Summary statistics for lower local governments/5

Table 2 Uganda's grant structure / 8

Table 3 Per capita allocations according to local government and funding windows / 16

 Table 4
 The use of formula allocation and equal share components for development grants / 21

Table 5 Effects of local government proliferation on the size and variance of Uganda's localgovernments / 23

Table 6 Pupil-teacher ratios (PTRs) across regions / 29

Table 7 Mean staffing ratios for primary and secondary education in government-financed schoolsby type of local government, region and sub-region / 33

Table 8 Health facilities administered by local governments / 42

Table 9 Grant structure and proposals for reform / 46

 Table 10
 Guiding principles for designing allocation formulas
 / 49

Table 11 Proposals for introducing new allocation formulas within the consolidated grantstructure / 49

Table 12 Ordinary least squares (OLS) regression results for total per capita intergovernmentalfiscal transfers68

Table 13 Analysis of partial and semi partial correlations / 68

Figures

Figure 1 Local government financing flows / 4

Figure 2 The share of intergovernmental fiscal transfers as a share of total budgeted expenditure (\$ millions) / 6

Figure 3 Total per capita budget allocations across local governments / 9

Figure 4 Local governments with higher poverty rates have lower per capita allocations on average / 9

Figure 5 Development partner funding accounts for much of the financing inequalities between urban and rural local governments / 14

Figure 6 Per capita inequalities in allocations between regions are less extreme but remain inversely related to poverty / 19

Figure 7 Total per capita allocations are biased towards less populous local governments / 21

Figure 8 Financing inequalities in primary education / 28

Figure 9 Inequalities in primary education wage allocations per enrollee reflect variation in pupilteacher ratios / 29

Figure 10 Budget per enrollee compared to primary leaving exam pass rate / 30

Figure 11 Financing inequalities in secondary education / 31

Figure 12 Budget per enrollee compared to pupil-teacher ratio in secondary education / 32

Figure 13 Budget per enrollee compared to secondary leaving exam pass rate / 34

Figure 14 Health sector recurrent financing per capita / 35

Figure 15 Recurrent health financing per capita by sub-region and infant mortality / 35

Figure 16 Primary edcuation pupil-teacher ratios and pupil-school ratios / 37

Figure 17 Primary school enrolment rates compared to school and teacher numbers / 38

Figure 18 Secondary education pupil-teacher ratios and pupil-school ratios / 39

Figure 19 Secondary enrolment rates compared to school and teacher numbers / 40

Figure 20 Facility to population ratios across local governments and health facilities / 41

Figure 21 Recurrent health financing per capita compared to health facility distribution / 43

Figure 22 Health facility ratios in sub-regions compared to poverty and recurrent and development financing / 44

Figure 23 Inequalities in per capita financing across wage, non-wage and non-USMID development grants / 51

Figure 24 Trends in total local government transfers prior to reform / 53

Figure 25 Trends in total transfers since the start of the reforms / 54

Acronyms

DDEG Discretionary Development Equalisation Grant

GoU	government of Uganda
нс	Health Centre
МоН	Ministry of Health
LDG	Local Development Grant
LGFC	Local Government Finance Commission
LGG	local government grant
LGMSD	Local Government Management Service Delivery Programme
LLG	lower local government
LRDP	Luwero-Rwenzori Development Programme
MDG	Millennium Development Goal
OTIMS	online transfer information management system
PETS	Public Expenditure Tracking Survey
PNFP	private not for profit
PRDP	Northern Uganda Peace Recovery and Development Plan
SDG	Sustainable Development Goal
UgIFT	Uganda Intergovernmental Fiscal Transfer Program
UNDP	United Nations Development Programme
USMID	Uganda Support to Municipal Infrastructure Development

1 Introduction

Concerns about inequality within countries have shifted towards the top of the international agenda. While the Millennium Development Goals (MDG) era resulted in significant development progress, within countries some people felt this less than others (Milanovic, 2012; Olinto et al., 2013). The 2030 agenda, as outlined in the Sustainable Development Goals (SDGs), has a greater focus on addressing these inequalities, and includes the cross-cutting objective of 'leaving no one behind'. SDG 10, to 'reduce inequality within and among countries', includes a target of adopting more progressive fiscal policies.

However, for many lower-income countries, redistributive fiscal policy through progressive taxation and cash transfers is limited by large informal sectors and narrow tax bases (Bastagli et al., 2012). Nevertheless, fiscal policy also has the potential to address inequalities through other forms of public spending, including in-kind transfers – for example, expenditures on health, education and infrastructure – if they target geographic areas and populations that are lagging behind. The degree to which these spending responsibilities are devolved varies, but in many lower-income countries much of this spending takes place at the subnational level through local governments, and is financed by intergovernmental fiscal transfers (Boadway, 2007; Glassman and Sakuma, 2014).

Boadway and Shah (2007) describe three main purposes for intergovernmental fiscal transfers. The first is simply to finance the vertical fiscal gap between the revenue local governments can potentially raise, and the public services they are expected to deliver. The fiscal gap is the result of central governments having most of the revenue-raising responsibilities,¹ while local governments have most of the spending responsibilities.² The second purpose is to equalise horizontal fiscal capacities to provide a given level of services. This tends to vary because the capacity of local governments to raise revenues varies,³ as may the expenditures required to provide a given level of services.⁴ The third purpose is to allow the central government oversight or influence over local government spending.⁵ These three purposes also speak respectively to the levels of adequacy, equity and discretion that the intergovernmental fiscal transfer system provides.

¹ Central governments typically hold revenue-raising responsibilities for the high-value categories including income taxes and consumption taxes, while local governments typically collect lower value revenues such as property taxes and business rates.

² Local government budgets often include the provision of primary education and primary healthcare for example.

³ For example, urban local governments have higher revenue potential than rural local governments.

⁴ For example, it is often more expensive to deliver services in local governments that are sparsely populated or have particular terrains, such as islands, or local governments in mountainous regions.

⁵ For example, to ensure that local governments are meeting national service delivery standards. These might include staffing ratios, such as the number of teachers per pupil in schools, or the number of specialists in health centres.

This paper is primarily concerned with the second purpose, the horizontal allocation of resources (equity). In lower-income countries the reality is that the allocation of intergovernmental fiscal transfers for public services often favours relatively better off local governments at the expense of the poorest (Dodd et al., 2019). Our aim is to shed light on why these geographical inequities in the per capita allocation of intergovernmental fiscal transfers persist. We use Uganda as the primary case to discuss the factors that may support or impede reforms to increase the equity of their allocation, while also drawing parallels to other countries where applicable. Over the past five years Uganda has been engaged in an ongoing reform programme to improve the adequacy, equity and efficiency of its intergovernmental transfer system. Moreover, Uganda's intergovernmental fiscal transfer system is relatively transparent, which makes detailed analysis possible.

Approximately 80% of the variation in the total per capita allocation of intergovernmental fiscal transfers across local governments in Uganda is accounted for by:

- 1. urban bias specifically the participation of selected local governments in on-budget urban infrastructure programmes financed by development partners;
- 2. population size due to a place-based bias in allocation formulas towards less populous local governments;
- 3. existing levels of staffing and infrastructure which each serve as prior input-based conditions for annual spending allocations (i.e. local governments which already have relatively more health workers and health facilities per capita receive more funding per capita);
- 4. enrolment in government schools with areas with more of the school-age population students out of school or attending private schools receiving less funding per capita.

We then examine progress under the ongoing reform agenda and discuss how and why the actual reforms implemented have differed from their stated ambitions. We suggest the following lessons for reformers in lower-income contexts:

- The overall adequacy (vertical allocation of resources) of funding matters for equity. Allocation changes tend to be at the margin and nominal reductions are politically difficult, particularly where existing policy commitments already exceed the resource envelope.
- There are diverse conceptions of equity; among key policy-makers, decisions on the budget often emphasise allocations per administrative unit and inequities between budgetary entities, instead of definitions of need, such as population and inequities between citizens. Reform support might be deepened by establishing a prioritised set of goals that are salient outside of a core of experts within the government machine. It could also be valuable to cultivate support for these goals among actors beyond the bureaucratic centre of the reform effort. This more holistic view of intergovernmental fiscal transfers equity requires high-quality information.
- Donor funding decisions inside and outside the intergovernmental transfer mechanism can result in durable inequities in some cases. However annual calculations of inequities do not always provide the full picture, because of stepwise roll-outs of donor financing and other factors, such as regional spillovers from urban spending.

The paper proceeds as follows:

- Chapter 2 provides a brief overview of Uganda's intergovernmental fiscal transfer system and the per capita financing inequalities across local governments, based on data from the 2020/21 Budget
- Chapter 3 provides a more in-depth discussion of the issues underlying these per capita financing inequalities
- Chapter 4 discusses the extent to which the reforms have had an impact on the equity of the intergovernmental fiscal transfer system to date
- Chapter 5 discusses other barriers and enablers for equitable allocation of intergovernmental fiscal transfers
- Finally, Chapter 6 concludes with some lessons for reformers in similar contexts.

2 An overview of Uganda's intergovernmental fiscal transfer system

While the focus of this paper is the distribution of intergovernmental fiscal transfers, these transfers are part of the wider system of local government financing shown in Figure 1. As well as the conditional and discretionary grants that form the intergovernmental fiscal transfer system, other financing flows recorded in local government budgets include locally raised revenues, other government transfers and external financing.

As illustrated in Figure 1, locally raised revenues constitute a relatively small proportion, approximately 4%, of total budgeted local government financing. Other government transfers, often referred to as subventions, are vertical spending programmes implemented by a central agency on behalf of the local government, accounting for 17% of total budgeted local government financing. These include on-budget development partner programmes managed through central government agencies but implemented at the local level. External financing from development partner programmes, which is implemented through local government budgets, accounts for 4% of the total local government budget.



Figure 1 Local government financing flows

Note: The sizes of the bars are illustrative of the relative sizes of the fund flows. Source: Local government performance contracts for 2020/21 from www.budget.go.ug We return to a discussion of these other local government financing flows in Chapter 5 of the paper. The rest of the paper focuses exclusively on the 75% of the local government budget that is financed by intergovernmental fiscal transfers.

Also shown in Figure 1 are the different layers of intergovernmental fiscal relations. Uganda currently has 175 higher local governments, comprising 134 district councils or rural local governments, and 41 municipal councils or urban local governments. Within rural local governments, there are two types of lower local government, sub-counties and town councils, while urban local governments comprise divisions. The number and population size of lower local governments vary considerably across higher local governments (see Table 1). These lower-level local governments also prepare their own budgets and are responsible for locally raised revenue collection. Sub-counties and divisions purportedly retain 65% and 50% of revenue collections respectively, while town councils retain 100%. Proportions of discretionary and conditional grants flow directly to lower local governments and facilities but are budgeted for under the higher local government. Our discussion in this paper focuses on the higher local government budget allocations, which include these allocations to lower local governments.

Figure 2 shows the vertical allocation of resources between the national government and those that flow to local governments through intergovernmental fiscal transfers. Although the overall share is relatively small at approximately 13%, this varies considerably across sectors. The highest-value local government spending responsibilities are in education and health, where intergovernmental transfers comprise 53% and 22% of total sector spending respectively. Although the 20% share of public administration is relatively large compared to other sectors, this includes unconditional recurrent and discretionary development grants that can be allocated across sectors. The volume of intergovernmental fiscal transfers for the economic sectors is considerably smaller by comparison, while local governments do not have spending responsibilities in the high spending rule-of-law sectors.

Туре			I Per higher local govern				
	Number			Number of LL			
	OF LLGS	Mean	Smallest	Largest	Mean	Least	Most
Subcounty	1,150	26,789	2,200	274,800	8.6	3	23
Town council	225	18,969	1,600	304,100	1.9	1	9
Division	109	54,873	5,600	296,600	2.7	2	4

Table 1 Summary statistics for lower local governments

Notes: LLG, lower local government; 19 of the 134 district councils do not have a town council. Source: Uganda Bureau of Statistics **Figure 2** The share of intergovernmental fiscal transfers as a share of total budgeted expenditure (\$ millions)



Notes: Unconditional recurrent transfers and the discretionary development grant are classified under public administration; other economic sectors include the following: land, housing and urban development; science, technology and innovation; tourism; trade and industry; and production and marketing (agriculture). (It should be noted that there are intergovernmental fiscal transfers for the latter two.) Here and throughout, we classify the Uganda Road Fund under the works and transport sector as an intergovernmental fiscal transfer, as it has been previously, rather than as another government transfer (or subvention) as it is currently classified. Source: 2020/2021 Budget Volume I and Volume II

As described in Table 2, the intergovernmental fiscal transfer system comprises a grant structure that includes both unconditional (or discretionary) and conditional grants. Conditional grants are budgeted under the respective line ministry and generally fund services with a (notionally) universal legal obligation such as education and healthcare. Discretionary grants are budgeted under the Ministry of Local Government, with separate grants for urban and rural local governments.⁶ Local governments may allocate these to any sector, although the unconditional wage and non-wage grants are predominantly used to finance the local public administration. For each sector, the responsible ministry issues a set of grant guidelines annually as part of the first budget call circular, which outlines the requirements local governments must meet when preparing their budgets.⁷

Table 2 shows that for most sectors there is a single wage, non-wage (or operating) and development (or capital) grant. This is similar to the grant structure in Rwanda, while contrasting to varying degrees with those of Tanzania, Kenya and South Africa, which have more consolidated grant structures (see Box 1, at the end of this chapter). Many of the grants are further fragmented by earmarks.⁸ Some earmarks are for different programmes. For example, the education sector has earmarks for primary, secondary and tertiary education meaning that the central government rather than individual local governments decide on the composition of spending between sector programmes.⁹ Other earmarks reflect specific central government policies. For example, both the health and education development grants have specific earmarks for the construction of specific types of facilities in specific locations.

8 These are also referred to as sub-grants.

⁶ Until the 2020/21 fiscal year, the discretionary development equalisation grant was budgeted under the Office of the Prime Minister.

The budget process for local governments includes various review points at both the local and national 7 levels. It begins when the finance ministry issues the first budget call circular in September. These are top-down budget ceilings which include indicative planning figures for each local government grant and the requirements that local governments must meet in preparing their budgets. The higher local government administration then coordinates the preparation of bottom-up budget estimates from its departments and lower local governments. These are consolidated in a budget framework paper for approval by the higher local government executive and submitted to the higher local government council and finance ministry in November. While the budget framework papers are discussed in the standing committees of the local government councils, they are also consolidated into the national budget framework paper and tabled for discussion in the national parliament by the finance ministry. The finance ministry issues a second budget call circular in February which includes any revisions to the indicative planning figures and feedback on compliance with budget requirements. Local governments make adjustments to their budget estimates on this basis and submit their revised budget estimates to their councils and performance contracts to the finance ministry for approval in April. Again, the finance ministry consolidates these into the national budget for approval by the national parliament in May. The budget process concludes when local governments sign their performance contracts and issue them to the finance ministry in June.

⁹ Local governments are responsible for vocational third-level education. Uganda's universities are centrally budgeted for under their own votes.

Table 2 Uganda's grant structure

		Wage			Non-wage			Development					Total			
	G	EM	US\$ millions	%	G	EM	US\$ millions	%	G	EM	US\$ millions	%	G	EM	US\$ millions	%
Discretionary	2	3	77	6.7 %	2	18	34	3.0%	2	12	148	12 .9 %	6	33	259	22.5%
Conditional																
Education	1	3	381	33%	1	5	90	7.8%	2	4	51	4.4%	4	12	522	45.2%
Health	1	1	121	10.5%	1	2	23	2%	2	4	23	2%	4	7	168	14.5%
Works and Transport					1	1	35	3.1%	2	2	7	0.6%	3	3	42	3.6%
Production and Marketing	1	1	21	1.8%	1	2	9	0.8%	2	4	4	0.4%	4	7	34	3.0%
Water and Environment					2	3	4	0.4%	2	2	21	1.8%	4	5	25	2.2%
Social Development					1	1	2	0.2%					1	1	2	0.2%
Trade and Industry					1	1	0.6	0.1%					1	1	0.6	0.1%
Public sector management	4	4	98	8.5%					1	1	3	0.3%	5	5	101	8.8%
Total	5	8	600	61%	15	38	198	17%	12	28	254	22%	32	74	1,154	100%

Notes: G, number of grants; EM, number of earmarks; %, percentage of total intergovernmental transfers. Exchange rate: UGX 3,725.50. The four grants under public sector management wage grants are for pensions, gratuities, pension and gratuity arrears, and salary arrears.

Source: 2020/21 Budget, Volume II, Tables 2a and 2b

Education is by far the largest sector, accounting for 45% of the value of total intergovernmental fiscal transfers. Together, education, health and discretionary grants account for 82% of the total. Most of the allocations – 61% – are on wages and pensions. Capital and operating grants account for 17% and 22% respectively. Despite universal mandates for most sectors, total per capita budget allocations are highly uneven across local governments (see Figure 3). While the average allocation is \$37 per capita, this varies by a factor of 16 between the best-funded (\$138) and worst-funded (\$8.50) local governments.

Per capita inequalities in financing are not necessarily a problem for equity. In fact, what is equitable often requires inequality in resource distribution per capita (Culyer, 2015). For example, higher cost urban areas might be relatively more expensive places to provide the same coverage and quality of service provision. Nevertheless, for an equitable allocation, we might expect more deprived local governments – with less capacity to raise revenues and higher expenditure needs – to receive higher per capita allocations. However, despite the fact that Uganda uses poverty and other measures of deprivation as variables in the allocation formulas for most grants, with explicit pro-poor earmarking within the discretionary development grant (see Box 2, in the next

chapter), the overall relationship between per capita financing and poverty runs in the opposite direction: local governments with higher poverty rates receive lower total per capita allocations on average (see Figure 4).



Figure 3 Total per capita budget allocations across local governments

Source: Local government budget allocations are per Budget 2020/21, Volume II, Tables 2a and 2b; population statistics are per Uganda Bureau of Statistics (UBOS) Indicative Planning Figures for 2020/21



Figure 4 Local governments with higher poverty rates have lower per capita allocations on average

Source: Local government budget allocations are per Budget 2020/21, Volume II, Tables 2a and 2b; poverty statistics are per Uganda Bureau of Statistics (UBOS) Indicative Planning Figures for 2020/21

These per capita distributions do not make Uganda unique. Tidemand et al. (2014) describe analogous patterns of inequality for Tanzania. The United Nations Development Programme (UNDP) (2019) notes similarly large per capita disparities between the best- and worst-funded local governments in Myanmar, Mongolia and Indonesia. For lower-income countries, Manuel et al. (2019) find lower than average per capita allocations for poorer regions for both education (in six of seven countries) and health (in six of eight). Meanwhile, Dodd, Manuel and Christensen (2019) find that per capita allocations for health and education are lower for regions with worse health and education outcomes. Similar findings are common in World Bank Public Expenditure Reviews. For example, a public expenditure review for Ghana notes 'substantial disparities in educational outcomes between wealthier and poorer districts and between urban and rural areas' that 'reflect the skewed distribution of qualified teachers and educational resources' (World Bank, 2017). And for Cameroon, the World Bank (2018a) finds that health facilities are concentrated in urban areas while there are lower numbers in poorer and more rural regions.

What is unique about Uganda is the relatively high degree of transparency around the intergovernmental fiscal transfer system, which is often lacking in other countries (Manuel et al., 2019). The next section makes use of this to provide some explanations for the financing inequalities, what is context-specific to Uganda and what is more generalisable to other jurisdictions.

Box 1 Grant structures

Grant structures differ considerably across countries (Hadley et al., 2015). Uganda's grant structure is highly fragmented, with local governments predominantly financed through conditional grants that are earmarked to sectors, programmes and economic classifications. A similar grant structure is used in Rwanda. This affords local governments minimal discretion over how funds are allocated across a) sectors and programmes and b) between wage, operating and capital spending.

These highly fragmented grant structures contrast with the approach of Kenya and South Africa, where local governments are financed predominantly through an **unconditional block transfer**, referred to in both countries as the 'equitable share', which is distributed using a single allocation formula. Until recently, Kenya's allocation formula was relatively simple, including six variables for population (45%), poverty (18%), land area (8%), fiscal effort (2%), a development factor (1%) and an equal share component (26%). These grant structures provide local governments with a high degree of discretion over the prioritisation of allocations across sectors, programmes and economic classifications.

Tanzania's grant structure is somewhere in-between Uganda's and Rwanda's fragmented systems, and Kenya and South Africa's more discretion-based systems. While conditional transfers constitute the bulk of financing for local governments, they are less fragmented programmatically and by economic classification, notionally allowing local governments

discretion over how to allocate these **sector block transfers** between programmes and to determine the appropriate mix between wage, operating and capital allocations. However, in practice, they operate much like Uganda's, with central government decisions reflected in the execution of grants.

Why does this matter for equity?

More fragmented grant structures can make it more difficult to produce an equitable allocation of resources across local governments, when sector line ministries are biased towards funding the existing supply of services through input-based allocations rather than distributing funding based on need. For example, the allocation of education grants to local governments for (a) wage grants based on the number of teachers and (b) non-wage grants based on enrolment creates a bias towards local governments that are already better served. This is often balanced by a development grant allocation that targets local governments with insufficient infrastructure (i.e. schools and classrooms) using an infrastructure deficit index in the allocation formula. However, this can introduce perverse incentives as local governments that improve will see their development allocation decline the following year. Moreover, the asset registers that are used to compile infrastructure indices are notoriously difficult to compile, maintain and quality control. As such the use of infrastructure indices in allocation formulas is a practice that is recommended to be avoided (Steffensen, 2010). Moreover, a more fragmented grant structure can present a hurdle to a more holistic view of the adequacy, equity and efficiency of the overall intergovernmental fiscal transfer system (ibid.).

In contrast, consolidated grant structures can make it more straightforward to take a more holistic view of equity. For example, a sector block transfer with a single allocation formula based more on need (i.e. population to be served) allows local governments with enough schools to meet demand to spend their allocation on teachers wages and other operating costs such as teaching materials and school meals, whereas local governments that cannot meet demand can allocate more to constructing new schools or classrooms and reallocate to recurrent spending as they enrol students and hire teachers. Similarly, local governments that are meeting demand for primary education can focus more development spending on expanding access to secondary education. It is also simpler to design allocation formulas for sector block grants. For example, for education, these can be mainly based on the schoolaged population, with additional variables for deprivation and cost factors.

However, a more consolidated grant structure means that local governments have more discretion over how to allocate resources. The benefits of this include the lofty goals of fiscal decentralisation: bringing government closer to the people and allowing politicians and bureaucrats to be accountable and responsive to the needs of citizens. However, if local politicians and bureaucrats fail in this endeavour, there is potential for unproductive imbalances in the composition of spending and/or inequities within the local government. Therefore, a more consolidated grant structure generally requires:

- local government capabilities to follow a rule-based system
- central government capacity to monitor adherence to these rules and sanction local governments that do not follow them.

However, realising the benefits of a more consolidated grant structure is far from straightforward and may be beyond the capabilities of many local government public administrations. In Kenya, dissatisfaction with the allocation formula among some stakeholders has led to its revision and the current proposal is now based more on sectoral considerations (CRA, 2019). While in Tanzania, which has a notionally more consolidated grant structure and a stronger commitment to equity in its formula-based budget allocations than Uganda, centralised control of staffing and project selection means that actual spending is biased towards better served local governments (Tidemand et al., 2014; Dodd et al., 2019). Moreover, a consolidated grant structure with a single allocation formula is only as useful as the political commitment to equity that accompanies it. It is possible to have a consolidated grant structure and inequitable distribution of resources as has been seen, for example, in Nigeria and Indonesia.

3 Understanding the drivers of financing inequalities

Steffensen (2010) notes that 'the specific manner in which a transfer system is developed is often based on a complex mixture of political choice, economic principles, historical reasons and [other] country contextual factors.' This chapter summarises the reasons behind the per capita financing inequalities in Uganda. By far the most important determinant of the per capita inequalities is whether the local government is part of a World Bank funded programme for urban local governments (Section 3.1). Population size is the next most important determinant of per capita inequalities, with less populous local governments receiving higher per capita allocations on average (Section 3.2). In the highest spending sectors like education and health, staffing levels are the most important determinant of per capita inequalities a local government has relative to others (Section 3.4). Local governments with better endowments of schools and health facilities receive higher per capita allocations on average, with health facilities being a more important determinant of the inequalities than schools. Estimates of the relative importance of each determinant are included in the Appendix.

3.1 Different types of local government

There are various reasons why countries exhibit biases towards different types of local governments in their intergovernmental fiscal transfers. For example, in Indonesia, which is further along the path towards urbanisation, general purpose transfers to subnational governments have a rural bias (World Bank, 2020). Tidemand et al. (2014) note that, in Tanzania (which has similar urbanisation dynamics to Uganda) there is a slight bias in per capita allocations towards urban local governments related to the allocation of capital grants. Much of the variation shown in Figure 3 and Figure 4 above reflects the fact that total financing per capita in Uganda is about twice as high on average for urban local governments vary by a factor of 5.6 between the best and least well funded, and by a factor of 16 between the best and least well funded urban local government.

Figure 5 Development partner funding accounts for much of the financing inequalities between urban and rural local governments



Note: USMID, Uganda Support to Municipal Infrastructure Development. Source: Local government budget allocations are per Budget 2020/21, Volume II, Tables 2a and 2b; population statistics are per Uganda Bureau of Statistics (UBOS) Indicative Planning Figures for 2020/21

This urban bias arises primarily from the allocation of the Discretionary Development Equalisation Grant (DDEG), which accounts for approximately 13% of total intergovernmental fiscal transfers (see Box 2). This includes separate grants for urban and rural local governments, and further earmarks for different types of urban and rural local governments, for historical and political reasons. There are practical explanations for the separation of discretionary grants for urban and rural local governments in this way. Boadway and Shah (2007) note that stratifying equalisation grants can reduce the complexity associated with equalisation, particularly if the objective is to achieve minimum standards rather than provide the same level of service across all locations. Kitchen (2007) recommends that local governments within a country should be grouped according to similarities, with the equalisation grant formula applied within each group, citing the example of New Brunswick in Canada and some German states as examples of jurisdictions that do this. Where there is stratification of the equalisation regime between different types of local government, 'the relative amounts of transfer that go to each group still need to be determined, a choice that

inevitably requires political judgement' (Boadway and Shah, 2007). In Uganda, and in other aid recipient countries, this political prioritisation is more complicated because of the interests of development partners, which they exercise through both on-budget and off-budget financing.

Box 2 Uganda's Discretionary Development Equalisation Grant

The government introduced Uganda's DDEG for the 2017/18 fiscal year as a way of consolidating existing development financing and 'affirmative action' allocations for local governments under a single set of grant guidelines, to simplify the planning and budgeting process for local governments and oversight for central government (MoLG, 2020). The consolidated allocations included:

- The Local Development Grant (LDG), per Article 193 of the Constitution (GoU, 1995), which included the Local Government Management Service Delivery (LGMSD) programme. Started in 2008, this programme channelled World Bank concessional financing to local governments and provided complementary capacity-building support for public financial management and public investment management (World Bank, 2014).
- The Northern Uganda Peace Recovery and Development Plan (PRDP) also commenced in 2008 and provided additional allocations by sector to the local governments in Northern Uganda that were affected by the civil war (GoU, 2015).
- The Luwero-Rwenzori Development Programme (LRDP) commenced in 2010 and provided additional discretionary development allocations to the local governments in the Luwero-Rwenzori Triangle that were also affected by civil conflicts.
- The Uganda Support to Municipal Infrastructure Development (USMID) programme commenced in 2013 to channel World Bank concessional financing to urban local governments (Municipal Councils) and was subsequently expanded to provide development finance to refugee-hosting rural local governments (District Councils) in 2019.¹⁰

The creation of the DDEG led to standard guidelines for the use of these funds and harmonisation of allocation formulas for their horizontal distribution. However, part of the compromise was that the vertical allocations were maintained using earmarks (referred to as 'windows'). As illustrated in Table 3 below, the variation in per capita allocations is much larger according to the category of local government compared to the variation per capita within the funding windows. Nevertheless, per capita allocations within windows are less favourable to poorer local governments, due to a bias in allocation formulas towards smaller local governments, the reasons for which are discussed further in Section 3.2.

¹⁰ This followed an influx of an estimated one million refugees as a result of the civil war in neighbouring South Sudan.

Main window	Local governments	Percentage of total	Percentage of poor	Alloc	Maximum– minimum		
		population	population	Mean	Min	Max	ratio
Rural	134	88%	96 %	1.58	0.26	15.94	10.08
LGG	48	31%	31%	0.37	0.26	0.54	2.1
PRDP	60	32%	48%	1.91	1.18	3.54	3.0
LRDP	18	18%	10%	0.66	0.31	1.11	3.6
Refugee-hosting	8	7%	8%	8.45	3.82	15.94	4.2
Urban	41	12%	4%	26.98	0.54	77.69	143.87
USMID	22	5%	2%	49.40	18.51	77.69	4.2
Non-USMID	19	7%	2%	1.03	0.54	1.75	3.2
Total	175	100%	100%	7.53	0.26	77.69	298.8

Table 3 Per capita allocations according to local government and funding windows

Notes: Rural local governments are funded from more than one window. Those with town councils (114 out of 134) are also funded by the town council window. Six of the eight refugee-hosting districts are also PRDP districts. Refugee populations statistics have not been accounted for. LGG, local government grant; PRDP, Northern Uganda Peace Recovery and Development Plan; LRDP, Luwero-Rwenzori Development Programme; USMID, Uganda Support to Municipal Infrastructure Development.

Source: Local government budget allocations are per Budget 2020/21, Volume II, Tables 2a and 2b; population statistics are per Uganda Bureau of Statistics (UBOS) Indicative Planning Figures for 2020/21

However, the larger issue from an equity perspective is the vertical imbalance in allocations across windows: across the rural windows there is a clearer policy commitment to equity, with higher per capita allocations to the PRDP local governments, which account for almost a third of the population and almost half of the poor population. Nevertheless, around 30% of the poor population reside in local governments that receive minimal allocations per capita through the local government grant (LGG) window.

But the bigger vertical imbalance in resource allocation is between urban and rural local governments, where the latter account for 96% of the poor population and the former just 4%. As discussed in Section 3.1, the main contributor to the imbalance in per capita allocations is the USMID programme. Nevertheless, non-USMID urban local governments are also financed at higher levels per capita on average than most rural local governments, despite having much lower poverty rates.

The largest DDEG funding window is an on-budget World Bank programme, Uganda Support to Municipal Infrastructure Development (USMID), which for the 2020/21 fiscal year finances 22 of Uganda's 41 urban local governments. As shown in Figure 5 above, the amounts are substantial, in some cases greater than 50% of the total local government allocation. Since 2019/20, the same

programme has also started providing financing for eight of the 134 rural local governments that are hosting refugee populations where the influx is creating pressure on public services, though the amounts are less substantial." The USMID example is illustrative of the broader challenges when considering the horizontal equity of allocations between different types of local governments. This is because there are arguments in support of providing relatively higher capital allocations to both urban and rural local governments, depending on the objectives of the equalisation regime and the relative stage of development of the country.

In poorer countries like Uganda, rural local governments have higher rates of poverty and lower capacity to raise own source revenues to finance their infrastructure deficits. Since they are less densely populated, it is also more costly to deliver public services and provide local public goods such as roads, water, sanitation and utilities (Boadway and Shah, 2007). These circumstances suggest a more equitable equalisation regime would provide higher allocations to rural local governments. Countries, such as Indonesia (and, previously, Nepal), include a cost index in their general-purpose transfer allocation formulas to reflect cost differences between different terrains. Other countries use land area in their allocation formulas to reflect the higher cost of delivering services in remote areas. An unstratified equalisation regime, with allocation variables for poverty and cost factors, would provide relatively higher per capita allocations to Uganda's rural local governments. However, where the objective is to meet minimum standards rather than fully equalise service provision (which Australia attempts to do, for example), the equity advantage of more equal service provision between urban and rural local governments must be weighed against the efficiency costs (Shah, 2007).

One justification for higher allocations to urban local governments is that they tend to have more costly expenditure responsibilities than rural areas (Kitchen, 2007). Examples include housing and infrastructure related to more complex transport systems such as bituminous roads, traffic lights and circles, flyovers, car parks, bus depots, and pavements. Population density means there are also greater requirements for:

- recreational facilities such as public parks
- cultural facilities such as libraries and theatres
- piped water and sewerage
- solid waste management.

Standards of construction are also higher or more complex, implying higher costs such as in the cases of road construction and water and sanitation infrastructure.¹² Another example is that land for the construction of health and education facilities may be more expensive in urban compared to rural locations.

¹¹ The per capita allocations are not inclusive of the refugee population.

¹² However, in Uganda, water and sanitation services are provided by the National Water and Sewerage Corporation.

The justification for higher per capita allocations for urban local governments may also be stronger in countries like Uganda, which are rapidly urbanising and where urban areas are expected to be the engines of future economic growth. The urban population is expected to quadruple to 20 million by 2040 (World Bank, 2015). But there is currently a 'huge infrastructure backlog' with respect to roads, solid waste management and street lighting, as well as growing requirements for better housing and large strategic infrastructure to improve urban productivity (World Bank, 2018b). As such, it is difficult to interpret the large disparities in per capita allocations between urban and rural local governments, because today's investments are expected to benefit a larger proportion of the population in the future. Moreover, as these investments are intended to generate higher rates of economic growth, they are also expected to generate greater domestic resource mobilisation. In the longer term, this can be used to finance development spending in more local governments through the intergovernmental fiscal transfer system.

A related justification for relatively higher allocations to urban local governments is that urban infrastructure often provides spillover benefits to populations in local governments in the wider region (Spahn, 2007). One example of this is infrastructure that provides access to markets. Again, this makes judgements about the equity of allocations between urban and rural local governments more difficult. An obvious point that is nevertheless worth pointing out is that urban local governments are located within rural local governments, and subregions are composed of several local governments. From this perspective, Uganda's per capita inequalities are less extreme. Compared to the per capita disparity of 16 between the best and worst funded local government (see Figure 3 above), this falls to 5.9 between geographical districts,¹³ and to just 2.2 between subregions (see Figure 6). Nevertheless, it remains the case that per capita allocations are not targeted towards geographical districts and sub-regions with higher poverty rates.¹⁴

These regional inequities reflect the fact that the USMID programme covers just over half of urban local governments. Per capita, non-USMID urban local governments receive DDEG allocations more in line with those of rural local governments (see Box 2). This again reflects efficiency-equity trade-offs. Urban infrastructure projects such as roads and drainage require significant outlays to achieve scale (World Bank, 2018b). Therefore, budget constraints, including those of development partners, may dictate pilot or phased approaches. This is because a more even or equitable resource allocation may result in incomplete projects or lower-quality completions, which is a problem in other jurisdictions where local governments fail to prioritise completions (Williams, 2017). In the case of Uganda, the original USMID programme started in 2013 and ran for five years, initially covering 14 urban local governments. It was then extended for a further five years and expanded to cover an additional eight urban local governments, as well as the eight refugee-hosting rural

¹³ I.e. the combined population of the urban local government and the rural local government which surrounds it.

¹⁴ However, it is worth noting that some of the geographical districts and sub-regions with the lowest per capita allocations are proximate to and potentially benefit from spillovers from the capital city of Kampala, which is not funded through the intergovernmental fiscal transfer system.

local governments. Future phases are expected to cover the remaining 19 urban local governments when they have met the minimum conditions to join the programme (World Bank, 2018b). So, while allocations may appear inequitable in any given fiscal year, they may be more equitable over the medium and longer term as the programme rolls out.¹⁵

Overall, the DDEG and, more specifically, the USMID programme, is the biggest contributor to the inequalities we observe in total per capita fiscal transfers across Uganda's local governments. At first glance these allocations are inequitable, given that more resources per capita flow to relatively better off urban local governments, and some urban local governments are favoured over others. Indeed, the decisions to stratify the equalisation regime and allocate more funding to urban local governments are a reflection of the policy of the government (with support from the World Bank)





Source: Local government budget allocations are per Budget 2020/21, Volume II, Tables 2a and 2b; population statistics are per Uganda Bureau of Statistics (UBOS) Indicative Planning Figures for 2020/21

15 Relatedly, the capacity to manage and deliver infrastructure projects varies between local governments, so there are trade-offs between equity and efficiency. This pertains not just to variation in the administrative capacity of local governments to manage infrastructure projects, but also the capacity of private sector contractors to respond to their demands. to trade off the advantages of a more equitable distribution against the efficiency costs. However, from another perspective, these investments may benefit wider populations beyond the individual local government through spillovers and future population growth.¹⁶ A more prescient perspective is that the rest of the intergovernmental fiscal transfer system, and particularly the rest of the DDEG, is grossly underfunded. For example, the least well-funded Kenyan county government receives a per capita allocation of \$35, which is comparable to what the average Ugandan local government receives, despite the fact that education is not a local government expenditure responsibility in Kenya.

As well as the DDEG allocations there are two further reasons for the bias in per capita financing between urban and local governments. The first is that Uganda's urban local governments remain relatively small in population size, which biases per capita allocations in their favour. The second is that urban local governments are more attractive locations for staff compared to more rural locations. These are both discussed in turn in sections 3.2 and 3.3 that follow.

3.2 Different sizes of local government

Uganda's local governments vary considerably in population size. Its largest local government, Wakiso District Council, has a population of just over 1.4 million, which is 88 times larger than its smallest, Moroto Municipal Council. As illustrated in Figure 7 below, total per capita allocations are biased towards Uganda's less populous local governments, many of which are urban. But variation in local government population size is common across all countries, as is a bias towards less populous tiers of subnational government in intergovernmental fiscal transfer allocations (UNDP, 2019).

In Ethiopia, the Oromia region is 125 times more populous than the Harari region, where the latter receives 3.2 times as much per capita as the former from the unconditional block grant (Harris et al., 2019). Similarly, in Kenya, Nairobi's population is 31 times that of Lamu county, which receives 5.3 times more per capita from the Kenya's 'equitable share' (CRA, 2019). In higher income countries, these inequalities in public spending per capita across subnational tiers of government tend to be narrower. In the United States, Wyoming is 53 times less populous than California, but spends 2.1 times more than the lowest spending state. Meanwhile, the maximum–minimum ratio between highest and lowest spending regions in the United Kingdom is approximately 1.3 (UNDP, 2019). Even excluding the USMID programme, the maximum–minimum ratio for Uganda is 7.9.

The main reason for the bias towards less populous local governments is the use of equal share components (also referred to as fixed allocations) in grant allocation formulas, as well as the use of non-formula-based allocations, also referred to as ad hoc allocations. Not to be confused with the equalisation discussion in the previous section, equal share components simply apportion a percentage of the grant to be distributed equally across all local governments. Equal share

¹⁶ This could be due to urban population growth and migration from rural to urban locations, in line with the aspirations of Uganda's second national development plan and the 2016 election manifesto of the ruling National Resistance Movement (NRM) party (World Bank, 2018b).

components are used more heavily for development grants, which account for 22% (\$254 million) of total transfers (see Table 2 above). As shown in Table 4, 25% of this total is distributed using non formula-based approaches, while approximately 20% of the 75% that is allocated using a formula-based approach is allocated using equal share components.



Figure 7 Total per capita allocations are biased towards less populous local governments

Source: Local government budget allocations are per Budget 2020/21, Volume II, Tables 2a and 2b; population statistics are per Uganda Bureau of Statistics (UBOS) Indicative Planning Figures for 2020/21

Sector	Value	Formula	Formula weights (%)						
	(\$ millions)	allocation	Equal	Population	Poverty	Other			
		(%)	share						
Urban DDEG	98	100	20	62	15	3			
Rural DDEG	50	100	25	30	40	5			
Education	51	28	19	65	0	16			
Health	23	26	0	0	0	100			
Works and Transport	7	0	N/A	N/A	N/A	N/A			
Production and Marketing	4	36	0	78	10	12			
Water and Environment	21	94	20	35	15	30			
Public sector management	3	0	N/A	N/A	N/A	N/A			
Total	254	75	20	49	20	10			

Table 4 The use of formula allocation and equal share components for development grants

Note: This includes cost variables (e.g. land area). DDEG, District Discretionary Development Equalisation Grant. Source: Online Transfer Information Management System (OTIMS)

The rationale for the use of equal shares is that all local governments require 'minimum allocations for construction and completion of meaningful infrastructure' (MoLG, 2020). This increases the per capita allocations of less populous local governments at the expense of more populous local governments. For example, Kween District (which is among the smallest rural local governments, with a population of 110,000) has a total allocation of \$1.35 million from development grants: more than twice as much as it would receive from a purely population-based allocation. Conversely, Tororo District is one of the largest rural local governments, with a population development allocation of \$1.84 million, which is 50% less than it would receive from a purely population-based allocation.

While it is less equitable to more populous local governments, without these adjustments smaller local governments would have development budgets sufficient to carry out just a handful of public investment projects per year. For example, the Ministry of Education estimates the costs of constructing primary and secondary schools at \$180,000 and \$500,000 respectively (MoES, 2020), while the cost of one kilometre of urban road and drainage ranges from \$0.8 million to \$1 million and \$0.5 million to \$1.1 million respectively (World Bank, 2018b), while the average total development allocation is \$1.5 million. Worse still it might lead to the splintering of development budgets into piecemeal projects with little impact on development outcomes, or a strict focus on maintaining existing infrastructure. This could exacerbate inequities within the local government and may also mitigate against smaller local governments developing the required capacity in public investment to manage larger projects. Moreover, a desirable feature of any intergovernmental fiscal transfer system is that allocations are predictable over time, and allocations that are biased towards smaller local governments tend to be politically viable because budgets are discussed by policy-makers in absolute rather than per capita terms.

Non formula-based allocations also tend to be biased towards less populous local governments because they generally apportion the same amounts to local governments regardless of size. The largest of these are in the health and education sectors. In the Ugandan health sector, there is a policy to construct a Health Centre III (the second most basic level of funded facility) in sub-counties without one. Similarly, in the education sector there is a policy to construct 'seed' secondary schools in sub-counties without one. Both policies were campaign promises of the ruling National Resistance Movement party in their 2016 election manifesto. Sub-counties, which are a second tier of sub-national government, also vary considerably in population size (see Table 1 above). Therefore, the equal share nature of the allocations tends to bias per capita allocations in favour of less populous local governments.

While wage and non-wage grants tend to have more population-based allocations, like development grants, the unconditional wage and non-wage grants are also more biased towards less populous local governments. Combined, these grants account for approximately 10% of total intergovernmental fiscal transfers (see Table 2). In per capita terms, the unconditional wage grant varies by a factor of 26 between the best and worst funded local governments, while the unconditional non-wage grant varies by a factor of 8. Although notionally unconditional, in practice local governments use these grants in combination with their own source revenues to cover the costs of public administration.

The allocation of the unconditional wage grant is based on staffing structures and filled posts, and most staff posts are identical across local governments. For example, every local government has a Chief Administrative Officer. For other posts in the 10 departments of each local government in Uganda, there are prescribed minimum and maximum staffing levels. Because these do not vary to the same extent as the population size of local governments, there is inevitably a bias in per capita allocations towards less populous local governments. This type of inequality is generally justifiable from an efficiency perspective. From an equity perspective, the more problematic imbalance is the variation in per capita allocations between local governments of similar size. This arises because some local governments are less able to fill the staff structures compared to others (World Bank, 2013).

The unconditional non-wage grant is distributed using a formula. However, this formula is applied only after approximately 40% of the grant is earmarked for specific functions. Some of these earmarks vary by population size (such as honoraria for councillors) but again not to the same extent as actual variation in population across local governments. Meanwhile, others are fixed across local governments (such as the costs of public financial management systems). Moreover, the formula also includes an equal share component of 45% across all local governments 'to ensure the basic costs of delivering administrative services in a local government can be met, whatever [that local government's] size' (MoLG, 2017).

Fiscal year	Total	Loca	l goverr	nments	Local government population						
	population	Total	Rural	Urban	Mean	Standard deviation	Largest	Smallest	Ratio		
1994/95	17,800,000	51	38	13	349,901	284,183	1,082,140	9,661	112		
1997/98	19,800,000	57	44	13	347,235	279,278	1,083,607	8,806	123		
2001/02	22,400,000	68	55	13	329,250	232,847	993,791	7,665	130		
2005/06	25,600,000	81	68	13	315,562	223,575	1,121,674	9,088	123		
2006/07	26,400,000	92	79	13	286,971	206,682	1,211,264	9,658	125		
2010/11	29,800,000	133	111	22	223,793	178,282	1,569,626	11,935	132		
2016/17	35,500,000	156	115	41	227,621	163,993	1,118,595	15,400	73		
2017/18	36,100,000	162	121	41	222,722	159,758	1,151,100	15,100	76		
2018/19	37,200,000	168	127	41	221,517	157,831	1,226,500	15,400	80		
2019/20	38,700,000	175	134	41	220,942	160,388	1,316,900	15,900	83		
2020/21	39,750,000	175	134	41	227,080	166,686	1,403,500	16,300	86		

Table 5 Effects of local government proliferation on the size and variance of Uganda's local governments

Notes: Rural and urban refer to district councils and municipal councils respectively. Kampala City Council Authority, which is not part of the intergovernmental fiscal transfer system, is excluded.

Source: Uganda Bureau of Statistics (UBOS) and Statoids

Because of the need to provide 'meaningful shares' and 'minimum costs', there are concerns from both an equity and affordability perspective about the proliferation of Uganda's local governments (World Bank, 2013; Nattabi, 2020). Over the last 25 years, Uganda's total number of local governments has increased from 51 to 175 (see Table 5 above). Constitutionally, this is justified on the basis of the 'necessity for effective administration and the need to bring services closer to the people' (GoU, 1995). While the 'proliferation' has seen the average size of a local government decline from approximately 350,000 to around 220,000 inhabitants, this remains 'roughly equivalent to that of similar jurisdictions in other countries' (World Bank, 2013). Furthermore, because proliferation has typically seen the larger local governments broken up, the variance between local government populations has declined.

As such, the larger problem with district proliferation from an equity perspective is not so much that it creates smaller local governments, but that it is not accompanied by a sufficient increase in the vertical allocation of resources to local governments. This has led to unfilled posts in some local governments. In 2013, the World Bank estimated the public administration vacancy rate at approximately 40%, describing local government proliferation as a potential 'time bomb' (ibid.). This was pre-2015; 42 local governments have been created since. And in the absence of sufficient increases in funding, the proliferation also exerts upward pressure on the equal share components of grant allocation formulas, to provide 'minimum costs' and 'meaningful shares'. This, in turn, reduces the pool of resources for an equitable distribution.

Along with the aforementioned tendency for administrative units to receive a standard package of service delivery facilities regardless of population, there is also a concern, both in Uganda and elsewhere, that equal share components provide incentives for stakeholders to agitate for the creation of new local governments or administrative units (see Box 3 below). Boadway (2007) recommends the following where equal share components are used in the distribution of intergovernmental fiscal transfers:

[There should be] a formal open, contestable, and deliberative process for municipal incorporation, amalgamation, and annexation... [The] lack of such a process can create a perverse incentive for the break-up of existing jurisdictions to qualify for additional assistance, as demonstrated by the experience in Brazil.

While Uganda's legislation contains relevant provisions on appropriate population sizes for the creation of local governments, these are frequently set aside for strategic and political objectives. For example, more than 50% of the current 41 municipalities are below the relevant population threshold of 100,000 inhabitants; indeed, three remain below the legislative threshold of 25,000 to be considered a town council. It is also worth reflecting on other jurisdictions, such as Switzerland (with its remote mountainous local governments) and the islands of Japan, respectively. In both these examples, special grants are used to deal with the financing issues that are particular to very small local governments or 'hard to reach'

areas, rather than there being an attempt to fully incorporate them within revenue sharing formulas (Fox, 2015).

Some amount of bias towards smaller local governments is inevitable. As discussed, per capita variations in grant allocations that favour smaller local governments are observable in most countries, even in those that are higher income. In developing countries, variations could be minimised over time as countries become richer, generate more domestic revenues and allocate a greater share of resources to local governments. In the meantime, more could be done to balance cost and efficiency considerations with those centred on equity, which requires taking a more holistic perspective of the entire intergovernmental fiscal transfer system, particularly in countries like Uganda, where there are more fragmented grant structures.

Box 3 Local government proliferation

As described in Section 3.2, the number of local governments in Uganda increased from 51 to the present 175 over a span of about 25 years. But local government proliferation is not a phenomenon that is unique to Uganda. Governments around the world have set about creating new local governments, with both the stated and actual intentions for doing so often unclear:

- Ghana increased its number of districts from 110 in 2,000 to 216 in 2012 (Resnick, 2017).
- Constituencies in Kenya increased from 158 in 1969 to 188 in 1988, to a further 210 in 1997 and 290 in 2013 (Opalo, 2020).
- The number of states in South Sudan increased from 10 to 28 in 2015 (Justin and De Vries, 2019).
- In the Democratic Republic of the Congo, a process known as 'découpage' saw the number of provinces increase from 11 to 21 in 2016 (Englebert et al., 2018; Calderón and Englebert, 2019).
- Like Uganda, Tanzania has been routinely creating new districts (Tidemand et al., 2014).

Advocates often push for the creation of new local governments under the banner of 'bringing government closer to the people' (Nolan and Jones, 2014). Indeed, the constitution of Uganda states that 'the creation of districts or administrative units shall be based on the necessity for effective administration and the need to bring services closer to the people' (GoU, 1995). However, theory and evidence on the optimal size of local governments is quite mixed. This is not surprising given the need to balance equity, efficiency and accountability considerations, and how these vary across different public services (Ahmad et al., 2005; Slack, 2007). Theoretically, larger jurisdictions benefit from economies of scale, but face costs because larger populations are likely to be more heterogenous in their preferences for public services (Alesina and Spolaore, 1997). Citizens in smaller jurisdictions are theoretically better able to monitor the performance of bureaucrats and politicians and hold them accountable. And while this may make them better informed about and more responsive to local needs, it can also leave them more open to capture by local elites (Pierskalla, 2019). This theory implies a U-shaped relationship between population size and the costs of providing public services, which has been tested empirically. For Slovenia, Pevcin (2014) estimates the optimal local government size at 17,000; for Spain, Hortas-Rico and Rios (2020) estimate a threshold of approximately 11,000, at which municipalities fail to attain economies of scale in public service delivery. Grossman, Pierskalla and Dean (2017) find that the quality of health outcomes in sub-Saharan Africa improves up to a threshold of around 45 governments per 1 million citizens. Meanwhile, Lewis (2017) finds the increase in local governments in Indonesia has made no improvement in school enrolment rates and has negatively affected access to water and sanitation. But there are various methodological challenges to estimating these effects (Pierskalla, 2019) and, because subnational configurations and fiscal responsibilities vary so much across countries, it is difficult to draw recommendations from one country to another. As previously noted, Uganda's local governments are within the size and variation parameters of other countries.

A significant concern is that the design of intergovernmental fiscal transfer allocation formulas, particularly the use of equal share components, incentivises local government proliferation. In Brazil, the number of local governments (municipalities) increased from 3,991 in 1980 to 5,560 in 2006. Most of the increase occurred after the passage of the 1988 Constitution. Here, municipalities were granted greater fiscal responsibilities and proceeded to increase outlays on personnel and administration, including state legislatures, at the expense of more productive spending on social programmes and infrastructure (Afonso and Araújo, 2006). Spahn (2007) partly attributes the proliferation to the equal share component of the fiscal equalisation scheme's allocation formula, while both Shah (2007) and Afonso and Araújo (2006) point to the lack of specific criteria for the creation of municipalities as an additional contributing factor. Similarly, Lewis (2003) and Nolan and Jones (2014) note an association between lump sum allocations of Indonesia's equalisation grant and the creation of new smaller local governments, with the latter noting that the allocation creates 'a strong incentive for division'. In Nepal, an increase in the number of Village Development Committees has also been associated with equal share grant allocations (UNDP, 2019).

However, there are also a host of more political reasons for local government proliferation. These may be more pertinent, and are difficult to disentangle from the fiscal incentives. For Uganda, Green (2010) considers six different motivations for district creation – the improvement of service delivery, ethno-linguistic conflict management, gerrymandering, the inability of the central government to resist local demands, the removal of regional opposition, and patronage and electoral politics – concluding that the latter is the most convincing. However, Grossman and Lewis (2014) contend that district proliferation in Uganda occurs because of a confluence of interests between the national executive, local citizens, and elites from areas that are politically, economically and ethnically marginalised.

3.3 Different staffing levels across local governments

While urbanisation and local government size account for much of the inequalities in total per capita local government financing, they predominantly affect the distribution of unconditional and development grants. While these account for approximately 32% of the intergovernmental fiscal transfer system, recurrent grants for education and health account for 53% (see Table 2). The distribution of these grants is predominantly input-based, and the main inputs are staff (i.e. teachers and health workers). Inequalities in per capita financing arise because sector line ministries are more focused on providing continuity to the currently served population rather than balancing this with the needs of the unserved or underserved population.

3.3.1 Primary education

Recurrent financing for primary education is provided through a wage grant and a non-wage grant. The wage grant funds the salaries of primary school teachers in government schools.¹⁷ This is allocated across local governments on the basis of staff already in post and recruitment plans to fill vacancies. Therefore, a local government's current endowment of teachers is the biggest influence on its allocation. Each primary school has a head teacher (school principal) and a minimum of seven teachers (i.e. one for each grade). Recruitment plans notionally add additional staff to schools, with the central government targeting a minimum staffing level of 1 teacher per 53 students. However, in the past, it has been difficult for some local governments to fill vacancies, due to insufficient funds (MoES, 2012). The non-wage grant funds the operating costs of the local government education departments and government schools. This is allocated using a formula that targets enrolment.

Recurrent financing for primary education is more evenly distributed than total financing through the intergovernmental fiscal transfer system, but nevertheless varies by a factor of 2.6 between the best and worst funded 10% local governments (see Figure 8). Since the wage grant and the non-wage grant both target enrolment – rather than school-aged population – per capita inequalities arise in cases where these two variables are not perfectly correlated. As such, the level of variation in per capita allocations reflects differences in:

• The proportion of the primary school-aged population attending private schools:

this varies considerably across local governments and local governments with relatively higher rates of enrolment in private schools, and therefore relatively lower rates of enrolment in government schools, get less financing per capita on average.

• The proportion of the primary school-aged population not attending school: in a small number of poorer local governments, a sizeable proportion of this group does not attend primary school. Again, this means that these local governments receive less financing per capita.

¹⁷ The staff of the local government education department are funded via the unconditional wage grant.

Moreover, the paucity of timely data on enrolment in private schools makes it difficult for government planners to determine whether lower gross enrolment rates in different local governments are the result of enrolment in private schools or children simply not attending school.





Source: Local government budget allocations are per Budget 2020/21, Volume II, Tables 2a and 2b; population statistics are per Uganda Bureau of Statistics (UBOS) Indicative Planning Figures for 2020/21; enrolment statistics are per the Ministry of Education and Sports (MoES) for the 2020/21 budget

Per enrollee in government schools, financing for primary education is more evenly distributed. Nevertheless, the best funded 10% of local governments are financed more than twice as well as the worst funded 10% of local governments (see Figure 8). While the non-wage grant is relatively evenly distributed by enrollee, the wage grant is more unequally allocated due to differences in pupil– teacher ratios across local governments (see Figure 9). Ninety-one local governments (52%) have pupil-teacher ratios better than the target of one teacher per 53 students. Of these, 32 are urban local governments, which means 78% of all urban local governments are staffed at or better than the target pupil-teacher ratio. Of the 84 local governments with a pupil-teacher ratio worse than the minimum target, 30 are in the eastern region and 34 are in the northern region, which accounts for 64% and 74% of all local governments in the two poorest regions of Uganda respectively.

There is also considerable variation within regions (see Table 6). For example, in the eastern region, all nine of the local governments in the Bugisu sub-region have pupil-teacher ratios worse than the target, while nine of the 15 local governments in the Busoga subregion have pupil-teacher ratios better than the minimum level.





Note: Kapelebyong District with a PTR of 315 is not shown.

Source: Local government budget allocations are per Budget 2020/21, Volume II, Tables 2a and 2b; enrolment and staffing statistics are per the Ministry of Education and Sports (MoES) for the 2020/21 budget

Region	Sub-region	Poverty rate	Local governments							
		(%) -	PTR ≤ 53	PTR > 53	Total	PTR > 53 (%)				
Central	Buganda	11	27	8	35	23				
Eastern	Bugisu	30	1	6	7	86				
Eastern	Bukedi	39	0	9	9	100				
Eastern	Busoga	37	9	6	15	40				
Eastern	Sebei	29	3	1	4	25				
Eastern	Teso	28	4	8	12	67				
Northern	Acholi	34	4	7	11	64				
Northern	Karamoja	61	4	6	10	60				
Northern	Lango	16	1	10	11	91				
Northern	West Nile	30	3	11	14	79				
Western	Ankole	9	15	2	17	12				
Western	Bunyoro	18	5	5	10	50				
Western	Kigezi	14	9	0	9	0				
Western	Rwenzori	14	3	1	4	25				
Western	Toro	16	3	4	7	57				
Total		22	91	84	175	48				

Table 6 Pupil-teacher ratios (PTRs) across regions

Source: Poverty statistics are per Uganda Bureau of Statistics (UBOS) Indicative Planning Figures for 2020/21; enrolment and staffing statistics are per the Ministry of Education and Sports (MoES) for the 2020/21 budget
These inequalities in financing are concerning because they correlate with variation in service delivery outcomes. As shown in Figure 10, lower recurrent spending per enrollee is associated with a lower percentage of pass rates on the primary school leaving exam.¹⁸ This suggests that a more equitable allocation of resources could improve learning outcomes, though the causal chain between more inputs and improved outcomes is undoubtedly more complicated. However, a more equitable allocation of resources between the served population (i.e. based on enrolment) would do little to change the fortunes of the unserved population (i.e. children not attending school).



Figure 10 Budget per enrollee compared to primary leaving exam pass rate

Source: Local government budget allocations are per Budget 2020/21, Volume II, Tables 2a and 2b; educational attainment statistics are per the Ministry of Education and Sports (MoES) for the 2020/21 budget

3.3.2 Secondary education

Similar patterns of per capita and per enrollee financing inequalities are present for secondary education (see Figure 11). However, the per capita and per enrollee inequalities between the best and worst funded 10% of local governments are higher for secondary education, at 4.8 and 2.3 respectively, compared to 2.6 and 2.1 for primary schooling. And while the average level of financing per school-aged population for secondary education is approximately half as much as for primary, the financing per secondary enrollee is five times higher than it is in primary education.

¹⁸ Following reporting norms at the Ministry of Education and Sports, examination pass weighted shares are calculated as follows for primary and secondary leaving examinations: the sum of the candidate count achieving Division 1 (highest grade) plus 75% of the count at Division 2, plus 50% of the Division 3 count, plus 25% of the Division 4 count, all divided by the number of candidates.

The higher financing per enrollee reflects higher spending on secondary education compared to primary, where the average local government wage bill per teacher is more than twice as high and the average local government operating budget per enrollee is more than nine times higher. The lower levels of financing per school-aged population reflects far lower provision of government secondary education compared to primary. The average local government gross enrolment ratio in government primary schools is 94% compared to 14% for government-financed secondary schools. The private sector also provides secondary education, some of which is co-financed by the government through partnership schools.¹⁹ However, a 2016 survey estimates that 1.65 million children are in secondary school, implying a gross enrolment ratio of just 19% (World Bank and MoES, 2016). As such, inequalities in per capita financing for secondary schooling are much more an issue of variation in access to government financed schools across local governments than for primary education.



Figure 11 Financing inequalities in secondary education

Source: Local government budget allocations are per Budget 2020/21, Volume II, Tables 2a and 2b; population statistics are per Uganda Bureau of Statistics (UBOS) Indicative Planning Figures for 2020/21; enrolment statistics are per the Ministry of Education and Sports (MoES) for the 2020/21 budget

¹⁹ However, these partnerships are in the process of being phased out.

As has been the case for primary education, inequalities in financing per enrollee reflect differences in pupil-teacher ratios (see Figure 12). The relationship between wage spending per enrollee and teachers per enrollee is however less linear for secondary schooling. This possibly reflects more variation within the wage structure for this area of education, with local governments that can attract more sought after and higher paid specialisms (e.g. maths and science teachers) having relatively higher wage allocations than local governments with similar pupil-teacher ratios that do not have these specialisms. This inequality may also be due to the higher salary costs associated with running boarding schools, given that an estimated 35% of Uganda's secondary education enrollees in government schools are boarders (World Bank and MoES, 2016).





Source: Local government budget allocations are per Budget 2020/21, Volume II, Tables 2a and 2b; enrolment and staffing statistics are per the Ministry of Education and Sports (MoES) for the 2020/21 budget

Per enrollee, secondary education staffing ratios are much better in government financed schools than in primary education (see Table 7). Disparities in staffing ratios are also much smaller between urban and rural local governments and between regions. This may stem from secondary school teachers being centrally deployed while primary teachers are locally hired. But from a per capita perspective, staffing ratios are far worse for secondary education compared to primary schooling, much better in urban local governments compared to their rural counterparts and much worse in the Northern region compared to the other three regions. The Karamoja sub-region in Northern Uganda particularly stands out as the worst-staffed sub-region for both primary and secondary schooling per capita, despite being staffed close to the mean for primary education on a per enrollee basis.

Table 7 Mean staffing ratios for primary and secondary education in government-financed schools by type of local government, region and sub-region

Again, we note that the concerning feature of these inequalities in financing is that they are associated with variation in service delivery outcomes. Although the relationship is less pronounced compared to primary education, local governments with lower levels of financing per enrollee have a lower percentage of students passing the secondary level leaving exam.



Figure 13 Budget per enrollee compared to secondary leaving exam pass rate

Source: Local government budget allocations are per Budget 2020/21, Volume II, Tables 2a and 2b; educational attainment statistics are per the Ministry of Education and Sports (MoES) for the 2020/21 budget

3.3.3 Healthcare

In the health sector, there are similar patterns of inequality in the allocation of grants for recurrent spending. The per capita disparity between the best- and worst-funded 10% of local governments is approximately 4.5, which is close to the per capita inequalities observed in secondary education. A wage grant funds frontline service delivery staff (i.e. health workers) and the staff of the local government health department, while there are separate non-wage (operating) grants for primary health care centres and hospitals. Again, most spending is on wages, which comprise 84% of all recurrent spending (see Figure 14). As in education, much of the disparity in recurrent per capita financing we observe in this area stems from an uneven allocation of staff across local governments.

However, health financing comes with its own nuances. In contrast to schools, even the smallest health centre serves a far greater swathe of the population, while larger health facilities may serve a population that extends beyond the local government (see Table 8 and the discussion in Section 3.4). From a more regional perspective, the inequalities in per capita financing are lower, but nevertheless are not particularly well targeted towards poorer health outcomes, at least as measured by infant mortality, a key indicator for the authorities (see Figure 15).



Figure 14 Health sector recurrent financing per capita

Source: Local government budget allocations are per Budget 2020/21, Volume II, Tables 2a and 2b; population statistics are per Uganda Bureau of Statistics (UBOS) Indicative Planning Figures for 2020/21



Figure 15 Recurrent health financing per capita by sub-region and infant mortality

Source: Local government budget allocations are per Budget 2020/21, Volume II, Tables 2a and 2b; infant mortality statistics are per the Ministry of Health (MoH) for the 2020/21 budget

3.4 Different facility levels across local governments

The uneven allocation of recurrent financing discussed in the previous section is partly related to an uneven distribution of service delivery facilities. Facilities such as schools and health centres have prescribed staffing structures. Local governments with relatively more facilities tend to have relatively more staff and therefore more recurrent financing per capita. While local governments may be able to build their way out of these infrastructure inequities, it is more difficult to deploy staff to areas of the country where they are reluctant to go. Again, this is not a problem that is specific to Uganda. All countries, rich and poor, struggle with the dilemma of incentivising staff to take up posts in hard to reach or otherwise deprived areas, which often requires specific institutional arrangements to achieve.²⁰

3.4.1 Primary education

In primary education, high pupil-teacher ratios are associated with high pupil to school ratios (see Figure 16). The target pupil-teacher ratio of 1 to 53 implies a standard school size of 371 students (i.e. seven grades with no class size greater than 53 pupils). As shown in the lower left quadrant of Figure 16, the 21 local governments with pupil-school ratios at or below this level are among the most well-staffed. They are also almost exclusively in the relatively less poor central and western regions. Above these, in the top left quadrant, are 70 local governments that have fewer schools per pupil but have pupil-teacher ratios that are better than the one to 53 minimum target, implying the use of schools that are larger than the standard size. These include 27 urban local governments, which is 66% of all urban local governments. There are 84 local governments (48%) in the top right quadrant with the lowest endowments of schools and staffing. This includes 74% and 64% of local governments in the relatively poorer northern and eastern regions, respectively. Overall, while there is a clear association between better endowments of schools and better staffing levels, there is also significant variation between the staffing levels of local governments with similar endowments of schools. This suggests that Uganda faces similar difficulties to other countries in staffing schools in more remote and poorer locations, and that simply constructing more schools may not fully address inequalities in access to primary education.²¹

However, local governments with the lowest endowments of schools are also those that rely most heavily on the government to provide primary education. As illustrated in Figure 17, gross enrolment rates in government schools are higher on average in local governments with fewer schools and teachers. This suggests that in some local governments a degree of catching up is required in terms of school or classroom construction to offset overcrowding and make it more straightforward to fill teacher vacancies. This is not particularly surprising given Uganda's high

²⁰ For a discussion of comparative arrangements on the posting of teachers in the United Kingdom and Germany, see West et al. (2014) and for a wider discussion on the perspectives of national leaders, health managers and health workers on the allocation of health care workers, see Kolehmainen-Aitken (2004).

²¹ For Tanzania, see Tidemand et al. (2014).



Figure 16 Primary education pupil-teacher ratios and pupil-school ratios

correlation 0.608

Note: Kapelebyong District with a pupil-teacher ratio of 315 is not shown. Source: Local government budget allocations are per Budget 2020/21, Volume II, Tables 2a and 2b; enrolment and staffing statistics are per the Ministry of Education and Sports (MoES) for the 2020/21 budget

population growth rate. At the same time, as many as 75 local governments have gross enrolment rates in government schools in excess of 100%. A major reason for this is grade repetition, with an estimated 1.5 to 3 million of Uganda's 7.4 million government primary school enrollees repeating a grade (Weatherholt et al., 2018; Uwezo, 2019; Hares et al., 2020). Kabay (2016) finds that despite a policy of automatic promotion meant to limit repetition, 88% of pupils at the time of the study described had repeated a grade and 11% had repeated three or more times.

Given that lower passing rates are associated with overcrowded school and classrooms, this further serves to emphasise the need to remedy infrastructure deficits or introduce policies such as double-shifting to break the cycle of overcrowding and poor learning outcomes.²² However, overcrowding due to resource constraints is not the only factor associated with grade repetition and neither is this issue specific to Uganda (Hares et al., 2020). Another potential explanation for the very high gross enrolment rates is that there are financial incentives to inflating enrolment numbers, a problem that has been noted in other sub-Saharan Africa countries (Sandefur and Glassman, 2015).

²² A double-shift school operates in two shifts, with some students attending early in the morning and others attending later in the day, increasing the number of students that can be taught without having to construct more classrooms.



Figure 17 Primary school enrolment rates compared to school and teacher numbers

Source: Enrolment, facility and staffing statistics are per the Ministry of Education and Sports (MoES) for the 2020/21 budget

3.4.2 Secondary education

As with primary education, pupil-teacher ratios for secondary schooling tend to be better in local governments with more schools per enrollee (see Figure 18), though the relationship for the latter is not as strong as that observed for the former. Urban local governments achieve better pupil-teacher ratios on average (see Table 7), despite having pupil-school ratios that are twice as high as rural local governments on average. Eight of the 12 urban local governments that are staffed below average levels are among the most recently created 19 (i.e. in 2016/17; see Table 5). Of the 24 rural local governments with higher-than-average pupil-school ratios and worse-than-average pupil-teacher ratios, there are 21 in the Eastern region.



Figure 18 Secondary education pupil-teacher ratios and pupil-school ratios

correlation 0.305

Note: Mbale Municipal Council with a PSR of 4,541 and PTR of 30 is omitted. Source: Enrolment, facility and staffing statistics are per the Ministry of Education and Sports (MoES) for the 2020/21 budget

And as was the case for primary education, the local governments that rely most heavily on government-funded secondary education tend to have the lowest endowments of teachers and schools (see Figure 11). Given the much lower gross enrolment rates, the case for secondary school construction appears more clear-cut than its equivalent in primary education. The Ugandan government has in fact commenced a plan to construct 'seed secondary schools' in all sub-counties that are currently without a secondary school: a policy commitment from the 2016 election in the ruling party's campaign manifesto. At a cost of approximately \$563,000 per school, and with 71% of the education development grant earmarked for this purpose, this implies the construction of approximately 62 schools per year. It also indicates a timeline of 19 years to double the existing stock of 1,171 government-supported secondary schools.

While the above are 'back of the envelope' calculations that do not account for economic growth and an expanding revenue base, they nevertheless serve to highlight the challenge of expanding access to universal secondary education. Although complementary public–private partnership options are available, the government has recently decided to phase out the co-funding of these schools. Moreover, given that a local government's number of sub-counties is not tightly correlated with its population, the 'one school per sub-county' policy may serve to increase inequalities in recurrent financing per capita. This can only be remedied if construction is targeted at sub-counties in those local governments furthest behind in terms of access to secondary schools. But this may be a lesser concern for some time, given low rates of secondary enrolment throughout the country and the budget constraints.



Figure 19 Secondary enrolment rates compared to school and teacher numbers

Note: Outliers Mbale Municipal Council and Kalungu District are omitted. Source: Enrolment, facility and staffing statistics are per the Ministry of Education and Sports (MoES) for the 2020/21 budget

3.4.3 Healthcare

In the health sector, inequalities in recurrent financing per capita across local governments are more pronounced and are again related to the uneven distribution of facilities (see Figure 20). Uganda has four types of health facility administered by local governments: three levels of health centres and general hospitals (see Table 8). Very few local governments have primary health care facility levels in line with the standards set out in the health sector grant and budgeting guidelines (see Figure 20). Only one local government has enough Health Centre (HC) IIs to meet the population standard of one Health Centre II per subcounty. Currently, only 32 local governments out of 175 have enough Health Centre IIIs to meet the population standard of one per 20,000 people. There are 46 local governments without any Health Centre IVs, while of the 129 that do have one, just 34 meet the population standard of one per 100,000 people. In contrast, for the 73 local governments with hospitals, all but six meet the population standard of one per 500,000 people, many by some distance.



Figure 20 Facility to population ratios across local governments and health facilities

Note: HC, Health Centre. Horizontal line = population standard. Source: Population statistics are per Uganda Bureau of Statistics (UBOS) Indicative Planning Figures for 2020/21; facility statistics are per the Ministry of Health (MoH) for the 2020/21 budget

Of course, the story is not quite as simple as meeting these population standards for each facility type. First, they are out of date, as they were drawn up at a time when Uganda had 92 local governments in total compared to the current 175, and had far fewer sub-counties and parishes. Furthermore, the lack of lower-level facilities can be compensated by the presence of a higher-level facility: the presence of more HCIIIs can compensate for a dearth of HCIIs; in fact, it is now government policy to ultimately phase out Health Centre IIs, upgrading them to meet the requirements of a Health Centre III where appropriate, and a target of one Health Centre III per sub-county. It is also the case that an HCIV can make up for a lack of HCIIIs. This only works to a degree: having hospitals providing primary health care to compensate for a lack of HCIIIs is much less practical and is also inefficient. Also, higher level facilities (HCIVs and hospitals) may have catchment areas that extend beyond the borders of the local government where they are located, particularly if they are in relatively small urban local governments.

Туре	Services provided	Standard	Number
General hospital	Preventive; promotive; outpatient curative; maternity; inpatient services; emergency surgery; blood transfusion; laboratory; and other general services. Also: in-service training; and consultation and research in support of the community-based health care programmes.	1:500,000 or one per local government	92 (of which 43 are private not-for-profit (PNFP) facilities
Health Centre IV	Preventive and promotive services; curative services (general Outpatient Department (OPD) and in-patient services); maternity; blood transfusion; ultrasound examinations for abdominal conditions, especially obstetric cases; caesarean sections; and lifesaving surgical operations and laboratory services.	1:100,000 or one per county	189 (of which 16 are PNFP)
Health Centre III	Preventive, promotive; outpatient; curative; maternity; inpatient; and laboratory services.	1:20,000 or one per sub-county	1,322 (of which 208 are PNFP)
Health Centre II	Preventive; promotive; outpatient; curative health services; and emergency delivery	1:5,000 or one per parish	1,832 (of which 274 are PNFP)

Table 8 Health facilities administered by local governments

Notes: Population to facility standards were originally drafted for the National Development Plan I (NDPI), retained in NDPII and subsequently incorporated into the health sector grant and budgeting guidelines. No clear statement is available on whether the per unit or per population standard takes priority.

Considered together, there is a high correlation between the combined capacity of health facilities as a ratio of the population and recurrent financing per capita (see Figure 21). Of the 92 local governments where both are below average, 29 are urban local governments, accounting for over 70% of all urban local governments. Of the other 63 rural local governments, 11 are in the central region, 19 are in the eastern region, 15 are in the northern region and 18 are in the western region. These figures account for between 41–51% of all local governments in those regions and indicates little in the way of the regional biases observed for the education sector. Local governments with higher ratios tend to be those that have hospitals.

However, it is the combined capacity of Health Centre IIIs as a ratio of the population that has the highest correlation with recurrent financing per capita among all health facility types.²³ As we have seen in the case of education detailed in this paper, there is notable variation in recurrent financing per capita between local governments with similar endowments of facilities. Again, this is the result of differences in local governments' abilities to staff facilities according to prescribed

²³ The correlation coefficient between recurrent health financing per capita and different types of health facility coverage are 0.50 for HCIIs, 0.62 for HCIIs, 0.35 for HCIVs and 0.5 for hospitals.

structures, resulting in lower wage allocations per capita. However, it also reflects lower levels of funding for local governments that are more reliant on private-not-for-profit health facilities whose non-wage allocations are approximately half those of government-owned facilities.



Figure 21 Recurrent health financing per capita compared to health facility distribution

Source: Local government budget allocations are per Budget 2020/21, Volume II, Tables 2a and 2b; population statistics are per Uganda Bureau of Statistics (UBOS) Indicative Planning Figures for 2020/21; facility statistics are per the Ministry of Health (MoH) for the 2020/21 budget

Interpreting whether these inequalities in local government financing are inequitable is difficult. Even the smallest health facilities serve populations far larger than schools, so it's more possible for health facilities to provide services across local government borders. This is particularly the case for higher-level facilities like hospitals, and more so as the size of local governments decrease due to proliferation (see Section 3.2). Viewed from a perhaps more appropriate sub-region perspective, inequalities in recurrent financing per capita are tightly correlated with our health facilities to population ratio, which is inversely related to the number of people below the poverty line (see Figure 22). This suggests that it is more difficult to provide health infrastructure and staffing in areas where need may be greatest.²⁴ Again, the recently re-emphasised government policy of providing a Health Centre III in every sub-county may do little to redress the inequalities

²⁴ Poverty may be a less relevant measure of need in the health sector compared to disease burdens. Also, the relationship between infant mortality and poverty is relatively weak (correlation coefficient of 0.18). The mortality of under-fives is also only weakly associated with poverty levels.

in financing unless they are targeted towards areas that are currently the most underserved. Based on current patterns, and for reasons discussed in Section 3.2, development financing per capita favours sub-regions that are relatively better served, with Lango being a notable outlier (see Figure 23). Conversely, these underserved sub-regions do benefit from 'affirmative action' earmarking within the discretionary development equalisation grant (see Box 2 in Section 3.1), which could in principle be used to reduce inequalities in facility levels.



Figure 22 Health facility ratios in sub-regions compared to poverty and recurrent and development financing

*Calculated as the population standard, times the number of facilities, divided bythe sub-region population

Source: Local government budget allocations are per Budget 2020/21, Volume II, Tables 2a and 2b (consolidated for sub-regions); population and poverty statistics are per Uganda Bureau of Statistics (UBOS) Indicative Planning Figures for 2020/21; facility statistics are per the Ministry of Health (MoH) for the 2020/21 budget

4 Reforms to improve the equity of intergovernmental transfers

This chapter considers some of the reforms Uganda has been attempting in order to improve the equity of its intergovernmental fiscal transfer system. The reforms were precipitated by reviews by both the Local Government Finance Commission (LGFC) and the World Bank, which tied the declining adequacy and equity of the intergovernmental fiscal transfer system to associated declines in service delivery and poverty reduction (LGFC, 2012; World Bank, 2013). The reform process commenced in 2014 for the 2015/16 fiscal year budget and is ongoing. It has included reforms to consolidate the grant structure, introduce new allocation formula and increase the adequacy of the funding. Like three legs of a stool, each is expected to work better with the other two. Most of the reforms have had some partial success, while other parts have failed to stick, which highlights the challenges of implementing rules-based systems to improve the equity of subnational financing more generally.

The main reason for the mixed results on equity is that the political economy favours marginal improvements in the financing of existing services rather than financing fiscal gaps based on need. Allocating staff based on need requires placing people in areas in which they would rather not live and diminishes the discretionary power of the institutions responsible for their deployment. Providing more development financing to the most underserved areas can conflict with infrastructure policy commitments to areas that are also underserved, but not to the same degree. And shifts in the allocation of operating budgets towards underserved areas can compromise ongoing service provision in areas that are better served.

4.1 Changing the grant structure

For the 2015/16 budget, the government of Uganda introduced a new grant structure. Starting in the late 1990s, the number of conditional grants to fund new services and activities increased from 10 to 44. Coupled with the increasing number of local governments (see Section 3.2) this spread funding more thinly and undermined the targeting of overall funding flows as each ministry focused on specific services and activities at the expense of considering the overall equity of intergovernmental fiscal transfer system. Early reform proposals suggested consolidating the grant structure into roughly one wage, one non-wage and one development grant per sector (see Table 9). Combined with new allocation formulas (see Section 4.2) and more funding (see Section 4.3), this reduction in earmarking was expected to allow for a more equitable distribution of total resources across local governments.

Sector No. grants in 2014/15					Reform proposal
	Wage	Non-wage	Development	Total	
Agriculture	2	1	1	4	3
Works and Transport	0	0	1	1	1
Education	3	8	2	13	3
Health	1	3	3	7	3
Water and Environment	0	3	1	4	3
Social Development	0	5	0	5	2
Public Sector Management	2	5	0	7	0
Accountability	0	3	0	3	0
Total conditional grants	8	28	8	44	10
Unconditional grants	2	2	0	4	4
Equalisation grants	0	2	0	2	2
USMID	0	0	1	1	0
Local Government Grant (LGG)	0	0	1	1	0
PRDP	0	0	1	1	0
LRDP	0	0	1	1	0
Total discretionary grants	2	4	4	10	6
Grand total	10	32	12	54	16

Table 9 Grant structure and proposals for reform

Source: ODI, 2015

As well as promoting greater equity, a more consolidated grant structure was supposed to provide more discretion to local governments to allocate their budgets based on local needs and improve the efficiency of spending.²⁵ Under these arrangements, central government ministries would still retain powers to balance spending through budget requirements in grant guidelines. For example,

²⁵ For example, in the education sector, moving away from separate wage, non-wage and development grants for primary and secondary education would allow for allocations based on the school-aged population rather than enrolment. It would also allow local governments to choose the mix of spending between these two programmes and different inputs that best suited their needs. This would mean that local governments that already had good coverage in terms of schools, teachers and enrolment could focus their budgets on recurrent spending, with fewer requirements for development allocations beyond maintaining existing assets. Conversely, if local governments lacked schools or classrooms, they could spend more on development and rebalance recurrent spending, as they increased enrolment and hired more teachers. And if they had good primary education coverage either through government and/ or private provision, they could invest more in expanding access to secondary education or in improving learning (e.g. through school inspection and/or teacher training).

by setting spending floors and ceilings on different programmes, and through policies like the setting of capitation grant levels for schools and minimum costs for health facilities. This would also mean that the central government would need to adjust its role from decision-maker towards providing more monitoring and oversight. While more local government discretion to address local problems had been a long-standing aim of Uganda's fiscal decentralisation strategy, indeed pre-dating the current reforms, questions remained over the level of discretion that:

- the central line ministries were willing to concede
- local governments could reasonably take on
- central government could effectively monitor.

Ultimately, the answers to these questions proved to be mostly negative (i.e. 'not much'). The fragmented structure and earmarking were largely retained or returned using sub-grants. For example, while the education non-wage grants were consolidated into one non-wage grant within the chart of accounts, this was managed through sub-grants for primary and secondary education, with separate allocations and allocation formulas for each. An initial bright spot for the reforms was the consolidation of the health and education development grants. This gave local governments discretion over the type and location of construction activity they undertook in these sectors. However, while this held through the initial three years of the reform, it subsequently came into conflict with the policies to construct seed secondary schools and Health Centre IIIs, which led to the re-emergence of earmarking and the creation of sub-grants. Similarly, it proved impossible to consolidate the various discretionary development grants (see Box 2). And for the unconditional non-wage grant, earmarking was actually restored at the request of local governments, who found that having more discretion over such a small amount of money served only to increase the difficulty of budget negotiations among local politicians.

As such, most of the consolidation reforms were either never implemented or they were unwound. Nevertheless, the framework for a more consolidated grant structure remains in place, making it plausible to (re)implement the reforms in future.

4.2 Changing the allocation formula

The second leg of the reforms was to introduce more equitable and transparent allocation formulas. Both the aforementioned LGFC and World Bank reports, in 2012 and 2013 respectively, had raised concerns about the horizontal equity and transparency of allocations across local governments. LGFC (2012) noted:

...While allocation criteria for a range of grants have improved, more needs to be done to make them more responsive to poverty and population factors in addition to policy objectives ... Sectors should be compelled to adopt more transparent and equitable allocation formulae [which will] reduce regional disparities. Meanwhile, the World Bank (2013) called for the 'current complex mixture of historical practices, need-based formulas, and ad hoc considerations determining amounts of such transfers to individual districts' to be replaced with 'a simple, formula-based system that is based on transparent criteria'. The report further argued that the inequities in allocations were inefficient and that greater value for money could be achieved by reducing the disparities in allocations across local governments.

Based on these recommendations, the task force leading the reforms resolved to adopt 'guiding principles for designing allocation formulae' (see Table 10) based on generally accepted good practices from the literature on intergovernmental fiscal transfer systems in other countries, but to allow their application to vary across different grant types (see Table 11). Notably this implied the following:

- The numerous sector conditional grants and multiple allocation criteria would be consolidated into one allocation for recurrent spending and one for development spending, and then distributed by a single allocation formula per sector. This approach would allow local governments to have discretion over the allocation between wage and non-wage inputs subject to meeting maximum and minimum criteria, while still permitting central government line ministries to set additional allocation criteria for sectors with programmes (e.g. education) within the grant guidelines.
- The wage and non-wage unconditional allocations would be consolidated into one recurrent allocation, with a different allocation formula for urban and rural local governments, and local government discretion over the allocation between wage and non-wage.
- Various earmarked multi-sector development grant allocations and allocation formulas would be consolidated into one discretionary development equalisation grant allocation, with a different formula for urban and rural local governments that covered all grant windows. The consolidation meant one set of grant guidelines could cover all the funding windows, replacing the previous myriad of allocation procedures that local governments were required to follow.

However, it was one thing for the task force to adopt reform principles, but quite another to implement them in practice. Across all sectors, but particularly in the health and education sectors, there was resistance to a single recurrent allocation and a single sector allocation formula. Due to the difficulties associated with reallocating staff, line ministries were concerned that this would simply lead to currently better staffed local governments remaining better-staffed but with insufficient non-wage and development allocations, and less well staffed local governments remaining understaffed while acquiring non-wage and development allocations that they would struggle to absorb. The compromise was therefore to consolidate the various non-wage and development grants and introduce new allocation formulas for these, while tackling wage grant inequalities by constructing more facilities and adding more staff in underserved local governments. However, as previously discussed, the targeting of underserved local governments is somewhat undermined by a lack of policy coherence with the goal of establishing secondary schools and health centre IIIs in sub-counties without them.

Table 10 Guiding principles for designing allocation formulas

- 1. Formulas should be simple and transparent
- Formulas should have no more than six criteria for allocation.
- Each formula should be presented simply and accompanied by a written explanation of how it works and why it has been designed this way.
- Data used in the formulas and the formulas themselves should be publicly available.
- 2. Allocations should be equitable within the resources available
- Allocations should match resources to the target population and capture any major differences in need and cost, and ensure a balance between these factors.
- Formulas should not use input criteria, as these reinforce existing disparities in allocations.
- Formulas should be used to distribute a predetermined pool of resources.
- A grant should be country-wide and distributed to all local governments where there is a need for services, unless it is funding a pilot initiative, or services providing spillover to specific jurisdictions.

3. Variables should be 'exogenous' to influence from local governments and not provide a disincentive to improve service delivery

- Incentive effects should be explicitly considered in the design process.
- Variables should be linked to the overall objectives of the grant and service delivery mandates of local governments.
- Variables should be 'exogenous' to influence from local governments and it should not be possible to influence/ manipulate them.
- Formulas should not undermine incentives to improve services. Therefore, existing service levels/infrastructure stock must not be used.
- 4. Variables should support predictable and politically viable allocations
- Variables should not vary significantly from year to year.
- Variables should be measured regularly to avoid large changes upon revision.
- Variables should be available for all local governments or at least at the regional level.
- Variables should use official data sources only and use the most updated validated public statistics.

Source: ODI, 2015

Table 11 Proposals for introducing new allocation formulas within the consolidated grant structure

Sector allocation formula			Unconditional recurrent allocation		Discretionary development equalisation allocation	
Recurrent allocation			Rural local		Rural LG formula	Urban LG formula
Maximum wage	Minimum non- wage	Development allocation	government (LG) formula	Urban LG formula	PRDP	PRDP
					LRDP	USMID
					Other	Other
 One single allocation formula per sector replacing multiple grants and allocation formulas Local government discretion over the allocation between wage, non-wage and development, subject 		• One allocation formula per type of LG replacing separate allocations for wage and non-wage		• Same allocation formula per type of local government for each funding window (e.g. PRDP, and LRDP)		

to fulfilling maximum and minimum criteria for wage • Local government and non-wage allocations

• Additional allocation criteria for some sectors with multiple programmes (e.g. education for allocation between primary and secondary education)

discretion over the

allocation between wage and non-wage

replacing multiple grants and allocation formulas • Local government discretion over the allocation of funding

across sectors to replace previous earmarking

Moreover, line ministries struggled to adopt many of the guiding principles for designing allocation formulas. The guiding principles essentially aimed to push line ministries towards the use of a progressive allocation formula that was heavily weighted towards population variables and population-weighted measures of deprivation, while allowing for the use of cost variables with lower weights where these were justified. However, most line ministries' existing allocation procedures were geared towards the use of input criteria from their management information systems – enrolment in the case of education, facilities in the case of health, road quality and lengths in the case of works and transport, and water points in the case of water and environment – for the allocation of non-wage grants. As discussed in Chapter 3, the problem with such coverage variables is that they are only weakly associated with population, due to historical imbalances, and often inversely related to deprivation, as well as being open to gaming.

The compromise at the time was that line ministries would use more progressive allocation formulas for the allocation of development grants, the logic being that this would allow underserved local governments to increase coverage and therefore attract more recurrent financing per capita in future financial periods. However, as previously discussed, this logic was somewhat undermined by less than coherent policies for increasing health and education coverage, as well as the widespread use of relatively high equal share components in the development grant.

Nevertheless, inequalities in per capita financing for non-wage and non-USMID development grants have reduced since the reforms commenced in 2015/16 (see Figure 23). However, because inequalities in wage grants have increased, due primarily to a wage increase for teachers and health workers in 2016/17, the overall inequalities remain roughly unchanged.

More fundamentally, the more textbook view of equity was not equally shared among all stakeholders to the reform process, often due to very legitimate concerns. As noted by Love-Koh et al. (2020) 'inequalities that are considered unfair, such as those based on socioeconomic factors, are known as inequities' but that 'moving from an analysis of inequality to one of inequity requires deciding which differences are unfair and remediable. This in turn requires value judgements that depend on ethical, political or cultural principles.' The most salient divergence was with respect to the political view of fairness, which favoured a more place-based perspective of equity, namely that particular administrative units should have specific facilities, staffing structures and minimal allocations, regardless of population size.

In the education sector, stakeholders were wary about targeting the school-aged population if it could lead to 'overfunding' local governments with higher levels of private provision. Even though such targeting would also allocate more resources to those local governments with more children out of school, stakeholders were equally concerned that the reasons for this were not wholly due to a lack of resources and that these local governments would not be able to spend the additional allocations well. In the health sector, stakeholders were concerned that local government populations were not representative of the catchment area of health facilities. And in the water and environment and works and transport sectors, stakeholders were concerned that allocations based on population would leave insufficient funds for local governments with functional investments to undertake maintenance and repairs, and would lead to the deterioration of their assets.

All these concerns were heightened by the widely held view at the time that the entire intergovernmental fiscal transfer system was inadequately funded. Given that budgets are made in absolute terms, many stakeholders subscribe to the view that it is fairer to give every local government a decent slice of a small pie, rather than to try to divide it on a per capita basis. Compared to a good practice allocation based on the guiding principles in Table 10 above, which tends to have large deviations in absolute allocations but small deviations in per capita allocations, such an approach leads to smaller deviations in absolute allocations and wider deviations in per capita allocations.



Figure 23 Inequalities in per capita financing across wage, non-wage and non-USMID development grants

Note: The 45 degree line represents the hypothetical scenario of equal per capita funding across local governments. The Lorenz curves and Gini coefficients measure the distance from this scenario i.e. the 45 degree line has a Gini of zero. *Excluding USMID

Source: Local government budget allocations are per Budget 2020/21, Volume II, Tables 2a and 2b (and equivalent for prior years); population statistics are per Uganda Bureau of Statistics (UBOS) Indicative Planning Figures for 2020/21 (and equivalent for prior years)

4.3 Improving adequacy

A recurring theme of this paper is that the per capita inequalities are the result of inadequate funding. For wage grants, it is difficult to move staff from better staffed locations to those that are less so, particularly because better staffed locations are not necessarily well staffed to begin with. Therefore, a more equitable distribution primarily necessitates filling vacancies through new recruitment that requires additional funding. For non-wage grants, changing the allocation formula to target the population that should be served under universal obligations faces resistance if the level of funding is insufficient to meet the minimum standards of the population that is being served.²⁶ And for development grants, equal share components and per capita inequalities are somewhat inevitable when a more progressive allocation cannot provide smaller local governments with 'meaningful allocations'. More fundamentally, changing allocation formulas inevitably results in winners and losers, and is therefore easier to accomplish when the allocations of the would-be losers can be at least 'held harmless' by increasing funding. These issues were particularly salient as Uganda began the reform process.

Leading up to the reforms, population growth and the prioritisation of economic infrastructure contributed to a steady decline in the value of the intergovernmental transfer system. Figure 24 shows that, in the decade prior to the commencement of the reforms, the share of local government financing from the national budget declined from approximately 25% to 15%. Although the total national budget increased in real terms, this share was insufficient to maintain the real per capita growth in local government financing of earlier periods. Real per capita transfers to local governments peaked at 94,000 Uganda shillings (UShs) in 2002/03. While wage grants remained relatively buoyant, non-wage and development grants experienced long-run declines.

Understanding that improving the equity of local government financing required additional funding, the government began to engage with the World Bank on a \$200 million Uganda Intergovernmental Fiscal Transfer Program (UgIFT). However, the conditions of this concessional loan, which included co-financing by the government and the introduction of new equitable allocation formulas, took a long time to agree. And so the real value of the intergovernmental fiscal transfer system continued to decline through 2016/17 and 2017/18. Pushing the agreement through both cabinet and parliament were also time-consuming affairs for those leading the reforms in the finance ministry.

Ultimately the agreement reached on UgIFT, coupled with the expansion of USMID, contributed to a notable increase in the value of the intergovernmental system since the reforms began. Total transfers in real per capita terms increased by 20% between 2015/16 and 2020/21. The biggest increases were for:

For example, while capitation grants for primary education were set at 10,000 Ugandan shillings (UShs) per enrollee, the primary education non-wage grant provided funding for only approximately UShs. 8,000 per enrollee.

- conditional non-wage grants in the health and education sectors, through UgIFT
- conditional development grants, through the financing of the policy to construct seed secondary schools and Health Centre IIIs under UgIFT
- the expansion of the USMID programme to more municipalities and refugee-hosting districts.

However, as a share of the total budget and total domestic revenues, the value of total transfers continued to decline. Moreover, the composition of the increase differed substantially from the recommendations of a report commissioned by the LGFC to determine an appropriate share of local government financing from the national budget (Tidemand et al., 2017). Notably, despite the fact that 42 new local governments were created over the period, in real per capita terms:

- there was only a marginal increase in the unconditional wage grant
- the unconditional non-wage grant declined further
- the only windows of the discretionary development grant that increased were the USMID ones.



Figure 24 Trends in total local government transfers prior to reform

Source: Tidemand et al., 2017



Figure 25 Trends in total transfers since the start of the reforms

Source: Authors updates of Tidemand et al., (2017) based on budget publications available at www.budget.go.ug

While the settlement reached on the composition and distribution of the increases in adequacy have not resulted in a significant reduction in overall inequalities in per capita financing since the 2015/16 period, they have declined for some sectors and some grants. In the education sector, per capita inequalities have worsened slightly for primary education recurrent grants but improved slightly for secondary education recurrent grants. Meanwhile, there has been a more notable reduction in per capita inequalities in the development grant as well as a reduction in the inverse relationship between its per capita distribution and the poverty headcount. In the health sector, recurrent financing per capita has become more unequal. This is due to an increase in the per capita. And though the health development grant is now more equally distributed per capita. And though the health development grant has become more equally distributed per capita, its distribution has become more inversely related to the poverty headcount. Production and marketing grants also became less equally distributed per capita during the period, while the water and environment, works and transport, and social development grants all became more equally distributed.

While the results of the reforms to date on equity are probably best described as mixed, the broader reforms have established a platform for further increases in the adequacy of the intergovernmental fiscal transfer system with concessional financing. The government is currently finalising the extension of UgIFT for a further \$300 million over three years, broadening the coverage to include the water and environment and production and marketing sectors. This is also deepening the support for the health and education sectors, to begin addressing staffing shortages, performance and accountability. And the EU has begun providing around €32 million in budget support to increase the adequacy of the non-USMID windows of the DDEG. These increases in adequacy, coupled with concerted efforts to align with guiding principles for formulas design, should lead to further incremental progress in the equity of the intergovernmental fiscal transfer system over the medium term.

5 Other barriers and enablers for equitable allocation

Focusing solely on the equity of intergovernmental fiscal transfers may miss the wider picture. Other relevant sources of financing for local governments include their own source revenues, central government subventions to local governments (where resources intended for local government are spent by the central government ministry on behalf of the local government), and off-budget financing from donors. Furthermore, focusing solely on budgets as we have so far in this paper, may miss the point if there are significant deviations in budget execution. And the role of parliament in ensuring allocations are equitable should not be glossed over. However, for parliament to exercise oversight over the adequacy and equity of the intergovernmental fiscal transfer system, there need to be significant investments in coordination across government agencies. Investments in technology can be useful in this endeavour, but only within a rules-based system, where processes are routinely followed by a large number of stakeholders.

5.1 Own-source revenues

So far, we have only lightly touched on own-source revenues (see Section 3.1). As in most other lower-income countries, local government own-source revenue in Uganda remains small relative to intergovernmental fiscal transfers.²⁷ This is because local governments do not have significant revenue assignments. Moreover, local revenue potential remains constrained by the policy choice to exempt owner-occupied dwellings from property tax, which is the largest potential tax base for most local governments. While some countries try to incentivise fiscal effort at the local level, by including revenue potential in their allocation formulas, doing so is not straightforward. In the absence of good data on economic activity at the local level, there is a tendency to use the actual collections of local governments as a proxy for revenue potential. This can create perverse incentives: such as a local government reducing its effort to collect local revenues to maximise its share of fiscal transfers (Steffensen, 2010). Nevertheless, given the trends in urbanisation, local government revenue may become a more important feature of Uganda's intergovernmental fiscal transfer system in future, which will need to be incorporated into grant allocation decision-making (if not the actual formulas), to provide both adequate and equitable allocations. These current and future trends are mirrored in many other lower-income countries.

²⁷ LGFC (2012) calculates own-source revenue at 3% of the total budget for local governments on average.

5.2 Subventions

Subventions are defined as resources intended for local government that are spent by the central government ministry on behalf of the local government.²⁸ These are often related to donor financing. At present, they are a far more significant source of spending at the local government level than own-source revenues. Tidemand et al. (2017) estimate the size of subventions at approximately two-thirds of total intergovernmental transfers, with their relative size varying across sectors. In the health sector, 60% of all spending is on primary and secondary healthcare through local government administrations and health facilities administered by local governmental fiscal transfers. In some cases – such as the central procurement and distribution of drugs and medical supplies, and the construction and equipping of hospitals – subventions reflect jointly agreed arrangements between central and local government that ensure value for money. In other cases, subventions reflect resistance to the devolution of financing for service delivery.

Some of this resistance is related to donor preferences on the flow of funds due to fiduciary risk. Examples here include the Global Fund, the Vaccine Alliance (GAVI) and different development partners' results-based financing (RBF) programmes.²⁹ These are all budgeted under the Ministry of Health vote, with funds flowing:

- through central procurement agencies (i.e. the National Medical Stores)
- directly to health facilities.

There are also substantial flows of donor financing to health facilities that are off-budget.³⁰ In a study of financing for the health sector, ODI (2019) found that there were 'considerable variations in donor funding levels between facilities, local governments and sub-regions'. It also indicated that this funding had not played a role in targeting sub-regions lagging behind in health coverage and income, and that 'local governments receive much poorer information on subventions and off-budget donor financing than they do on fiscal transfers, making it hard to plan and budget effectively for these funds.' However, following the presentation of these findings, the Ministry of Health has begun providing more details on subventions funded by donors in the annual budget guidelines for local governments.

²⁸ These are funds that are budgeted for local governments by central government agencies under their own vote, rather than provided to local governments through the fiscal transfer system.

²⁹ These include the World Bank's Uganda Reproductive, Maternal and Child Health Services Improvement Project (URMCHIP), and ENABEL, the Belgium Development Agency's programme.

³⁰ However, as highlighted by ODI (2019), some donor financing that does not appear in central government budget does feature in local government budgets.

5.3 Releases, actual expenditures and spending quality

Focusing solely on budget allocations can also miss the wider picture. Budgets for local governments must be first released and then spent to be effective in achieving their goals. Public Expenditure Tracking Surveys (PETS) frequently highlight the non-release, delay or capture of budgeted allocations (Welham et al., 2017). Tidemand et al. (2014) consider Tanzania, highlighting deviations between budgets and releases arising from unfilled staff positions at the local government level. In Uganda, budgeted allocations are more explicitly linked to filled positions, so while allocations may not be equitable (see Section 3.3), they are credible. Over two decades of continuous improvements in cash management, as well as the prioritisation of local government transfers by the cash flow committee, mean that delays are not a significant issue.³¹ And while capture of resources by local elites was once a major issue, with almost 80% of capitation grants not reaching schools (Reinikka and Svensson, 2011), initial investments in transparency and a subsequent shift to making payments directly to beneficiary bank accounts has largely mitigated this issue. As such, Uganda's budget allocations provide a good basis for judging the adequacy and equity of intergovernmental fiscal transfers across its local governments, but this may not be the case in other countries.

However, what is released and how it is spent can of course differ. Local government administrations, schools and health facilities may all spend resources in ways they were not intended in budgeting guidelines.³² Monitoring adherence to a rules-based system is particularly important with respect to inequities within local governments, which are frequently higher than those observed between local governments, both in Uganda and elsewhere.³³ To this end, an additional part of the reforms has been to introduce a local government performance assessment (LGPA). This monitors adherence to various sectoral and cross-cutting processes and procedures including budgeting requirements (OPM, 2018). Many of these processes and procedures are important for reducing inequities in services to citizens. For example, the assessment examines and rewards local governments for ensuring vacancies are filled and facilities are constructed in underserved communities. Adherence is incentivised by linking development grant allocations to LGPA scores, while local governments that perform poorly are provided with support from central agencies to develop and implement performance improvement plans. These mechanisms may lead to improvements in equity in future periods, both within and across local governments, if they can address staffing and facility gaps. Nevertheless, this ex-post monitoring needs to be

This is not to suggest that budget credibility is not an issue in Uganda, just that it is not a concern for its intergovernmental fiscal transfers.

³² Despite this, these may be for well-intentioned reasons in some circumstances, particularly if grant guidelines are inflexible to local governments addressing pressing local problems.

³³ Pupil-teacher ratios for individual schools vary much more than pupil-teacher ratios between local governments. Tidemand et al., (2014) document inequities within Tanzania's local governments that are greater than those across local governments.

accompanied by more dedicated ex-ante monitoring of adherence during the budget process, as well as during budget execution by the central agencies, if the stated goal of a more discretionary intergovernmental fiscal transfer system is to be achieved.

5.4 The legislature

Along with central agencies, there is also an important role for parliament, as approvers of the annual budget and the creation of new local governments. This involves ensuring that allocations are equitable across local governments. Having a more holistic institutional oversight of total allocations is particularly important for fragmented intergovernmental fiscal transfer systems like Uganda's. However, LGFC (2012) notes that 'information provided to Parliament is not always adequate to study the implications of their decisions on local government financing' and 'budget information does not always permit a strategic view and discussion of local government financing or an appreciation of its impact on service delivery'.

5.5 Digitalisation

Technology can be useful in enabling a more holistic view for stakeholders committed to ensuring the equity of intergovernmental fiscal transfers. As part of their reforms, the government in Uganda has invested in new public financial management technology to improve the administration and transparency of intergovernmental fiscal transfer allocations. This includes an online transfer information management system (OTIMS)³⁴ that provides an overview of the entire intergovernmental fiscal transfer system, including the formulas, variables and data used in determining each grant allocation. It also comprises analytical tools for assessing their equity at every stage of the budget process. This has reduced the oversight issues associated with every line ministry maintaining separate systems. The system is also integrated with other PFM systems in the Ministry of Finance through application programming interfaces (APIs) and could be linked to management information systems in line ministries in the future. This could provide opportunities for 'localising the SDGs' by bringing together financial and non-financial data on inputs, outputs and outcomes to inform policy decisions. Nevertheless, maintaining a system that supports a fast-moving budget process and requires data from various agencies – for 175 local governments, thousands of lower-level governments and tens of thousands of facilities - requires a massive amount of coordination, adherence to shared processes (like unique identifiers), and ongoing maintenance to manage the integrity of the system when the rules are inevitably imperfectly followed.

6 Discussion and conclusions

This paper has focused on the issue of equity in intergovernmental fiscal transfers that, in many countries, finance the bulk of service delivery spending on education, health, and other local infrastructure and services. In the case of Uganda, we find that total per capita inequalities for intergovernmental fiscal transfers are high, varying by a factor of 16 between the best and worst funded local governments, and that the distribution is inversely related to poverty rates. But this is not a startling discovery, given that similarly unequal per capita distributions are observable in other lower-income countries.

6.1 Urbanisation matters

This paper has identified that the main determinants of inequalities in intergovernmental fiscal transfers per capita in Uganda are related to different types of local governments, their varying population sizes, and historical imbalances in service delivery facilities across them. The main difference between local governments that drives per capita financing variation is that some are urban and others are rural, with the former much better funded on average, mainly due to a World Bank programme that funds some urban local governments.³⁵

However, not all these inequalities are necessarily inequitable. In many countries, including Uganda, larger per capita allocations for urban local governments can be justified by urbanisation and spillovers. Policy choices to prioritise urban local governments also reflect differences in their expenditure assignments compared to rural local governments. However, the scale of these inequalities should be justified by more rigorous calculations of the variation in the fiscal gap across local governments, including consideration of own-source revenues and other sources of local government financing.

6.2 Equity is difficult to improve comprehensively – even with more resources

Uganda's efforts to reform its intergovernmental fiscal transfer system show that these inequalities are difficult to redress. Although the real per capita value of total intergovernmental fiscal transfers increased by approximately 20% since the reforms began, the results in terms of improving equity have been mixed, with improvements in some areas offset by regression in others. Less populous local governments receive higher per capita allocations on average, which is primarily due to equal share components in grant allocation formulas. The ratio of service delivery

³⁵ There are many benefits to having the donor programmes reflected in the grants than not, despite the apparent distortion.

facilities to population varies across local governments and correlates with staffing levels, which determine the bulk of financing for health and education spending. In Uganda, these two sectors combined account for 50% of all spending through intergovernmental fiscal transfers.

The wider lesson for reformers and those supporting them is that even when adequacy is increased, the political economy continues to create biases in recurrent and development spending that favour, respectively, input-based and place-based allocations. The prevailing policy direction favours better served local governments rather than underserved or unserved local governments, which works against the principle in the SDGs of 'leaving no one behind'.

Reform designers should take into account the political requirement to fund prior and/or suboptimal norms of equity, which tend to be based on administrative features (prior hiring, buildings and units of government), rather than per capita allocations. One approach is to establish a pre-agreed set of 'red lines' protecting a 'core' set of salient goals in an often complex, multifaceted reform environment.

6.3 Support for a more citizen-focused perspective on equity is crucial

A focus on more salient goals that resonate with citizens and the fiscal gaps that must be financed to meet them might go a long way towards ironing out the inequalities in intergovernmental fiscal transfers we have discussed in this paper.

Durable progress may require identifying and cultivating a broader coalition of impartial and high-powered actors, including from outside government, in order to temper the biases of central agencies towards input-based allocations, and policy-makers towards place-based allocations.

The wider lesson from Uganda is that a technical foundation, such as consolidating the grant structure or changing allocation formula, is unlikely to be sufficient for increasing equity if goals are expressed primarily in financial terms.

A more holistic view of the equity of the intergovernmental fiscal transfer system may have taken the form of expressing the goals of the reform in more tractable terms, such as identifying and agreeing salient outcome indicators for the population (including those unserved) at the outset.

6.4 Staff deployment is a key determinant of equity

An emerging arm of the intergovernmental fiscal transfers reform in Uganda is starting to advocate for a more equitable and efficient system for the allocation of service delivery staff, particularly teachers and health workers.

Many countries, rich and poor, struggle to varying degrees with the issue of staff not wanting to be posted to areas where they are most needed and use different institutional models for dealing

with this. For example, in Germany, equitable teacher staffing levels across local authorities are maintained by centralising control of their employment at the state (*Länder*) level (West et al., 2014), while in Tanzania centralised control of staffing has the opposite effect (Tidemand et al., 2014).

The lesson to other reformers is to tackle this as early as possible if politically feasible. Efforts to reform budget allocations will have little impact on outputs and outcomes unless staff can be incentivised or otherwise induced into posting (and turning up to work and carrying out their job, using effective techniques) in underserved local governments.

6.5 Generating or acquiring trustworthy information is key to furthering a more holistic agenda on equity

To take a more holistic view of the intergovernmental fiscal transfer system, reformers and those supporting them will need to be empowered with the necessary data and information to garner the attention of other policy-makers. This means having information and understanding far beyond the financial aggregates comprising the grants themselves and the census projections.

Improvements in technology and digitalisation now offer the opportunity for more evidencebased policy-making for countries that effectively harness their potential. This could help enable lower-income countries to move beyond allocations based on input indicators that focus solely on the served population, towards a more thorough understanding of the fiscal gap. Allocations could also address service delivery bottlenecks and opportunities more explicitly and efficiently. More engagement with information could help ensure that the SDGs are truly localised and that policy-makers have a better understanding of who is being left behind and what can be done about it.

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Appendix – determinants of total per capita intergovernmental fiscal transfers

In Chapter 3, we discussed the importance of various factors in explaining the variation in per capita resources that local governments receive through the intergovernmental fiscal transfer system. These include whether an urban local government is part of the USMID programme, the size of the local government in terms of population and the ratio of service delivery facilities (primary schools, secondary schools and health facilities) to the population. To investigate the relative importance of these determinants, we have employed an ordinary least squares (OLS) regression (see Table 12) and analysis of the partial correlations (see Table 13).

Column 1 of Table 12 shows that, on its own, being an urban USMID local government accounts for 65% of the variation in total per capita grant allocations. Together, the five variables explain almost 80% of the variation in total per capita allocations. In the fully specified model in column 6, all the determinants are significant, apart from the primary school-aged population to school ratio, which loses its significance after the inclusion of the combined capacity of health facilities. Holding the four other variables constant, urban USMID local governments receive on average \$52 per capita more than other local governments. Being smaller also pays. For every additional 100,000 people, local governments receive \$2.40 less per capita on average. And a 1% increase in combined health facility capacity is associated with a total allocation that is \$2.00 per capita higher on average. More schools per school-aged population are also associated with higher allocations, though the estimated coefficients are smaller and not significant for primary education.

Given the correlation between the five variables, we performed an analysis of their partial correlations to understand their individual contribution to the variation in total per capita grant allocation. The partial correlation measures the correlation between each variable and the total per capita grant allocation, taking into account the influence of all the other variables. The square of this coefficient measures the percentage of the total grant allocation variation, unexplained by the four other variables, which is explained by the variable considered. Column 3 shows that being an urban USMID local government explains 71% of the variation unexplained by the other four variables. Variation in the combined capacity of health facilities explains 13%, while variation in population explains 12%. The explanatory power of the ratio of the school-aged population to the number of schools is much smaller, with variation in the indicator for secondary education explaining approximately 3% of the unexplained variation, while for primary education it is about 1%.

Table 12 Ordinary least squares (OLS) regression results for total per capita intergovernmental fiscal transfers

	(1)	(2)	(3)	(4)	(5)
VARIABLES	Total	Total	Total	Total	Total
USMID	53.64***	47.84***	49.21***	48.99***	51.85***
	(2.972)	(2.794)	(2.617)	(2.637)	(2.539)
Total population (thousands)		-0.0373***	-0.0309***	-0.0282***	-0.0242***
		(0.00557)	(0.00533)	(0.00540)	(0.00512)
School-aged population to school ratio (primary)			-0.00998***	-0.00538**	-0.00351
			(0.00192)	(0.00257)	(0.00244)
School-aged population to school ratio (secondary)				-0.000758**	-0.000622**
				(0.000304)	(0.000287)
Combined capacity of health facilities as a ratio of the population					2.022***
					(0.411)
Constant	30.43***	39.62***	45.61***	45.90***	36.79***
	(1.054)	(1.666)	(1.933)	(1.902)	(2.573)
Observations	175	175	175	173	173
R-squared	0.653	0.725	0.762	0.761	0.792

Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01

Table 13 Analysis of partial and semi partial correlations

Variable	Partial correlation	Semi-partial correlation	Partial correlation ^2	Semi-partial correlation ^2	Significance value
USMID	0.8450	0.7215	0.7140	0.5205	0.0000
Total population (thousands)	-0.3433	-0.1669	0.1179	0.0279	0.0000
School-aged population to school ratio (primary)	-0.1105	-0.0508	0.0122	0.0026	0.1527
School-aged population to school ratio (secondary)	-0.1657	-0.0767	0.0274	0.0059	0.0313
Combined capacity of health facilities as a ratio of the population	0.3554	0.1736	0.1263	0.0301	0.0000