Flypaper effects of Central Transfers on the spending behaviour of Ghana's central region local governments: Does status matter?

Efek Flypaper Central Transfer pada perilaku belanja pemerintah daerah wilayah tengah Ghana: Apakah status berpengaruh?

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Abstract

Fiscal system incentivises local government officials to depend on central government's transfers to fund their budgets. This paper examines whether district and municipal status local government officials exhibit the same spending behaviour when presented with central government's transfers. The paper uses the panel data model to estimate the flypaper effect on district and municipal status local governments in the Central Region of Ghana from 2008 to 2015. The result shows differences in spending behaviour between district and municipal status local governments, where the flypaper effect is more pronounced on municipal status local governments (52.6%) than district status local governments (44.8%). Though municipal local governments are financially better in raising own-source revenues compared to the district local governments, the design of the fiscal system tends to make municipal local governments more reliant on central transfers than on expenditure of own-source revenues. This reduces interest in raising own-source revenue and its expenditure, a situation which has an adverse long-term impact on decentralisation in terms of citizen empowerment and participation. The study recommends an optimal level of central transfers which will serve the purpose of correcting vertical and horizontal imbalances, as in theory, and at the same time promote the ideals of decentralisation (citizen empowerment and participation).

Keywords: decentralisation; flypaper effect; intergovernmental transfers; local governments; spending behaviour

Abstrak

Sistem fiskal mendorong pejabat pemerintah daerah untuk bergantung pada transfer pusat untuk mendanai anggaran mereka. Makalah ini mengkaji apakah pejabat pemerintah daerah yang berstatus kabupaten dan kotamadya menunjukkan perilaku belanja yang sama ketika disajikan dengan transfer pusat. Makalah ini menggunakan model data panel untuk memperkirakan efek flypaper pada pemerintah daerah berstatus kabupaten dan kotamadya di Wilayah Tengah Ghana dari tahun 2008 hingga 2015. Hasilnya menunjukkan perbedaan perilaku belanja antara pemerintah lokal berstatus kabupaten dan kota, di mana efek flypaper adalah lebih menonjol pada pemerintah daerah berstatus kota (52.6%) daripada pada pemerintah daerah berstatus kabupaten (44.8%). Meskipun pemerintah daerah kota secara finansial lebih baik dalam meningkatkan pendapatan asli daerah dibandingkan dengan pemerintah daerah kabupaten, desain sistem fiskal cenderung membuat pemerintah daerah kota lebih bergantung pada transfer pusat daripada pengeluaran pendapatan asli daerah. Ini mengurangi minat untuk meningkatkan pendapatan asli daerah dan pengeluarannya, suatu situasi yang memiliki dampak jangka panjang yang merugikan terhadap desentralisasi dalam hal pemberdayaan dan partisipasi warga. Studi ini merekomendasikan tingkat optimal transfer pusat yang akan melayani tujuan mengoreksi ketidakseimbangan vertikal dan horizontal, seperti dalam teori, dan pada saat yang sama mempromosikan cita-cita desentralisasi (pemberdayaan dan partisipasi warga).

Kata kunci: desentralisasi; efek kertas laying; transfer antar pemerintah; pemerintah daerah; perilaku belanja

Introduction

Ghana has a central transfer system, also known as intergovernmental transfer system, as part of its decentralisation programme called the District Assembly Common Fund (DACF). The erstwhile Local Government Act, Act 462 of 1993 (Inanga & Osei-Wusu 2004) and the present Local Government Act, Act 936 of 2016, all mandate the creation of the District Assembly Common Fund and the appointment of an administrator for the fund to oversee the quarterly disbursement of funds from the central government to all the local governments in Ghana (Government of Ghana 1993, 2016). As per the 1992 constitution of the Republic of Ghana, the central government of Ghana sets aside 7.5% of Ghana's total national revenue and shares the money with all the local governments in Ghana based on a sharing formula that is determined by the Parliament of Ghana (Government of Ghana 1992, Fumey & Egwaikhide 2019). From the recent guidelines of the parliament of Ghana for sharing the District Assembly Common Fund, this study deduces the following constitutional motivations for the creation of the development fund. These are to ensure that all the local government jurisdictions have an adequate supply of public services and projects. It is also to promote the equitable distribution of public services and projects across all local governments in Ghana. These constitutional motivations require that all local governments in Ghana spend the development fund, the District Assembly Common Fund, on essential services for the development of their respective communities, as outlined in Ghana's intergovernmental transfer policy (Fumey & Egwaikhide 2019).

However, studies have made it evidently clear that different forms of financing arrangements (fiscal systems) communicate different spending behaviour to local government officials (Pöschl & Weingast 2013, Weingast 2014, Rodden 2016, Park 2022). Intellectuals have spent considerable time investigating this spending behaviour and how it affects the performance and efficient service delivery of local governments (Elhiraika 2007, Mogues & Benin 2012, Dick-Sagoe & Tingum 2021, Park 2022). For example, Park (2022) specifically states that central transfer influences the level of local government expenditure in that local government officials respond to citizens preferences. Such information is necessary to guide policymakers, especially those who design intergovernmental transfers. Oates (1999) reveals that local governments are more incentivised and respond better to intergovernmental transfers than they do to their own-source revenue; the so-called "flypaper effect". This is to say that intergovernmental transfers augment local government expenditure, compared to local governments' own source of revenue (Oates 1999), thus affecting performance, local autonomy, and efficient service provision at the local level (Pöschl & Weingast 2013, Rodden 2016, Dick-Sagoe 2020).

Ample evidence proves that local governments in developing countries have failed in terms of performance and efficient service provision and, in some cases, decentralisation has worsened efficient pro-poor service provision (Dick-Sagoe 2020, Dick-Sagoe et al. 2021). Such studies caution the need for certain conditions to be met before decentralisation can manifest in efficient and quality service provision. It is important to note that decentralisation is meant to promote local autonomy, accountability, transparency, and active local participation. These aforementioned conditions, when in place, ensure performance and efficient service provision at the local level for local government. This means that decentralisation, according to its proponents from the public choice camp, promises efficient service provision only when certain conditions are met (Crook 2003, Dick-Sagoe 2020). For example, Robinson (2007), Bossuyt and Gould (2000) and Dick-Sagoe (2020) emphasised active and increased local participation and accountability for decentralisation to deliver (perform). Brosio & Ahmad (2008) and Sow and Razafimahefa (2015) call for the effective autonomy of local governments and strong transparency, evident in accountability to the local people through active participation in service and project delivery. However, the design of central transfers tends to affect the achievement of these conditions (active local participation, accountability, autonomy of local governments, and strong transparency), which are important prerequisites for the performance of local governments.

By design, own-source revenue collection strengthens decentralisation by promoting local autonomy, transparency, and active local participation (Pöschl & Weingast 2013, Rodden 2016). For example, as

local people's money (own-source revenue) is used to provide local services, local people are empowered to demand accountability from the local government officials. This unconsciously increases the participation of the local people in the affairs of the local government, something which is good for improving service provision. This puts local government officials on their toes to prudently spend their financial resources on goods and services that meet the direct needs of the local people, thus resulting in efficient service provision. These (local autonomy, transparency, and active citizen participation) are necessary conditions for the achievement of the theoretical benefits of decentralisation (Tiebout 1956, Musgrave 1959, Oates 1972, Brosio & Ahmad 2008). Weingast (2009) and Pöschl and Weingast (2013) encourage local governments in developing countries to depend on own-source revenues if efficient service delivery remains their priority.

However, theory states that central transfers are to support local governments' service provision and to ensure that services are equitably distributed in all local governments in the country despite the financial strength (availability of potential sources of own source revenues) of the local government. The reality is that some local governments (municipal status local governments) can raise enough own-source revenues to finance local services and projects due to the availability of such resources in large numbers compared to others (district status local governments). This is to say that the absence of central transfers will automatically lead to a huge variation among the local governments (municipal and district status) in terms of local service and project provision and own source revenue generation (Dick-Sagoe & Tingum 2021), a situation which will lead to the flight of mobile citizens to endowed (municipal status) local government jurisdictions (Tiebout 1956, Levaggi & Smith 2003).

On the contrary, the presence of central transfer poses risks because it tends to obscure own-source revenues and, in most cases, discourages local governments from collecting own-source revenues, compromising local autonomy (Setyawan 2011). Zigiene (2012) warns that this situation contradicts the policy supporting central transfers. Because of this, Fiva (2006) and Grisorio and Prota (2015) warn that central transfers without corrective measures can result in a race to the bottom. So the question which remains to be answered is "how can central transfers be optimised to promote a win-win for service provision and decentralisation?" or should we continue promoting the current situation of "recentralised" decentralised local governments in Ghana, as central transfer is creating? Encouraging "recentralised" decentralised local governments erodes local autonomy and makes local governments serve the political interests of the central government (Rao & Singh 1998, Kang & Setyawan 2012, Dick-Sagoe 2013, Pöschl & Weingast 2013).

The above questions form the motivation for conducting this study. However, this study becomes more relevant in the sense that many studies have analysed the relationship between central transfers and government size (such as Jin & Zou 2002, Martinez-Vazquez & Yao 2009) and inequality (such as Kyriacou et al. 2015, 2017). Little is known about central transfers and local government spending, particularly those that create differences between local governments based on status (district and municipal), as this study seeks to do. Studies which are close to this study are central transfers and the composition of local government expenditure (such as Siwińska-Gorzelak et al. 2020, Park 2022) and central transfers and strategic behaviour of local governments (Park & Kim 2022). This is to prove that this study is unique as it is arguably the only one of its kind in Ghana. Besides, what even makes this study worth pursuing is the current search for an intellectual solution to the constant failure of decentralisation policies in many developing countries, including Ghana.

The introduction continues to provide literature on the link between the revenue sources available to local governments and decentralisation. The arguments of the political economy of decentralisation have been used to explain the linkage between local government revenue sources (own-source and intergovernmental transfers- IGT) and the basic argument of decentralisation. As has already been explained, decentralisation promises efficient service provision only when certain conditions are met, namely accountability, active local participation, transparency, and local autonomy, the so-called basic arguments of decentralisation (Tiebout 1956, Musgrave 1959, Oates 1972).

The political economy of decentralisation approach seeks to emphasise service provision accountability at the local government level (Sow & Razafimahefa 2015). Achieving accountable service delivery at the local government level has been difficult without own-source revenues (Brosio & Ahmad 2008, Ambrosiano & Bordignon 2006). Small and weaker local governments usually have relatively low capacity to implement their assigned role because of the low percentage of own-source revenues to total local expenditure. This then brings the need for intergovernmental transfers to support local governments in implementing their assigned tasks (Rao & Singh 1998, Schroeder & Smoke 2003, Pöschl & Weingast 2013). However, excessive reliance on intergovernmental transfers (IGT) negates the autonomy of local governments. This was proved by Jia et al. (2019) when they realised intergovernmental transfers (IGT) dis-incentivise local governments in China to intensify the mobilisation of own-source revenue collection.

Also, transparency, through proper, timely, and accurate accountability to the local people about the performance of the local government in comparison to the expectations of the local people, is key to the performance of local governments. Decentralisation and efficient service provision have been long-standing issues. For example, Gaster (1991) and Rodden (2016) concluded that, without proper and positive two-way communication between the local government officials and the local people, decentralisation will hardly translate into efficient service provision as envisaged by the proponents of decentralisation, who propose the possible likelihood of decentralisation leading to equity theoretically. Through positive and two-way communication, Gaster (1991) emphasised transparency, accountability, and active participation of the local people. The relationship between accountability, participation, and local autonomy at the local level and local government revenues is explained below using Pöschl and Weingast's (2013) fiscal interest approach. Rodden (2016) further argues that local people become powerful and demand accountability from their local governments when they pay tax in exchange for efficient public goods. In the same way, intergovernmental transfers weaken local people's incentives to monitor the spending behaviour of their local government officials.

The literature continues to explain the fiscal interest model. The core argument of the model, according to Wallis and Sylla (1994), is that local government officials are incentivised by policies that relax their soft budget constraints. It further argues that these officials are biased towards policies that favour revenue increase. These policies end up affecting the performance of local governments, measured in terms of efficient public service provision, which, according to the proponents of decentralisation, is achieved through the promotion of local autonomy, evidenced by active participation of the local people, downward accountability to the local people, and transparency (Tiebout 1956, Musgrave 1959, Rodden 2002, Weingast 2009, Pöschl & Weingast 2013, Rodden 2016, Sirenko et al. 2018). The model postulates that, for local governments to perform (measured in efficient local service provision), fiscal design should reward increased own-source revenue collection and lessen dependence on intergovernmental fiscal transfers (Oates 2005, Pöschl & Weingast 2013). Thus, fiscal system design shapes local governments' policy choices and their performance in local service provision.

Sirenko et al. (2018) attribute the breakdown of local governments' autonomy, a key component for the promotion of decentralisation and efficient service provision, to fiscal design, which encourages the domination of intergovernmental transfers and less regard for increasing own-source revenue collection. Rao and Singh (1998) explain further how intergovernmental fiscal transfers affect the performance of local governments from economic and political perspectives. To them, the economic perspective supports the provision of public services and the political perspective annexes the local governments as the agents of the central governments. Intergovernmental fiscal transfers have inevitably become a political weapon for the central government to annex local governments as their agents, thereby eroding the foundations of decentralisation. Once local governments become agents of the central government, they lose their local autonomy, thus affecting efficient service provision.

The next section explains the District Assemblies Common Fund (DACF) of Ghana. The challenges local governments face in mobilising own source revenues for development purposes led to the creation of the District Assembly Common Fund (DACF) in Ghana. The 1992 constitution of Ghana (Article 252) provides the legal backing for the establishment of the DACF to serve as a mechanism for the

transfers of resources from the central government to the local governments (King et al. 2003). In addition, the Act of Parliament of Ghana (Act 455) was made to support the operation of the DACF as the Act instructs the transfer of not less than 5% (now 7.5%) of the total revenue of Ghana to the local governments. As a Development Fund, DACF ensures the use of Ghana's wealth to benefit every citizen (Owusu-Amponsah 2017).

Five main components are considered in determining the size of each local government's share of DACF. These, according to Banful (2007) are need, service pressure, responsiveness, reserved and equality factors. In 2003, the "poverty" factor, measured as the number of schools located in the local government in need of major repair, was added and later removed. The equality factor is a benchmark amount which is distributed evenly to all the local governments. The need factor measures a local government's development need in comparison to other local governments. Responsiveness factor rewards local governments' effort to increase own-source revenue generation. Service pressure factor measures the population density of the district.

A special deduction is made from the total DACF allocation, known as a contingency from 1994 to 1999 and renamed after 1999 as the reserve and is used for bulk purchases for local governments. The reserve is also used to support the monitoring roles of the administrator of the DACF and the office of the Regional Coordinating Councils. The reserve was 5% of the total DACF allocation in 1994, 10% from 1995 to 2004, 20% in 2005 and 25% in 2006 (Sarquah 2008).

The introduction then ends with a review of empirical studies similar to this study. In a study on the topic "fiscal decentralisation and service provision in the Central Region of Ghana", Dick-Sagoe (2017) observes that central (intergovernmental) transfers make up between 80 to 90% of local government revenues in the Central Region of Ghana. This means that, without such transfers, local governments in the Central Region of Ghana cannot finance their development projects. Mogues and Benin (2012) focus on the fiscal dimensions of Ghana's decentralisation by explaining central government transfers to local government and its influence on own-source revenue generation. They observe that local governments depend hugely on central government transfers for their development in Ghana.

Elhiraika (2007) observes overdependence on central government transfers in South Africa and reports that the situation significantly affects local accountability and transparency. Thus, making local governments accountable to the central governments, a situation which erodes the essence of decentralisation. Panggabean and Dalimunthe (2017) assessed the flypaper effect on the expenditures of the district and municipal government in the North Sumatra province using secondary data from the budget realisation report from 2011 to 2014. Their regression result, using 27 regencies consisting of five municipalities and 22 districts in Indonesia, proves the presence of the flypaper effect on the expenditure of municipal and district government. They conclude that local governments are dependent solely on transfers and not exploring local own revenues.

Research Method

The study employs a quantitative method which includes the random effects Generalised Least Squares panel data models. These approaches are highly utilised in estimating intergovernmental transfers as they account for heteroscedasticity and unobserved heterogeneity among local governments while producing efficient and reliable estimates (Hsiao 2003). Following empirical specifications by Cárdenas and Sharma (2011) and Acar (2019), we specify the model as follows:

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \alpha_i + \mu_{it}$$
 (1)

where Y_{it} is the dependent variable, i represents the 17 local governments within the central region, t represents the time period from 2008 – 2015. β_0 is the intercept (constant) term, β_i represents the parameters to be estimated, X_1 and X_2 are the independent variables, α_i shows the time-constant unobserved heterogeneity in local governments, and μ_{it} are individual local governments and time-

variant errors. The economic variables used in the study are in real terms, deflated using price-index taken from the Ghana Statistical Service.

The empirical model is estimated using a double-logarithmic equation where coefficients are interpreted as elasticities. A conventional model for the estimation is specified as follows:

$$logtotexp_{it} = \beta_0 + \beta_1 loggrants_{it} + \beta_2 logincome_{it} + Z_{it}\gamma + \mu_{it}$$
 (2)

where

 $log tot \ exp_{it} = log \ of \ total \ expenditure \ of local \ governments \ i$ in year t. $log grants_{it} = log \ of \ total \ grants/transfers$ received by local governments i in year t. $log income_{it} = log \ of \ own \ source$ revenue by local governments i in year t. $Z_{it} = social \ characteristics \ of \ local \ governments \ i$ in year t.

Equation 2 is either estimated by fixed effects (FE) or random effects (RE) models based on the Hausman (2015) test statistic in the decision criteria (Min 2019). The test is performed on the null hypothesis; H₀: random effects are more consistent; against the alternative hypothesis, H₁: only the fixed effect estimates are consistent. If the test statistic is significant, then the null hypothesis is rejected, and the FE model is consistent. Alternatively, if the test statistic is insignificant, the null hypothesis cannot be rejected, and the random effects estimator is consistent.

The study uses data from the archives of the office of the District Assembly Common Fund administrator (can be accessed via the link https://mofep.gov.gh/publications/composite-budget/), and the archives of the Controller and Accountant General's office, Accra-Ghana (can be accessed via the link http://www.cagd.gov.gh/). Information on Central government transfers (intergovernmental transfers) to local governments, local governments' own revenues, and other characteristics were obtained from these sources for the period 2008 to 2015 for a total of 136 panels. Analysis was conducted up to 2015 because of the lack of data in later years. The sample, composed of 17 local governments, was divided into urban and rural local governments. Out of the total sample, 80 (59%) local governments are rural, while 56 (41%) are urban, with 74% of the total local governments in the Central Region of Ghana. Conclusions were drawn based on the result from the data analysis and discussed alongside the empirical reviews.

Results and Discussion

We start this section with a summary of the descriptive statistics of the nominal variables used in the study, as shown in Table 1. The nominal variables are totexp (total expenditure of local governments), grants (grants/transfers received by local governments) and igf (own source revenue by local governments). Statistics in Table 1 are divided into district and municipal statuses of local governments. Though the estimations are carried out using the log of the variables, the descriptive statistics are presented in nominal terms to show the amount of money (in Ghana cedis) that was either spent, received as transfers, or generated by the local governments on average during the period under consideration. For example, the mean total expenditure for the district local government over the period was 2,379532 cedis, as compared to 3,220,694 cedis for municipal local governments. The statistics also show that municipal local governments received more grants over the period than district local governments while also generating more revenue.

Further analysis of mean grants or central transfers or intergovernmental transfers compared to the mean own-source (igf) revenues mobilised by the local government bodies (by district and municipal status) has been presented and discussed alongside the findings in the empirical reviews. It was realised that, in both cases (municipal and district status local governments), transfers exceeded the own source revenues (igf) mobilised by the local government. From Table 1, the mean grants (2084108) and igf (354558.5) for district status local governments, and the mean grants (3576989) and mean igf

(843127.3) for municipal local governments, all indicate that grants or intergovernmental transfers were leading the revenue structure of local governments under study. This was observed by all the authors reviewed in the empirical review section of the introduction. See, for example, Dick-Sagoe (2017), who studied the same case in Ghana; Elhiraika (2007), who studied the same case in South Africa; Mogues and Benin (2012), who studied the same case in Ghana; and, finally, Panggabean and Dalimunthe (2017), who studied the same case in Indonesia. All the authors expressed worries as the situation affects the manifestation of true results of decentralisation, which the establishment of local governments is supposed to champion and make the local people own and steer the affairs of their own development, as theorised by Musgrave (1957), Tiebout (1961), and Oates (1972). This part truly reveals the true influence of transfers or intergovernmental transfers on local government finances, irrespective of their status. This situation is more likely to influence local government expenditure decisions (and thus spending behaviour in general), as this study seeks to uncover. The next paragraphs unearth the flypaper effects of these transfers on the local government bodies by status (district and municipal).

Table 1.Descriptive statistics using nominal values

Variables	District status local governments			Municipal status local governments				
	mean	std dev	min	max	mean	std dev	min	max
totexp	2379532	1147678	117005.7	5271819	3220694	2169171	155852.9	1.02e+07
grants	2084108	1214947	95889.22	4902416	3576989	8730868	291263.6	6.67e+07
igf	354558.5	513025.9	8228.89	3008154	843127.3	1176029	77627.04	7748625

Source: Authors' calculation based on data from 2008-2015

Based on the flypaper literature (Sagbas & Saruc 2004, Sour 2013), the argument for the existence or non-existence of the flypaper effect is obtained from the magnitudes of the coefficients of grants or central transfers or intergovernmental transfers and income in equation (2). If the magnitude of the coefficient of transferred funds is greater than the magnitude of the coefficient of own revenue, then the flypaper effect does exist (Dick-Sagoe & Tingum 2021). More so, unconditional grants could have a stimulating effect on the local tax effort (in our case igf). This generates a substitution effect, which is likely to reduce the local tax effort (Canavire-Bacarreza & Espinoza 2010).

We first estimate the Hausman test to choose between the random effect and fixed effect models, as shown in Table 2. Model 1 shows the test results for district-status local governments, while Model 2 shows the results for municipal-status local governments. The chi2 and probability values of the test statistics fail to reject the null hypothesis for the two models. Therefore, RE estimators are efficient and consistent and were applied in the analysis, especially as it assumes that the unique errors are not correlated with the independent variables in the models (Greene 2012).

Table 2.
Hausman test results

Model	Test	Chi2	Prob > chi2	Decision	
Model 1: Rural	Random Effect Vs Fixed Effect	3.41	0.1814	Accept H ₀	
Model 2: Urban	Random Effect Vs Fixed Effect	1.78	0.4103	Accept H ₀	

Source: Authors' calculation

To account for heteroscedasticity in the models, the analysis employs the random effects Generalised Least Squares (GLS) regression in order to obtain optimal unbiased results (Musau et al. 2015). The results are presented in Table 3. The overall significance of the models is checked using the prob & gt; chi2 statistics which is 0.000 for all the models. The value of rho shows the intra-local government correlation and indicates the variances that are due to differences across district-status local governments and municipal-status local governments.

Table 3.Random effect GLS regression accounting for heteroscedasticity

Variable		tatus local nments	Municipal status local governments		
	1	2	3	4	
Igrants	0.448***	0.406***	0.526***	0.505***	
	(0.068)	(0.083)	(0.067)	(0.117)	
ligf	0.337***	0.194**	0.367***	0.400***	
	(0.061)	(0.076)	(0.067)	(0.121)	
Constant	3.993***	6.105***	2.308	2.204	
	(1.386)	(1.608)	(1.431)	(2.474)	
Year Dummy	N0	YES	NO	YES	
Wald chi2	57.80	89.51	78.72	72.52	
Prob > chi2	0.0000	0.0000	0.0000	0.0000	
rho	0.6077	0.8925	0.3762	0.2087	
Observations	80	80	56	56	

Source: Authors' calculation

The coefficients of the regressors are all positive and significant for both district-status local governments and municipal-status local governments. This suggests that a 1% change in government transfers (intergovernmental transfers) will cause a 44.8% to 52.6% change in local total expenditure in district and municipal status local governments, respectively. These results are in line with the results from Dick-Sagoe and Tingum (2021), as they concluded that central government transfers contribute more to local government expenditure in Ghana. Other authors such as Elhiraika (2007), Mogues and Benin (2012) and Dick-Sagoe (2017) all observed the influence of the flypaper effect on local government in the presence of transfers. Specifically, Panggabean and Dalimunthe (2017) expressed the influence of flypaper effects on all local government expenditure in Indonesia and went further to unearth that the effect is more pronounced on municipal-status local governments than district-status local governments, just as in the case of this study. Arguably, we see influence higher on municipal local governments than on district-status local governments due to the fact that municipal local governments receive more transfers than district-status local governments. However, the question to pose here is that, among the two (district and municipal local governments), who possesses more opportunities for raising own-source revenues (igf)? The answer obviously is that municipal local governments have more taxable opportunities to exploit to finance local expenditure than district-status local governments. Raising own-source revenues (igf) and, in fact, dependence on igf for development expenditure of local governments has been widely argued by the fiscal interest model proponents, such as Weingast, to promote the achievement of the ideals of decentralisation compared to transfers. This is because dependence on own-source revenues (igf) to finance development expenditure encourages active local involvement in the development process, promotes local accountability, and promotes local autonomy. The next few paragraphs provide a breakdown for a detailed discussion.

In the case of IGF (own-source revenue), a 1% increase changes local total expenditure by 33.7.2% and 36.7% in district status local governments and municipal status local governments, respectively, ceteris paribus. The results show that central government transfers contribute more to local government expenditure than local governments' own-source revenues. However, most theories on intergovernmental transfer predict that lump-sum grants have the same effects on the expenditure of local governments as an identical increase in their own revenue (Sour 2013). However, on empirical grounds, scholars like Bradford and Oates (1971) found that local governments would increase their expenditure more in response to a grant than their own revenue generated. According to Bergvall et al. (2006), grants to local governments represent the most common and efficient way of transferring resources from central to local or sub-national governments. This provides an avenue where the grants can be used for the purposes of financing and subsidising services as well as equalising service capacity.

The analysis shows that the flypaper effect is higher for municipal-status local governments (52.6%) than for district-status local governments (44.5%). Compared to the contributions of own-source revenue to total local expenditure, the local governments exhibited the effects of flypaper as intergovernmental transfers (also known as transfers or grants) accounted for the greater part of local expenditure. These findings are in conformity with those of Gamkhar (2000), who stated that authorities increase expenditures by a greater amount in response to an increase in central transfers than the amount by which they reduce expenditures in response to a decrease in transfers (Sour 2013). The result proves the likelihood for local governments to suffer from the delivery of efficient service to the local people. However, municipal-status local governments are at greater risk of suffering from efficient service delivery compared to district-status local governments.

This study is not devoid of limitations. First, the study considers only the period from 2008 to 2015 due to the availability of data on district and municipal governments. Recent data on discretionary and compulsory intergovernmental transfers include new local governments that were created after 2015. Such data were excluded from the analysis due to the unbalanced nature of the panel. Second, only 2 (two) variables were included in the analysis as obtained from the archives of the office of the District Assembly Common Fund administrator. This study can be extended to include control variables such as poverty, population; whose data were not available when this study was conducted.

Conclusion

This study has wholly proven that the flypaper effects of transfers cause municipal local governments to spend more on transfers than on own-source revenue. The same situation influences municipal-status local government officials to rely on and spend more on transfers rather than focusing on mobilising the large available own-source revenue potential at their disposal. Thus, transfers encourage municipal-status local governments to develop a spending behaviour that focuses more on transfers than on own-source revenue.

The literature review section of this study has made it clear that decentralisation only promises efficient service provision if local autonomy, active local participation, transparency, and accountability exist. Thus, the developmental significance of decentralisation is anchored on assumptions, theoretical justifications, and promises. An increase in local government expenditure on local service provision does not necessarily increase the quality of local service provision, which is necessary to reduce poverty at the local level. In the case of local governments in the Central Region of Ghana, central (intergovernmental) transfers have been an avenue for these local government officials to increase local expenditure without necessarily looking into the quality components of such provisions. The reason why this occurs is the low participation of the local people in the planning, execution, monitoring, and evaluation of these projects funded from central transfer. Because such monies are not directly paid by the local people as local tax, their incentive to participate in the expenditure decisions of such monies is virtually non-existent. In this case, citizens have less power to demand accountability from local government officials, giving them (local government officials) the freedom to make decisions that suit their selfish interests. Citizens become powerful and demand accountability from their local governments when they pay taxes in exchange for efficient public goods. In the same way, central (intergovernmental) transfers, when allowed to make the greatest part of local government finances, weaken citizens' incentives to monitor the spending behaviour of their local government officials.

The study has proved that flypaper is more intense in municipal-status local governments than district status local governments in the Central Region of Ghana. Higher central (intergovernmental) transfers to local governments match higher local total expenditure, which does not lead to efficient service provision because transfers break accountability, active participation of the local people, and local autonomy. However, central transfers are important for local governments, especially the weaker (district status) local governments, with virtually non-existing avenues for mobilising own-source revenue to enhance equitable distribution of local services and projects. This implies that though central (intergovernmental) transfers have a negative unintended effect on local governments, they also present

an opportunity for less fortunate local governments (district status) to be able to receive their fair share of public services and projects, though the efficiency of these services will be compromised due to less participation.

These findings bring up the following policy relevant questions. Should the central government continue to transfer its limited resources to local governments, particularly municipal status local governments with abundant avenues to raise own-source revenue to finance their development, when these transfers have an impact on the efficiency of public services? Again, should the central government continue disbursing central (intergovernmental) transfers to local governments if these transfers have been proven to erode the basic foundations of decentralisation (local autonomy, active local participation, and accountability) that the state has spent resources to promote? The study recommends the need for an optimal level of central (intergovernmental) transfers which will serve the purpose of correcting vertical and horizontal imbalances, as in theory, and at the same time promote the ideals of decentralisation.

The contribution of this study confirms the already existing literature on the flypaper effect and the fiscal interest models, which raises attention to the worrying effects of transfers in crowding out the ability of local governments in developing countries, such as Ghana, to achieve the true decentralisation mandate, which is evident in active local participation, local autonomy, and downward accountability.

References

- Acar Y (2019) Does flypaper effect exist? New evidence from Turkish municipalities. Sosyoekonomi 27 (39):55-68. https://doi.org/10.17233/sosyoekonomi.2019.01.03.
- Ambrosiano MF & Bordignon M (2006) Normative Versus Positive Theories of Revenue Assignments in Federations. In: Brosio G & Ahmad E (ed). Handbook of Fiscal Federalism, chapter 12. Massachusetts: Edward Elgar Publishing. https://doi.org/10.4337/9781847201515.00021.
- Banful AB (2007) Can Institutions Reduce Clientelism? A Study of the District Assemblies Common Fund in Ghana. Cambridge, MA: Harvard University.
- Bergvall D, Charbit C, Kraan D, & Merk O (2006) Intergovernmental transfers and decentralised public spending. OECD Network on Fiscal Relations Across Levels of Government, Working Paper No 3.
- Bossuyt J & Gould J (2007) Decentralisation and poverty reduction: Elaborating the linkages. European Centre for Development Policy Management. Policy Management Brief 12.
- Bradford DF & Oates W (1971) Towards a predictive theory of intergovernmental grants. The American Economic Review 61 (2):440-448.
- Brosio G & Ahmad E (2008) Local service provision in selected OECD countries: Do decentralized operations work better? IMF Working Paper No. 08/67. https://ssrn.com/abstract=1112209.
- Canavire-Bacarreza G & Espinoza NGZ (2010) Fiscal transfers a curse or blessing? Evidence of their effect on tax effort for municipalities in Sinaloa, Mexico. International Studies Program Working Paper 10, Georgia State University, Atlanta.
- Cárdenas OJ & Sharma A (2011) Mexican municipalities and the flypaper effect. Public Budgeting & Finance 31 (3):73-93. https://doi.org/10.1111/j.1540-5850.2011.00990.x.
- Crook RC (2003) Decentralisation and poverty reduction in Africa: The politics of local—central relations. Public Administration and Development: The International Journal of Management Research and Practice 23 (1):77-88. https://doi.org/10.1002/pad.261.
- Dick-Sagoe C (2013) Performance and challenges of internally generated revenue mobilisation of the Abura-Asebu-Kwamankese district assembly for local level development. Dissertation, University of Cape Coast, Ghana.
- Dick-Sagoe C (2017) Towards quality service delivery outcomes: What can local governments' own-source revenue do? Paper presented at the 2nd International Conference on Public Administration and Development Alternatives in Gaborone, Botswana (26-28 July 2017). In: MP Sebola and JP Tsheola (ed). The Independence of African States in the Age of Globalisation. University of Limpopo publication, South Africa, pages 223-228.

- Dick-Sagoe C (2020) Decentralization for improving the provision of public services in developing countries: A critical review. Cogent Economics & Finance 8(1). https://doi.org/10.1080/233220 39.2020.1804036.
- Dick-Sagoe C, Asare-Nuamah P, & Dick-Sagoe AD (2021) Public choice and decentralised healthcare service delivery in Lesotho: Assessing improvement and efficiency in service delivery. Cogent Social Sciences 7 (1). https://doi.org/10.1080/23311886.2021.1969737.
- Dick-Sagoe C & Tingum EN (2021) Flypaper effect of intergovernmental transfers and incentives to improve own-source revenue mobilization of local governments in the central region of Ghana. Open Journal of Social Sciences 9 (8):434-447. https://doi.org/10.4236/jss.2021.98030.
- Elhiraika AB (2007) Fiscal decentralisation and public service delivery in South Africa. ATPC Work in Progress No. 58. A paper was presented at a workshop on "Public expenditure and service delivery in Africa: Managing public expenditure to improve service quality and access" organized by ECA from 11-13 October 2006, Lusaka, Zambia.
- Fiva JH (2006) New evidence on the effect of fiscal decentralization on the size and composition of government spending. FinanzArchiv/Public Finance Analysis 62 (2):250-280.
- Fumey A & Egwaikhide FO (2019) Redistributive politics: The case of fiscal transfers in Ghana. International Journal of Social Economics 46 (2):213-225. https://doi.org/10.1108/IJSE-05-2017-0191
- Gamkhar S (2000) Is the response of state and local highway spending symmetric to increases and decreases in federal highway grants? Public Finance Review 28 (1):3-25. https://doi.org/10.1177%2F109114210002800101.
- Gaster L (1991) Quality and decentralisation: Are the connected? Policy and Politics 19 (4):257-267. https://doi.org/10.1332/030557391782454142.
- Government of Ghana (1992) The national constitution of the Republic of Ghana. Accra-Ghana.
- Government of Ghana (1993) Local Government Act of 1993, Act 462. [Accessed 2 April 2022]. https://lgs.gov.gh/index.php/law-acts-legislative-instrument/.
- Government of Ghana (2016) Local Governance Act, 2016, Act 936. [Accessed 2 April 2022]. https://lgs.gov.gh/index.php/law-acts-legislative-instrument/.
- Greene WWH (2012) Econometric analysis 7th Ed. Hoboken: Prentice Hall.
- Grisorio MJ & Prota F (2015) The impact of fiscal decentralization on the composition of public expenditure: Panel data evidence from Italy. Regional Studies 49 (12):1941-1956. https://doi.org/10.1080/00343404.2013.859665.
- Hausman JA (2015) Specification tests in econometrics. Applied Econometrics 38 (2):112-134.
- Hsiao C (2003) Analysis of panel data, second edition. In: Hsiao C (ed). Analysis of Panel Data, Second Edition. Cambridge: Cambridge University Press https://doi.org/10.1017/CBO9780511754203.
- Inanga EL & Osei-Wusu D (2004) Financial resource base of sub-national governments and fiscal decentralization in Ghana. African Development Review 16 (1):72-114. https://doi.org/10.1111/j.1467-8268.2004.00085.x.
- Jia J, Ding S, & Liu Y (2019) Decentralization, incentives, and local tax enforcement. Journal of Urban Economics 115. https://doi.org/10.1016/j.jue.2019.103225.
- Jin J & Zou H (2002) How does fiscal decentralization affect aggregate, national, and subnational government size? Journal of Urban Economics 52 (2):270-293. https://doi.org/10.1016/S0094-1190(02)00004-9.
- Kang Y & Setyawan D (2012) Intergovernmental transfer and the flypaper effect—evidence from municipalities/regencies in Indonesia. KDI School of Pub Policy & Management Paper.
- King R, Azeem VA, Abbey C, Boateng SK, & Mevuta D (2003) Tracking of the district assemblies common fund: A pilot study of four district assemblies.
- Kyriacou AP, Muinelo-Gallo L, & Roca-Sagalés O (2015) Fiscal decentralization and regional disparities: The importance of good governance. Papers in Regional Science 94 (1): 89-107. https://doi.org/10.1111/pirs.12061.
- Kyriacou AP, Muinelo-Gallo L, & Roca-Sagalés O (2017) Regional inequalities, fiscal decentralization and government quality. Regional Studies 51 (6):945-957. https://doi.org/10.10 80/00343 404.2016. 11509 92.

- Levaggi R & Smith PC (2003) Decentralization in Health Care: Lessons from Public Economics. In: Smith PC, Ginnelly L, & Sculpher M (ed). Health Policy and Economics: Opportunities and Challenges. Maidenhead, Berkshire: Open University Press. 223-247.
- Martinez-Vazquez J & Yao M (2009) Fiscal decentralization and public sector employment: A Cross-country analysis. Public Finance Review 37 (5):539-571. https://doi.org/10.1177/10911421 09343176.
- Min C (2019) Models for Panel Data. In: Min C (ed). Applied Econometrics: A Practical Guide. London: Routledge.
- Mogues T & Benin S (2012) Do external grants to district government discourage own revenue generation? A look at local public finance dynamics in Ghana. World Development 40 (5):1054-1067. https://doi.org/10.1016/j.worlddev.2011.12.001.
- Musau MV, Waititu AG, & Wanjoya AK (2015) Modelling panel data: Comparison of GLS estimation and robust covariance matrix estimation. American Journal of Theoretical and Applied Statistics 4 (3):185-191. https://doi.org/10.11648/j.ajtas.20150403.25.
- Musgrave R (1959) Public Finance. New York: McGraw Hill.
- Oates WE (1972) Fiscal Federalism. New York: Harcourt Brace Jovanovich.
- Oates WE (1999) An essay on Fiscal Federalism. Journal of Economic Literature 37 (3):1120-1149.
- Oates WE (2005) Toward a second-generation theory of fiscal federalism. International Tax and Public Finance 12 (4):349-373. https://doi.org/10.1007/s10797-005-1619-9.
- Owusu-Amponsah V (2017) Effects of the District Assembly Common Fund (DACF) on socioeconomic development in Ghana: A case study of Tano-South District assembly in the Brong Ahafo Region of Ghana. Dissertation, University of Cape Coast, Cape Coast.
- Panggabean FY & Dalimunthe MB (2017) Analysis of flypaper effect on the district and municipality government expenditures in North Sumatra province. Paper presented at the 2nd International Conference on Accounting, Business & Economics, Yogyakarta, 26-27 October 2017.
- Park J (2022) Fiscal decentralisation and composition of local government expenditure: Evidence from South Korea. Public Finance Review 50 (1):62-90. https://doi.org/10.1177%2F10911421221093142.
- Park S & Kim S (2022) Does fiscal decentralization affect local governments' strategic behaviours? Evidence from South Korea. Pacific Economic Review. https://doi.org/10.1111/1468-0106.12388.
- Pöschl C & Weingast BR (2013) The Fiscal Interest Approach: The Design of Tax and Transfer systems. Redwood City: Stanford University Press.
- Rao MG & Singh N (1998) Intergovernmental transfers: Rationale, design and indian experience. Department of Economics, University of California, Santa Cruz.
- Robinson M (2007) Does decentralisation improve equity and efficiency in public service delivery provision? IDS Bulletin 38 (1):7-17.
- Rodden J (2002) The dilemma of fiscal federalism: Grants and fiscal performance around the world. American Journal of Political Science 46 (3):670-687. https://doi.org/10.2307/3088407.
- Rodden J (2016) Decentralized rule and revenue. Paper prepared for United States Agency for International Development (USAID) on the day of June 14, 2016. Stanford University. https://static1.squarespace.com/static/5761e0e7d1758ead80bca408/t/576364c1f5e231826f0c96a e/1466131649937/jr_finance_FINAL.pdf.
- Sagbas I & Saruc NT (2004) Intergovernmental Transfers and the Flypaper Effect in Turkey. Turkish Studies 5 (2):79-92. https://doi.org/10.1080/1468384042000228602.
- Sarquah E (2008) Challenges of fiscal decentralization policy in the Akuapem South District of Ghana. Thesis, The University of Bergen, Bergen.
- Schroeder L & Smoke P (2003) Intergovernmental fiscal transfers: Concepts, International practices and Policy Issues. In: Smoke P & Kim Y (ed). Intergovernmental fiscal transfers in Asia: Current practice and challenges for the future 20.
- Setyawan D (2011) Intergovernmental transfer in Indonesia and the flypaper effect phenomenon. Thesis, KDI School, Sejong-Si.

- Sirenko NM, Baryshevskaya IV, Poltorak AS, & Shyshpanova NO (2018) State and Tendencies of Intergovernmental Regulation in Ukraine in Conditions of Fiscal Decentralization. Financial and Credit Activity: Problems of Theory and Practice (2):157-164. https://doi.org/10.18 371/fcaptp.v2i25.136489.
- Siwińska-Gorzelak J, Bukowska G, & Wójcik P (2020) The impact of revenue autonomy on the composition of local public spending: Evidence from Poland. Local Government Studies 46 (4):641-665. https://doi.org/10.1080/03003930.2019.1635017.
- Sour L (2013) The flypaper effect in Mexican local governments. Estudios Economicos Vol. 28 (1): 165-186.
- Sow M & Razafimahefa IF (2015) Fiscal decentralization and the efficiency of public service delivery. International Monetary Fund.
- Tiebout CM (1956) A pure theory of local expenditures. Journal of Political Economy 64 (5). https://doi.org/10.1086/257839.
- Wallis JJ & Sylla RE (1994) The Interaction of Taxation and Regulation in Nineteenth-Century U.S. Banking. In The Regulated Economy: A Historical Approach to Political Economy. Chicago: University of Chicago Press. 121-144.
- Weingast BR (2009) Second generation fiscal federalism: The implications of fiscal incentives. Journal of Urban Economics 65 (3):279-293. https://doi.org/10.1016/j.jue.2008.12.005.
- Weingast BR (2014) Second generation fiscal federalism: Political aspects of decentralization and economic development. World Development 53: 14-25. https://doi.org/10.1016/j.w orlddev. 2013.01.003.
- Zigiene G (2012) The importance of functions assignment for the intergovernmental fiscal relations. Journal of Business Management 5 (Special Edition):112-125.