

Towards Quality Service Delivery Outcomes: What Can Local Governments' Own-Source Revenue Do?

C Dick-Sagoe

Veernarmad South Gujarat University, India

Abstract: Local governments are mandated, through decentralisation, to mobilise own-source revenues and channel them into poverty reducing service provision like education and health. Arguably, the best way to measure the benefits from poverty reducing public service provision is through quality service outcomes (such as quality education outcomes). This paper argues that the structure of local government finances, where local governments depend heavy on intergovernmental transfers is not a problem to consider much on when it comes to improved local service delivery. However, much focus should be geared towards the performance in the mobilisation of own-source revenue and its relationship with poverty reducing public service provision outcomes at the local level. The reason is that decentralisation is a medium to enhance the participation of the local people. The best way to enhance this local participation is through increased accountability from the local governments to the local people. Local participation attracts local innovations which are necessary for improved public service outcomes. Existing studies show that the collection of own-source revenues enhances local accountability, which is prerequisite for achieving quality public service delivery outcomes. This paper argues that increases in own-source revenues will impact more on poverty reducing public service provision outcomes. Longitudinal panel data of revenue and service delivery outcome reports for the 20 local governments in the Central Region of Ghana, from 2011 to 2015, were used to answer the research question for the study. The research question is "does increases in own-source revenues improve quality of public service delivery outcomes at the local level?" The study found no statistical relationship between service delivery outcomes (core textbook provision per child) and own-source revenues. On the other hand, there was a moderate statistical relationship between own-source revenues and pupil per trained teacher ratios at 0.01 alpha value. Recommendations were made for local governments to increase own-source revenue mobilisation efforts as it impacts positively on efforts to improve local public service delivery outcomes, especially if the focus is on improving pupil per teacher ratio at the local level.

Keywords: Local government, Service delivery, Quality service Outcomes, Own-Source Revenue, New Public Management

1. Introduction

The need to focus on service provision became relevant due to the failures of economic development theory from the growth economists. As a result, developing countries have shifted to the provision of poverty reducing public services to improve poverty levels, through the basic needs approach (Seer, 1969). This was meant to correct the challenges created by the development economists position on national productivity as critical for national development. Additionally, the emergence of the new management theory and its recommendations for improving the efficiency of the public sector revolutionised public service delivery and its outcomes. This theory became conspicuous to remedy the challenges of the bureaucratic system which hinders efficiency, managerial discretion

and innovation, especially in public service provision. Barton (1979) further adds challenges such as irrational decisions with fewer basis on cost and benefits to the public.

Reforms of the new public management are: efficiency, marketisation, accountability and decentralisation. Efficiency is assessed from the ratio of service input and output and employing new methods of working. Marketisation marks the adoption of contractual relationships in the public sector which involves measures to revolutionise contractual relationships in procurement, tendering and delivery of services. Public officials, according to the provisions of the new public management, are expected to account for their actions / decision and use of resources. Accountability should concentrate on the effects of public officials' decisions on social

welfare. Additionally, accountability should be on performance measures and quality as used in the private sector. The last stage, transfers of power and responsibilities to the lesser levels of government is decentralisation. Decentralisation becomes more effective if lower levels of governments are more autonomous beyond government to stimulate initiative, increase local responsiveness and provide tailored local solutions.

With these changes, developing countries have intensified the provision of poverty reducing public service provision like education, health, potable water and roads. In other words, decentralised public service provisions, through the local governments, have been promoted. The reason can be traced to the model of public goods provision by Tiebout (1956). Tiebout clearly states lower levels of governments are more efficient in the provision of services compared to the Central government. It is argued that decentralisation will attract the participation of the local people and improve lower levels accountability, an opportunity to improve public sector innovation and efficiency. Further, the competition generated through the provision of same/ similar public goods by different local governments improve efficiency. These arguments put forward are expected to improve service delivery outcomes, especially those which benefit the poor. However, overtime this linkage between decentralisation and service delivery outcomes have been very weak (Lewis & Smoke, forthcoming, Smoke, 2003 and Boex, 2009, Dick-Sagoe, 2017). This is to say that decentralisation has not materialised in improved service delivery. This scenario has been recorded in most developing countries including Ghana. Several academic explanations have been provided to explain this poor linkage. For example, the second generation theories of fiscal decentralisation argue that the fiscal incentives generated from the design of decentralisation has a lot to do with the performance of public officials, in terms of public service outcomes levels (Weingast, 2009). One of the prominent theories of the second generation is the fiscal incentive model of Weingast (2013). To them, huge transfers to local governments are the cause of their laxity to innovate and improve local service delivery outcomes. These huge transfers erode transparency and accountability to the local people, who are the beneficiaries of public services (Mogues & Benin, 2012). This presents low incentive to the local governments to collect more own-source revenues for development (Rodden, 2003, Oates, 2005). To

many other researchers, poor local service delivery outcomes represent a practical failure to support classical theories of decentralisation. Studies to identify the causes of poor local service delivery outcomes emerged problems like corruption and local elite capture.

This paper argues that the gross picture of the structure of local government finances is not the problem for the poor levels of public service outcomes. Simply put, local governments' dependence on external transfers, rather than the own-source revenue is not the causal problem of the poor service outcomes in developing countries. However, trends in the performance of own-source revenue collection at the local level has a lot to explain poverty reducing public service outcomes levels at the local level. This is to say that own-source revenue collection performance is positively related to service provision outcomes at the local level. Increase in own-source revenue collection results in an increase in willingness to pay taxes by the local people. Willingness to pay for local taxes goes with demands for local accountability and participation. Increased local accountability and participation promotes efficiency and innovations (Navarra & Cornford, n.d.), which are necessary conditions for increased local service delivery outcomes. Bawole (2017) reports citizens' apathy as limitations for decentralisation in Ghana. The rest of the paper has been structure this way. It starts with the study objectives and a brief literature review on the new public management theories and the fiscal incentive model. It then continues with the research methodology. Data analysis, presentation of findings and discussions are done. The study finally ends with a conclusion. The papers aim to examine the relationship between own source revenue and service delivery outcomes (core textbook per student ratio and pupil per trained teacher ratio) from 2011 to 2015 and would like to answer the question: What is the relationship between own source revenue and service delivery outcomes of local government? The paper is grounded on the Decentralisation theorem. Decentralisation improves service delivery, accountability and socio-economic development (Smoke, 2015). Tiebout (1956) "*interjurisdictional competition*", Musgrave (1959) "*solution to the assignment problem*" and Oates (1972) "*decentralisation theorem*", provides theoretical support for decentralisation and how it improves local service delivery. Their theories (Tiebout, Musgrave and Oates) assume a normative position that sees public decision-makers as benevolent social welfare maximisers.

Table 1: Descriptive Statistics

Variables	Mean	Std. Deviation	N
Total IGF	447629.733	391866.4453	68
Pupil per trained teacher ratio	39.676	12.8614	68
Core Text took	.734	1.0405	68

Source: Revenue and service outcome reports of local governments and ministry of education, Ghana (2015)

2. Research Design and Methodology

The study adopted the quantitative study approach. It made use of the objectivist epistemology and positivist theoretical perspective. The design used was the panel longitudinal. This design requires a repeated collection of data consistently over time. The study made use of revenue records of own-source revenue mobilised by the local governments in the Central Region of Ghana. It does the same for public service provision outcomes (quality education) for the local governments in the Central Region of Ghana. This data is recorded over a period of 2011 to 2015. Correlation was used for the analysis of the variables of the study, which are own-source revenues (independent variable), and pupil per trained teacher ratio and pupil per core text book ratio (as the dependent variables (m)). Sample size was determined using Harris (1985), who states that sample size (n) for correlation and regression analysis should not be less than: $50 + m = 50 + 2 = 52$. However, the study used a sample size of 68,

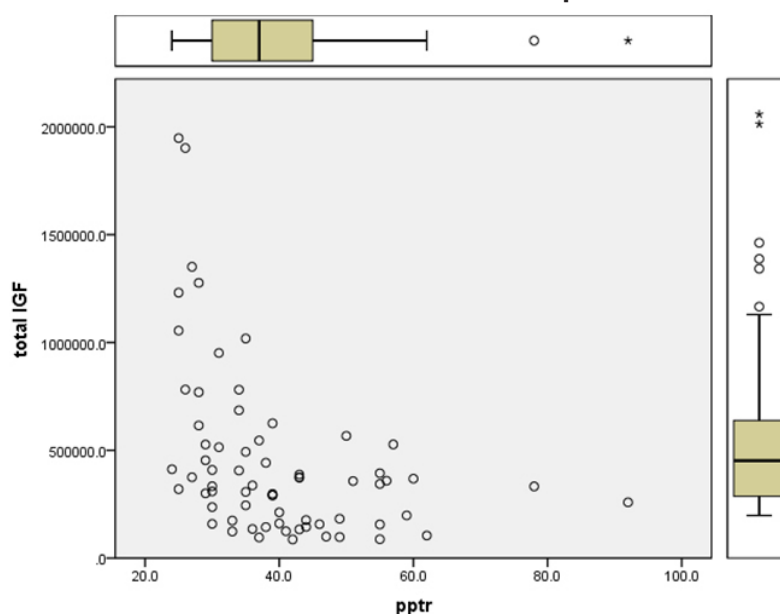
meaning the study used more than the determined minimum sample size of 52.

3. Results and Discussions

Figure 1 presents scatter plot for own-source revenue (denoted by total IGR on the y-axis / vertical axis) and pupil per trained teacher ratio (denoted as pptr on the x-axis / horizontal axis of the graph). The scatter plot depicts that of the typical demand curve indicating an inverse or negative relationship between total IGR and pptr while Table 1 shows the descriptive statistics of the variables used for the analysis.

Table 2 on the following page finally presents the correlation analysis for the variables for the study. The dependent variables are the quality education variables (which are number of pupil per core text books –mathematics text book, Science text book and English text book, and number of pupil per trained teacher ratio). The independent variable on

Figure 1: Scatter Plot of Own-Source Revenue and Pupil Per Trained Teacher Ratio



Source: Revenue and service outcome reports of local governments and ministry of education, Ghana (2015)

Table 2: Correlations Result

		Own-source Revenue	Pupil per trained teacher	Core Text books
Own-source Revenue	Pearson Correlation	1	-0.417**	-0.036
	Sig. (2-tailed)		0.000	0.769
	N	68	68	68
Pupil per trained teacher ratio	Pearson Correlation	-0.417**	1	-0.052
	Sig. (2-tailed)	0.000		0.675
	N	68	68	68
Text book	Pearson Correlation	-0.036	-0.052	1
	Sig. (2-tailed)	0.769	0.675	
	N	68	68	68

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Revenue and service outcome reports of local governments and ministry of education (2015)

the other hand is own-source revenues. The result indicates that own source revenues correlate moderately with pupil per trained teacher ratio. This is supported with a Pearson correlation (r) of -0.42. On the other hand, own-source revenues had no correlation with pupil per core text book ratio. The analysis then shifted to the correlation between own-source revenues and pupil per train teacher ratio. According to Cohen (1988), Pearson correlation (r) figure ranges from -1 to +1. The interpretation of the results is as follows: $r = -.30$ to $-.4.9$ is considered a moderate relationship, while $r = 0.0$, is considered a no relationship. Finding the percentage of pupil per trained teacher ratio that own-source revenues of local governments in the Central Region influenced led to the calculation of the coefficient of determination or the $r^2 \times 100$. The result $(-0.42 \times -0.42) \times 100 = 0.18 \times 100 = 18\%$. Therefore, own-source revenues only explain 18 percent of the changes in pupil per trained teacher ratio in the Central Region of Ghana.

The negative sign, attached to the Pearson correlation (r) of -0.42, indicates an inverse or a negative relationship between the two variables. This can be supported with the pattern of the scatter plot in Figure 1. The simple practical meaning is that higher levels of own-source revenues matches lower levels of pupil per trained teacher ratio. A simple practical understanding is that a classroom of 10 students to 1 trained teacher is better than a classroom of 20 students to 1 trained teacher. Therefore, the inverse

relationship reflects something better on ground. Therefore, the need to promote the collection of own-source revenues by the local governments in the Central Region of Ghana.

4. Conclusion

This study has empirically answered the link between own-source revenue collection and service delivery outcomes using the Central Region of Ghana. The study has proved to support the argument that increases in the collection of own source revenues by local governments matches improvement in local public service outcomes, using education as a case in the Central Region of Ghana. Specifically, increasing own-source revenue collection moderately improves pupil per trained teacher ratio. Further, the study shows that local governments with higher amounts of own-source revenue collection in the Central Region have improved pupil per trained teacher ratios in their classroom by 18 percent. To support the previous point, the structure of these local governments in Central Region has been proved to be the heavily dependence on Central government's transfers, where local governments have seen their sustenance built entirely on external transfers (Dick-Sagoe & Djimatey, 2015; Dick-Sagoe, 2017). They (local governments) are in the position to be accountable to the main actors within the external sources of funds. This tends to down play the need for downward accountability to the local people. Absence of this take away

the role local community play to ensure improved outcomes for locally determined services through the full participation of the local people (Bawole, 2017). This study has empirically proved the relevance of own-source revenues, especially in this era where local governments are encouraged to mobilise own-source revenues. Being a source of funds for local development, its increased mobilisation has proved to support local public service outcomes, especially pupil per trained teacher ratio in the local governments in the Central Region of Ghana. So mobilisation of own-source revenues seeks to support the idea of the new public management theorist, which seeks to improve the activities of the local governments in line with management principles.

Policy makers should consider the design of own-source revenue mobilisation as a system leading to stronger mechanisms of accountability and the possibility of participation by the citizen and other non-government organisations, with the aim of improving local public service outcomes. Linking this analysis to real life situation, it can be said that qualified or trained teachers accepts posting to places or localities with good infrastructural development. Business enterprises prefer to establish in places with adequate infrastructure which supports their businesses such as roads, water, electricity, market infrastructure etc. Local governments which are able to collect more own-source revenues are those located in places of improved infrastructural development with availability of taxable property. With this, such local governments are able to use their own-source revenues to support the external transfers to provide infrastructural facilities which attract trained teachers, thus improving the quality of education. Additionally, local governments in localities with good flows of own-source revenues will do their best to impress the local citizens, especially the tax payers, in terms of providing quality local public services (Gadenne, 2013). The reason is that, if the local people do not see improvement in local public services, they will simply stop the payment of local taxes (own-source revenues). The local governments, in a quest to impress the local people and receive their support in the payment of local taxes (own-source revenues) will improve local service delivery.

References

Barton, A.H. 1979. A Diagnosis of Bureaucratic Maladies. In C.H. Weiss & A.H. Barton (eds.) *Making Bureaucracies Work*. London: Sage.

- Bawole, N.J. 2017. Pro-Poor Decentralisation in Ghana: Exploring the facilitators and the limitations. *Administrative theory and Praxis*, 39(2):122-139
- Boex, J. 2009. Fiscal Decentralisation and Intergovernmental Finance Reform as an International Development Strategy. *Urban Institute Centre on International Development and Governance Working Paper* No. 2009-06.
- Cohen, J. 1988. *Statistical Power Analysis for the Behavioral Sciences*. Hillsdale, NJ: Erlbaum.
- Dick-Sagoe, C & Djimatey, R. 2015. Structure of Abura Asebu Kwamankese District Assembly's Revenue: Understanding the need of Fiscal Independence for District Assemblies in Ghana. *International Journal of Economics, Commerce and Management*, 3(5):622-633.
- Dick-Sagoe, C. 2017. Fiscal Decentralisation and Public Services Provision for Local Development of the Districts in the Central Region of Ghana. Unpublished Doctoral dissertation. Veer Narmad South Gujarat University: India.
- Gadenne, L. 2013. Tax me but spend wisely: The political economy of taxes. Theory and Evidence from Brazilian local governments. *ULC Working Paper*.
- Harris, R.J. 1985. *A Primer of Multivariate Statistics*. New York: Academic Press.
- Lewis, B.D. & Smoke, P. 2012. Incentives for better local service delivery: International experience and relevance for Indonesia. In *Indonesian Decentralisation: Ten Years after the Big Bang*. Manila: Asian Development Bank.
- Lewis, B.D. & Smoke, P. (forthcoming). Intergovernmental Fiscal Transfers and Local Incentives and Responses: The Case of Indonesia. *Fiscal Studies*, Accepted Article, doi:10.1111/1475-5890.12080.
- 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.
- Musgrave, R. 1959. *Public Finance*. New York: McGraw Hill.
- Navarra, D.D. & Cornford, T. (n.d.). ICT, Innovation and Public Management: Governance, Models & Alternatives for e-Government Infrastructures. London School of Economics: London.
- Oates, W. 1972. *Fiscal Federalism*. New York: Harcourt Brace Jovanovich.
- Oates, W.E. 2005. Toward a Second-Generation Theory of Fiscal Federalism. *International Tax and Public Finance*, (12):349-373.
- Pallant, J. 2005. *SPSS Survival Manual: A step by step guide to data analysis using SPSS for windows (version 12)*. Sydney: Allen & Unwin.
- Rodden, J. 2002. The dilemma of fiscal federalism: Grants and fiscal performance around the world. *American Journal of Political Science*, 46:670-687.
- Rodden, J. 2003. *Fiscal Decentralisation and the Challenge of Hard Budget Constraints*. Cambridge, M.A: MIT press.
- Seer, D. 1969. The Meaning of Development. *International Development Review* 11(4):3-4.

- Smoke, P. 2003. *Fiscal Decentralisation in Developing Countries: A Review of Current Concepts and Practice*. NY: United Nations.
- Smoke, P. 2014. Why theory and practice are different: The gap between principles and reality in subnational revenue systems. In R. Bird and J. Martinez-Vazquez (eds.), *Taxation and Development: The Weakest Link*, Edward Elgar, Cheltenham, pp. 287-325.
- Smoke, P. 2015. Rethinking decentralisation: Assessing challenges to a popular public sector reform, *Public Administration and Development*, (35):97-112.
- Tiebout, C.M. 1956. A Pure Theory of Local Expenditures. *The Journal of Political Economy*, 64(5):416-424.
- Weingast, B.R. 2009. Second generation fiscal federalism: The implications of fiscal incentives. *Journal of Urban Economics*, (65):279-293.
- Weingast, B.R. 2013. The Fiscal Interest Approach: The Design of Tax and Transfer Systems. Available at: <http://www.content/uploads/2013/10/Weingast-Poschl-BRW.13.1007.pdf>. Accessed 10 April 2016.