



Fiscal Performance and Sustainability of Local Government in South Africa – An Empirical Analysis

Niek Schoeman

Working paper 201

January 2011

Fiscal Performance and Sustainability of Local Government in South Africa – An Empirical Analysis

Niek J. Schoeman *

January 24, 2011

Abstract

This paper analyses fiscal performance in terms of own-revenue collection and sustainability of local municipalities in South Africa. Criteria such as gross value added, revenue collected from own sources, debtors outstanding, the ageing of debt and dependency on grants are considered. The conclusion is that a large number of municipalities do not comply with the requirement that a “reasonable” amount of current expenditures be financed by means of own resources. Furthermore, local government finances are featured by substantial variance as far as collection of own income is concerned. While close to half of them finance more than 50 percent of their current expenditures from own resources, about one third are largely dependent on grants from upper spheres of government and generate less than 20 percent of current expenditures from own resources. As a whole, the fiscal sustainability of the local government sector, given the current scenario of flows, is a reason for concern. In order to comply with international criteria for solid fiscal performance, a number of municipalities will have to improve their performance with regard to own-revenue collection.

The reason for this phenomenon seems to be the problem of “soft budgets” and an historic dependence on grants to finance not only capital expenditures but also most, if not all of, current expenditures. Due to historical and political factors, local governments in South Africa differ substantially in terms of potential revenue base, but it may be that in many cases potential revenue is not exploited and that the high level of dependency on grants is the result of inefficiency and lack of political will to be more self-reliant. In view of the wide-spread protest actions against poor quality of service delivery at the local government level, fiscal authorities should take a fresh look at the extent to which these governments are accountable for being more financially independent. This would help prevent the accumulation of debt as a result of growing backlogs in service payments.

KEYWORDS; Local government; fiscal sustainability; South Africa.

JEL CLASSIFICATION: *H71; H72*

1 Introduction

The series of protest actions by local communities have sparked a renewed debate about the effectiveness of service delivery at especially the third sphere of government in South Africa. The relevant literature is featured by a great number of articles arguing the merit for more or less decentralisation in order to improve the quality of service delivery. This article analyses one aspect of this issue, namely the shorter- and longer-term financial capability of local governments of being more self-reliant in finding financial resources to provide for the needs of their constituencies.

*University of Pretoria, Department of Economics, Pretoria, 0002, South Africa. Phone: +27 12 420-3455. E-mail: niek.schoeman@up.ac.za

In his budget speech on 22 April 2010, the Minister of the Department of Cooperative Governance and Traditional Affairs, Mr S Shiceka, also raised concern about the apparent disjuncture between expenditures and the revenue base of local governments when he commented as follows:

“One of the key observations is that the intergovernmental fiscal relations is based on outdated approaches wherein the baseline used for financing of municipalities is not aligned to their income, revenue base and the tasks at hand” (Budget vote 2010/11 speech, p 1).

Although it is accepted that municipalities differ widely with regard to their potential revenue base due to, for example, historical and political reasons, a high dependency on grants could affect the enthusiasm with which local governments exploit own-revenue sources. In this regard local revenue simply becomes an extension of the national government’s budget, but without the strict control over expenditures at this level. Furthermore, it could create problems such as the “flypaper effect” as explained by Oates (2008: 324). According to this view, grants may provide for a far greater stimulus to public expenditure than an equal increase in revenue from own resources. This raises concern about the responsiveness of local officials to the needs of the electorate, with expenditures being allocated according to their own objectives. In addition, high levels of grant dependency could therefore also promote fiscal irresponsibility and even instability at the national government level (Amusa, *et.al.*, 2008).

In addition to the concern about the allocation of funds, the lack of accountability of local government officials has also been identified as a main contributor to a greater amount of grants dependency. This is known as the “soft budget” problem, where local governments overspend based on expectations that grants from central government will increase concomitantly. There is therefore little need to explore possibilities regarding the collection of more own resources. Furthermore, in some cases corrupt officials are empowered to provide fiscal incentives to individuals and projects of their choice through rent-seeking practices. Such officials/politicians are not accountable because of such “soft budgets”, meaning that they expect central government to bail them out should their budgets not balance because of overspending. Oates (2008: 324) refers to this behaviour as the “raiding of the fiscal commons”. Thus, the lack of clear targets regarding own resources creates a culture of transfer dependency. This tendency is not uncommon in South Africa and the following warning by Canuto and Liu should be taken seriously:

The deterioration in primary balance is driven by declining revenues combined with expenditure rigidity or continuing expenditures. In general, countries’ fiscal needs are rising but fiscal space is narrowing, resulting in deteriorating fiscal positions across regions and tiers of the government. (World Bank Economic Premise, no.13, May 2010).

Although the literature is unclear as to what a “reasonable” level of own funding means, this paper aims at defining such a level by analysing the level of dependency of local governments in South Africa. The results seem to provide guidelines as to what such “reasonable margins” could be for categorisation and appropriate policy adjustment. These margins are assumed to be aligned with what Bird (see Oates, 2008: 326) has termed a “solid system of local tax”.

It should be noted that this paper does not deal with the institutional design of local government finance in South Africa and therefore possible deficiencies in this regard have not been considered. Rather, it is assumed that the structure and institutional outlay of the different levels of government in South Africa are themselves endogenous and simply a function of the historic political decision-making processes. In many instances the design of these institutions has been the result of decisions to address political problems and not so much the result of a proper investigation into what is economically viable and fiscally sustainable.

Momoniati (2001: 2) outlined a number of shortcomings in local government finance in South Africa. Some of the most relevant issues include the following (numbers have been updated according to latest data available):

1. Increasing reliance of municipalities on transfers from national government to fund their activities, due to a lack of own-revenue effort and a lack of commitment to leverage private funding.
2. The outstanding debtors of municipalities for which data is available amounted to US\$ 3,7 billion in the 2009/10 fiscal year compared to US\$ 3,4 billion in the 2007/08 fiscal year (an average increase of 10,9 percent per annum if the exchange rate effect is excluded).
3. Actual expenditure by all categories of municipalities had been increasing annually by 13,3 per cent from US\$ 11,4 billion in 2003/04 to US\$ 24,1 billion in 2009/10. This increase far exceeded the inflation rate and represents a sharp increase in real expenditures.
4. Low levels of expenditure on repairs and maintenance due to the ease with which these expenditures can be deferred in favour of new capital projects or other operating costs. Two factors appear to underlie this problem. First, the under-pricing of municipal services relative to their true cost of delivery, including maintenance costs, and secondly, poor management practices in municipalities.
5. Poor quality of data on provincial transfers to local government. Some provinces are not consistently gazetting their municipal allocations and it is safe to assume that they transfer larger amounts than what they are publishing. The fact that provincial transfers to municipalities have not been consistent is an indication of uncertainty on the part of provinces in relation to their planning, which in turn makes it difficult for municipalities to plan for this funding.
6. Weak co-ordination between programs. The overall implication is that transfers are not yet reaching their potential in terms of comprehensively supporting economic growth and poverty alleviation.
7. Programs to strengthen the capacity of municipalities remain fragmented and are difficult to evaluate. This is a significant problem, given concern about capacity constraints in municipalities.
8. Probably one of the most serious problems at local government level is the proportionally high ratio of salaries to total operating expenditures (28,4 percent in the case of Metros and 35 percent in the case of Category B municipalities for which data is available). According to Momoniat the challenges faced by the municipalities at the lower end of the spectrum relate primarily to persistently high vacancy rates, which are greatly aggravated by poor management and poor governance.

Casual analysis of the current data base reflects the concerns expressed by Momoniat. For example, 75 percent of debtors outstanding are in excess of 90 days while debtor information is not available for all municipalities. Consumer debt is therefore on the increase and large amounts had to be written off over the past few years. Little evidence exists with regard to targets set for own funding of at least current expenditures and the data shows a large degree of variance in terms of the generation of own funds. This own-revenue problem is also raised by Amusa and Mathahane (2007) who note:

“... attention needs to be paid to addressing problems relating to the collection of incomes due from available revenue sources...” (SA Journal of Economics: 273). The authors also point out the fact that transfers to local governments feature a number of problems hindering the effective implementation of conditional grant-funded programs. In this regard the fragmented disbursement mechanisms and the lack of co-ordination between policy and budgeting units seem to undermine service delivery and create confusion regarding accountability/responsibility (SAJE: 283).

Against the backdrop of the issues raised, an attempt is made to review the capacity/efficiency of local governments in South Africa to collect own revenue and also to measure the impact of current local financing policies in terms of fiscal sustainability. It should be noted that welfare gains fall outside the scope of this paper. In order to measure such gains/losses it would be necessary to quantify the variation in demand for local services across jurisdictions and in differing costs of providing these services (Oates: 2008, 317). One would expect that welfare gains would vary directly with the magnitude of the variation and inversely with the price elasticity of demand for such services. However, given the lack of relevant data this has not been possible.

The rest of this paper is structured as follows: Section 2 provides a brief description of the data used while section 3 outlines the variances in revenue collection capacity. Section 4 analyses the concept “fiscal sustainability” at local government level and section 5 concludes with some policy suggestions.

2 Data

Local government revenue data are largely limited to the data published by the South African National Treasury (Local Government Budgets and Expenditure Review, various issues). It would have been more correct to work with audited data (Auditor-General) but given the time lags, and in many cases the non-availability of such data, this has not been possible. Despite the fact that a comprehensive set of fiscal data on local government is available from National Treasury, many municipalities still fail to report crucial information such as debtors outstanding as well as revenue from all sources of income. In addition to this, only a limited number of municipalities report the age of their outstanding debtors. Even where they do report, qualified audit opinions based on poor internal controls renders this information suspect.

Therefore, the analysis in this paper is based largely on monetary stocks and flows related to revenue. Where possible, indicators are expressed in per capita terms, with population figures mostly based on the 2001 census figures as reported by National Treasury.

3 Own-Revenue Financing

The data shows that on average, local governments collect only a relatively small portion of revenue from own resources and have little or no borrowing power to fund deficits (except in the case of metros). Casual empirical analysis of relevant variables revealed some interesting results. Table 1 shows a list of category B municipalities collecting more than 15 percent of Gross Value Added (GVA) in their particular areas. It should be noted that 2004 GVA is used as a proxy for regional GDP since it is the only related figure available (www.treasury/mfma/publications). Revenue includes charges on the sale of services such as electricity and water, etc., own funding and external loans, but excluding subsidies and grants used to finance both operational and capital expenditures. From the total of 237 municipalities in category B, only 43 collect more than 15 percent of GVA from own sources and loans in their areas.

It is also interesting to note that there does not seem to be any correlation between the level at which income is generated by means of the sale of services and loans and the size of the population. In other words, some small municipalities manage to achieve relatively high collection rates from GVA, while some large municipalities fair much worse in this regard. Kingwini for example, is at the top of the list, with a population of only 94 047, while Buffalo City is at the lower end of the table, collecting only 16 per cent of GVA, with a population of 803 448. At the bottom end of the scale, 56 municipalities collect less than 5 percent of GVA. The reasons for this variance are not quite clear but it is suspected that financial procedures that affect the culture of payment for service charges and a lack of service provision might be some of the most important explanations.

The implication of this is that municipalities, in general, largely rely on subsidies and grants to finance not only capital expenditures but also operational expenditures (see Table 2). In the case of 15 municipalities, grants and subsidies exceeded total expenditures, while in 28 other cases grants and subsidies finance more than 80 percent of total expenditures. In fact, in the case of 107 municipalities (category B), subsidies and grants finance more than 50 percent of their current expenditures. However, this also means that 130 municipalities manage to fund up to 50 percent of their current expenditures from own resources. In fact Table 3 shows that 50 of the 237 municipalities (category B) manage to fund less than 20 percent of their current expenditures by means of grants and subsidies. The best performer here is Umhlathuze, which finances only about 7 per cent of its current expenditures from grants and subsidies. It is interesting to note that 11 of the municipalities on this list also appear on the National Treasury’s list of “top 20” municipalities.

In addition to grants and subsidies, the main sources of revenue comprise property rates and service charges on the distribution of electricity, water, sewerage and sanitation. Furthermore, Table 3 shows that property taxes and service charges on the sales of electricity and water account for about 85 percent of total revenue. The balance consists of a combination of donations and contributions which adds up to 5 percent, while the other 10 percent is generated by other sources of revenue. Thus, the bulk of total revenue is raised from service charges and grants, with a fair amount being raised from property taxes. The relatively high standard deviations of the three variables indicate though that the size of the proportion of revenue generated by a specific source of income varies quite substantially from one municipality to another.

Figure 1 shows the plot of the logarithm values of per capita revenue from the sale of services and the logarithm values of per capita GVA by municipalities for which a full data set is available¹. The figure shows an almost linear correlation between GVA and revenue collected (see Table 7 for statistical results) in the form of service charges, up until the turning point at approximately US\$ 4 900 ($(\exp(10.65)/8.58 = \text{US\$}4\ 912)$). Thus, if the per capita GVA of the municipal area is below US\$ 4 900, the per capita revenue of the municipality grows at close to 1 per cent for each percentage increase in the per capita GVA and tapers off where the GVA of the municipality exceeds US\$ 4 900. The intuition behind this phenomenon is that as the per capita GVA of a municipality increases, income also rises with a concomitant increase in the demand for services in all those municipalities where the per capita GVA is lower than the upper turning point in the figure. This turning point could be regarded as the level at which the municipality has reached a “matured” status, where the majority of consumers have access to the desired levels of water and electricity supply in that municipality.

From an efficiency point of view it is important to look at the difference in the ratios of revenue collected from service charges and the GVA of a municipality. In other words, to what extent do they succeed in raising revenue from the potential income base they have? An analysis of the data shows a substantial level of variance between municipalities (See Figure 2). The hypothesis is that the larger the ratio of the per capita revenue of the municipality relative to its per capita GVA, the more efficient the municipality is in generating own resources. It should be noted that this can only be true in the case where municipalities have not reached “maturity” and therefore only those to the left of the turning point have been included in the ratio analysis. The two lines at the top and bottom of the plot represent the 99 per cent confidence intervals of the distribution, and the shaded area the 99 per cent confidence limits of the mean of the distribution.

In order to compare, municipalities are categorised based on the mean revenue/GVA ratio. Those above the mean are regarded as more efficient than those below the mean. Since the observations close to the mean (within the 99 per cent confidence intervals of the mean of the distribution) are not significantly different from it, these ones have been classified as “moderately successful”. Those above the 99 per cent confidence limit are classified as “most successful” and those below it as “less successful”. The spread of the classified municipalities is shown in Figure 3. The revenue/GVA

¹The author would like to acknowledge the inputs of Mr. Roland Du Plessis, Masters student at the University of Pretoria, who computed the data for the analysis.

ratios of the “less successful” ones range from 0.021 to 0.051, while the “most successful” ones range from 0.82 to 0.143.

The municipalities as classified are listed in tables 5a-5c. In Table 5a the “more successful” ones (34 or 51 per cent of the total in this data base) have been sorted from high to low in terms of GVA in US dollars. At the top of the list is Knysna with GVA per capita of US\$4 881 and revenue per capita of US\$488, which is third largest on the list. Table 5b contains the municipalities classified as “marginally successful” with their ratios within the 95 per cent confidence levels of the mean ratio. From the list it can be seen that although the GVA per capita figures are not lower than in the case of Table 5a, the per capita revenue per GVA is lower. Approximately 20 per cent of municipalities fall into this category. Finally the “less successful” municipalities are listed in Table 5c. It is interesting to note that municipalities such as Swellendam, Swartland, Cederburg, with a relatively high GVA per capita, are included in this group since their per capita revenue is as low as US\$ 239, 243, and 189, respectively. At the bottom of the list is Elundini with a low GVA of US\$ 291 and per capita revenue of only US\$11. The latter group comprises 32 per cent of the total.

This outcome is meaningful. The comparison is between each municipality relative to its own GVA base. It can therefore not be argued that the ones below the mean ratio perform poorly just because of their disadvantaged position regarding economic activity in the area. In fact, the figures show that some municipalities with a relatively low level of per capita GVA outperform others with a relatively high GVA per capita. For example, Sakhisizwe with a per capita GVA of only US\$ 491 performs much more superior in ratio terms than Swellendam, with a per capita GVA as high as US\$ 4 624. The structure of the economy in the area regarding the demand for municipal services matters, but financial discipline and motivation, together with skills levels, probably also play a major role.

The next section provides a futuristic view of the stance of fiscal affairs at local government level in South Africa given the financial flows as described hitherto.

4 Fiscal Sustainability of the Local Government Sector in South Africa

Blanchard (see Burger, 2001: 14) defines fiscal sustainability as whether or not the current course of fiscal policy can be sustained without public debt exploding or imploding. Thus, in order to be sustainable, revenue should match expenditures from an intertemporal perspective. However, given its dependence on grants, local government sustainability does not seem to be an issue. Although grants and expenditures are debated in great detail and outstanding municipal consumer debt also receives attention, the fiscal sustainability of a local government is not discussed in public documents. Grants are based on the equitable-share formula and budgeted for by national and provincial government given the status quo as far as own funding is concerned. The question is then what the fiscal sustainability implications would be of a rule that prescribes a minimum level of dependence on own funds (to protect the national budget) despite the increasing demand for municipal services in years to come. Such a scenario is simulated by means of a cap on grants used to finance current expenditures (maximum of 50 percent) based on the performance of almost half of category B municipalities included in the analysis.

Schoeman (2006: 117) argues that municipal fiscal sustainability in South Africa is under pressure. From a sample of 27 municipalities, it was found that the average revenue collection period is in the range of 150 days and that the lag is on the increase. This translates directly into liquidity problems, increased short-term loans, deficits and the accumulation of long-term debt. Another key finding of the paper is that the number of debtors in the sample and the provision for bad debt are on the increase as well. Even though operating revenue increases, expenditure growth exceeds revenue growth. As a result the dependence on short-term loans and government grants are on the increase in many cases. Due to insufficient data it was not possible to do a similar exercise in this

paper, but an attempt will be made to measure sustainability using the conventional methodology for national government debt. However, in order to do this, conventional concepts such as deficit and debt had to be adjusted, to suit the scenario for local government finances. Therefore, the concept “debt” in this model not only includes accumulated municipal deficits and outstanding principle together with interest payments, but also consumer debt owed by service users. Although somewhat fictitious, it serves as a proxy for the ability of local governments to be sustainable in the longer term.

Furthermore, in the model the concept “deficit” is adjusted to allow for overspending in each financial year based on capped grants at a ratio of 50 percent of current expenditures. This is necessary in view of the problem of “soft budgets” referred to before, which means that deficits are simply financed by means of transfers and therefore do not matter much in a local government framework. The cap of 50 per cent on current expenditure has been chosen arbitrarily based on the fact that close to half of municipalities comply with this norm as described earlier on. Thus, the “deficit” of each municipality is adjusted to include the balance left if grants are capped at a maximum of 50 percent of current expenditures. The model assumes that such a deficit accumulates into debt, which has to be repaid together with interest as if borrowed from government or the private sector. From a budget perspective this “debt” will have to be provided for by the national government, possibly in the form of an addition to the contingency reserves that are budgeted for. An analysis of the data shows a close correlation between outstanding debtors and the age of outstanding debt. In fact, in the case of debt older than 90 days, in which case the debt will probably have to be written off, the correlation is about 95 percent. In other words about all debt accumulated will not be recovered. The reasons for this phenomenon are not clear and have not been analysed in this paper. However, it is suspected that financial discipline which affects the ageing of the debt, together with skills levels and efficiency of governance that affect fiscal effort, have much to do with it.

The model used is based on the conventional Uctum and Wickens model (see Jacobs *et. al.*, 2002: 550) with the variables “deficit” and “debt” as adjusted. Unfortunately, outstanding consumer debt figures (debt older than 90 days) have not been available for all municipalities and this was dealt with by awarding all those for which data is not available, the average of available data. Using these adjustments, total outstanding municipal “debt” in 2009/10 amounted to US\$ 2 617 million in the case of metros and US\$ 2 717 million in the case of category B municipalities (a total of US\$ 5 334 million).

As in the previous analysis in section 3, the GVA data published by National Treasury (2004) is used as a proxy for regional income. Since fiscal needs are often driven by demographic factors, the latter have been captured by expressing values in per capita terms. In this analysis the critical issue reflected in the dynamics of the debt is the change in the outstanding debt as a result of changes in local fiscal policy, the efficiency of local governance in terms of revenue collection and national variables such as interest rates, inflation and growth in GVA. From an inter-temporal point of view, it is argued that fiscal policy is sustainable when the local government sector’s aggregated budget constraint holds in present value terms. Thus, the current debt should be offset by the sum of expected future discounted budget surpluses (discounting a cap regarding dependency on grants and subsidies).

In the model the municipal intertemporal budget constraint can be written in nominal terms as:

$$G_t - T_t + iB_{t-1} = \Delta B_t \quad (1)$$

where G is municipal spending on goods and services, T is municipal revenue, B is the value of the municipal debt outstanding, at period t_1 , i is the interest rate on municipal debt. The debt in year t is equal to the difference between spending and revenue for year t , plus the sum of the outstanding debt and the interest cost thereon. To separate the impact of the interest rate, G does not include interest payments on municipal debt, since it is accounted for in the term $i_t B_{t-1}$. Expressing (1) in terms of ratios to nominal GVA gives:

$$g_t - \tau_t + (I - \Pi_t - \eta_t)b_{t-1} = \Delta b_t \quad (2)$$

where the lower-case letters g , τ , and b , denote the ratio of the corresponding upper-case variables to nominal GVA (Y), $\Pi_t = (P_t - P_{t-1})/P_{t-1}$ and $\eta_t = (Y_t - Y_{t-1})/Y_{t-1}$, with P and Y representing the price level and real GVA respectively. Thus, Equation (2) can be rewritten as:

$$d_t + \rho_t b_{t-1} = \Delta b_t \quad (3)$$

where $d_t = g_t - \tau_t$ is the primary local government deficit expressed as a proportion of nominal GGP/GVA and $\rho_t = i_t - \Pi_t + \eta_t$ is the real *ex post* interest rate adjusted for real output growth. Equation (3) is an identity, which holds *ex post* in time t . Looking forward, the identity can only hold in *ex ante* terms.

Thus, in period $t+1$,

$$b_{t+1} = E_t[(1 + \rho_{t+1})^{-1}(b_{t+1} - d_{t+1})] \quad (4)$$

where b_t is known in period t , and for the one-period budget constraint to hold in expectational terms, must equal the expected discounted net debt/GVA ratio in period $t+1$, conditional on information at time t .

In order for fiscal policy to be sustainable for one period in the future, equation (4) must hold.

The corresponding expression for n periods ahead is obtained by solving forward and successively substituting the future compound discounted debt/GVA ratio to give the n -period intertemporal budget constraint:

$$b_t = E_t \delta_{t,n} b_{t+n} - E \sum_{i=1}^n \delta_{t,i} d_{t+i} \quad (5)$$

where

$$\delta_{t,n} = \prod_{s=1}^n (1 + \rho_{t+s})^{-1} \quad (6)$$

is the time-varying real discount factor n periods ahead, adjusted for real GVA growth rate, r_t , defined as

$$r_t = \prod_{s=1}^t \frac{1}{(1 + i_s)} \quad (7)$$

Thus, the present stock of debt is equal to the sum of the present value of future primary surpluses plus the present value of the stock of debt in year “ n ”.

From an intertemporal budget constraint point of view, local governments would be solvent if the present stock of debt were equal to the present value of all future primary surpluses. Thus, a necessary condition for sustainability is that as n moves to infinity, the discounted value of the expected debt/GVA ratio converges to zero. This is also known as the transversality condition, meaning that no new debt is issued to meet interest payments.

With $\rho > 1$, it is assumed that real interest rates will exceed real growth rates over the period $t+n$. Using equation 3 and assuming unchanged fiscal policy behaviour, but with a cap of 50 percent on current expenditure financed from grants and subsidies, the “debt” of metros will increase from the current US\$2,6 billion to US\$10,2 billion over the next ten years, while that of category B municipalities will increase from US\$2,7 billion to US\$ 7,5 billion. Using equation 5 to get the intertemporal n -period budget constraint, Table 6 shows that in the case of metros, the debt/GVA ratio will have to decline by an average of 9 percent per annum while municipalities will have to lower their debt/GVA ratios by an average of 10 percent per annum. This would only be possible if the gap between expenditure and revenue from own sources is narrowed. Thus, if fiscal policy implemented by municipalities and metros does not allow for drastic changes from the current scenario, total local government “debt” (discounting the 50 percent cap on the financing of current expenditures) will increase from the current US\$5,3 billion to approximately US\$17,5 billion over the next ten years.

5 Conclusion

The analysis shows that approximately one third of municipalities do not comply with the requirement that a “reasonable” amount of current expenditures be financed by means of own resources. Furthermore, a substantial variance could be detected as far as collection of own income is concerned. Although the reason for this phenomenon has not been investigated, it is suspected that it has to do with lack of skills and political will to be more reliant on own income. It also has to do with a history of dependence, and of bailouts by the national government due to “soft budget” policies. Fiscal sustainability concerns highlight the importance of increasing the level of own resources, thereby limiting deficits and “debt”. The results show that if the subsidies and grants formula is adjusted to a capped limit on grants for current expenditures, fiscal balances of local government finance in South Africa could become unstable. Due to historical and political factors, local governments in South Africa differ substantially in terms of potential revenue base, but it is suggested that in many instances the full potential of an own-revenue base is not fully exploited – an issue that should be dealt with in the allocation-of-grants policy of the higher spheres of government.

In view of the mass protests by communities against poor service delivery, more and better-quality services are needed, which require sufficient funding and sound financial practices, so that the sustainability of government finances at the national level is not jeopardised. Also, thriving markets at the local government level require strong governance that protect property rights – strong enough to confiscate some of the wealth of its citizens in order to do their job (Weingast: 1995, 1). The performance of municipalities classified as “more successful” could serve as a benchmark for setting criteria in terms of self-reliance; the equitable-share formula should be adjusted accordingly. However, exactly how this adjustment should be made falls outside the scope of this paper and is targeted as a follow-up research project.

The analysis in this paper should not be confused with arguments for or against fiscal decentralisation. It merely touches upon the importance of sound fiscal practices, which is but one aspect of the debate about more or less decentralised government. What stands out is the diversity between different local authorities regarding self-reliance, which signals differences in competency and reflects the difficulty of finding a sufficient number of skilled officials at the third sphere of governance. Also apparent is evidence of patronage, in which skilled officials are overlooked in favour of more politically connected candidates. In this regard the merit of sustaining an institutional framework with too many municipalities not performing according to minimum standards from a financial point of view, raises the question whether at least some of them should be incorporated within other more successful constituencies.

References

- [1] Amusa, H. & Mathane, P. (2007). South Africa’s intergovernmental fiscal relations: An evolving system. *South African Journal of Economics*, 75, 265-283.
- [2] Amusa, H, Mabunda, R. & Mabugu, R. (2008). Fiscal illusion at the local sphere: an empirical test of the flypaper effect using South African municipal data. *South African Journal of Economics*, 76:3, 455-460.
- [3] Canuto, O. & Liu, L. (2010). Sub-national Debt Finance and the Global Financial Crisis. World Bank Economic Premise. *World Bank*, 13, May.
- [4] Dahlberg, M., Mörk, E., Rattsø, J. & Ågren, H. (2008). Using a discontinuous grant rule to identify the effect of grants on local taxes and spending. *Journal of Public Economics*, 92, 2320–2335.
- [5] Jacobs, D. et.al. (2002). Alternative definitions of the budget deficit and its impact on the sustainability of fiscal policy in South Africa, *South African Journal of Economics*, 70, 543-559.

- [6] Momoniat, I. (2001). Fiscal decentralisation in South Africa: A practioner's perspective, available from: <http://info.worldbank.org/etools/docs/library/128819/momoniat/2001>.
- [7] National Treasury. (2009). Municipal MTREF information, available from: http://www.treasury.gov.za/legislation/mfma/media_releases/mbi/2009/.
- [8] Oates, W.E., (2006). On the theory and practice of fiscal decentralization" *Institute for Federalism & Intergovernmental Relations (IFIR)*, Working paper, 2006-05, 1-33.
- [9] - 2008, On the evolution of fiscal federalism: Theory and institutions. *National Tax Journal*, LXI, 313-334.
- [10] RSA. (2010). Department of Cooperative Governance, Budget vote speech, 2010/11, 1.
- [11] RSA National Treasury. *Local government budgets and expenditure reviews*, various issues.
- [12] SA Reserve Bank. *Quarterly Bulletin*, various issues.
- [13] Schoeman, NJ. (2006). Rethinking fiscal decentralization in South Africa. *Journal of Public Administration*, 41, 110-127.
- [14] Weingast, B.R. (1995). The economic role of political institutions: Market preserving federalism and economic development. *Journal of Law, Economics, & Organisation*, 11, 1-31.

Table 1: Municipalities (category B) collecting more than 15 per cent of GVA in the form of own revenue and external loans excluding grants

No.	Municipality	%Revenue/ GVA	Population	No.	Municipality	%Revenue/ GVA	Population
1	Kungwini	0.588	94,047	24	Saidanha Bay	0.182	60,960
2	Greater Kokstad	0.584	40,409	25	Ngwathe	0.180	138,178
3	Overstrand	0.314	45,220	26	Msunduzi	0.179	631,121
4	Senqu	0.282	145,647	27	uMuziwabantu	0.178	89,030
5	Moshaweng	0.278	108,010	28	Abaqulusi	0.175	200,493
6	Maluti-a-Phofung	0.276	407,124	29	Musina	0.173	42,145
7	Mossel Bay	0.268	67,452	30	Mthonjaneni	0.173	43,114
8	Umtshezi	0.265	57,848	31	Dannhauser	0.171	110,846
9	Plettenberg Bay	0.264	26,608	32	uPhongolo	0.171	115,550
10	Kouga	0.252	70,362	33	Mogalakwena	0.171	318,506
11	Polokwane	0.246	517,398	34	Potchefstroom	0.161	128,735
12	KwaDukuza	0.233	169,164	35	Buffalo City	0.156	803,448
13	Blue Crane Route	0.231	37,621	36	//Khara Hais	0.156	83,164
14	Maquassi Hills	0.213	66,440	37	Dihlabeng	0.154	123,212
15	uMngeni	0.209	71,997	38	Ermfuleni	0.153	830,416
16	Langeberg	0.208	41,641	39	Mogale City	0.152	244,013
17	George	0.206	125,563	40	Umsobomvu	0.152	27,680
18	Laingsburg	0.202	6,302	41	Mutale	0.152	93,815
19	Ndlambe	0.197	53,735	42	Knysna	0.151	45,460
20	Endumeni	0.196	51,064	43	Breede River/Winet	0.151	74,632
21	Elundini	0.191	130,777				
22	Sakhisizwe	0.185	68,936				
23	Mpofana	0.183	32,045				

Source: MTEF 2009/10 National Treasury with own calculations

Table 2: Municipalities (category B) funding in excess of 50 per cent of their current expenditures by means of grants and subsidies

No	Municipality	%	No	Municipality	%
1	Kagisano	1.652	55	Nkonkobe	0.72
2	Mhlontlo	1.332	56	Kwa Sani	0.717
3	Naledi (Fs)	1.285	57	Setsoto	0.715
4	Molopo	1.248	58	Greater Giyani	0.711
5	Mbhashe	1.195	59	Mohokare	0.709
6	Thembisile	1.181	60	Mnquma	0.699
7	Okhahlamba	1.161	61	Impendle	0.687
8	Mbizana	1.141	62	Nkomazi	0.686
9	King Sabata Dalind	1.104	63	Dr. J. S. Moroka	0.682
10	Ndwedwe	1.096	64	Mafube	0.680
11	Nquthu	1.088	65	Amahlathi	0.676
12	Khai-Ma	1.071	66	Port St Johns	0.666
13	Maphumulo	1.063	67	Maruleng	0.665
14	Lepelle-Nkumpi	1.053	68	Elundini	0.660
15	Ngqushwa	1.014	69	Moses Kotane	0.659
16	Indaka	0.999	70	Nala	0.655
17	Emalahleni (Ec)	0.990	71	Phumelela	0.653
18	Thulamela	0.989	72	Intsika Yethu	0.648
19	Imbabazane	0.985	73	Bushbuckridge	0.647
20	Nyandeni	0.982	74	The Big Five False Bay	0.647
21	Engcobo	0.980	75	Matatiele	0.632
22	Ntabankulu	0.954	76	Sakhisizwe	0.631
23	Umzumbe	0.948	77	Renosterberg	0.626
24	Umhlabyalingana	0.946	78	Albert Luthuli	0.607
25	Blouberg	0.92	79	Kgetlengrivier	0.605
26	Ezingolweni	0.915	80	uMuziwabantu	0.601
27	Nkandla	0.912	81	Greater Tubatse	0.599
28	Mamusa	0.901	82	Ulundi	0.593
29	Moretele	0.898	83	Tswelopele	0.585
30	Msinga	0.895	84	eDumbe	0.583

No	Municipality	%	No	Municipality	%
31	Umzimkhulu	0.892	85	Greater Marble Hall	0.577
32	Fetakgomo	0.889	86	Greater Taung	0.575
33	Tokologo	0.869	87	Tsolwana	0.566
34	Ratlou	0.866	88	Magareng	0.564
35	Nongoma	0.841	89	Elias Motsoaledi	0.563
36	Ingwe	0.825	90	Mthonjaneni	0.562
37	Aganang	0.822	91	Nketoana	0.559
38	Jozini	0.816	92	Sundays River Valley	0.558
39	Makhudutamaga	0.812	93	Ikwezi	0.555
40	Mkhambathini	0.811	94	Ntambanana	0.554
41	Koukamma	0.807	95	Kopanong	0.552
42	Hlahisa	0.807	96	Masilonyama	0.546
43	Molemole	0.807	97	Merafong City	0.546
44	Mogalakwena	0.801	98	Greater Letaba	0.541
45	Mbonambi	0.798	99	Dikgatlong	0.541
46	Richmond	0.792	100	Baviaans	0.526
47	Umdoni	0.787	101	uPongolo	0.525
48	Mier	0.781	102	Umsobomvu	0.520
49	Ikheis	0.771	103	Umvoti	0.517
50	Great Kei	0.756	104	Moshaweng	0.513
51	Vulamehlo	0.751	105	Prince Albert	0.510
52	Inkwanca	0.749	106	Dipaleseng	0.508
53	Qaukeni	0.746	107	Nxuba	0.507
54	Mandeni	0.733			

Source: MTEF S009/10 National Treasury with own calculations

Table 3: Municipalities funding less than 20 per cent of current expenditures through subsidies and grants

No.	Municipality	%	Included in Treasury's Top 21	No.	Municipality	%	Included in Treasury's Top 21	Treasury Top 21
1	Bitou	19.3%		28	Randfontein	13.5%		Buffalo City
2	Matjhabeng	19.3%		29	Naledi (Nw)	12.7%		City Of Matosana
3	Lesedi	19.1%		30	Cape Agulhas	12.3%		Drakenstein
4	Hibiscus Coast	18.9%		31	Potchefstroom	12.1%		Emalahleni (Mp)
5	Bela Bela	18.7%		32	Ba-Phalaborwa	11.6%		Emfuleni
6	Ndlambe	18.3%		33	Breede River Winelands	11.6%		George
7	Matzikama	18.1%		34	Endumeni	11.2%		Madibeng
8	Oudtshoorn	18.1%		35	Saldanha Bay	11.1%		Mangaung
9	Maletswai	17.9%		36	Sol Plaatje	10.6%	Yes	Mbombela
10	Cederberg	17.7%		37	Steve Tshwete	10.5%	Yes	Msunduzi
11	Theewaterskloof	17.7%		38	Kouga	9.9%		Polokwane
12	Mpofana	17.6%		39	uMhlatuze	9.6%	Yes	Rustenburg
13	City Of Matosana	17.3%	Yes	40	Tswaing	9.5%		Sol Plaatje
14	Lekwa	17.0%		41	Msunduzi	9.3%	Yes	Stellenbosch
15	Mangaung	16.9%	Yes	42	Govan Mbeki	9.2%		Steve Tshwete
16	Metsimaholo	16.7%		43	Swartland	7.0%		uMhlatuze
17	Msukaligwa	16.4%		44	Drakenstein	5.3%	Yes	
18	Umtshezi	16.2%		45	Overstrand	4.6%		
19	Breede Valley	15.5%		46	Swellendam	4.2%		
20	Rustenburg	15.4%	Yes	47	Ubuhlebezwe	3.7%		
21	Dihlabeng	15.2%		48	KwaDukuza	2.1%		
22	Moshaweng	15.1%		49	Emalahleni (Mp)	1.5%	Yes	
23	Abaqulusi	14.7%		50	Stellenbosch	0.9%	Yes	
24	Witzenberg	14.7%		51				
25	Mossel Bay	14.3%		52				
26	George	14.2%	Yes	53				
27	Senqu	13.6%		54				

Source: MTEF 2009/10 National Treasury with own calculations

Table 4: The contribution of each of the identified sources of revenue relative to total revenue

Variable	N	Mean	Std Dev	Minimum	Maximum
prate	208	0.12222	0.08992	0	0.60183
srate	208	0.35388	0.22399	0	0.856707
grate	208	0.36768	0.27249	0	0.98377

Own calculations

Table 5a: Municipalities "more successful" in generating income from their revenue base

	Name	Gross value added per capita dollar	Revenue per capita dollar
1	Knysna	4,881	488
2	Bitou	4,559	547
3	George	4,259	425
4	Drakenstein	4,059	310
5	Mogale City	3,988	347
6	Mossel Bay	3,817	544
7	Potchefstroom	3,559	350
8	Mangaung	3,031	246
9	Breede River Winelands	3,030	315
10	Hessequa	2,843	266
11	Kouga	2,517	339
12	Randfontein	2,508	224
13	Emfuleni	2,275	223
14	Westonaria	2,270	177
15	Buffalo City	2,238	192
16	Beaufort West	2,198	174
17	Laingsburg	2,109	166
18	Camdeboo	1,934	146
19	Emthanjeni	1,922	159
20	Matjhabeng	1,867	144
21	Inxuba Yethemba	1,776	147
22	Polokwane	1,609	123
23	Blue Crane Route	1,546	192
24	Ndlambe	1,528	185
25	Dipaleseng	1,416	107
26	Mantsopa	1,405	117
27	Prince Albert	1,309	122
28	Ngwathe	1,131	145
29	Nala	1,108	114
30	Maquassi Hills	1,055	102
31	Umsobomvu	1,030	121
32	Maluti-a-Phofung	707	62
33	Mogalakwena	523	59
34	Sakhisizwe	491	60

Source: Own calculations

Table 5b: Municipalities classified as "marginally successful" in collecting own revenue

	Name	Gross value added per capita dollar	Revenue per capita dollar
1	Cape Agulhas	4,445	294
2	eThekwin	4,419	295
3	Nelson Mandela Bay	3,751	266
4	Sol Plaatje	3,334	245
5	Witzenberg	3,323	235
6	Oudtshoorn	3,154	217
7	Umjindi	2,752	184
8	Delmas	2,741	187
9	Naledi	2,506	185
10	Makana	2,347	158
11	Lekwa-Teemane	2,263	160
12	Modimolle	2,093	133
13	Renosterberg	1,757	107
14	Emakhazeni	1,733	115
15	Kopanong	1,594	118
16	Phokwane	1,495	92
17	Lukhanji	1,352	99
18	Setsoto	1,292	81
19	Magareng	1,203	85
20	Nketoana	1,164	75
21	Greater Tzaneen	947	65
22	Makhado	751	50

Source: Own calculations

Table 5c: Municipalities classified as "less successful" in collecting revenue

	Name	Gross value added per capita dollar	Revenue per capita dollar
1	Swellendam	4,624	239
2	Swartland	4,311	243
3	Cederberg	4,211	189
4	Breede Valley	4,139	223
5	Tsantsabane	3,706	153
6	Merafong City	3,644	163
7	Bergrivier	3,514	174
8	Karoo Hoogland	3,494	103
9	Matzikama	3,444	182
10	Theewaterskloof	3,380	154
11	Lephalale	3,144	89
12	Hantam	3,099	111
13	Lekwa	3,074	170
14	Thaba Chweu	3,034	142
15	Kannaland	2,744	152
16	Thembelihle	2,740	160
17	City Of Matlosana	2,668	139
18	Msukaligwa	2,415	123
19	Ditsobotla	2,395	61
20	Mbombela	2,298	87
21	Masilonyana	2,171	73
22	Kareeberg	2,085	116
23	Ventersdorp	1,919	107
24	Letsemeng	1,899	60
25	Siyathemba	1,794	97
26	Lesedi	1,791	95
27	Ikwezi	1,706	57
28	Ubuntu	1,705	76
29	Seme	1,660	58
30	Madibeng	1,539	25
31	Gariep	1,532	75
32	Baviaans	1,506	72
33	Tswelopele	1,473	39
34	Mamusa	1,473	82
35	Sundays River Valley	1,422	46
36	Dikgatlong	1,377	69
37	Mafube	1,368	77
38	Mkhondo	1,120	61
39	Ramotshere Moiloa	861	38
40	Phumelela	787	41
41	Tokologo	731	38
42	Tswaing	715	24
43	Nkomazi	675	20
44	Albert Luthuli	625	19
45	Elias Motsoaledi	625	18
46	Tsolwana	542	21
47	Greater Marble Hall	502	25
48	Blouberg	496	7
49	Greater Letaba	367	10
50	Senqu	336	17
51	Elundini	291	11

Source: Own calculations

Table 6: Inter-temporal analysis of the growth in debt: 2009/10 – 2019/20

	ρ_t	δ_t	$\delta_t b_t$	$\sum_{i=1}^n \delta_{t,i} d_{t+i}$	b_t	Diffbt*bt
Metros						
2010/11	2.5	0.963	9.402	5.900	5.903	
2019/20	0.5	0.928	8.945	0.472	0.47	-10.11
Category B						
2010/11	0.8	0.983	10.194	5.84	5.84	
2019/20	1.7	1.003	10.401	0.49	0.49	-10.86

Table 7: Model results of the Municipal Revenue/GVA ratios

The REG Procedure
 Model: MODEL1
 Dependent Variable: lrev

Number of Observations Read	113
Number of observations used	113

Analysis of variance					
Source	DF	Sum of Squares	Mean Square	F value	Pr > F
Model	1	60.92403	60.92403	127.29	<.0001
Error	111	53.12549	0.47861		
Corrected Total	112	114.04952			

Root MSE	0.69182	R-Square	0.5342
Dependent Mean	6.82743	Adj R-Sq	0.5300

Coeff Var	10.13287		
-----------	----------	--	--

Parameter estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	-3.64063	0.93010	-3.91	0.0002
lgva	1	1.08794	0.09643	11.28	<.0001

The REG procedure
 Model: MODEL1
 Dependent variable: lrev

Number of Observations Read	19
Number of Observations Used	19

Analysis of variance					
Source	DF	Sum of squares	Mean square	F Value	Pr > F
Model	1	1.20808	1.20808	3.11	0.0959
Error	17	6.61072	0.38887		
Corrected Total	18	7.81880			

Root MSE	0.62359	R-square	0.1545
Dependent mean	7.69744	Adj R-Sq	0.1048
Coeff var	8.10128		

Parameter estimates					
Variable	DF	Parameter estimate	Standard error	t Value	Pr > t
Intercept	1	17.45333	5.53687	3.15	0.0058

Parameter estimates					
Variable	DF	Parameter estimate	Standard error	t Value	Pr > t
lgva	1	-0.88132	0.50002	-1.76	0.0959

Figure 1: Plot of the logarithm of per capita revenue by the logarithm of per capita gross value added by municipality

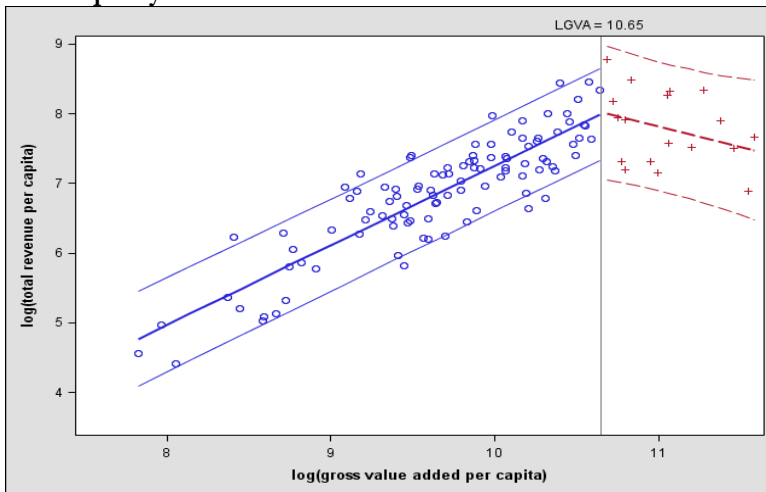


Figure 2: Plot of revenue/GVA ratios of municipalities

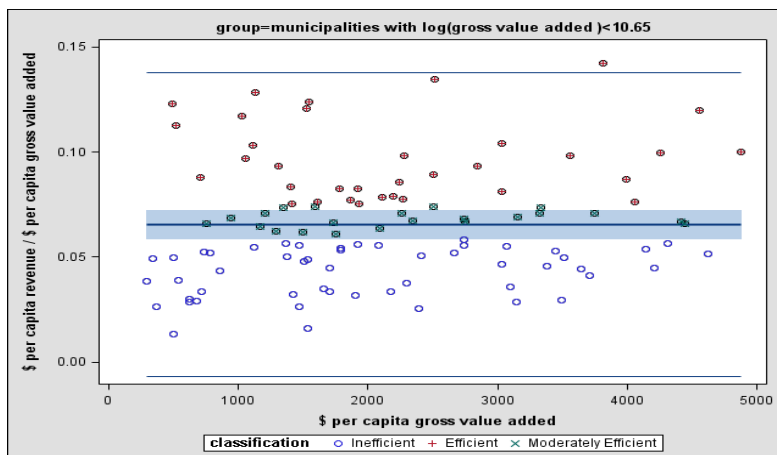


Figure 3: The spread of municipalities categorized in terms of revenue/GVA ratios

