THE EXTENT OF DEBT FINANCING WITHIN STATE-OWNED CORPORATIONS IN KENYA

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Abstract

The public sector reforms' programme in Kenya, has witnessed five state-owned corporations being privatised, and several more, from hotels to banks, have been scheduled to be privatised. However, many of Kenya's state-owned corporations are in considerable debt, which reduce their value in the process of privatisation. This study attempted to determine the extent and the theory suitable for explaining debt-financing within the state-owned corporations in Kenya from 2007 to 2011. The study applied both descriptive statistics and a hybrid of cross sectional and longitudinal quantitative surveys. The results observed some level of stability on the aggregate long-term debt ratios, with minimal use of stock market instruments, which implied the application of the agency theory.

JEL Classification: G32

Keywords: Debt Financing, Financial Leverage, Pecking Order Theory, Trade-Off Theory, Agency Theory, State-Owned Corporations

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1. Introduction

In Kenya, the first phase of the reform agenda of state corporations, under the umbrella of public sector reforms' programme, has witnessed five state-owned corporations being privatised, and several more, have been scheduled to be privatised (Seymour, 2011). However, many of Kenya's state-owned corporations are in considerable debt, which reduce their value in the process of privatisation. Phase two of the reforms, which was launched in 2006 and still in progress, witnessed a series of ministerial and segmental initiatives that led to the introduction of governance reforms, especially on public sector financial management, including debt financing policies and performance-based management (Marwa and Zairi, 2009).

The Kenyan presidential report, Republic of Kenya (2013) further noted that, in 2011/12, eleven income generating state-owned corporations made losses, compared to twelve in 2010/11 and sixteen in 2009/10. This represents 21%, 23% and 31%, respectively, of all income generating state-owned corporations. Highlighting the debt financing patterns, the report observed that the pattern of accumulation of publicly guaranteed debt financing to state-owned corporations in Kenya shows a decline in 2007 from 2006, but has been on an upward trend since then. This indicates that financial performance of state-owned corporations in Kenya has been increasing while their debt financing levels have been on the rise since 2007. Consequently, this study attempted to determine the extent and the theory suitable for explaining debt-financing within the state-owned corporations in Kenya for five-year period, from 2007 to 2011.

2. Extent of debt financing

Many diverse empirical measures have been used to show debt-financing levels within corporations (Frank and Goyal, 2009). They argue that some scholars advocate for book leverage, which is the proportion of corporation debt finance to the total book value of the corporation assets. Others scholars advocate for market leverage, which is the proportion of corporation debt to market value of the corporation.

Book leverage, as a measure of the debt financing level within a corporation, is the proportion of corporation debt finance to the total book value of the assets. Frank and Goyal (2009) argued that supporters of the book leverage approach believe that financial markets swing so much and managers, in many occasions, tend to have a notion that market leverage figures may be unreliable as a guide to corporate financial policy. Since the calculation of book leverage relies on the book value of the corporation, which is an accounting measure (Chen, 2013), managers tend to put more attention on book leverage because debt is better supported by assets in place than it is by growth opportunities.

Market leverage, used as a measure of the debt-financing level of a corporation, is the proportion of corporation debt to market value of the corporation. In support of market leverage, Knaup and Wagner (2012) argued that the statement of financial position might provide an inaccurate assessment of the true value of a corporation since many of the assets listed on the statement of financial position are mostly valued on their historical cost rather than their current value. Markets are generally believed to be futuristic and numbers generated from them in the calculation of market leverage may be more relevant to the decisions of the corporations managers (Frank and Goyal, 2009).

Fama and French (2002) and Rajan and Zingales (1995) suggested that reliance on book leverage is not a serious limitation and most of the state corporations in Kenya are not listed in the stock exchange. This study applied the book leverage and different definitions of debt, i.e., long-term, short-term and total debt, as debt-financing level proxies.

3. Theories of debt financing

Studies have analysed debt finance to determine whether optimal debt finance levels exist. An optimal debt finance level would be one that will minimize a corporation's cost of capital while maximizing corporation value. According to Miller (2012), the balancing of the bankruptcy costs against the tax gains on debt financing gives rise to an optimal capital structure. Therefore, decisions on debt finance level have an impact on the success of the corporation. Precisely how corporations decide the amount of debt in their capital structures remains a puzzle (Rao, Al-Yahyaee and Syed, 2007).

The argument for the existence of an optimal debt financing level has kept researchers long in the field for decades. From the initial work of Modigliani and Miller (1958) to the recent studies like Jõeveer (2013); Jiraporn, Kim and Kitsabunnarat (2012); Kayo and Kimura (2011) and Fan, Titman and Twite (2012), researchers have continued to find out whether debt financing levels are relevant or irrelevant in financing decisions of a corporation. Myers (2001) argued that there is no universally accepted theory of debt financing choice and there is no reason to expect one. However, he consents to the fact that there are several conditional theories which have been accepted.

Most corporate finance literature point to the "trade-off theory", in which taxation and deadweight bankruptcy costs are taken into consideration (Frank and Goyal, 2009). According to this theory, corporations seek debt finance levels that balance the tax advantages of additional debt against the possible bankruptcy costs (Myers, 2001). Myers (1984) proposed the "pecking-order theory" in which there is preference of retained earnings, debt and then equity. Frank and Goyal (2009) argued that the idea that firms engage in "market timing" has also become popular. Finally, the "agency theory" lurks in the background of much of the theoretical discussion. Agency concerns are normally included in the trade-off framework when deduced broadly. Each theory has tried to explain the reasons behind the choice between debt financing and other forms of financing.

There are other recent theories which have been proposed lately. Jensen (1986) developed the free cash flow theory in which he argues that free cash flows allowed firms' managers to finance projects earning low returns which might not be funded by the equity or bond markets, hence, reducing debt financing. Myers and Majluf (1984) contributed to the asymmetric information hypothesis in debt financing. They argued that asymmetric information problems drive the capital structure of firms since managers know more than the rest of the market about their firm's value (information asymmetry) and the market penalizes the issuance of securities, including debt, whose benefits related to the assessment of such information.

Berger, Ofek, and Yermack (2012) highlighted that there are theoretical arguments and some empirical evidence that point to the possibility that managers can become entrenched, and that they may deviate from choosing optimal debt financing as a result. The argument is referred to as managerial entrenchment theory, which suggests that entrenchment motives may cause managers to increase debt financing level beyond the optimal point, in order to inflate the voting power of their equity stakes and reduce the possibility of takeover attempts (Harris and Raviv, 1988). Since managerial entrenchment involves management control issues, it affects the agency costs and can be grouped under the agency costs theory of debt financing. Research on debt financing theories is yet to be concluded (Myers, 2001). This study is, therefore, an additional contribution to the wealth of financial management epistemology already in existence in the area of debt financing.

4. Methodology

The study used descriptive approach which enabled the researcher to determine the extent of debt financing and identify the debt financing theory applicable in explanation of debt-financing strategies within state-owned corporations in Kenya. In addition, the study applied a hybrid of cross sectional and longitudinal quantitative surveys. Rindfleisch, Malter, Ganesan and Moorman (2008), in their study of cross-sectional versus longitudinal surveys, argued that both the designs have limitations and a combination will give a strong output. Therefore, the combination of the techniques allowed the researcher to investigate the constructs of the study.

Variables and measures for debt financing

Since Fama and French (2002) and Rajan and Zingales (1995) suggested that reliance on book leverage is not a serious limitation and most of the state corporations in Kenya are not listed in the stock exchange, this study applied the book leverage and definitions of debt, i.e. long term, short term and total debt, as debt financing level proxies. As summarised in table 3.1 below, the study used book values to measure long term debt leverage (LTL) using long term debt of the state corporation divided by the total assets, Short term debt leverage (STL) using short term debt of the state corporation divided by the total assets and, total debt leverage (TDL) using total debt of the state corporation divided by the total assets.

Sample size

The sample size for the study is made up of all the 50 income generating corporations, selected from the general population of 262 state corporations in Kenya, using stratified non-probability sampling technique. The non-income generating corporations are excluded from the study, since their financial performance is not profit based and may not be influenced by market oriented decisions, such as debt financing strategies. Struwig and Stead (2013) argued that non-probability sampling technique should be used in special cases, usually when the population has a lot in common, like in this case income-generating state-owned corporations.

Data analysis

The information from the financial statements, were used to measure the variables across the state-owned corporations. In addition, ratio analysis was used to measure the variables from the financial statements over the five year period. Most of the study variable measures were extracted from the financial statements of the state-owned corporations for the five-year period from 2007 to 2011. The researcher obtained in total 80% of the copies of financial statements both from the Ministry of Finance office. These copies of the financial statements of the corporations obtained from the Ministry of finance office were used as secondary data for longitudinal analysis of the extent of debt financing within the state corporations using debt financial ratios.

5. Results

Descriptive statistics for items of common-size financial statements

Table 5.1 presents the descriptive statistics of the common statement of financial position and the common cash flow, which are used to illustrate the extent of debt financing within the state-owned corporations in Kenya for the five-year period from 2007 to 2011. The table shows that the maximum value of total debt ratio was 2.736, and of long-term debt and short-term debt were 2.736 and 2.630, respectively. These results indicate that, during this period, some state-owned corporations borrowed more than their total assets, meaning that they were insolvent and have a high risk of being put under receivership.

Table 1. Descriptive statistics for items of common-size financial statements

	Minimum	Maximum	Mean	Std. Deviation
Non-current assets	0.018	0.970	0.583	0.281
Current assets	0.030	0.982	0.417	0.281
Long-term debt	0.000	2.630	0.283	0.489
Short-term debt	0.008	2.736	0.295	0.341
Total Debt	0.008	2.736	0.576	0.640
Equity	-1.736	0.992	0.424	0.640
Dividend payment	0.000	0.508	0.007	0.028
Capital expenditure	-0.174	0.805	0.048	0.092
Net increase in working capital	-2.589	1.095	-0.008	0.192
Operating cash flows after interest and taxes	-2.535	0.450	0.019	0.176
Financing deficit	-0.588	1.139	0.028	0.177
Net equity financing	-0.069	1.042	0.034	0.103
Net debt financing	-0.341	0.304	0.007	0.059

On the other hand, minimum debt ratios were low, with the long-term debt ratio figure being zero. This shows that, at some point during this period, there were state-owned corporations using only short-term debt as a way of borrowing. The standard deviation shows that there was a very high deviation on long-term debt figures, at 0.489, compared to short-term figures' deviation, which was at 0.341, during the five-year period from 2007 to 2011. However, when the two are combined as total debt, the deviation was

much higher at 0.640. This highlights that there were some state-owned corporations with very low figures of total debt and very high figures at the same time, during the period.

Table 1 also shows a minimum negative financing deficit of -0.588 and maximum net equity financing being (1.042) more than net debt financing (0.304). These results indicate a contradiction of the findings of Shyam-Sunder and Myers (1999) pecking order model, which assume that the financing deficits will be filled entirely with new debt issues, except for firms at or near their debt capacity. In addition, the mean and the standard deviation of net equity financing of 0.034 and 0.103, respectively, are greater than those of net debt financing of 0.007 and 0.059, respectively.

Common-size statement of financial position and statement of cash flow

Table 2 presents an aggregate common-size statement of financial position for state-owned corporations in Kenya for the five-year period from 2007 to 2011. The value of each item of the common-size statement of financial position is calculated as a percentage of the book value of total assets and then averaged for each corporation reporting data in their statement of financial position in that year. The table shows remarkable stability of total debt over the five-year period, with a slight decline in 2011. This behaviour is consistent with the findings of Frank and Goyal (2009) and Lemmon *et al.* (2008) who also found stability in total debt ratios of the U.S. corporations. According to Lemmon *et al.* (2008), leverage ratios, such as total debt, long-term and short-term debt ratios are generally relatively stable over time.

Table 2. Common-size statements of financial position

	Average statement of financial position's item as a fraction of total assets				
Year	**2007**	**2008**	**2009**	**2010**	**2011**
Non-current assets	0.588	0.591	0.585	0.580	0.568
Current assets	0.412	0.409	0.415	0.420	0.432
Total assets	1.000	1.000	1.000	1.000	1.000
Long-term debt	0.288	0.283	0.306	0.283	0.253
Short-term debt	0.369	0.305	0.287	0.264	0.251
Total debt	0.661	0.587	0.585	0.549	0.498
Equity	0.339	0.413	0.415	0.451	0.502
Total equity and liabilities	1.000	1.000	1.000	1.000	1.000

Further, Table 2 highlights stability in short-term debt ratios, with some slight declining trend, throughout the five-year period. The aggregate total debt ratios, on the other hand, seem to be quite stationary over the period. It is remarkable how the assets, particularly non-current assets, also remained stable over the period.

However, it is interesting to note that equity grew steadily over the five-year period. If the increase in equity is due to increase in profits, then it is an indication that this increase in equity, with a decrease in debt levels, can be explained by the pecking order theory. The theory basically states that the corporation will use debt financing, rather than equity financing when internal cash flow is not sufficient to finance investment expenditures (Myers, 2001).

Table 3 presents common-size cash flows data for state-owned corporations in Kenya. The value of each item of the cash flow is calculated as a fraction of the book value of total assets and then averaged across each corporation reporting data in its statement of cash flow for the five year period from 2007 to 2011.

Table 3. Common-size statements of cash inflows and outflows

	Average cash flow items as a fraction of total assets				
Year	**2007**	**2008**	**2009**	**2010**	**2011**
a) Dividend payment	0.0203	0.0053	0.0017	0.0018	0.0034
b) Capital expenditure	0.0297	0.0530	0.0426	0.0523	0.0643
c) Net increase in working capital	-0.0811	0.0142	0.0340	-0.0379	0.0317
d) Operating cash flows after interest and taxes	-0.0343	0.0350	0.0340	0.0186	0.0442
Financing deficit (a+b+c-d)	0.0032	0.0376	0.0443	-0.0023	0.0552
Net equity financing	0.0099	0.0454	0.0224	0.0484	0.0430
Net debt financing	0.0118	-0.0042	0.0163	-0.0003	0.0112

In contrast, Table 5.3 shows that operating cash flows after interest and taxes, which indicates profits in cash basis, declined during the last three years from 2008 to 2011, while net equity financing increased

over these periods. Therefore, this increase in equity, while debt financing decreased, can be best explained by the agency theory. The theory indicates that there was external financing during these periods, but equity external financing was preferred over external debt financing because of the fear of managers to expose their investments for external screening (Frank and Goyal, 2005).

Graphical presentation of aggregate debt ratio levels

The graphical presentation of debt ratio levels, presented in Figure 1 shows some stability on total debt, with a slight declining trend, of less than 5%, towards the end of the period-in 2011. As advocated by Lemmon *et al.* (2008), a very steady stability of total debt is observed between 2008 and 2009, where the values were stationary. Figure 5.1 also shows that short-term debt somehow follows the same trend of total debt, with a steady slight average decline of about 6% throughout the years. This may be an indication of the state-owned corporations changing their debt financing strategy to use more of long-term debt, compared to short-term debt, over the period, because of the steady commercial banks' interest rates. Interestingly, the long-term debt levels shows some "trade-off theory" debt pattern, where there exists an optimal or target level, and the state-corporations adjust their debt levels towards that target (Frank and Goyal, 2005).

Figure 1 shows an existence of optimal or target level in 2009 and the firms adjust towards it at a rate of about 2%. However, the figure also shows an immediate deviation, at the same rate (2%), from the target level in the following years i.e., 2010 and 2011. According to the trade-off theory, stationary behaviour is expected when the debt level of the corporation has reached the optimum level. In general, the stability behaviour of the debt-financing levels, highlighted in Figure 1, also pose a problem for the pecking order theory (Frank and Goyal, 2005). In order to further understand the debt-financing levels within the state-owned corporations in Kenya, the aggregate levels of individual types of debt financing during the five-year period from 2007 to 2011, are illustrated in Figure 2.

Figure 1. Aggregate debt ratio levels

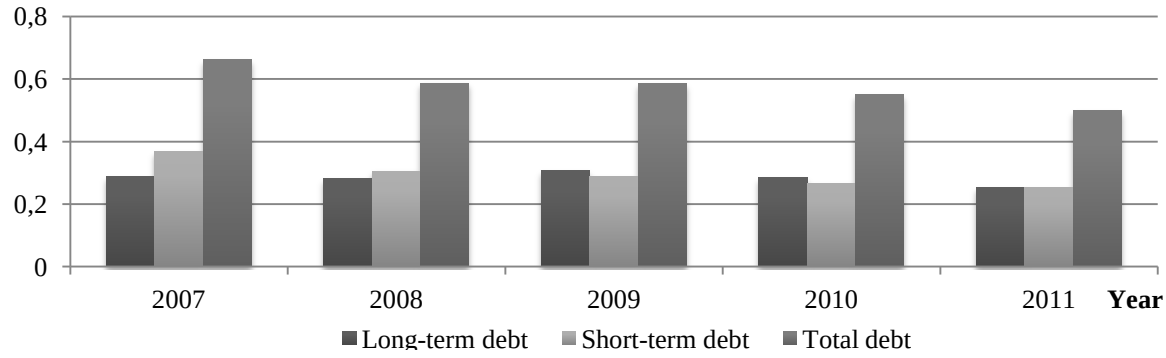


Figure 2. Aggregate levels of individual types of debt financing

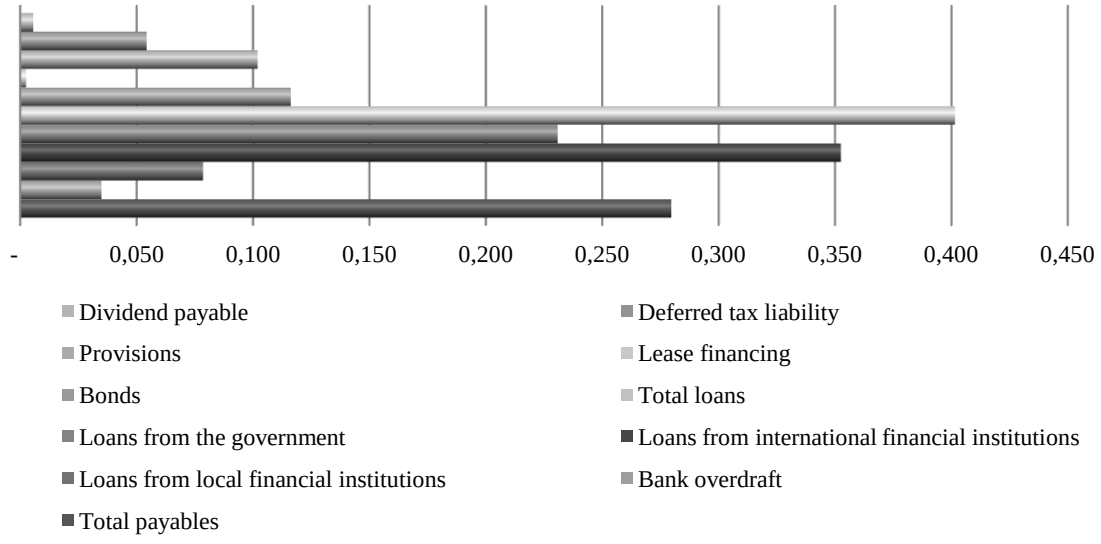


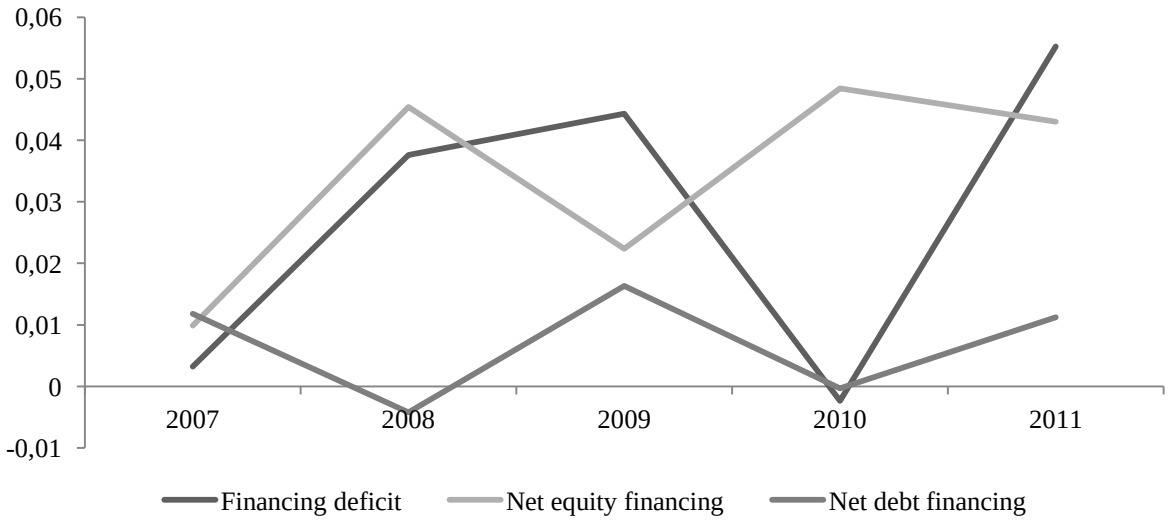
Figure 2 shows that the average levels of bank loans, in total, were higher than all the other types of debt, such as bonds and total payables, during the five-year period from 2007 to 2011. It is further observed that loans from international financial institutions were higher (0.353) than the loans from the government (0.231) and loans from local institutions (0.079). These results indicate that the state-owned corporations in Kenya prefer borrowing from financial institutions, since the local commercial banks' interest rates in Kenya have been higher than most of the international banking rates during this period. Further, the state-owned corporations in Kenya may be using more of loans from international financial institutions as a foreign exchange rate risk hedging strategy.

Figure 2 also shows that the levels of trade and other payables (0.280) were equally high during this period, second to loans from international financial institutions. On the other hand, the levels of bonds (0.054) and lease finance (0.002) are on the lower levels, though the level of bonds is, to some extent, higher than lease finance. This may be an indication that state-owned corporations in Kenya are beginning to appreciate financing through debt securities, such as bonds. Aggregate bank overdraft level (0.035) was not very high, but Figure 2 indicates that it is also a type of debt financing used by some state-owned corporations in Kenya.

Graphical presentation of aggregate net external financing levels

Figure 3 presents the average net long-term debt financing/issuance, net equity financing/issuance and financing deficit for the state-owned corporations in Kenya for the five-year period from 2007 to 2011. The figures are calculated as a fraction of total assets. Net debt financing is increase in long-term debt minus long-term debt repayments. Net equity financing is the issue of equity stock minus any repurchase of equity stock. The financing deficit is calculated as dividend paid plus capital investments plus change in working capital minus operating cash flows.

Figure 3. Net aggregate external financing levels



According to Frank and Goyal (2003), it is expected that net debt financing and net equity financing ought to track the financing deficit. They argued that, under the pecking order theory, one would expect net debt financing to track the financing deficit much more closely than would net equity financing. Empirically, Figure 5.3 shows an interesting pattern between net debt financing, net equity financing and financing deficit for state-owned corporations in Kenya for the five-year period from 2007 to 2011. The correlation between aggregate net debt financing and aggregate financing deficit (0.3) is greater than that between aggregate net equity financing and aggregate financing deficit (0.2). As highlighted in Figure 5.3, aggregate net debt financing tends to track financing deficit more than the aggregate net equity financing.

However, the rate at which net debt financing tracks financing deficit is very low. This is an indication that state-owned corporations used debt to finance part of their financing deficits during the five-year period (Frank and Goyal, 2005). In contrast, in 2008 and 2010, Figure 5.3 shows that aggregate net equity financing were above financing deficit. This indicates that equity issues were also used by the state-owned corporations in Kenya, during the five-year period, to finance part of their financing deficits. In general, Figure 5.3 indicates that most of the state-owned corporations in Kenya use debt conservatively and that these corporations occasionally use more equity than debt.

Debt financing levels of Kenyan state-owned corporations within various sectors

Table 4 presents the descriptive statistics for the analysis of long-term debt financing of state-owned corporations within the various sectors of the economy in Kenya. The table shows that the level of long-term debt financing within the state-owned corporations in Kenya, during the five-year period from 2007 to 2011 was higher within the manufacturing sector. The mean of the long-term debt ratio is the highest (0.514), with the highest maximum ratio of 2.630 and standard deviation of 0.710. These results indicate that the use of long-term debt is common amongst state-owned corporations within the manufacturing sector in Kenya. However, the minimum value of zero indicates that some state-owned corporations within the sector also did not have long-term debt as a type of debt financing within the financial statements during the five-year period from 2007 to 2011.

Table 4. Descriptive statistics for the long-term debt of the sectors

	Minimum	Maximum	Mean	Std. Deviation
Manufacturing	0.000	2.630	0.514	0.710
Finance	0.000	0.822	0.146	0.242
Energy	0.000	0.520	0.226	0.154
Transport and telecommunication	0.014	1.200	0.342	0.474
Trade	0.000	1.672	0.414	0.725
Education	0.000	0.128	0.010	0.020
Other sectors	0.000	0.000	0.000	0.000
Unlisted state-owned corporations	0.000	2.630	0.302	0.528
Listed state-owned corporations	0.000	0.520	0.187	0.187

It can also be observed from Table 4 that state-owned corporations within the trading sector used more of long-term debt to finance their investments, since the highlighted long-term debt ratio mean of the sector is 0.414, with a maximum value of 1.672 and standard deviation of 0.725. The minimum long-term debt ratio of zero within this sector, as well, shows that there were some state-owned corporations within the trade sector which did not have long-term debt under their financial statements during the period. Table 5.4 further shows that long-term debt is also a common financing strategy amongst the state-owned corporations within the transport and communication sector, with a long-term debt ratio mean of 0.342 and a maximum of 1.200. Nevertheless, the minimum long-term debt ratio was 0.014, indicating that all the state-owned corporations within the transport and communication sector had long-term debt in their financial statements throughout the five-year period from 2007 to 2011.

On the other hand, Table 4 shows that the levels long-term debt ratios within the energy, finance, education and other sectors are on the low side, with other sectors (Medical and housing) which have a mean, maximum and minimum values of zero each. These results indicate that the long-term debt financing was not a financing strategy used by state-owned corporations within the medical and housing construction sectors in Kenya. These long-term debt financing levels are clearly observed using a graphical presentation in Figure 4. The figure presents the average long-term debt ratio for the state-owned corporations within the various economic sectors in Kenya for the five-year period from 2007 to 2011.

It is observed in Figure 4 that the manufacturing sector had the highest levels of long-term debt financing within the state-owned corporations in Kenya over the five-year period from 2007 to 2011. This was followed by the levels within trade, transport and communication, energy and finance sectors, respectively. Education and other sectors had the lowest levels, with other sectors presenting zero levels. In general, the sectors highlight some kind of stability throughout the years, with the trading sector showing a decline in 2008, followed by stability and then another decline in 2011. According to Murray Z and Vidhan K (2008), stability of long-term debt ratios acts as an evidence of trade-off theory. On the other hand, the authors argued that a fluctuation of long-term debt ratios tracking the corporation's financial deficits is a sign of the pecking order theory. Therefore, with more of stability amongst the long-term debt ratios within the sectors, a sign of trade-off theory is highlighted, though not steadily, since there are some fluctuations within the period.

Figure 4. Long-term debt levels of the sectors

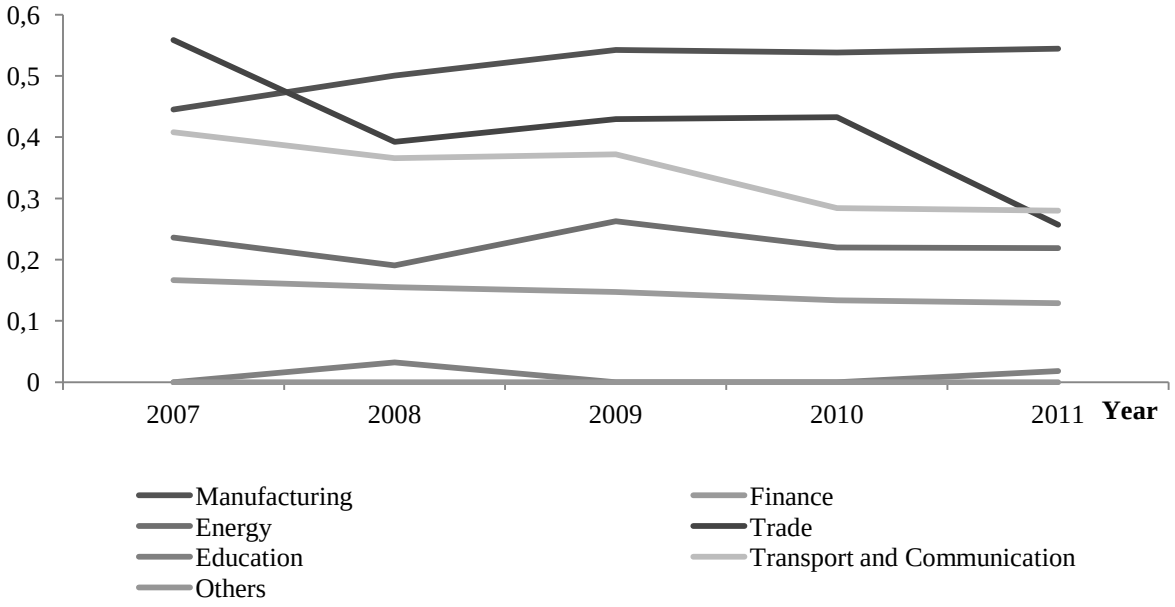


Table 5 presents the descriptive statistics for the sector's short-term debt as a fraction of total assets for the state-owned corporations within the various economic sectors in Kenya for the five-year period from 2007 to 2011.

Table 5. Descriptive statistics for the short-term debt of the sectors

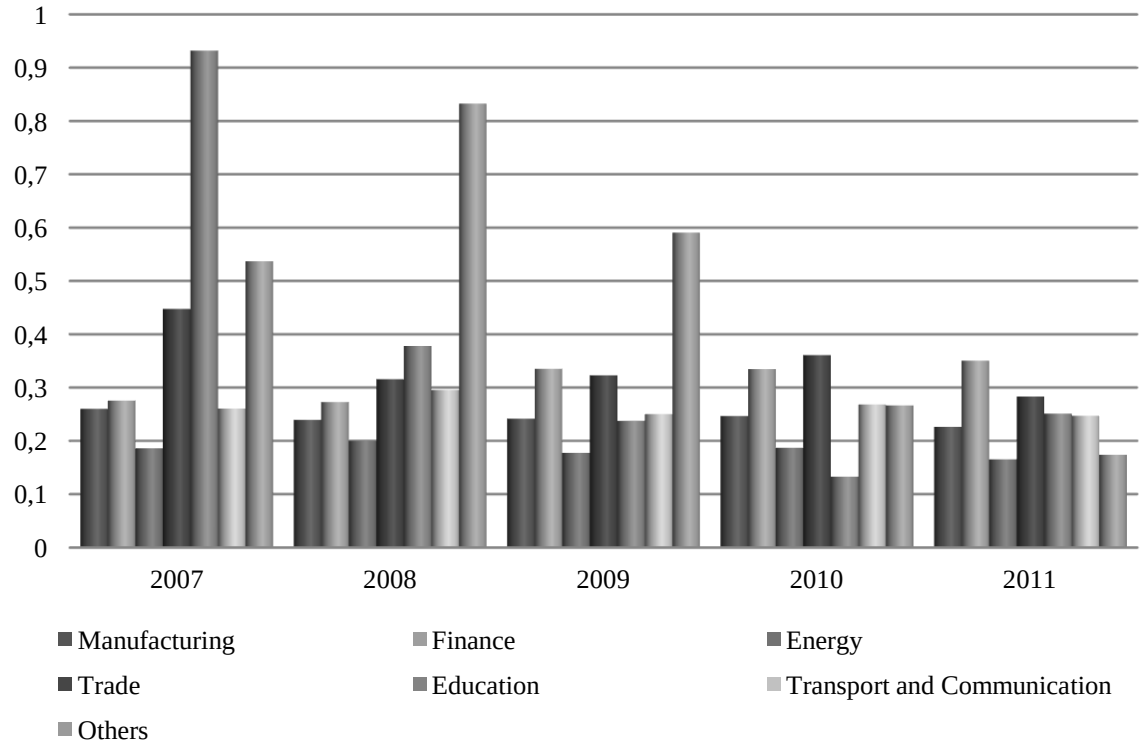
	Minimum	Maximum	Mean	Std. Deviation
Manufacturing	0.008	1.106	0.243	0.301
Finance	0.010	0.896	0.314	0.378
Trade	0.020	0.994	0.346	0.424
Energy	0.065	0.400	0.183	0.137
Transport and telecommunication	0.048	0.534	0.264	0.183
Education	0.048	2.736	0.386	0.436
Other sectors	0.026	1.005	0.480	0.264
Unlisted state-owned corporations	0.008	2.736	0.280	0.333
Listed state-owned corporations	0.020	0.896	0.374	0.389

Table 5.5 shows that the use of short-term debt is common amongst all the state-owned corporations from various economic sectors in Kenya. Unlike the long-term debt ratio, the mean of short-term debt ratio levels within the manufacturing sector did not demonstrate the highest value, though the maximum value still showed a high figure (1.106) amongst other sectors, being second to the education maximum value (2.736).

Further, Table 5 shows that, except for the trade sector, most of the sectors, such as education and other sectors, which had mean levels of long-term debt, show high mean levels of short-term debt (0.386 and 0.480, respectively). These results indicate that those sectors, which were not using a lot of long-term debt financing, compensated the low levels of long-term debt with more of short-term debt levels in their financing strategies.

Figure 5 gives a better graphical presentation of short-term debt levels amongst these various economic sectors in Kenya over the five-year period from 2007 to 2011. It can be observed from the figure that most sectors had stable short-debt levels over the five-year period, with the exception of the educational and other sector categories. The highest level of short-term debt level amongst the sectors was experienced in 2007 and 2008 within the category of education and other sectors, respectively. In order to advance the reduction of heterogeneity of debt-financing levels of state-owned corporations that may be caused by listing or non-listing, an additional analysis of levels of debt financing is done, taking into account whether the corporation is listed or not.

Figure 5. Short-term debt levels of the sectors

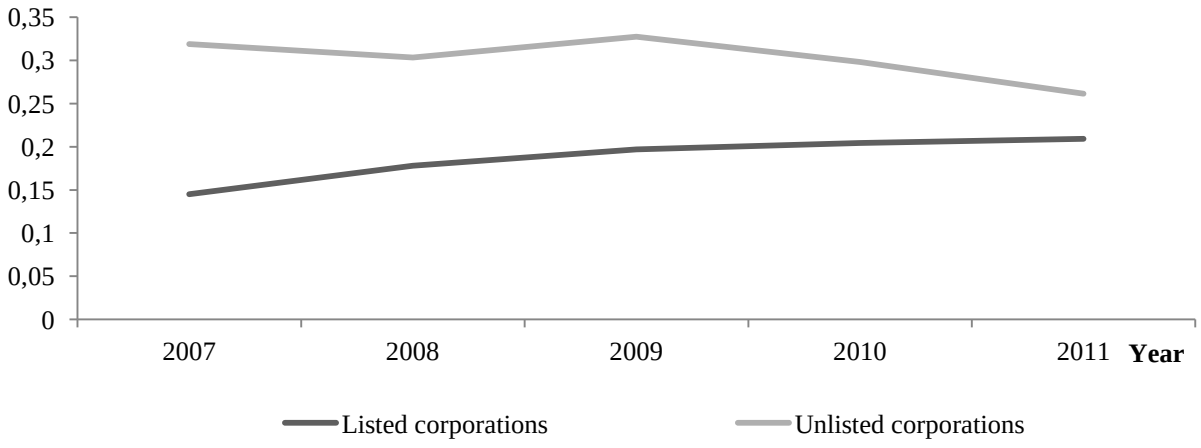


Debt financing levels of listed and unlisted state-owned corporations in Kenya

The percentage of listed state-owned corporations in Kenya has been increasing through the new public management reforms' privatisation process being adapted in Kenya. A total of 15% of the state-owned corporations included in this study sample are listed in the Kenyan capital market. Most of the state-owned corporations (75%) in Kenya are not listed in the capital market and, therefore, rarely access the stock market debt financing sources.

However, Figure 6 shows that long-term debt levels of unlisted state-owned corporations, though slightly fluctuating, have been above the long-term debt levels of listed state-owned corporations over the five-year period from 2007 to 2011. The figure indicates that, even though the unlisted state-owned corporations in Kenya rarely access the capital market debt financing sources, their levels of long-term debt financing, through other non-capital market sources, are still higher than long-term debt financing levels of listed state-owned corporations. The slight fluctuations within the long-term debt of unlisted state-owned corporations is a sign of the pecking order theory if the fluctuations are tracking a financing deficit trend (Murray Z and Vidhan K, 2008).

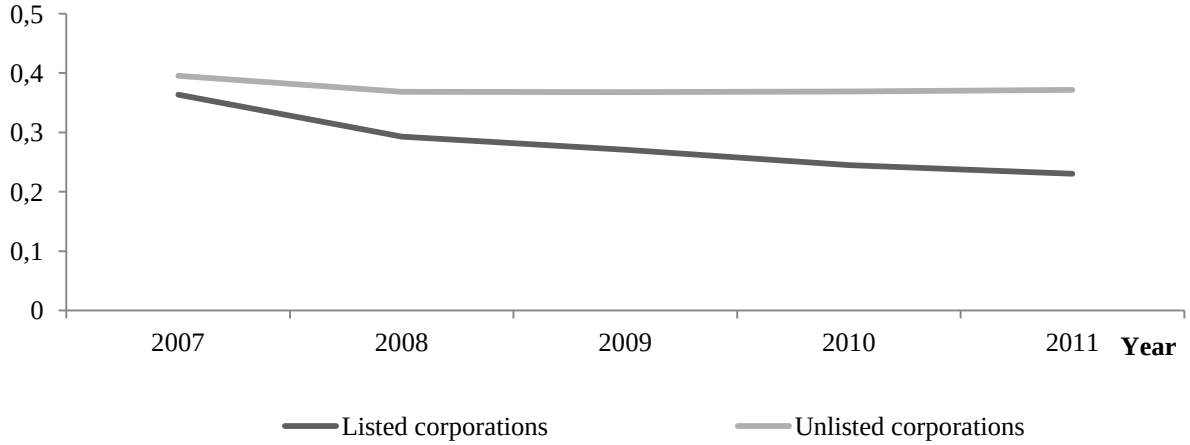
Figure 6. Long-term debt levels within listed and unlisted state-owned corporations



The long-term debt financing levels of listed state-owned corporations are lower throughout the period. However, they show some stability, with a slight incline towards 2011. The stability is a sign of the trade-off theory pattern amongst the listed state-owned corporations. It can be highlighted, though not proved, that long-term debt financing theories pursued by the listed state-owned corporations and unlisted state-owned corporations are not consistent.

However, Figure 7 shows that the levels of short-term debt within the same corporations have some consistency on the trends. The trend of the short-term debt levels for the unlisted state-owned corporations demonstrates some steady stability, while the levels of long-term debt financing look stable but with some decline towards 2011.

Figure 7. Short-term debt levels within listed and unlisted state-owned corporations



The figures of both the long-term debt ratios and the short-term debt ratios within the state-owned corporations in Kenya during the five-year period from 2007 to 2011 indicate that the levels of debt financing in total are slightly stable, but with some decline trend towards 2011. However, there is a lot of variation on debt financing levels amongst state-owned corporations from different economic sectors and whether the corporation is listed or unlisted. It is, therefore, important to identify the factors influencing these debt-financing levels within the state-owned corporations in Kenya.

6. Conclusion

It can be concluded that the extent of debt financing within the state-owned corporations in Kenya is not much different from the behaviour exhibited in earlier studies under private-sector corporations. The stability of aggregate debt levels was experienced under long-term debt, while slight fluctuations were observed under aggregate total-debt and short-term debt results. This implies that the state-owned corporations in Kenya do not apply the pecking order theory fully. The results demonstrated that state-owned corporations prefer using internally generated funds followed by debt, in terms of local and international loans, and equity, in terms of grants and government allocations. The debt instruments in the stock exchange, which should also follow after internally generated funds, with other debt forms, like loans, rank last, which somehow contradicts the pecking order theory. Hence, the results may be a sign of the agency costs theory, since more use of debt from the stock exchange exposes the investments of the state-owned corporations to the debt providers (Frank and Goyal, 2005; Randa and Gubbins, 2013).

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