

THE CASE FOR PRIVATISATION

By

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Abstract

The period of the late 1980s and early 1990 has witnessed the business community world over being increasingly concerned with three aspects of productivity, efficiency and accountability. Discussions about these issues have tended to cut across both the private as well as the public sector enterprises and, a group of researchers believe that the privatisation of enterprises will provide the answers to the issues raised.

This paper attempts to analyse concerns of efficiency, productivity and accountability in a specific African country namely Botswana. In this country the levels of efficiency of three utility parastatals are analysed by using financial ratio indicators.

The recommendations made after utilising this method point to a wide range of steps that have to be taken to address efficiency of parastatals in Botswana.

Introduction

In recent years we have witnessed an increasing concern with issues of productivity, efficiency and accountability in the business world. The operations of parastatals have not escaped public scrutiny. Consumers have continued to exert pressure on Governments, to restrain price rises of public utilities and to ensure that public funds are wisely used. Specifically, many believe that the answer to the issue of efficiency and effectiveness of both government and parastatal organizations lies with privatisation.

In Botswana, there has been an increasing concern with what has been perceived as the high cost of utilities. An article in the Business focus (April 1995) read as follows: 'Utility companies in Botswana have for a long time been at the receiving end of a barrage of criticism mostly for their "too high

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tariffs” but also for their “inefficiency”. These sentiments are shared by many consumers in Botswana. Some commentators have claimed that these high costs act as a significant disincentive to industrialisation in the country. There is a general belief that parastatals are by their nature, inherently inefficient and therefore good governance is more likely to be achieved in a privatised and competitive environment.

On the other hand, the utility companies argue that these criticisms are unfair. In a recent press release the chief executive officer of the Botswana Power Corporation said that there are fundamental reasons which cause utility costs in Botswana to be relatively high and that superficial comparison with costs in neighbouring countries is unfair. (Botswana Guardian Nov. 17, 1995) This is the background which led us to undertake this study of utilities in Botswana.

Objectives of the Study

The main objective of the study is to analyze the level of efficiency of the three utility parastatals, namely, **Botswana Power Corporation, Botswana Telecommunication Corporation, and Water Utilities Corporation** using financial ratio analysis. The study will also consider a number of issues on corporate governance of these corporations and make recommendations on the feasibility of privatising some or all of these corporations.

Conceptual Framework

There are a number of underlying assumptions to this study the more important being:

- Good corporate governance should lead to higher levels of efficiency and effectiveness.
- Efficiency and effectiveness can be enhanced in a competitive environment where market forces are able to operate.
- Privatisation is more likely to lead to the achievement of good corporate governance.

Methodology

The research relies principally on the analysis of secondary data contained in the annual reports and accounts of the selected corporations. In addi-

tion, we have consulted with a number of knowledgeable people on these issues and their views have informed our own conclusions. The annual reports cover the period 1989 to 1994.

Literature searches have been conducted using CD-ROM. Topics searched included: financial analysis, corporate governance and privatisation.

Corporate Governance

Good corporate governance has always been central to the interests of corporate stakeholder. The writings of early management theorists espoused the concept that good management was the key to economic prosperity. Thus the work of Taylor, Fayol and the human relations movement reflected a desire to maximize efficiency at the work place. Over the past quarter century we have witnessed a serious deterioration in the level of corporate management in a significant number of organisations. The collapse of Royce Royce in 1971 and more recent failures of Bank of Credit and Commerce International, Poly Peck, Maxwell Industries and in 1995 Barings and Meridian Biao banks have contributed to the disenchantment with the work of auditors and board of directors. The developing countries have also witnessed corporate upheavals but it tends to be concentrated in the parastatal sector in contrast to the private sector in the developed world. Shareholders, creditors and employees quite often end up the victims of bad and incompetent management which can sometimes extend to fraudulent behaviour. Kaplan and Harrison (1993) on the basis of an American study report that boards of directors are experiencing increased levels of responsibility for their action and those of their organisations.

In Botswana, there have in recent years been a number of instances of corporate mismanagement. The best known one is that of Botswana Housing Corporation which was a subject of a Presidential Commission of Enquiry (Christie 1992) and the National Development Bank which was restructured in 1994.

Governance of Botswana Utilities

We have approached the governance of the Botswana utilities from both a qualitative and quantitative perspective. In the financial analysis below we look principally at evidence from quantitative data. In this section we examine dimensions of governance based on the board of directors. Our analysis was limited to some extent by the fact that we had to rely on publicly available information. Disclosure of corporate governance activities is not mandatory in

Botswana and thus the corporate reports contain very little information on the level of governance.

Directors

This section considers the quality of corporate governance based on information contained in the annual reports on directors. We have analysed the composition of the boards of directors of the three utilities and the data is found in Table 1.

TABLE 1: COMPOSITION OF BOARDS OF DIRECTORS 1994

	Civil Services	Parastatal	Private Sector	Total
BPC	4	1	3	8
WUC	4	1	4	9
BTC	3	2	2	7

Source: Annual Reports 1994

The board of all three utilities tend to be dominated by civil servants and parastatal employees. The private sector is represented but not in a significant way. One expects a civil service representation on these boards but it is disquieting from a corporate governance point of perspective to have senior civil servants chairing parastatal boards. It is difficult in these circumstances to expect that the interests of stakeholder other than government will be recognised. Also, can we expect a market orientation from utilities when the board is dominated by public sector representation? Senior civil servants can be expected to reflect a bureaucratic and regulatory culture in the deliberations of these boards. The culture is characterised by compliance and control procedures whereas a commercial organisation is best served by a culture of efficiency and effectiveness. This last point tends to be the principal determinant in the privatisation debate.

Can the government regulate its own parastatals? The answer is yes; although conflict of interests would arise here. Since the government is the shareholder, it has a direct interest in the interest in the bottom-line of these

institutions. In Botswana, the Permanent Secretary of the parent Ministry is usually the Chairman of the Board of the parastatal. How can he, having decided on prices of the parastatal in the Board, turn the request down in his capacity as Permanent Secretary? He might also not easily agree to removing any regulatory barriers to entry into that particular industry.

The next section reviews the principal work on univariate and multivariate predictor models of the organisational financial performance. We then go on to discuss the calculated ratios for the utilities and their implications for corporate governance.

Financial analysis

Historically the assessment of the level of management performance has focused on financial measures. Conceptually, this is appropriate as all the stakeholder express their interest in monetary terms. Nevertheless enlightened modern management will strive to fulfil their wider societal obligations. The most important stakeholder include shareholders, creditors, financial institutions, employees, management and fiscal authorities. There are also groups who cannot claim to have a direct financial interest in an organization, nevertheless can be adversely affected by these entities. This includes the rights of consumers and the ecological impact of corporate activities.

The assessment of the financial performance of profit orientated entities has a well established methodology. The methodology includes the computation and interpretation of univariate and multivariate models. Univariate predictors of performance are single ratios calculated for a number of accounting periods. These ratios are used to assess the liquidity, profitability, leverage and stock market attraction of an organization.

There is a large body of empirical research into the efficiency of single ratios to predict corporate performance. Different ratios have been claimed to be the best predictors including NETPROFIT:NETWORTH (Fitzpatrick 1974), WORKING CAPITAL TOTAL ASSETS (Smith 1974) and CASH FLOW TOTAL DEBT (Beaver 1966).

The current view held by many researchers is that single ratios taken on their own do not contain sufficient information to develop a reliable basis for assessment. It is suggested that a combination of ratios is used to make reliable business assessment and prediction. Multivariate predictor models which combine several single ratios are considered to be more efficient. These

models include the FAILING COMPANY MODEL by Blum (1974) the Z SCORE MODELS of Altman (1968), Taffler (1977) and the Y SCORE MODELS of Parish & Tamari (1978) and Ronan (1994). All these models attempt to draw attention to the quality of corporate governance and to provide early warning signals where governance is inadequate. All the predictor models should be used with circumspection and should be considered as aids in the final assessment of a firm. Sound business judgment is vital in arriving at an overall diagnosis of the performance of the organization and in developing an appropriate strategic response to the challenges facing the organization.

The financial analysis is based on selected ratios calculated using historical costs. Ratio analysis can provide useful insights on how effectively and efficiently an enterprise is managing its operations and can be used for predicting future trends. The evaluation relies heavily on generally accepted benchmarks as no comparative data is available on the average ratios for the utility sector in neighbouring countries.

For this study we have selected seven financial ratios which includes three each for profitability and liquidity and two financial gearing. We consider the selection to be the most appropriate for the financial analysis of the parastatal organizations under consideration.

In assessing the effectiveness of the utility corporations in Botswana we have to bear in mind the unique relationship of these utilities to the government. As will be seen in subsequent sections, the corporations have enjoyed the backup support of the government by getting loans at rates below the market rates, and the government pumping in additional irredeemable capital to finance additional projects. If they had to compete for funds in the capital markets maybe they would have managed their affairs differently.

Liquidity Ratios

Liquidity is the business organisation's ability to meet its short term liabilities as they mature and still remain solvent. The liquidity of the Botswana utilities will be assessed based on current ratios, quick ratios and debtor's turnover ratio.

Current Ratio

The current ratio is a measure of short term liquidity. It is computed by dividing the total current assets by the total current liabilities. The rule of

thumb for this ratio is two times, that is, the business should have twice as much current assets as current liabilities. The higher the ratio, the more liquid the enterprise is and the lower the likelihood of insolvency. However, a very high current ratio could indicate that the business is locking up its funds in idle assets instead of investing the funds to earn a return, reflecting inefficient asset management.

Quick Ratio

The quick or acid test ratio is considered to be a better indicator of liquidity than the current ratio. It is a more sensitive measure of liquidity because it makes a refinement in the computation by excluding inventory, which is considered to be less liquid, from the current assets. The benchmark for this ratio is one times. Current assets excluding inventories should equal current liabilities. The BPC and the WUC do not maintain stock in trade, but they have a stock of maintenance spares which are considered as current assets.

Debtor's Turnover Ratio

Debtor's turnover ratio in days indicates the number of days it takes the organisation, on average, to collect its bills from credit customers. This ratio gives an indication of the efficiency of the collection department in making collections from its credit customers. Since utilities are basically supplied on credit to all consumers, efficiency in debt collection is crucial in managing the liquidity of the organisations concerned.

Profitability Ratios

Profitability ratios measure an organisation's ability to generate revenues in excess of its expenses. All stakeholder are interested in the profitability of the business because its long term viability and existence depends on its ability to generate profits. Profitability of the utilities in Botswana is of interest to all utility users because if the utilities can generate enough profits from their operations they would have more funds to pay for their operating expenses and this would in turn lower the cost of the utility to the ultimate consumer.

Profitability will be evaluated using three key ratios: return on investment, return on sales and the capital turnover ratio.

Return on Investment

The return on investment is expressed as the ratio of earnings before interest and taxes to total assets. This ratio shows the efficiency of management in earning a return from using the resources of the organisation. There is no generally accepted benchmark for this ratio, but the higher the ratio, the more return an enterprise is generating from each Pula invested in assets.

Return on Sales

The return on sales ratio measures the amount of profit earned from each Pula of sales. It is derived by dividing earnings before interest and taxes by total sales; the higher the ratio, the higher the return a firm is generating from each Pula of sales. A high ROS ratio indicates that a firm is managing its operations efficiently.

Capital Turnover Ratio

The capital turnover ratio measures how effectively the organisation's assets are being utilized and whether the investment in assets is justified in terms of the activity as measured by turnover. The capital turnover ratio is calculated by dividing total sales by total assets.

Gearing Ratio

Gearing ratios provide an insight into the capital structure of the organisation and the extent to which non-equity funds are used to finance the assets of the enterprise. In our analysis gearing is assessed base on the proportion of equity to total funds employed, and the relationship between long term debt and total assets.

Detailed analysis of each utility

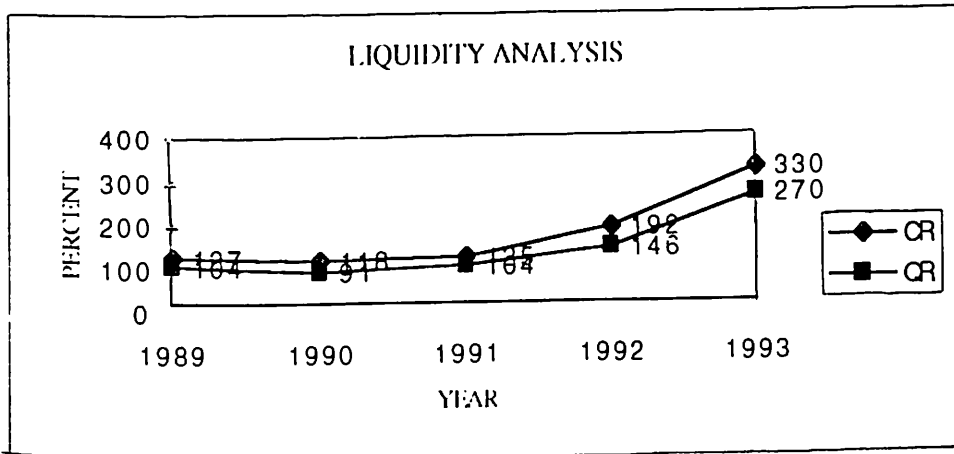
The Botswana Power Corporation

The following section evaluates the performance of the Botswana Power Corporation using the key ratios discussed above.

Liquidity Ratios

The liquidity analysis for Botswana Power Corporation is shown in Fig. 1

Fig. 1: Botswana Power Corporation Liquidity



Current Ratio

In 1989, the current ratio was 1.27 times. It fell to 1.18 times in 1990 and rose to 1.35 times in 1991. This was an unsatisfactory ratio as it falls below the benchmark of 2 times which is considered adequate. In 1992 the ratio increased to 1.92 times and in 1993 it reached a record high of 3.3 times.

The drop in the current ratio in 1990 can be attributed to the fall in the net current assets from the 1989 level. Net current assets decreased by P7million from the 1989 level. The drop in net current assets was due to fact that the corporation utilized surplus cash to redeem their more expensive loans as evidenced by the decrease in long term loans of P 15.5 million from the 1989 level. The drop in long term debt is matched by a drop of almost the same magnitude in the bank and cash balances. The small increase in the current ratio in 1991 is attributable to similar reasons as the corporation continued to pay off its more expensive debt prematurely.

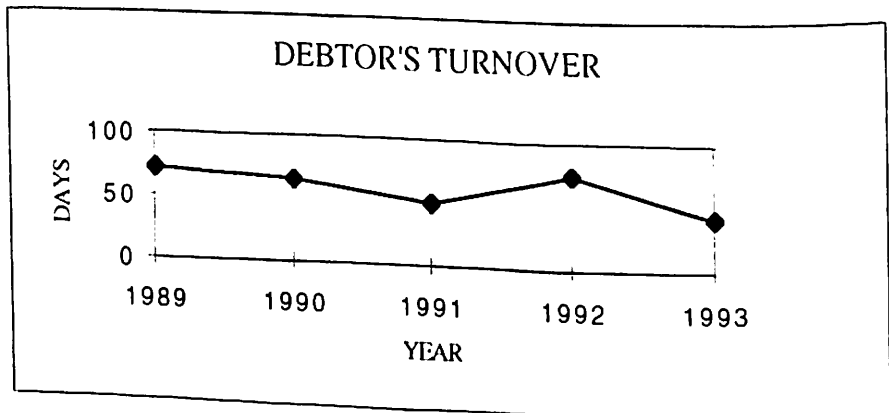
In 1992 and 1993 the current ratio reflects a huge increase on the previous year level. In 1991 interest rate increased steadily and it became more attractive for the corporation to invest its surplus funds in the local market than to repay any further loans. Hence BPC adopted a policy of accumulating deposits and building up their cash balances. Deposits and investments increased by P60.3 million resulting in the phenomenal jump in the current ratio in 1993. The increase in cash and deposits was financed by cash from operations which amounted to P94.6 million.

Quick Ratio

BPC does not have stock in trade, however, it maintains inventory of maintenance spares. The quick ratio was generally good over the period studied. In 1989 BPC had a quick ratio of 1.04 times, however, in 1990 it fell to 0.901 times. The reasons for the decline in the quick ratio are the same as those explained above for the current ratio. In 1991 the quick ratio increased to 1.04 times and in 1992 it increased to 1.46 times. In 1993 it increased to 2.79 times reflecting a very high degree of liquidity.

Debtor's Turnover Ratio

The debtors' turnover ratio is shown in Figure 2 below.



In 1989, the average collection period was, 73 days. However, this had decreased to 44 days in 1993. The corporation embarked on intensive efforts to improve debt collection and credit control procedures in 1990 and also installed a central building system in April 1990 which has greatly lowered the total amount of debtors despite increase in turnover.

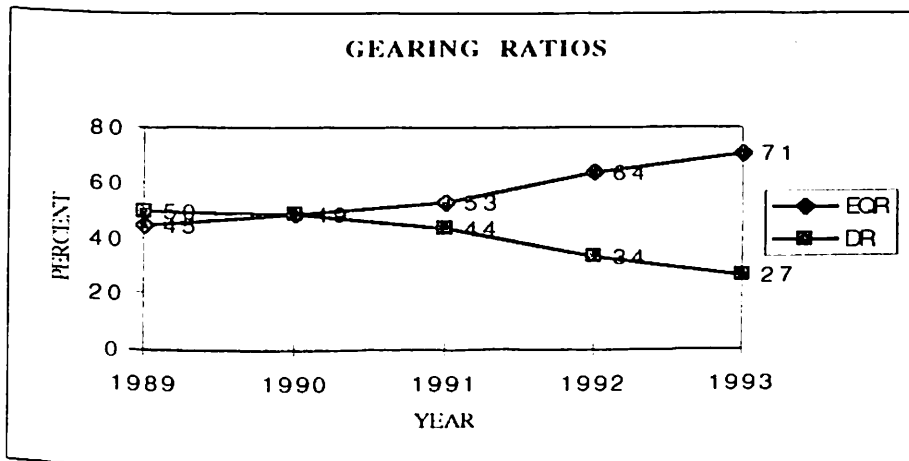
Gearing Ratio

The gearing ratios for Botswana Power Corporation are shown in Fig. 3

In 1989 the equity ratio was 45% and it increased steadily to 71% in 1993. We can conclude that BPC is not heavily leveraged since long term debt accounts for less than 50% of the total funds employed. The corporation is relying less on borrowed funds and has been paying off most of its expensive debt. This is evidenced by the fact that the Pula value of the total debt has

declined by 21% from 1989 to 1993. In 1989 long term debt was P312.7 million but in 1993 it had dropped to P246.9 million. The debt ratio has been steadily decreasing steadily from 50% in 1989 to 28% in 1993.

Fig. 3:



The long term debts are mainly funded by the government and they command comparatively low interest rates. The interest rates range from 6% to 10% which is below the prime rate which has ranged between 9% to 14% over the same period. BPC also has some external loans from IBRD, Commonwealth Development Corporation, the European Investment Bank and several other organisations. All these loans are guaranteed by the government and they have very low interest rates ranging from 3.75% to 10.5%.

Profitability Ratios

The profitability indicators for Botswana Power Corporation are shown in Fig.4

Return On Investment

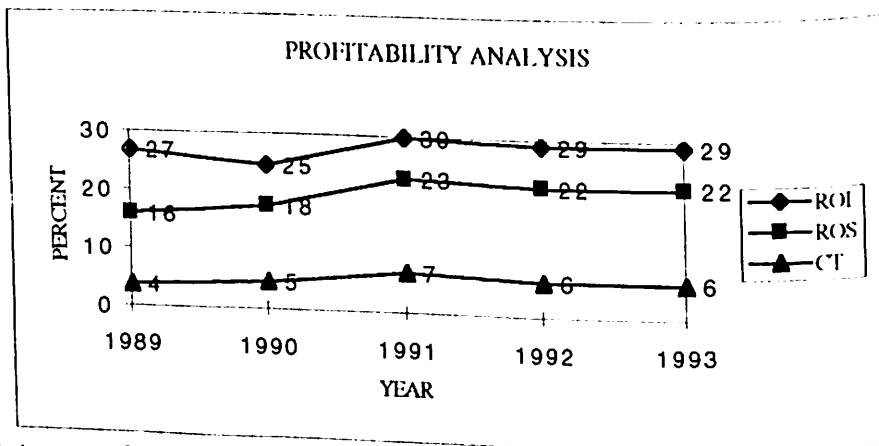
The corporation experienced low profitability based on ROI. The ROI ratio was 4% in 1989, it increased to 7% in 1991 but fell to 6% in 1992 and 1993. The low ROI can be explained by the fact that power generation is very capital intensive. Also the corporation has a policy of revaluing their fixed assets every five years. This means that the value of the fixed assets increases year after year, resulting in high depreciation expense and low operating income. The last revaluation was in 1993. To achieve a higher ROI the corporation would have to increase the tariffs drastically which would be detrimental

to consumers. The tariff increase has remained below the inflation rate over the years studied, and the annual increase has been just below 5% per annum.

The corporation is required by some debt covenants to maintain a return on fixed assets of not less than 8%. However, this rate of return has never been achieved and management does not consider it feasible under the current economic environment.

The return on fixed assets base on net income was 6.4% in 1989, it increased to 7.3% in 1992, but declined to 6.7% in 1993.

Fig.4:



Return on Sales

BPC's profitability was good, based on ROS ratio. In 1989, the ratio was 27% but it fell to 25% in 1990. The fall in the ROS is attributable to a high increase in operating expenses. Whereas income increased by 14%, operating expenses increased by 17% hence causing a drop in the ROS ratio. In general 1990 experienced mild weather which reduced the summer and winter peak consumption causing a 1.77% drop in the forecast annual energy demand. The ROS ratio rose to 30% in 1991, but declined to 29% in 1992 and 1993. The levelling of this ratio is related to the slowdown in the economic growth of Botswana in general. In 1993 sales increased by 17% whereas, operating expenses increased by 16.9, hence causing a levelling off of ROS. On average the corporations performance was good and the corporation recorded an increase in net income of 42.03% over 1992 results. The result were achieved, as stated in the 1993 Annual Report, due to 'increased revenues and greater focus on cost control'

Capital Turnover Ratio

The capital turnover ratio for BPC is very small due to the capital intensive nature of power generation. Sales cover only a small proportion of the value of the assets employed.

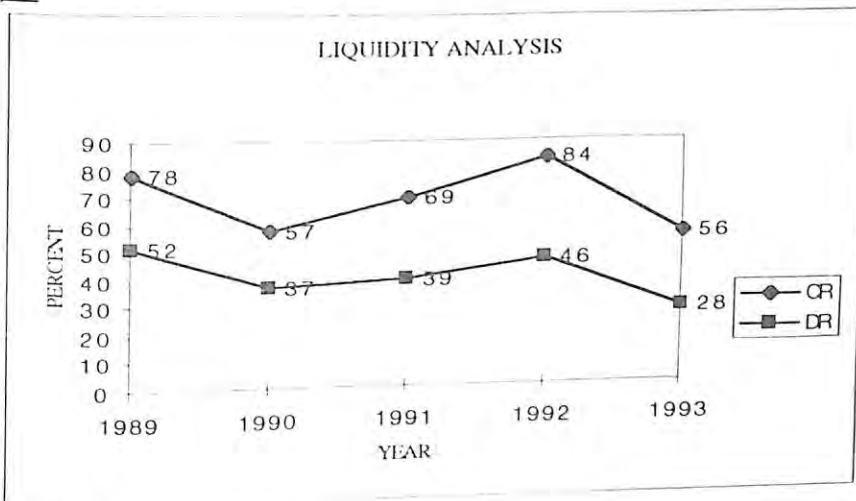
In 1989, the capital turnover ratio was 0.16 times, it increased to 0.18 times in 1990 reached a peak of 0.23 times in 1991, and declined to 0.22 times in 1992 and 1993.

The Botswana Telecommunications Corporation

Liquidity Analysis

The liquidity analysis for BTC is shown in Fig. 5

Fig.5:



Current Ratio

The variability in the liquidity ratios was more pronounced than that of the activity ratios. This reflects the failure of the corporation in forecasting changes in economic activity. In fact, that Corporation failed to forecast even long-term trends in the economy to an extent that their actual performance (which was influenced by economic activity) deviated from their plan. The current ratio reflects these failures through its wide swings. The current ratio was 0.78 times in 1989. It fell to 0.57 times in 1990, rose to 0.84 times in 1992 and fell to 0.56 times in 1993.



The drop in the current ratio in 1990 is mainly due to a significant increase in current liabilities. Due to unanticipated increased activity, the Corporation seems to have controlled its overdraft and creditors balances, but oblivious of the slow-down in economic activity, it seemingly continued to increase its orders. Its customers also started playing truant, hence, the increase in stock and trade debtors raised the current ratio to record levels. This situation might have sent the Corporation into a panic forcing it to increase its overdraft and reduce the rate of paying its creditors, thus sending the current ratio down to record levels in 1993.

Quick Ratio

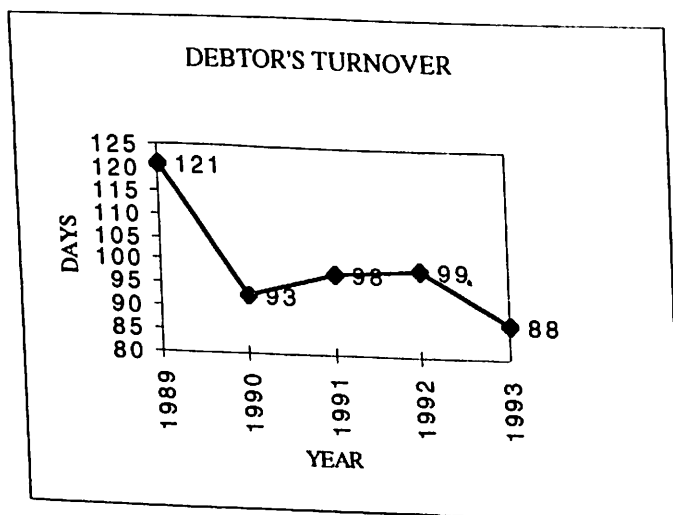
The trend in this ratio almost matched that of the current ratio. The current ratio peak of 1992 was not matched, however, as the high current ratio was caused by a drastic increase in stocks. The quick ratio was 0.52 times in 1989, fell to 0.37 times in 1990, rose to 0.46 times in 1992 and fell to 0.28 times in 1993.

BTC's liquidity can be described as poor over the period studied as both the current ratio and the quick ratio failed to reach the generally accepted benchmarks.

Debtor's Turnover Ratio

The Average Collection Period is shown in Fig. 6

Fig.6:



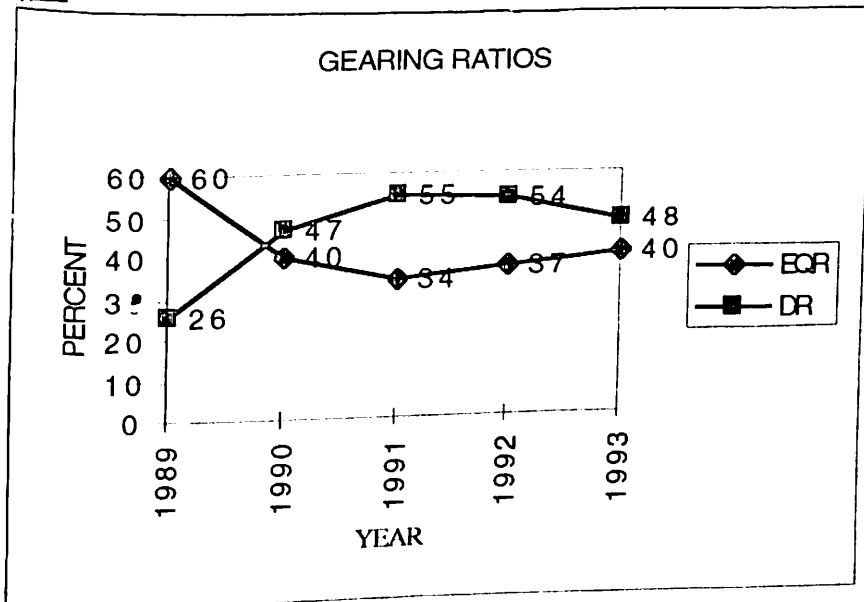
The average collection period was 121 days in 1989, but it fell to 93 days in 1990. The following three years were 98, 99 and 88 days respectively. Good economic performance seems to have assisted in the reduction of the collection period together with more stringent measures taken by the Corporation to ensure timely payments by clients.

Gearing Ratios

The gearing ratios of BTC are shown in Fig.7.

The Government of Botswana is the sole shareholder of BTC. While the actual irredeemable capital has not changed over the period, the Government has accepted a situation where massive profit retention are the order year-in and year-out. These retained earnings have caused the equity position to improve over the years. In 1989, equity funds accounted for 26% of the funds employed, but by 1993 it represented only 48% of the total funds employed. The debt ratio also declined from 60% in 1989 to 34% in 1991, however, it rose to 37% in 1991 and 40% in 1993. This reflects less reliance on borrowed funds.

Fig.7:



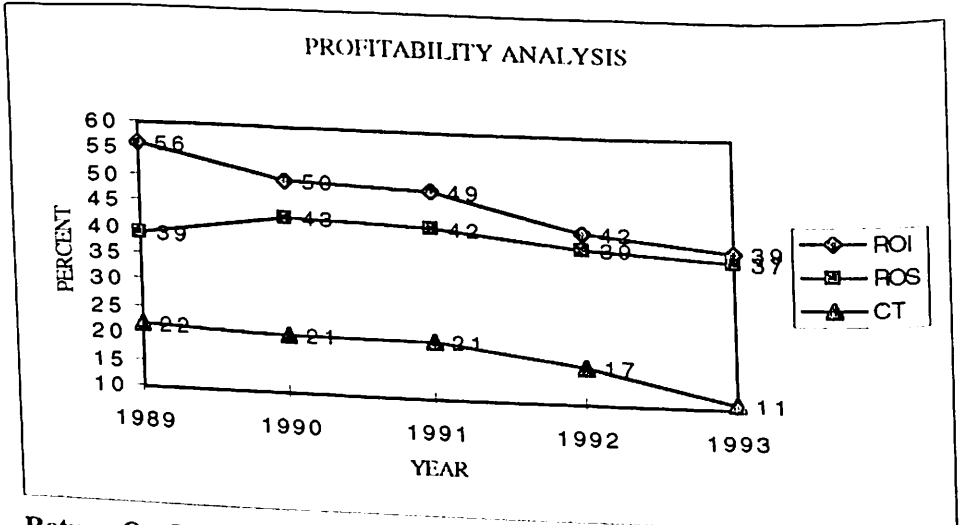
Profitability Analysis

The profitability analysis for BTC is shown in Fig. 8.

Return on Investment

The Corporation earned its first ever profit in 1988, hence 1989 was the second year the Corporation reported profit. All previous losses were covered by the two years' profit. It should also be noted that the years 1989-91 marked the peak of Botswana's economic boom period. Hence, the good performance of the Corporation can partly be attributed to the good performance of the economy. ROI hovered between 22% in 1989 and 21% in 1990 and 1991, which can be considered to be quite good by all standards. The Chairman of the Corporation remarked in his 1990 Report that the economic boom manifested itself in unprecedented growth in commercial and residential properties, which obviously translated into growth in Corporation sales. In fact, the year-on-year increase in sales peaked in 1990 while increase in total operating expenditure exhibited a lagged effect, thus peaking two years later. This explains the decrease in ROI to 17% in 1992 and 11% in 1993. The drastic decrease in sales growth rate in 1993 was caused by the collapse of the construction sector and the general slow-down in economic activity. The corporations efforts to cut down costs did not result in improved profitability since sales were increasing at a decreasing rate. ROI hit its lowest level of the period.

Fig.8:



Return On Sales

The decrease in this ratio was almost uninterrupted over the period starting from a high of 56% and falling down to 34%. As noted above, sales

increase over the entire period, albeit at a decreasing rate. The increase in profits, on the other hand, was even slower, registering negative year-on-year growth in 1993 financial year. The reasons behind this are explained above - i.e. slow-down in construction and commercial activity and failure by the Corporation to reduce expenses accordingly.

Capital Turnover Ratio

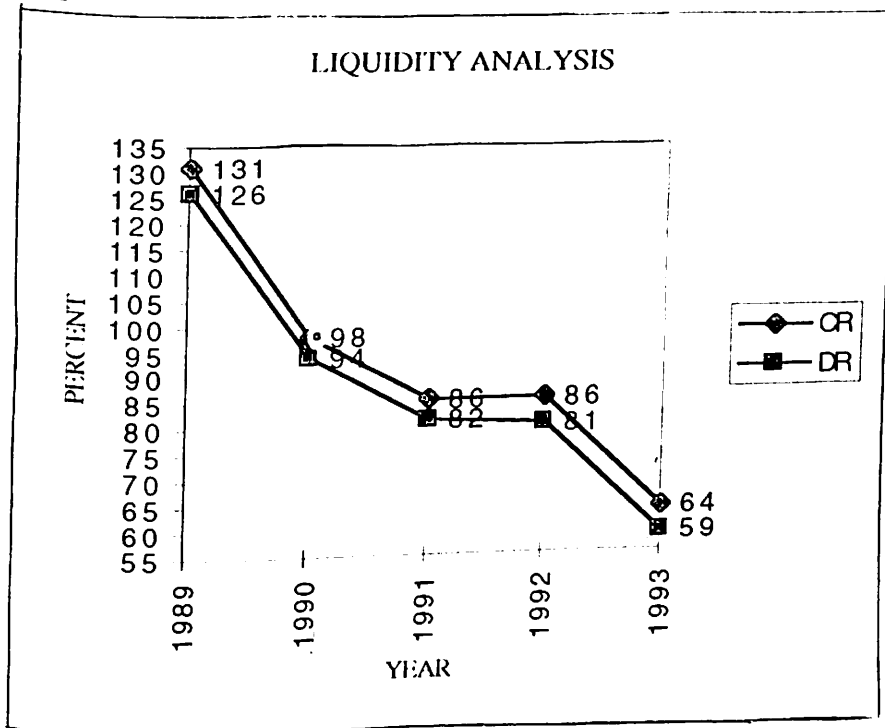
Total Assets maintained consistently high rates of growth. The rate of increase in total assets was somewhat constant since it is a predetermined rate, and that of sales was affected by economic performance, the sales total assets ratio followed the sales trend. However, it reached its peak a year after the peak in sales growth.

Water Utilities Corporation (WUC)

Liquidity Ratios

The liquidity of WUC is depicted in Fig.9

Fig.9:



Current ratio

In 1989, the current ratio was 1.31 times. The ratio dropped in the subsequent two years to 0.98 times in 1990 and to 0.86 times in 1991. For the year 1992 it rose a little to 0.87 times before dropping even further to 0.64 times in 1993. The drop in the ratio in 1990 compared to 1989 is a result of a large increase in payables by 110.86% over the 1989 figure. The increase of current assets between 1989 and 1990 of 0.98% was negligible. The same trend occurred in 1991, as a result of payables increasing by 26.56% as compared with 1990 current assets, the increase was negligible compared to the increase in current liabilities. Similarly, the drop in the current ratio in 1992 was as a result of an increase in current liabilities, this time an increase in loan repayments-short term, which rose by 37.05% over the 1991 figure. For the year 1993, the drop in the ratio was occasioned by a negligible increase in current assets of 2.78% over the 1992 figure, as compared to an increase in payables of 64.16% and of loan repayments- short term of 20.26% over the 1992 figures.

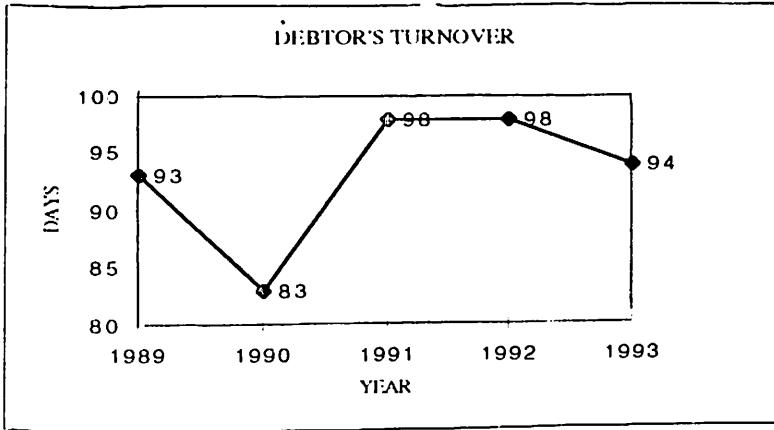
Quick Ratio

The quick ratio for WUC was almost moving in tandem with the current ratio over the year 1989 to 1993. In 1989, the quick ratio was 1.26 times. The ratio dropped to 0.94 times in 1990 because of the significant increase in current liabilities of 35.07% over those in 1989, while the quick assets increased insignificantly by 0.76% over the same period. In 1991 it dropped further to 0.82 times, the drop being attributed to an increase in current liabilities (17.67% and payables alone increasing by a whopping 110.86%) and an insignificant increase in quick assets (2.23%) as compared to 1990. A further drop in the ratio to 0.81 times in 1992 was again as a result of an increase of 2.59% in 1992 (the loan repayments - short term alone increasing by 37.05%) while quick assets increased by 0.96% over the 1991 figures. The lowest ratio in the five-year period occurred in 1993 when the ratio plummeted to 0.59 times. As seen in the current ratio, payables increased by 64.16% and loan repayment - short term by 20.26% (or an increase of 39.52% in total current liabilities) over the 1992 figures, while quick assets increased by a negligible 1.94% over the 1992 figure.

Debtor's Turnover Ratio

The debtors turnover ratios for Water Utility Corporation is shown in Fig. 10

Fig. 10:



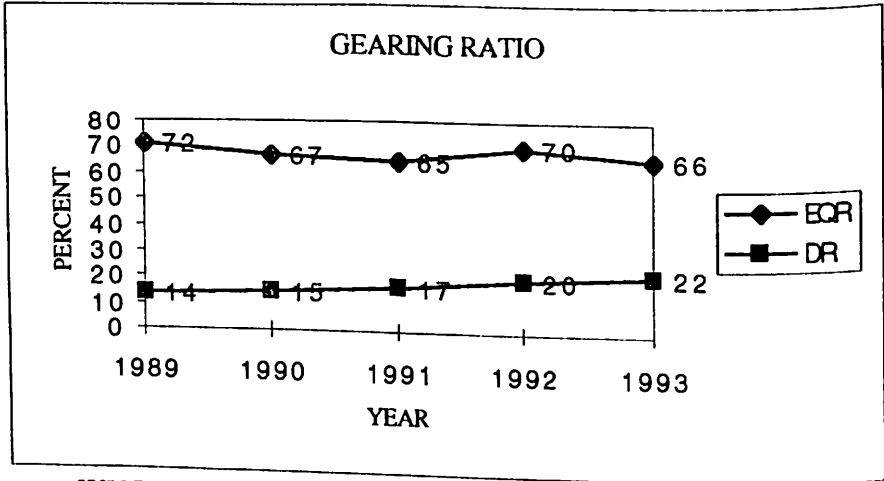
For the year 1989 the average collection period for WUC was 93 days. In 1990, it dropped to 83 days, as a result of a drop in debtors by 1.4% and an increase in sales by 9.87% over the 1989 figures. For the years 1991 and 1992 the average collection period increased to 98 days, before it dropped to 94 days. It should be noted that 1992/93 period was the worst drought period in the Southern African region, and this must have affected the collection period. Normally, WUC bills are required to be settled within 30 days of the invoice date. Judging from the long average collection periods which prevailed over the five year period, WUC's credit control system and collection policy would be considered to be very inefficient.

In summary, the liquidity of WUC declined drastically over the five year period. Both the current ratio and the quick ratios remained very much below the accepted benchmarks of times two and one respectively. The poor liquidity can partly be attributed to WUC's inability to collect its outstanding debts on time.

Gearing Ratios

The gearing ratios for Water Utilities is shown in Fig. 11

Fig.11:



WUC is highly geared corporation. The proportion of debt to total funds employed declined from 86% in 1989 to 85%, 83%, 80% and 78% in the years 1990, 1991, 1992 and 1993 respectively. The debt ratio was 72% in 1989, fell to 67% in 1990, and 65% in 1991. However, it rose to 70% in 1992 but fell again to 66% in 1993. This trend indicates that WUC basically relies on "other peoples' money" rather than on its own equity to finance its operations. However, the reliance on debt is declining.

The corporation relies, for its funding, on foreign loans given directly to the corporation, (IBRD and CDC); foreign loans to the Government of Botswana on loan to WUC, and on loans from the Public Debt Service Fund (PDSF).

Profitability

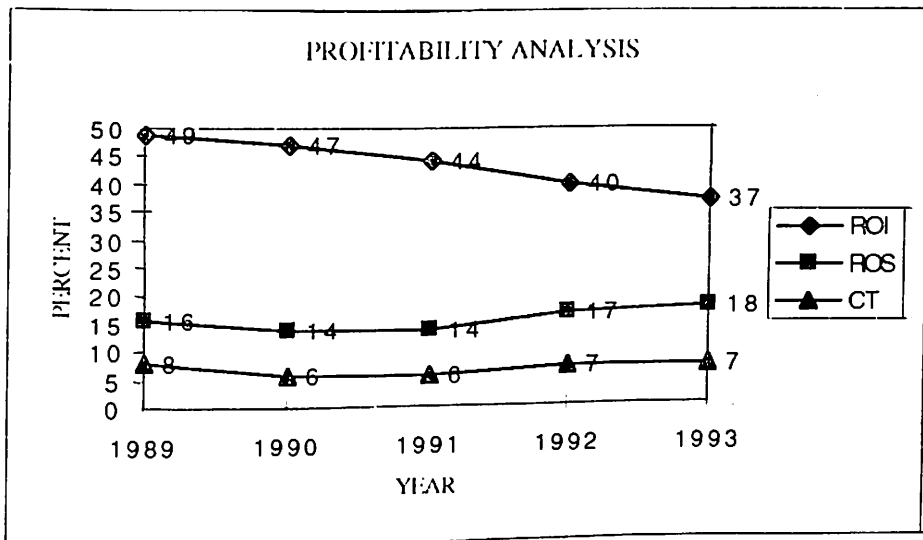
The profitability of Water Utilities is shown in Fig. 12

Return on Investment

The Return on Investment of WUC for the five-year period 1989-1993 showed a successive decline. The ROI for 1989 was 8%, dropping to a low of 6% in 1990 and 1991 respectively. In 1993 it rose to 7%. This trend showed

that management's level of efficiency in using the assets of WUC to earn a return was deteriorating over the five-year period.

Fig.12:



Return on Sales

The Return on Sales for WUC exhibited an unbroken declining trend between 1989 and 1993. The ROS was 49% in 1989, dropping respectively to 47%, 44%, 40% and 36% in the years 1990, 1991, 1992 and 1993.

The ability of WUC to earn profits from the sale of water declined over the five-year period. This scenario can be explained by the 1990 interruptions of supply of water as major extensions were connected to the reticulation system. Furthermore, some short disruptions to supply occurred in 1992. These were occasioned either by pipe bursts and power failures (events not within WUC's control), or by planned major connections aimed at improving supply. Besides, the year 1992/93 was the worst drought year in the South African region.

Capital Turnover Ratio

For WUC the capital turnover ratio was 16% in 1989. It declined to 14% in each of the next two years respectively, before improving to 17% in 1992 and to a five-year high of 19% in 1993. The efficiency with which WUC is using its assets to generate sales, and, by implication, profits, has improved over the five-year period. While the ROI and ROS have deteriorated over the

five-year period, assets have been worked harder and harder. This implies that costs and expenses have gone up over the years, thereby contributing to the deteriorating results of operations.

In summary, the profitability of WUC as measured by ROI and ROS declined over the period under study. The capital turnover rate, on the other hand, has improved. This shows that assets have been worked harder, but the return on sales has deteriorated. This could imply inefficiency in the way WUC is managing its operations.

Should Botswana Privatise its Utilities?

It has been argued that "competition is indisputably the most effective means-perhaps ultimately the only effective means - of protecting consumers against monopoly power. Many countries in the world among them the United Kingdom, Latin American and Eastern European countries have privatised the generation and distribution of utilities. Why Privatise?

Several arguments have been put forward to support the bid for privatisation. A discussion of some of those arguments is given below.

To Encourage Competition

The advantages of competitive markets and competition must be recognised. C.D. Forester and other authorities emphasize that competition's invisible hand is the best regulator because it draws competitors into a market to remove excess profits. S. Siddique (1995) argues that the decision to privatise electricity generation and distribution in Latin American countries was taken "to assure adequate resource flows to the industry and to induce greater efficiency by opening up to competition, modern management techniques, and the profit motive". Firms in competitive markets must reduce their costs to the minimum for fear of being undercut by competition. They must plan annual productivity improvements, at least to match those of competitors. They are likely to innovate more, hence consumers will enjoy more diverse goods and services. It is mentioned that even the possibility of competition may be enough to stimulate the incumbents to greater efficiency.

In view of these compelling tendencies of competition, it is likely that should a monopoly be broken down, the immediate effect that the resulting small firms will operate at higher costs is going to be a short-run effect-pro-

vided there are such smaller firms. In the long-run, firms will have to find ways of lowering those costs, otherwise they will find themselves out of that market. The key is, obviously, possibilities of entry.

Can a public firm participate effectively in a competitive environment? The answer is yes, although there might be a conflict of interests. The public servants usually set the rules guiding participation of firms in the market. They are the "referees," as it were. When they are the managers of firms participating in the market, in addition to being the "referees," there arises this conflict of interests, unless there is completed deregulation. Hence, if firms are to compete fairly, they must all be in private hands. This is why the Botswana Government must privatise first and foremost, before other issues like deregulation or enhancement of the competitive environment are considered.

Sir Keith Joseph, Mrs. M. Thatcher's Minister who championed privatisation, stated that there can be no meaningful competition between private firms and an established natural monopoly whose funds are underwritten by a government guarantee. Hence, he concluded that privatising the natural monopoly should introduce more effective competition, and where there is effective competition, there is increased consumer choice.

To Increase Efficiency

C.D. Foster (1992) argues that there are positive arguments for preferring privatisation if the overriding objective is economic efficiency. One argument is that one would better harness the well-trying forms of private enterprise and the profit instincts of private shareholders rather than invent a different apparatus and range of incentives. Secondly, financial market disciplines do provide extra stimuli for efficiency. Foster stresses that these only apply where there are workable financial markets, and that they may not even threaten largely natural monopolies.

Another argument relates to the fact that politicians usually have other objectives other than economic efficiency. One generation of politicians may adhere to economic efficiency requirements, but eventually political interference will subvert the primary of economic efficiency. So, if complete deregulation precedes privatisation, some private firms might show some interest and even participate in competition with these natural monopolies. Some semblance of success might even be achieved, but the next generation of politician might have different ideas with respect to this deregulation. It is safer to have the industries privatised as this is less easily reversible, he stresses.

To Reduce Government Expenditure

There are several benefits of privatisation. Since parastatals' borrowing is part and parcel of public sector borrowing, their privatisation reduces the Public Sector Borrowing Requirement thereby reducing government expenditure. The need to borrow is further reduced since the proceeds from sale of assets of the parastatals boosts government revenues.

Parastatals, like all other firms, must function on their own. Privatising them removes the government "shield" from daily accountability to customers, shareholders and bankers. The privatised institutions will be easier to regulate.

Government borrowing, as a percentage of the Gross Domestic Product, is usually high in countries that have to support parastatals. This borrowing is inflationary. Privatising the parastatals will lower the Public Sector Borrowing Requirement, as stated above, thereby reducing inflation.

To Spread Local Ownership of Industries

Privatisation of parastatals might also be an opportunity to spread local ownership of industries. This is contrary to the fears expressed by certain nationalists that privatising parastatals will dilute local ownership as it will certainly be foreign investors who will be in a position to buy the shares of these parastatals. But this need not be so as the Government can surely reserve certain percentages of shares for locals. The foreign investors will be needed for the skills and further innovation, particularly for technology-dependent activities like telecommunications.

There is the aspect of service, however, included in some of the parastatals. These aspects might not appeal to the private sector as they will not be sufficiently profitable. These aspects can surely be included in the Ministries' line functions if they can be separated from those activities that can be privatised. If separation is not possible then, the private sector should assume responsibility over the entire range of activities.

The Botswana situation

Provision of utilities in Botswana at independence, just like industrial activity, was almost no-existent. Two or three centres existed with central

water reticulation and electricity was imported from neighbouring countries. The new government came into Power with an agenda largely dominated by infrastructural-creating type of projects. The message was clear-without a developed infrastructure, there could be no hope of attracting foreign investors into any of the sectors.

This is how government came to be the provider of utilities. Botswana is a vast (570000 square kilometres) arid and sparsely populated country. As at 1995, the population density is still below two persons per square kilometre. These conditions, together, make the provision of all types of utilities difficult and expensive to government, and impossible to any private institution. An "egg-chicken" situation is evident with respect to the provision of utilities. Industrialization is impossible without utilities being provided at reasonably low rates; but on the other hand, industrialization and intensive settlement is needed for the utilities to be provided at reasonably low rates! Yet Botswana took a political decision 30 years ago, to spend on utilities in order to drive the economy. This is the only way the investors can set up and create employment. The cost of utilities has, as a result, remained very high since the amount provided is not market-determined and firms providing them have never enjoyed economies of scale. This means that the main benefit of a monopoly is not enjoyed by Botswana utility parastatals.

This raises a number of questions. If massive distances and low population concentrations/low industrialization are causes for the absence of economies of scale, what shape are the parastatal's cost functions? Can this situation be better exploited by localized institutions serving their own small areas or by yet another larger monopoly (like inviting the South African giants to serve the Botswana market). What are the implications on privatisation of these utilities?

One argument put forward (to complicate the scenario) is that the current utility parastatals should be 'commercialized' as a first step to them being privatised. This, presumably means that they should be forced to operate 'as if they were private companies borrowing funds from the private money market at commercial rates, for example. This also involves 'deregulating' the industries in which they operate to enable other firms to enter and compete with them. Results of this commercialization will show whether the industries in which the parastatals are operating in are amenable to forces of competition. If not, privatising the parastatal will serve no purpose as it will only create a private monopoly with similar inefficiencies and inconsiderate attitudes to-

wards consumers as the parastatal monopoly. This is likely to force the government to intervene again in the industry by way of regulation if not nationalization.

There is the political/nationalistic and strategic reasons for government assuming ownership of these utilities, also. In particular, water and electricity are seen as strategic resources in Botswana (due to their scarcity) which can be used by outside forces to ensure that the country toes a particular line it would not have chosen to. In this respect, it might be found to be difficult to deregulate such industries. As the Honourable Minister of Finance, Mr. F. Mogae said during the 1995/96 Budget Speech, Botswana is in a dilemma of whether to produce its own power at high costs and create employment or import cheaper electricity from neighbouring countries. Botswana is trying to balance 'domestic self-sufficiency at a very high cost and dependence on external sources in the hope of reducing own expensive costs' (Botswana Daily News, March 9, 1995).

Many countries utilize what can be termed a 'tier-approach'. Here, the government owns and controls the generators of water and electricity while local authorities or private firms or both will be left to the distribution of those utilities. This model could enhance the commercialization of the utilities without tampering with the strategic aspects they imply. The government, in this respect, can satisfy its objectives and at the same time allow competitive forces (though in a limited manner) to play some role in enhancing efficiency.

Conclusions and recommendations

The study focused on the three utilities with a view of establishing ways of increasing efficiency of the operations and bringing down the cost paid by the final consumer. The major premise of the study was that the high costs of utilities in Botswana are due to a large extent to inefficiencies in running the operations and that privatising the utilities would eliminate these inefficiencies, bring down the operating cost and ultimately, lower the cost paid by the consumers.

- The financial analysis revealed that the three utilities are not generating sufficient profits. This was reflected by the low profitability and liquidity ratios. Also it would appear that there are inefficiencies in working capital management, a fact substantiated by the poor liquidity ratios and the long average debt collection periods.

- We have ascertained that the composition of the boards of the utilities is heavily biased in favour of civil servants. This is not an ideal situation for organisations which are expected to pursue competitive strategies.
- There are unique geographic and technical factors which contribute to the high costs of utilities in Botswana. Even though inefficiencies in the operations could have contributed to some extent to the high utility costs, the main cause of the escalating costs is the high cost of producing and distributing these services in Botswana. Botswana is a large country with semi-arid climatic conditions and a small population which makes the costs of providing utilities to be relatively very high. Also the infrastructure required to establish a telecommunications network in a large sparsely populated country are very high. The utilities do not receive subsidies from the government hence the tariffs charged must cover all the costs.
- Privatisation of Utilities is not a Viable Option for Botswana in the foreseeable future. The reasons which normally trigger a government to privatise utilities in other countries are not a major driving force in Botswana. Privatisation is sometimes triggered by the fact that the government needs to borrow heavily to subsidise the utilities. In Botswana, the government is a net saver, hence there is no incentive for privatisation. Another disincentive for privatisation arises from the fact that the size of the Botswana economy does not allow for economies of scale, hence private investors might not be interested in acquiring a utility company.

Recommendations

We make the following recommendations on the issues of Privatisation and Governance.

Privatisation

Complete privatisation of water and electricity supply and distribution is not recommended. To increase efficiency in the supply of these essential services we recommend that the following approach should be adopted:

- The BPC and WUC should be commercialised. These utilities should be required to run their operations just like any other commercial enterprise with no preferential treatment. These utilities should borrow funds at market going rates and pay taxes.
- The government should adopt the 'tier-approach' which allows for some aspects of the supply and distribution of utilities to be handled by private companies or local authorities. The government should continue to own and control the generators of water and electricity while the distribution is handled by private companies.
- Government should consider privatising BTC and breaking down the company into several companies dealing with different aspects of telephone provision service. Different companies could handle the sale of long distance telephones, telephone equipment sales, facilities for computer wide area network, etc.

Governance

- The system of appointing directors should be changed. The board should include non executive directors of sufficient calibre and number for their views to carry significant weight in decisions.

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