

'EVALUATION OF COMMERCIALISATION POLICY PERFORMANCE IN NIGERIAN STATE-OWNED COMMUNICATIONS AND POWER INDUSTRIES'

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INTRODUCTION

Background to the Study

Commercialisation of state-owned enterprises (SOEs) is one of the economic reform policies in the Structural Adjustment Programme (SAP) that was launched in 1986 to stem economic crisis in Nigeria. Deregulation of the economy has been a major issue in economic policy in Nigeria since the oil price failure, which started in 1979 and manifested in large scale fiscal deficits and public debts in 1980s. Various stopgap measures were adopted between 1979 and 1985 to redeem the economy from the externally induced crises. Some of those measures, however, only ended up worsening the problem, as the government expenditure cumulatively led to increase in the fiscal deficits, external debts and its growth-retarding servicing burden on the economy. The government then decided to undertake a more comprehensive economic adjustment programme.

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One specific policy that the government adopted as a major way of dealing with the size of public expenditure is privatisation and commercialisation of the SOEs. The objectives of the SOEs' reforms include enhancement of efficiency by improving allocation and use of resources through changes in prices and incentives to factor owners; improvement in the goal achievement orientation of the management; increase in competition; improved sales and increase in possibility of liquidation for those mismanaged (Shirley 1989). These reforms can involve a change in the ownership of an enterprise or part of an enterprise from the public to the private sector through sale of the public sectors' equity holding to the private investors, a case of *privatisation*. Or, it may be a process by which government controls of, and budgetary allocations to, SOEs are removed or at least significantly reduced, while the government maintains the ownership of such SOEs, a case of *commercialisation* either fully or partially. Since the adoption SAP policy measures in 1986, the Nigerian government has undertaken the two scales of reforms in the SOEs.

In the Nigerian economy, there has been serious problem of excessively high costs of production generally and in the industrial sector in particular. The astronomical cost according to Okigbo (1997) and Iwayemi and Ayodele (1995) enters the production function indirectly because of inefficiency in the production and supply of public utilities and poor maintenance of the economic and social infrastructure. These extra and unnecessary costs were due to be removed or at least be reduced significantly using economic adjustment policies among which are commercialisation and privatisation of the public utilities and other infrastructure. It was reasoned that government ownership and control of SOEs were the cause of the large scale inefficiency that prevailed in the public sector. Since the costs incurred by organisations as a result of irregular supplies of utilities and poor infrastructure are still observed to be very high and outrageous, there is need to question the effectiveness of the commercialisation policy which set out to address the inefficiencies in the public utility sector.

However, the issue in the present context of the Nigerian economic policy making is not questioning the soundness of the goals of commercialisation policy. Given that the policy has been embarked on for about a decade now, it is pertinent to raise some questions on the performance of the policy: how much of the set objectives has been

achieved since the initiation of the reforms of the SOEs? and what can be done to enhance the achievement of the policy objectives?

The evaluation of the performance of reform programmes such as commercialisation of SOEs, which has resulted in serious costs in the economic accounts of the Nigerian households, deserves a professional assessment. It calls for an empirical economic analysis of the policy performance with the aim of making recommendations on policy enhancing measures. As the World Bank (1990) reveals, lack of post-policy performance analysis has been identified as a major problem in the process of policy implementation in the LDCs. Some good policies are often abandoned because of lack of such assessment. Again, timely evaluation of a policy programme may reduce dead-weight costs of the policy on the tax-payers as the policy can be reviewed in time to enhance its effectiveness and social benefits.

In order to reach any concrete conclusion regarding the assertion that some SOEs are producing the predicted effects of the policy, some basic questions must be answered. First, what are the indicator variables that should be used for the measurement of the policy performance in the SOEs? Second, using some economic and social indicators of performance, what is the true performance of the commercialisation policy on selected SOEs? Third, what are the areas of the SOEs' activities in which some policy reviews are required to enhance their economic and social performance? These are some of the problems which this study sets out to solve.

The major aim of this study, therefore, is to select some measurements indicative of the effectiveness of commercialisation policy and use them to assess the performance of the SOEs on which the policy has been implemented in Nigeria. The other objectives of this work are as follows:

- i. to assess the extent to which commercialisation policy has been executed in the three SOEs selected for this study across the Nigerian economy;
- ii. to carry out analysis of changes in performance indicators within SOEs overtime and execute a comparative analysis across the SOEs;
- iii. to assess the efficiency of resource employed in SOEs and the change in productivity of inputs during the policy period; and

- iv. to identify measures that the government should implement in order to increase the rate of attainment of the policy goals of improved efficiency and output growth in the SOEs under study.

Justification for the Study

This study is embarked on as an attempt of giving solution to the idolised problem of paucity of research studies on post-policy analysis in the LDCs which is attributable to lack of data. The situation in Nigeria is not so remarkably different from the general scarcity of empirical and extensive studies when considering the post-commercialisation policy evaluation of the SOEs performance.

There is need to appreciate the relevance of commercialisation policy in Nigeria. Primarily, the SOEs in the commercialisation list were those whose levels of performance prior to the reforms were too poor for immediate privatisation. Their level of dependence on government subvention and loans (which were later written off by the government) was so high that gradual reform measures such as commercialisation was conceived to be better than privatisation. Before reforms in 1986, some 56.6 per cent of the investment in the SOEs were in the utilities and services sectors that are now commercialised. The share of government total loans to SOEs similarly reveals that public utilities and transportation borrowed an average of 51 per cent in 1986-1992, followed by the manufacturing with 45.4 per cent. Since commercialisation was aimed at increasing the SOEs' financial self-sustainability which in turn is to pave way for eventual privatisation, there are some evidences that the policy was expedient and that it could have achieved quite some of its objectives. An evaluation is required to unravel the relative strength of the policy achievement.

Fundamentally, the study is concerned with only SOEs which have been commercialised. There are a few reasons for the choice of this group of SOEs. First, the commercialised organisations were mostly those regarded as purely economic enterprises which can do well in a free market situation, and are really performing close to that expectation after the implementation of the commercialisation. The commercialised SOEs were regarded as strategic enterprises either because their products are essential inputs to many production activities or their products are crucially social necessity. Some of the commercialised enterprises were so classified because of the inability of domestic investors to buy up and

run them efficiently at that time, an indication of capital market limitation. Again, some SOEs are still highly dependent on the government and hence on tax-payers for credits to meet their inefficient production gap. But beyond that, their capital structure and their existence as SOEs have represented fiscal commitment of government resources over the years. This calls for stock-taking to assess the social benefit-cost effects of their performance. The choice of three SOEs, namely, National Electric Power Authority (NEPA), Nigerian Telecommunications Limited (NITEL), and the Nigerian Postal Service (NIPOST), was particularly informed by the basic input services they provide to the production system.

The intended significance of this study is four-fold. First, it is aimed at minimisation of policy cost to the government. It is a known fact that where policy is formulated, reviewed, or discontinued based on correct observed data, it costs less to the government in terms of fiscal obligation and its political reputation and stability. Second, the result will provide the managers of the affected SOEs with an unbiased assessment of their performance thus forming a source of guide for internal organisation of the SOEs to achieve their objectives. Third, the society both the consuming public and more importantly the tax-payers, will ultimately get higher streams of private and social benefits if the level of efficiency of the SOEs is eventually increased. By evaluating commercialisation policy in Nigeria, the study demonstrates the extent to which the organisational reforms encapsulated in commercialisation have achieved the policy goals of increased efficiency and growth. Finally, this study is advantageous in the cost savings plan. This is because it is presenting a general evaluation of the commercialisation policy in Nigeria thus ending the repeated demands for funding of a single-institution case-study on the same research issue. Ultimately, the work will enrich the knowledge materials available for LDC's policy evaluation.

Background to the Soes Selected for the Study

What is NITEL today started in 1886 when the British Colonial Power in Nigeria established a wireless contact between Lagos and London under the Cable and Wireless Company (CWC). The establishment of telephone services in government offices followed, this. Telecommunications infrastructure was purposely developed to support the colonial administration set up, the internal services was provided by

the government Post and Telecommunications (P & T) Department while the CWC carried out the external services. This parallel arrangement lasted till 1985 even though after independence in 1960, government took over CWC and set up a limited liability company called Nigerian External Telecommunications (NET). With effect from January 1985, government merged NET and the telecommunications arm of P & T to form a new company called Nigerian Telecommunications Limited (NITEL) while the postal unit still remains a government department called Nigerian Postal Service (NIPOST) to handle postal services only.

Historically, therefore, NIPOST evolved from the postal services department of the P&T into a separate organisation in 1985. The scope of services of NIPOST has been expanded to include new products such as transportation of cargo/passengers, speed-mail delivery and secretarial/business services.

Electricity generation in Nigeria began in 1896. The Nigerian Electricity Supply Company (NESCO) commenced operations as an electric utility company in Nigeria in 1929 with the construction of a hydroelectric power station at Kurra Falls. The Electricity Corporation of Nigeria (ECN) was established in 1950, while the first 132 kV line was constructed in 1962 to link Ijora Power Station to Ibadan Power Station. Also, in 1962, the Niger Dams Authority (NDA) was established with a mandate to develop the hydropower potentials of the country.

In 1972, ECN and NDA were merged to form the National Electric Power Authority (NEPA) as a monopoly, charged with the responsibility of generating, transmitting distributing and selling of electricity nationwide. The monopoly status was maintained until 1998, when it ceased to have an exclusive right over power production and sales. This study will therefore be particularly concerned with these three commercialised SOEs to facilitate in-depth evaluation of their performances in view of the extra-budgetary burden they constitute to the government, and ultimately on tax-paying public.

One feature common to these three SOEs is that they have for a long time remained government monopolists in the provision of their services. In addition to this, they have been fully owned and controlled by the Federal Government. Also, they were not seen by government as profit-making organisations from the onset and they depended on government for supply of funds especially for their capital development. They were operating at a questionably low level of performance

compared to their private sector counterpart. The desire to improve their economic activities has resulted in the ongoing commercialisation programme.

The study is presented in five sections including this Introduction. The next section is on literature review and also gives the theoretical framework for the analysis, while section three deals with the methods of analysis adopted. The presentation and discussion of results are done in section four. The study is concluded at section five.

LITERATURE AND THEORETICAL REVIEW

Review of Related Literature

Generally, the justification offered for state ownership of economic enterprises includes the unwillingness of the private sector to invest on socially acceptable ventures and terms and; in the LDCs, the need for rapid economic development to catch up with the industrialised countries (Newbery, 1992). The LDCs have so many development constraints, which would make rapid economic transformation through the sole efforts of the private sector a mirage. The development theorists defended the position that public sector should extend its investment financing to those enterprises that require indivisibly bulky capital outlay since such investments are hindered by shortage of domestic capital accumulation as result of low savings on account of low disposable income.

Consequently, the public sector in the LDCs invested in key industries to boost industrial growth. Further, from economists standpoint, certain public goods are better left in the hands of government as a natural monopoly because of the underlying benefits of large scale economies to be gained. Despite the soundness of the developmental role thesis of government direct participation in ownership of productive enterprises, such active participatory commitments are discovered to be massively bedeviled by inefficiencies at a higher scale than what is comparatively observed in the private sector. If market failure is taken to be the basic reason for government direct involvement in the ownership of economic enterprises, then, market indicators are strongly reporting government inefficiency in its activities in SOEs. Paradoxically therefore, market efficiency in resource allocation is the basis for public sector reforms (Shirley, 1989). The superiority of the private sector in resource utilisation and profit performance come largely from the freely competitive market environment in which they operate without legislative shield from failure and bankruptcy (Kay and Thompson, 1988).

The failure of the state to allow SOEs which cannot perform efficiently to face the penalising economic returns of inefficiency, which is liquidation, has been the cause of unaccountable attitude that has culminated in general poor performance of the SOEs (Shirley, 1989; and Swanson and Wolde - Semail, 1989). The inefficiency has been experienced widely among the Nigeria SOEs. Hutcheson (1996) estimates huge economic losses caused by NEPA unreliable power supply and inefficient management, and by state-owned fuel refining and distribution system. He also highlights dead-weight losses (of over US\$3 billion) mounted on the economy due to the malfunctioning of energy sector alone during the first half of 1990s. The effects of the inefficiencies have manifested in colossal fiscal burden, which has lingered and pressurised the growth in government deficits, public debts and unnecessary tax burden on the income earners.

Overextended and poorly performing SOEs have also slowed the growth of the private sector in many developing countries. The government sometimes ensure the availability of critical inputs to the SOEs, thus giving them competitive edge over the rivalry private sector producers (Kikeri, *et al.*, 1994). However, there is convergence on the assertion that it is more advantageous and efficient to have SOEs whose activities are freed from government regimentation and bureaucracy. Thus, appreciation of divestiture, or at least operational reforms, of SOEs which is currently ongoing in many countries, developed and less developed alike, is anchored on the gain of efficiency in resource allocation under a market situation (Galal, 1990). Jones (1991) however established the fact that efficiency level does not necessarily depend on ownership structure of an organisation, but that a flexible decision-making management that is less subjected to exogenous authority, a set of well-defined organisational objectives, and set of predetermined evaluation rules, are required and necessary for achievement of efficiency in either the private or public sector.

On the contrary, Newbery (1992) maintains a more definite position about ownership structure. He classifies enterprises into those that can operate in any unregulated market situation which are those that should completely be divested by the state; while the enterprises producing social services and utilities produced by large natural monopolists should be loosely regulated by the government. This classification calls for caution in the process of reforms of the SOEs. The

caution becomes more important in the pre-industrial economies of the LDCs than it is for the post-industrial economies of the western nations. For the LDCs there is need to put the process of the reforms in proper perspective by giving answers to questions such as what, when and how to privatise (Newbery, 1992, and Kikeri, *et al.*, 1994). Answers to these questions are pertinent in attending to structural rigidities existing in the factor markets and in resolving developmental needs of the economies, while justifying their political autonomy in the process. Shirley (1989) and World Bank (1990), thus emphasise the need for phasing economic reforms generally and SOEs' reforms particularly in the LDCs.

In Nigeria and other LDCs there is more to the argument for partial reforms (commercialisation) than the market structure. Some organisations must be controlled to check the excesses resulting from the lack of free market competition. Yet the government is also interested in the distribution of the shares of some SOEs across economic, political and ethnic groups thus making commercialisation of some SOEs a more realistic policy given the peculiar situation in the Nigerian political economy (Obadan and Ayodele, 1998).

Commercialisation of SOEs entails freeing the managerial decision processes of the SOEs in order that the management can take independent decision for which it is responsible and as a result of this autonomy it becomes accountable. Shirley (1989) and Jones (1991) have listed the required framework for the reform of SOEs to include, an autonomous but accountable management and board of directors setting measurable objectives, devising ways and means of achieving the set goals, and evaluating its achievements against the objective. The role of the government in the process is to behave as the private equity-holders who set long range general goals and hold the board of directors, which in turn holds the management, responsible for the level of achievement attained.

THEORETICAL ISSUES IN COMMERCIALISATION

In assessing the impact of commercialisation policy, three major measurements of organisational performance used by Martin and Parker (1997) come to mind, namely, costs of production, productivity and profit level of the selected SOEs. Conservation of costs in the process of production and productivity growth are very crucial measurements of performance of the commercialised SOEs in Nigeria since reckless

spending by the management and poor attitude to work in SOEs have been identified to be major causes of poor performance (Zayyad, 1991). Again, since the primary goal of the SOEs marked out for commercialisation was not profit-making (though this is not ruled out of the question), their performance analysis should emphasise financial self-sustainability that would reduce fiscal burden on the society. It should also emphasise increase in output per factor input, productivity growth and factor efficiency, and enhance cost-saving operations.

The theory of the firm addresses the behaviour of firms within an economic space. The firm's optimisation entails: the maximisation of output (which implies the minimisation of costs); and by extension, the maximisation of the difference between revenue and costs (that is, maximisation of the profit).

Under some special conditions, the classical rule for firms' behaviour can be adjusted to accommodate special characteristics of some firms. This is because not all business organisations are set for the pursuit of profits. Some are interested in the maximisation of market share/patronage, maximisation of the quality of output so as to maximise growth in consumption, depending on the type of markets where the producer is operating.

In a SOE, the goal of production is different from that in pure private settings. Cost minimisation, to a SOE, connotes somewhat different thing compared to a pure private firm. In a SOE, the capital funds are provided by the government. Some of the funds are interest-free but has some moral costs (or some form of moral hazard) attached to them such as the loss of internal power and control. At times, such loss of control entails financial losses that come about as a result of imposition of some extraneous decisions on the SOE by the government. Such imposition is commonly observed in employment, selection of board of directors and managers, contracting of external loans, award of contract and government intervention in other internal affairs, of the SOE. For the SOE, cost minimisation implies its maximisation of autonomy and control over the affairs of its establishment. This means if SOEs can minimise its deficit financing, then its autonomy can be increased and profit position may improve.

In Nigeria, internal autonomy of the SOEs has been greatly eroded and commercialisation was aimed at improving financial independence and self-control. The objective function of the SOEs is

thus minimisation of deficits' subject to the internal budget requirement (negative) plus sales (positive). There are many ways that this can be attained by reduction in output or increase in prices, depending on the output price elasticity and income elasticity facing the product. Decrease in deficits can also be achieved through down-sizing of workforce (through retrenchment and temporary lay-off). This can also be achieved through improvement of skills and efficient employment of the present workforce. The choice will depend on the cost to the SOE in terms of strikes and opposition by the workers.

Data Analysis

Analysis of Financial Performance

In a typical social-oriented organisation like NIPOST, which focuses more on social service and rather little on operational sustenance and much less on making profits, the impact of commercialisation of its activities has to emphasise the primary goal of the policy rather than the long term profitability. For NIPOST, therefore, ratios used in the analysis of its financial response to the policy include deficit to income, subvention to income, personnel cost to income, personnel cost to current expenditure and current deficit to subvention ratios. The deficit to income ratio generally shows a tendency towards a decline except in 1995 when the level of current deficit was higher than income by 11.4 per cent. In 1996 and 1997 this ratio ranged from 33.6 to 53.1 per cent, respectively. Also, the ratio of subvention to internally generated income has also been falling in the period covered, except in 1995. The deficit to income ratio indicates the extent of support required from the government to meet the running expenses.

A fall in this ratio, therefore, indicates that there is improvement in income generating effort, or that a reduction in wasteful spending – both of which alludes to improvement in efficiency of the organisation. The fall in the ratio of subvention to income tells virtually the same story of improved income-generating capacity. However, the decline in this ratio can also mean that government is reducing its subsidies to NIPOST, which has been one of the objectives of commercialisation. The observed development occasioned by commercialisation prompted establishment have been revised in a way that maximizes gains from available income opportunities. For instance, prior to the reorganisation that accompanied NIPOST's commercialization, new products such as EMS/Speed post.

Mail Passenger Service, Electric Mail Project, Post Bank, etc. were not exploited. These products have increased NIPOST's income over the years. Between 1992 and 1995 the revenue generated through EMS/Speed post increased from N62.3 million to N136.7 million – over 119 per cent increase, and in that 1995 this product accounted for 23.9 per cent of NIPOST revenue.

One of the appreciable ways by which NIPOST has responded to the policy of commercialization has been effective management of its personnel cost. Even though the general trend in salary/wage bill has been increasing between 1992 and 1996, the increase has been well managed such that wage bill has never doubled the previous years level. This is commendable cost management given the rapid wage increases that have taken place in the economy during the period, and considering the fact that NIPOST is still under the civil service structure. The main reason for the drop in labor cost has been the downsizing of the work force from 22,321 in 1994 to 19,258 and further down to 14,500 by 1996 and 1997, respectively. As a result, personnel cost to expenditure or income ratio have been falling as shown in Table 1.

Table 1: NIPOST Financial Ratios

Amount (in N'million), Ratios (in percentage)	1992	1995	1996	1997
Revenue	297.11	572.16	981.7	991.50
Recurrent Expenditure	574.29	1209.73	1312.0	1517.93
Current Deficit	250.18	637.57	330.3	526.43
Personnel Costs	271.38	523.29	563.5	481.32
Overhead Costs	275.91	686.44	764.7	1036.61
Government Subventions	291.32	757.84	530.36	491.0
Deficit to Income Ratio	84.2	111.4	33.6	53.1
Subvention to Income	98.1	132.5	54.0	49.5
Personnel Costs to Current Expenditure	49.6	43.3	42.9	31.7
Current Deficit to Subvention	85.9	84.1	62.3	107.2
Personnel Costs to Income	91.3	91.5	57.4	48.5

Source: NIPOST Headquarters, Abuja.

The post has traditionally provided the one sure and reliable method of communication both commercial and personal. For a very

long time paper communication had dominated the entire globe but recently, this position of monopoly has been eroding by new methods of electronic communication such as Facsimile, E-mail and the Internet. In reaction to this, the NIPOST to apply to the government to be made a parastatal since it had remained part of the government department. This autonomy was granted in 1992 when it was reclassified as a parastatal. This provided the organisation with the muscle and latitude to control and implement its predetermined activities and enable it reposition itself in relation to its declared objectives among other pertinent positive developments.

Arising from its new status, the number of mails handled increased tremendously. In 1988, it handled only 293.68 million mails, made up of 79.87 million locally posted and 213.8 million received from abroad. In 1992, the number of local mails stood at 258.59 million while those received from abroad was 192.83 million. The local mails increased by 224.5 per cent. The number of total mails handled rose to 578.1 million in 1995, comprising 236.6 million posted locally and 341.5 million received from abroad. These figures are shown on Table A1 in the Appendix.

Capital expenditure in the establishment has increasingly shifted towards the provision of facilities that would directly impact on income generation performance of the organisation. For instance, of the N637.1 million used for purchase of transport vehicles in 1997, only N75 million or 11.8 per cent was spent on purchase of cars, while the rest was allocated to purchase of lorries, pick-up vans, motor cycle and bicycles which are used in mail delivery. But generally, there has been expenditure budget overrun in NIPOST, even throughout the period of the commercialisation. This can be observed in Table 3.

On the average, since 1992, NIPOST has been overshooting its budget by 56.6 per cent. The budget overrun is worsened by the fact that revenue targets were largely unmet. The revenue targets and actuals are presented in Table 2. Since the commencement of the commercialisation policy, NIPOST has been entangled in serious budget constraints of unmet revenue targets and overrun of budgeted expenditure. Thus, its finances have been that of operating at unattainable income/budget frontier. This actually poses a serious threat to its survival in the face of commercialisation.

Table 2: NIPOST's Budgeted and Realised Expenditure and Revenue

Year	Budgeted Expenditure (in N'million)	Actual Expenditure (in N'million)	Expenditure Over-run to Budget (%)	Revenue Target	Amount Generated	Deviation (in N'million) as a rate of Budget (%)
1989	107.25	112.45	5.20 4.85%	70.95	74.93	3.98 5.6%
1992	342.17	547.29	205.12 59.94%	392.57	297.11	95.46 24.32%
1995	746.82	1209.73	462.91 61.2%	665.99	572.16	93.83 14.1%
1996	685.73	1312.0	446.27 51.55%	1119.12	981.78	137.22 12.3%
1997	988.02	1517.93	529.91 53.63%	1106.36	991.5	114.86 10.38%

Source: NIPOST (various issues) *Annual Report and Accounts*, with additional data from NIPOST Headquarters, Abuja

With respect to its efficiency target, NIPOST usually reports meeting up to 90 per cent of its performance target. This is a testable assertion that can be evaluated against the score by its service-consuming public. However, there is a general impressive opinion about its current level of performance in that letter can now be received across the country within a week or two compared to the previous poor state of 1-2 months for Nigerian inland mails.

The partial commercialisation of NIPOST has been on course for about seven years now. The following changes can easily be observed in the corporation:

- (i) Engaging multiple production activities and emphasising competition. For example, in this category we have the EMS/Speed post, which provide courier/expedited mailing that is meant to compete with private courier operators such as DHL and UPS, and post office business centres aimed at servicing the daily business needs such as computer services, electronic mailing and photocopying to the customers. Other products include mail-passenger transport services; and agency service by which NIPOST can act as agents, on commission, to provide some services to some organisations such as examination bodies (sales of forms) or sales of books, etc for commission.

- (ii) Plans to achieve self-financing operation have not been successful because of over-centralisation and poor operational capital and environment. The NIPOST management can only review postage tariffs after the government through the supervisory Ministry of Communication has given approval. However, tariffs have been changing more frequently than they could have before the reforms. For example, in 1996 and 1997, there were postal tariffs and commissions review.

In spite of some observed positive developments, NIPOST still faces some internal problems that can frustrate the expected gains of commercialisation. For instance, their *Annual Report and Statement of Accounts* do not present some vital financial data. In most cases, the final accounts are not presented at all. Financial information about the organisation is difficult to deduce from the general statements in the report. Even where such accounts are presented, some of the rules adopted are questionable. For instance, the rates used for depreciation are ludicrous – no depreciation is charged for landed property/buildings; furniture, fittings and equipment as well as plant and machinery are depreciated at 10 per cent rate; while motor vehicles are depreciated at the rate of 20 per cent.

NITEL was slated for full commercialisation during the first phase of the programme that started in 1988. During the period 1989-1999, NITEL has progressed to become a limited liability company that is independent of government grants even for its capital projects. NITEL's financial position reveals that the company is increasingly becoming profit making, as positive profits are being recorded in recent years as can be observed in Table A2 in the Appendix. In nominal terms, NITEL was noted to be consistently making losses in the early years of commercialisation, 1988-1991. But beginning from 1992 it has been recording profits at some increasing rates, except 1994 when there was a fall in the level of the nominal profit compared to the previous year's level. It is noteworthy that NITEL became a fully commercialised but government owned organisation in January 1992, from when its losses ceased.

Financial performance of NITEL can also be evaluated using some of its financial ratios. Generally, the performance of NITEL improved between 1992 and 1996, the period covered in Table 3.

However, the internal performance of the organisation vis-à-vis the accumulation of loans, though improving over the years due to improved increased sales-profit performance, has not been very impressive. This picture may be better if loans due and interest payable per annum is used; but figure of loans due in the current year was not available. Between 1994-99, the company has not collected any loan or subvention from the government³.

The size of personnel cost has been increasing during the period. This increase is, however, absorbed and more than offset by the fact that nominal profit has been increasing faster. Thus, profit per employee has been consistently higher and increasing faster than average wage rate (Table 3).

Electricity is generated in Nigeria through hydro and thermal sources. NEPA's available electric generating units include, five thermal and three hydro-power stations, with a total installed capacity of about 5876 megawatts (MW). The installed capacity has a considerable surplus since 1986, yet available capacity is frequently less than peak demand, creating severe supply-demand imbalance. Electricity generation has maintained a steady growth over the years. In 1970, a total of 1547.0 million kWh was generated but this rose to 10,765.4 million kWh in 1986 showing an average growth rate of 13.3 per cent per annum during this period. Subsequently it increased to 16,2115.5 million kWh in 1996 before it fell to 15,110.0 million kWh in 1998.

From available statistics, consumption has always lagged behind generation. In 1970 total electric energy generated was 1547 million kWh whereas amount consumed was 1272.8 million kWh giving a net surplus of

Table 3: NITEL Financial Performance

Financial Variable (in N'million) and Financial Ratio	1992	1994	1995	1996
Personnel Cost (in N'million)	330.57	651.07	1462.53	1979.71
Direct Cost	4033.18	2625.41	2451.97	5539.97
Sales Revenue	6367.28	10073.64	16885.94	22089.07
Income	6868.5	10409.16	17378.43	22963.39
Expenditure	6167.02	9123.6	14026.97	16188.14
Loans	10133.13	17288.28	22258.85	22365.98
Profit before Tax	701.48	1285.56	1891.82	6775.25
Earnings to Loans (ratio)	0.678	0.602	0.781	1.027
Expenditure to Loans	0.609	0.528	0.630	0.724
Earnings to Expenditure	1.114	1.141	1.239	1.419
Profit to Loans	0.069	0.074	0.085	0.303
Profit to Sales	0.102	0.124	0.112	0.295
Earnings to Direct Costs	1.703	3.965	7.088	4.145
Profit per Employee (N)	44397.34	88898.07	134133.86	487147.68
Average Wage Rate (N)	20922.15	45022.27	103696.11	142343.47

Source: NITEL Headquarters, Abuja

274.2 million kWh. Net surpluses for 1989, 1993, and 1996 were 5256.1, 4506.3 7002.1 million kWh respectively. Available data revealed, that Nigeria has suffered heavy energy losses as consumption has always lagged behind generation yet electric supply has been very unreliable leading to frequent power outages. It is estimated that energy losses range from 31.4 to 41.5 per cent between 1980 and 1996 due particularly to the problems associated with outdated transmission technology in the distribution. The rate of actual supply has been on the decline since 1994 as indicated in Table A3 in the Appendix. Peak consumption occurred in 1993 when 9998.3 million kWh was consumed but it fell to 8521.2 million kWh in 1998. This fall in consumption was largely due to the fall in actual supply as opposed to the total amount generated.

Activities in NEPA reflect the general trend in Nigerian government-owned organisations. During the period of trade booms, when electricity supply structures were developed, there was no problem of fund supply to electricity projects. Again, there was no serious concern for the maintenance of the equipment since they were relatively in their vintage in production.

By the break of 1980s, the horizon of NEPA financing changed. There was an upsurge in the demand for electricity; there was an increased need to provide for maintenance and depreciation; yet there was massive fall

³ NITEL Journal, March 1999, p. 2.

in government subventions and soft loans to the establishment due to the fall in government oil revenue. Unfortunately, partly because of government policy of aggressive electrification of rural communities, NEPA was not quick to adjust to the unfolding crises. This led to NEPA's incurring operating deficits. The deficits were compounded because of increasing resort to, interest-bearing borrowed funds for financing of its project. Financing charges were increasing significantly. This was contradictorily combined with government regulated (fixed) tariff for electricity. This made cost recovery difficult, setting a stage for increasing deficit. After the deregulation, NEPA has also been complaining about the rapid increase in the pump prices of refined petroleum products, which have pushed up their operating costs and worsened their deficit position. Nevertheless, going by the operating financial performance of NEPA in the 1990s, it can be concluded that the deregulation has, to some extent, removed the recurrence of operating deficits. This has been shown along with other financial performance indicators in Table 4. But there is no sustainable trend of earning operating surplus since the 1999 financial position shows a deficit of ₦1.99 billion or \$19.87 million.

Another issue of concern in NEPA's operating deficit is the corresponding high record of electricity consumers' debts owed NEPA. Although the private consumer debts are higher than those of governmental institutions, the latter is undoubtedly a more questionable debtor because those institutions are capable of paying such bills. The complaints about poor payment response in the private sector consumers are basically two sets of reasons:

- (i) Private consumers complain about arbitrary billing, which are sometimes not based on meter-reading but mere estimates. There is also the complaint of lack of meters in the newly electrified communities, which impairs proper billings and payments. Above all, because of poor quality of electricity supply, consumers are generally reluctant to pay their bills.

Evaluation of Commercialisation Policy Performance in Nigerian State-Owned

Table 4. Selected Financial Ratios on NEPA (Amount in ₦'000, Ratios in %)

Year	Total Revenue	Surplus/Deficit	Total Debts due NEPA	Debits by Private Consumers	Total Interests Paid by NEPA	Costs of Materials	Had Debt Provision	Debt Servicing Costs to Account Receivable ratio	Had Debt provision to Total Revenue	Surplus/Deficit to Total Revenue	Material Costs to Total Operating Costs	Government Account Receivable to Total Debt Owed to NEPA
1980	254264	89662	194958	135557	4610	29646	13132	2.36	5.16	35.26	18.01	30.47
1981	402910	120368	296290	263933	13118	47302	23970	4.43	5.95	29.87	16.74	10.92
1983	432416	62109	451943	344771	34624	54895	25682	7.66	5.94	14.36	14.82	23.71
1984	413120	48018	505672	360872	72236	55203	24409	14.29	5.91	11.62	15.12	28.64
1985	461219	51077	598036	412286	110877	53035	26759	18.54	5.80	11.07	12.93	31.06
1986	529480	-15355	660687	466663	189756	107272	30784	28.72	5.81	-2.90	19.69	29.37
1987	543746	-107307	757718	528765	409594	194167	31801	54.06	5.85	-19.73	29.82	30.22
1990	2586396	-804051	2173155	1161569	212937	686511	na	9.80	0.00	-31.09	34.18	46.55
1991	2850755	-230666	2733114	1453784	166533	522525	1812570	6.09	63.58	-8.09	20.86	46.81
1992	3117010	564350	1690315	144924	111040	650844	1981367	6.57	63.57	18.11	2.33	91.43
1993	5116329	112637	4104827	1905589	284857	538776	2714264	6.94	53.05	2.20	13.89	53.58
1994	7921142	375221	5923309	2804599	222401	917184	3880505	3.75	48.99	4.74	15.12	52.65
1995	13516308	2123645	9773096	5142762	1415651	1574811	3990847	14.49	29.53	15.71	15.57	47.38
1996	17852465	442780	15742012	8788334	1139106	1592608	8968782	7.24	50.24	2.48	11.53	44.17
1997	19075695	4307361	20779659	12127666	1015327	2046168	7915859	4.89	41.50	22.58	13.84	41.64
1998	19372072	571117	24888642	14693824	1036482	2033257	9362162	4.16	48.33	2.95	13.22	40.96
1999	33629544	-1986980	29653849	21143538	16528018	2700530	18084844	55.74	53.78	-5.91	8.67	28.70

Source: National Electric Power Authority (various issues) Annual Report and Accounts

- (b) NEPA's attitude towards revenue collection is poor. They supply electricity to consumers that do not have meters. The staff of NEPA who work in billing section are dishonest. They often act in ways that make the establishment's revenue to be diverted or that enhance the loss of revenue. This is a typical instance of moral hazard resulting from agency activities.

The massive electrification of rural areas has resulted in increased trade in electric equipment. There has been a rise in theft and vandalism of NEPA installations. The replacement of such equipment has added to NEPA's cost outlay.

Another problem concerning electricity industry in Nigeria is the structure of ownership and control. The supervisory ministry has often dictated the project to be executed, the costs of such contract and the contractors to be used. Such projects will not be economically profitable. There are many of such controversial contracts in the establishment, which have actually increased the financial burden of NEPA. NEPA officials agreed to the opinion that commercialisation policy has reduced the occurrence of such problems but there are still cases where government officials act in a transaction that could have rightly been completely internal affairs of NEPA.

NEPA is plagued with plethora of problems among them are:

- NEPA's operations are too large to be under one management particularly in our environment with poor managerial culture and undeveloped communications system;
- the authority experiences major breakdowns arising from outdated and heavily overloaded equipment due to a general lack of technical know-how;
- the organisation is poorly funded from budgetary allocations that arrive late and the internal machinery for fund generation is epileptic and poor because of inefficient billing and collection system. Thus, NEPA is heavily owed by a large number of its customers;
- the organisation suffers from poor preventive and routine maintenance culture that has resulted in huge energy losses and recently the organisation has been bedevilled by vandalism and pilfering of its

equipment. In fact, information from NEPA indicates that vandalism of equipment accounts for 20 to 30 per cent of NEPA's "black-outs".

The financial performance of NEPA shows that, on the whole, NEPA has swings in virtually all its financial ratios. In terms of its profit performance, there is no sustainability that can be observed – it has been swinging from surpluses to deficits back and forth. However, the concentration of deficit in the second half of 1980s and the beginning of the 1990s was reversed by the initiation of the commercialisation policy. However, in 1999 the deficit resurfaced. The ratio of surplus to total revenue has been very unstable even in a period where there was positive difference of revenue over costs. For instance, in 1992 that ratio was 18 per cent but in 1993 it fell to 2.20 per cent. It recovered to 15.7 per cent in 1995 but was not sustainable as it fell again to 2.5 per cent in 1996. Although, it swung up again in 1997, the trend reverted back to decline as at the end of the period.

Another problem that is facing NEPA is debt management crisis. NEPA owes heavily just as it being owed hugely. However, debts owed by NEPA are higher than whatever others are owing the establishment. This is principally because a good proportion of NEPA's payable debts is external and denominated in foreign currency. With the ongoing and persistent naira depreciation, NEPA's external obligations have been increasing. In the main, customers' debts to NEPA have been rising in recent years. The rate of growth of these receivable obligations is a serious source of worry for the ability of NEPA to self-sustain its financial plans.

The private sector has become increasingly involved in debts owed NEPA. The ratio of these debts that goes into bad debts has also been increasing. Many reasons have been offered for the increase in debts owed NEPA. The private sector complains about poor power supply situation that has led to rapid rise in possession of generating power sets. The implication of this is that the supply of electricity from NEPA is fast becoming a supplement (or standby) to generating sets. Thus, the threats of power cut can no longer be used to induce compliance to prompt payments of electricity bills.

The nominal prices of the products of the commercialised organisations were highly controlled and regulated during the pre-

commercialisation period. Electricity tariffs were kept unchanged between 1979 and 1989 at an average of ₦0.07 per kwh. Postal charges remained fixed at between ₦0.05 and ₦0.10 for local mails, and twice the local charges for international mails in the period 1979 to 1989. The price movement in the telecommunication sector prior to the deregulation was not any different because prices were generally fixed by the government. However, since the commercialisation programme began, these SOEs have freedom to adjust their prices. The energy charge per kWh for household and industrial consumers in 1999 was ₦2.60 and ₦4.74, respectively. For NIPOST, local mails currently bear ₦20.00 stamp; while NITEL's tariff for local telephone call is between ₦4.30 and ₦42.90, depending on if the radial distant of the call is less or greater than 700km. However, neither the consumers nor the service providers (the SOEs) are satisfied with the price adjustments for while the clients are complaining about poor product quality, the SOEs are often of the opinion that the charges are below their operating costs.

DEA Results for NIPOST, NITEL and NEPA

Apart from the evaluation of commercialisation policy based financial ratio, the data envelopment analysis is also adopted to assess the effect of the policy on technical efficiency and productivity in each of the firms in relation to the others. Here, the Data Envelopment Analysis (DEA) has been used in computing the relative change in technical and scale efficiencies, and total factor productivity changes.

The Data Envelopment Analysis (DEA) affords us an opportunity to calculate the change in total factor productivity and the decomposition of it into pure technical change and technical efficiency. This is done with the use of the Malmquist productivity index. Fare, *et al* (1994) specified an index for measurement of change in total factor productivity in the form of a geometric mean of two Malmquist productivity indexes as follows:

$$M_t(x^{t+1}, y^{t+1}, x^t, y^t) = \left[\left(\frac{D_0^t(x^{t+1}, y^{t+1})}{D_0^{t+1}(x^{t+1}, y^{t+1})} \right) \left(\frac{D_0^{t+1}(x^t, y^t)}{D_0^t(x^t, y^t)} \right) \right]^{1/2} \quad (1)$$

The first parenthesis inside the bracket represents efficiency change and the second, technical change. This is a general statement of the productivity at the production point (x^{t+1}, y^{t+1}) in relation to point (x^t, y^t) .

y^t). If the value is greater than unity, it represents positive growth in total factor productivity (TFP), in period $t+1$; the value one shows that there is no change in TFP; whereas, value less than unity indicates a fall in TFP. D_0 is the distance function that measures the maximal proportional change in output required to make (x^t, y^t) feasible in relation to technology. The variables (x, y) are vectors of inputs and outputs. The superscripts $(t, t+1)$ represent present and future time, respectively.

Equivalently, this index can be expressed as

$$M_t(x^{t+1}, y^{t+1}, x^t, y^t) = \frac{D_0^{t+1}(x^{t+1}, y^{t+1})}{D_0^t(x^t, y^t)} \left[\frac{D_0^t(x^{t+1}, y^{t+1})}{D_0^{t+1}(x^{t+1}, y^{t+1})} \frac{D_0^{t+1}(x^t, y^t)}{D_0^t(x^t, y^t)} \right]^{1/2} \quad (2)$$

where:

$$\text{Technical Efficiency change} = \frac{D_0^{t+1}(x^{t+1}, y^{t+1})}{D_0^t(x^t, y^t)}$$

$$\text{Technical change} = \left[\frac{D_0^t(x^{t+1}, y^{t+1})}{D_0^{t+1}(x^{t+1}, y^{t+1})} \frac{D_0^{t+1}(x^t, y^t)}{D_0^t(x^t, y^t)} \right]^{1/2}$$

Adopting the output approach to the problem, Coelli (1996) begins with the assumption of constant returns to scale technology and then proceeded to decomposition. The constant returns to scale, output-oriented linear programme (DEA) is used for calculation of the distant function, $D_0^t(x^t, y^t)$. The following is the constant returns to scale output-oriented linear programme used for calculation of the distance function $D_0^t(x^t, y^t)$.

$$\begin{aligned}
 (a) \quad [d_o^t(x_t, y_t)] &= \text{Max } \phi, \lambda, \phi \\
 \text{st.} \quad -\phi y_{it} + Y_{it} \lambda &\geq 0, \\
 x_{it} - X_{it} \lambda &\geq 0, \\
 \lambda &\geq 0, \quad \dots\dots\dots(3)
 \end{aligned}$$

The remaining three LP problems are;

$$\begin{aligned}
 (b) \quad [d_o^{t+1}(x_{t+1}, y_{t+1})]^{-1} &= \text{Max } \phi, \lambda, \phi, \\
 \text{st.} \quad -\phi y_{i,t+1} + Y_{i,t+1} \lambda &\geq 0, \\
 x_{i,t+1} - X_{i,t+1} \lambda &\geq 0, \\
 \lambda &\geq 0 \quad \dots\dots\dots(4)
 \end{aligned}$$

$$\begin{aligned}
 (c) \quad [d_o^t(x_{t+1}, y_{t+1})]^{-1} &= \text{Max } \phi, \lambda, \phi, \\
 \text{st.} \quad -\phi y_{i,t+1} + Y_{i,t+1} \lambda &\geq 0, \\
 x_{i,t+1} - x_{it} \lambda &\geq 0, \\
 \lambda &\geq 0, \quad \dots\dots\dots(5)
 \end{aligned}$$

$$\begin{aligned}
 (d) \quad [d_o^{t+1}(x_t, y_t)]^{-1} &= \text{Max } \phi, \lambda, \phi, \\
 \text{st.} \quad -\phi y_{it} + Y_{it} \lambda &\geq 0, \\
 x_{it} - x_{i,t+1} \lambda &\geq 0, \\
 \lambda &\geq 0, \quad \dots\dots\dots(6)
 \end{aligned}$$

The solutions to LP (3) to (6) above are used to obtain the change in TFP and to calculate change in scale efficiency and technical change indices.

The technical efficiency ratios with constant returns to scale (CRS) and variable returns to scale (VRS) are given as:

$$\begin{aligned}
 TE_{(CRS)} &= AP_c/AP \\
 TE_{(VRS)} &= AP_v/AP \\
 SE &= (AP_c/AP)/(AP_v/AP) = AP_c/AP_v
 \end{aligned}$$

These ratios are used in the computation of the technical efficiency and the decomposition of it.

The data used for the DEA were mostly transformed. Analysis of Malmquist's productivity and efficiency indices used data on quantity of output and factors of production. The number of labour hour used in the current year's production is calculated by simply multiplying the total number of employees by the average number of hours supplied by each worker during the year. This method has been adopted in some studies involving the production analysis (as in Moreney and Toevs, 1979 and Mlambo, 1993). The average hours of work was put at 2080, while the number of employees was supplied in the companies' annual reports.

The derivation of physical capital was done using the total amount set aside for depreciation as a base. The argument here is that the value of current wear and tear of capital stock in current year's production represents the monetary worth of capital that enters the current stream of production. Depreciation, therefore, equals the price of capital (that is, the user's cost of capital) multiplied by the physical quantity of capital. User's cost of capital (U_k) is computed as follows:

$$U_k = P_i(r + \alpha)$$

where: P_i = price of investment goods (producer price of electrical equipment was used);

r = interest rate (here, average nominal lending rates were used because real interest rate would become negative given the high rate of inflation - for example, 57 and 72.8 per cent for 1995 and 96, respectively)

α = average depreciation rate.

The capital employed was thus derived by computing user's cost of capital for each year and using it to deflate the value of depreciation. Similar approach was adopted to derive materials used in current production. The running costs (which, of course, do not include labour

costs and depreciation) are assumed to be the costs of materials. The price index for electricity and fuel was used as a deflator. The output was derived from sales, deflating it with aggregate (rural and urban) price index for "other services".

The results of the DEA of efficiency and productivity changes are presented in Table 5. The most consistent performance is recorded for NITEL, where the level of efficiency remained unchanged over the years. The level of technological change has been falling during the five years considered. In the second year, NITEL's technological change declined to 83.9 per cent level or a fall of 16.1 per cent from the 1992 technological level. Throughout the rest of the period, NITEL's technological change showed a decline.

NIPOST's total productivity has improved over the period except in 1995 when there was a decline. The level of efficiency, as indicated by the Malmquist index means, shows that there has been marginal increase in the level of efficiency. The scale efficiency for this organisation which increased only in 1993 by 18.6 per cent, remained unchanged for the following two years but recorded a decline of 11 per cent in 1996 (Table 5).

Table 5 Malmquist's Efficiency and Productivity Changes Indicators

	CRS Technical Efficiency	Technolo- gical Change	Pure Technical Efficiency	Scale Efficiency Change	Total Factor Produc- tivity Change
1993 NIPOST	1.186	1.675	1.00	1.186	1.980
NITEL	1.00	0.839	1.00	1.00	0.839
NEPA	0.802	0.416	0.813	0.987	0.333
1994 NIPOST	1.00	1.095	1.00	1.00	1.095
NITEL	1.00	0.692	1.00	1.00	0.692
NEPA	1.247	0.360	1.230	1.013	0.448
1995 NIPOST	1.00	0.532	1.00	1.00	0.532
NITEL	1.00	0.911	1.00	1.00	0.911
NEPA	0.807	1.160	0.828	0.974	0.936
1996 NIPOST	0.890	1.624	1.00	0.890	1.446
NITEL	1.00	0.781	1.00	1.00	0.781
NEPA	1.239	6.587	1.207	1.026	8.160
Annual Means					
1993	0.996	0.976	0.938	1.058	1.053
1994	1.082	0.716	1.077	1.004	0.745
1995	0.936	0.868	0.943	0.991	0.793
1996	1.043	2.997	1.069	0.972	3.462
Organisation's Means					
NIPOST	1.019	1.232	1.00	1.019	1.265
NITEL	1.00	0.806	1.00	1.00	0.806
NEPA	1.024	2.131	1.020	1.00	2.469
Overall Mean	1.014	1.389	1.007	1.006	1.513

The DEA results for NEPA's performance had some impressive results for TFP change. But when the yearly changes are evaluated, it is observed the result is spurious since all years recorded declines except the fifth year where there were very high increases, which came about as result of increase in electricity tariff. Nevertheless, the level of efficiency change in the NEPA is on the average about two per cent throughout the period.

Annual means of Malmquist index also show that the three organisations have been performing poorly in terms of efficiency changes and in other indices. Apart from the fifth year, where the NEPA's

performance positively increased, the means for technical change and TFP growth would have been negative. Generally, the evaluation of efficiency shows that, in the three establishments, improvement in the levels of efficiencies is about 1.00 per cent. This weak performance may be attributed to initial adjustment difficulties experienced by each of the SOE in the course of implementation of the commercialisation policy. Such problems include government overseeing ministries resisting the SOEs' autonomy, management reluctance at accepting accountability and decentralisation as the new rule, workers' agitation against retrenchment of redundant labour and competitive wage fixing and the public resistance to deregulation of prices of SOEs' products.

Policy Recommendations and Conclusion

There are some general problems observed among the three SOEs, which inhibit the effectiveness of the commercialisation policy. Some of these problems are the poor preparation of the firms for commercialisation programme, acute lack of investment funds for capital projects and lack of independence from the government in decision-making processes. Others are management resistance to decentralisation and accountability in the new process, workers' agitation against retrenchment of redundant employees and competitive wage fixing, and public complains about poor quality products with arbitrary increases in their prices.

Despite the enormity of the problems, these SOEs have some opportunities and strengths that can be exploited to enhance their performance. For instance, these SOEs have large stock of capital equipment and infrastructure and if such stock is well maintained, it can be used to better the organisations' financial performance. Moreover, the large sizes of these SOEs, if well managed through modern corporate decentralisation and electronic technique can engender decreasing costs since these organisations are generally subject to increasing returns to scale.

These SOEs are operating in an economy where there is a large market for their outputs. This provides them with opportunity to make a large scale turnover with high profits. Besides, the Nigerian economy is well endowed with both human and material resources, which can be harnessed for business growth. For instance, Nigeria has very high number of waterfalls and cataracts by which small dams can be constructed; just like her spread in human settlements and interconnected

commercial nerve-centres can provide high postal and telephonic business opportunities.

In view of the large sizes of the organisations under study, it will be commendable that they adopt decentralised approach of management to lubricate their decision-making processes. Such management reorganisation/decentralisation should be both longitudinal and latitudinal (that is, across management cadres and geographical location of the establishment). This will ensure a speedy process of decision-making and minimise waste that is associated with long chain of decision hierarchy in the management scheme.

The size of these SOEs which is often reckoned as a problem is basically the problem of over-centralisation in the management process of these SOEs. It is observed, however, that one major characteristic of these SOEs (which are sometimes referred to as regulated industries) is the existence of economy of scale (Cowing and Stevenson, 1981). Given effective decentralization of the management organogram, scale expansion in these SOEs will, therefore, result in harvesting of increasing returns to scale.

The level of inefficiency will continue to be experienced in these SOEs due to inappropriate staffing strategy inflicted on them by government intervention in their employment matters. Government interference in employment and placement of workers should be removed so that the SOEs may use their economic needs and the qualification(s) of employees as bases for recruitment and placement of workers. Also, there should be effective training of staff. In these ways the productivity and efficiency of labour will increase. Another gain from increased autonomy of the firms is access to the capital market. If the SOEs can freely access loans from the banking sector, they will be alleviated of some of their financial difficulties. Besides, if they are solely responsible for retiring such debts, the loaned capital will serve as "gearing factor" in their financial management, which will engender financial discipline in these SOEs.

More importantly, since commercialisation is aimed at increasing the involvement of the SOEs in market oriented activities, it is important to recommend that the ongoing packaging of NITEL and some sectors of NEPA for privatisation should be pursued with diligence. However, to make room for further gains from the commercialisation in NITEL and NEPA, there is need to increase its technical capacity by revitalisation of

breakdown capacity and expand their existing capacity. These two SOEs, even though they are improving, their financial performance are not able to meet half the effective demand for their products in the country. The large market potentials available to these SOEs can be exploited through expansion, unbundling and subsequent privatisation of some of their activities.

In conclusion, commercialisation policy has enhanced the independence of the target organisations, increased the financial performance of these establishments and impacted positively on government budget deficits since less funds now flow to SOEs as subventions. Nevertheless, the public has not benefited sufficiently from the policy, as outputs from these SOEs are poor in quality with large shortages. The policy should be reviewed, as intended by the government, to allow these organisations more freedom in taking decisions. NITEL, for instance, has performed well enough to embark on capacity expansion and undergo privatisation; while NEPA should be revitalised, some sectors of it unbundled and privatised. NIPOST can be given a boost through increased autonomy, decentralisation and increased capitalisation of its profit-making lines of activities.

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Appendix

Table A1: Number of Postal Articles Handled ('million)

Year	No. of Articles Posted in Nigeria	No. of Articles Received from Abroad	Total No. of Postal Articles Handled
1988	79.87	213.80	293.68
1989	106.77	223.44	330.21
1990	152.83	226.79	379.62
1991	Na	Na	Na
1992	258.59	192.83	451.42
1993	212.86	277.54	490.39
1994	218.82	318.89	537.50
1995	236.65	341.55	578.20
1996	197.40	387.07	484.47

Source: Federal Office of Statistics (various years) *Annual Abstract of Statistics*

Table A2 NITEL's Profit Position 1988 - 1996

Year	Profit/Loss (N'm)	Change in Profit/ Loss (%)
1988	-586.37	
1989	-1615.26	175.47
1990	-1789.42*	10.78
1991	-142.62	92.03
1992	701.48	591.85
1993	3570.62	409.01
1994	1285.56	64.00
1995	1891.82	47.16
1996	6775.25	258.13

Note: * From 1990, company tax has been levied on NITEL's profit/loss.

Source: NITEL Headquarters, Abuja.

Table A3: Electricity Generation and Consumption (million kWh)

Year	Generation	Consumption
1970	1547.0	1272.8
1979	6225.5	4030.3
1982	8531.6	6047.1
1986	10765.4	7374.8
1989	12812.4	7556.3
1991	14166.6	8079.9
1993	14504.6	9998.3
1994	15531.0	9593.9
1995	15856.0	9435.9
1996	16211.5	9209.4
1997	16169.1	8843.2
1998	15110.0	8521.2

Source: CBN 2000