Discussion Paper No. 2001/86

Incentive Structure, Civil Service Efficiency and the Hidden Economy in Nigeria

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September 2001

Abstract

Successive governments in Nigeria have introduced reforms aimed at improving the efficiency and effectiveness of the civil service. Still, the service remains inefficient and incapable of reforming itself, let alone the rest of the economy. Corruption has become an endemic feature of public sector activities, with the oil booms and busts distorting the incentive structures of civil servants and other agents in the economy. It is estimated that the 'hidden' economy now comprises the bulk of economic activity.

To turn the tide will demand the creation of an efficiency-based incentive scheme that links reward to performance. Political interference in the daily operations of the civil service needs to be minimised if the confidence of the public service is to be restored. Wage incentives are also important in raising morale. An underpaid civil service will not be able to perform its 'patriotic duty'.

Keywords: Nigeria, oil boom, civil service reform, corruption

JEL classification: H1, H71, H72, O10, O20, Q33, Q38, O55

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This study has been prepared within the UNU/WIDER project on Institutional Capabilities, Reform Ownership and Development in SSA which is directed by Dr Steve Kayizzi-Mugerwa.

UNU/WIDER gratefully acknowledges the financial contribution to the project by the Government of Italy (Directorate General for Development Co-operation).

1 Introduction

> It is not my father's work. Work or no work, I must collect my salary.
> (Sefiya T. Ajayi, former Nigerian Civil Service Commissioner)

As a major instrument for implementing government policies, the civil service in Nigeria is expected to be professionally competent, loyal and efficient. Nonetheless, it is now denounced, as elsewhere in Africa, for being corrupt, poorly trained and poorly attuned to the needs of the poor. Ironically, the civil service is expected to play the key role in managing and implementing reform programmes in the country. This has led to a number of complex agency problems, yet to be resolved. However, it is broadly acknowledged, and Nigerian experience attests to this, that when the incentive structures in the civil service remain poor, its efficiency as well as ability to effect policy, such as that directed toward reducing poverty, will remain very low.

The main objective of this paper is to analyse the incentive structures and efficiency of the Nigerian civil service. Section 2 of the paper describes the evolving structure of the Nigerian civil service, dwelling on major legislation, wage enhancing measures, civil service commissions and reform measures since the early 1980s. Section 3 analyses the nature of incentive structures in the civil service and discusses their impact on work morale, efficiency and corruption. It also provides an empirical analysis of the extent of the hidden economy in Nigeria and its impact on production in the rest of the economy. Section 4 discusses how to approach the incentive problem in the Nigerian civil service, including issues of measurement and analysis. Section 5 concludes the paper.

2 Evolving structure of the Nigerian civil service

2.1 Structure and functions of the Nigerian civil service

The origins of the Nigerian civil service date back to the beginning of the twentieth century with the introduction of British rule in Nigeria. The colonial masters introduced a dual system of administration: direct rule in the South and indirect rule in the North. A more formal civil service emerged only in 1914, when the Northern and Southern Protectorates were amalgamated to form the present geographical space called Nigeria. This, however, did not immediately lead to a unified civil service until 1945 when significant changes were introduced, based on the recommendations of the Walayn Committee. These changes included the admission of Africans into higher grades of the civil service and the creation of the Central Public Service Board. In 1954 the Federal Public Service Commission was established and granted full powers to appoint, promote, dismiss, and discipline junior civil servants. At Independence on 1 October 1960, the powers of the renamed Federal Civil Service Commission were extended to cover all civil service grades.

The main function of the Nigerian civil service is to implement government policies. However, its ability to do this has depended crucially on the form of government of the day. As will be discussed in more detail later the traditional role of the civil service in Nigeria has been severely diluted by the politicisation of the civil service in recent years, undermining its credibility and integrity. Presidents or State Governors have tended to listen more to their close political supporters and advisers than to professional civil servants. As a result, sharp friction arises between the advisers (usually political appointees) and the civil servants (career administrators), with the advisers always getting the upper hand. The consequence of this has been the weakening of the civil service, with workers lacking motivation, since professional prospects are bound to diminish in a politicised civil service.

In a recent summary of the factors affecting the efficiency of the Nigerian civil service, Ajayi (1998) has noted the following: Over staffing and the closely related poor remuneration of employees in public service are key factors. Secondly, there are the issues of poor assessment of manpower needs and the use of wrong criteria to appraise staff performance. These two have led to poor recruitment procedures, inadequate training and ineffective supervision. There tends to be a lack of qualified technical support staff as opposed to the abundance of general staff. The failure to carry out periodic assessment of manpower needs of the various departments leads not only to uneconomic systems of compensation but also to inadequate job description and poor physical working conditions. There has also been considerable political interference in the process of personnel administration, leading to improper delegation of power, ineffective supervision and corruption. The resulting apathy has in turn led to unauthorized and unreasonable absenteeism, lateness and idleness and, notably, poor workmanship.

For the above problems, relating to what is now generally referred to in the country as the ‘Nigerian factor’, to be addressed, it is imperative that appropriate incentive structures to raise worker morale be put in place. Although successive Nigerian governments attempted to address the above problems, it was ultimately not in their interest to tackle the ‘Nigerian factor’. It was the means for their survival.[1]

2.2 Civil service reforms in Nigeria

The Nigerian civil service has undergone a number of reforms in the past decade with the aim of enhancing its efficiency and effectiveness. In fact, there have been no less than 10 major commissioned reports on the problems of the civil service in Nigeria (Table 1). However, the bulk of these reports focused more on salaries, wages and conditions of service than on the more fundamental structural and attitudinal challenges of the civil service. Two commissions on the civil service, those led by Adebo and Udoji, deserve special mention here because they attempted to take a broader look at impediments to the performance of the civil service. Whilst the Adebo Commission recommended the setting up of a Public Service Review Commission to examine fundamental structural issues,[2] the Udoji Commission focused primarily on the issues of increasing efficiency and effectiveness in the public service. The Udoji Commission recommended, among others, the introduction of an open reporting system for

1 This explains, perhaps, why Ibrahim Babangida, once asked the economists in his government to explain why, in spite of the widespread corruption and lack of social capital, the Nigerian economy had not yet collapsed!

2 These included the role of the Public Service Commission, as well as the structure of the Civil Service and its conditions of service and training arrangements.

performance evaluation, as well as unified grading and salary structures covering all established posts in the civil services. To enhance policy coherence, the Commission also suggested the creation of a senior management group, comprising administrative and professional cadres.

While the recommendation of the Udoji Commission found easy passage, thanks to the oil bonanza of the 1970s, which raised government income substantially, the period after the boom proved more difficult. High public sector borrowing requirements coupled with a growing external debt had forced the government to embark on structural adjustment programmes, even as the civil service experienced an unprecedented rise in indiscipline and the rest of society witnessed a general increase in corruption and other crimes.[3]

Table 1

Civil service reforms in Nigeria 1934-1994

	Year
Hunts Commission	1934
Harragin Commission	1945
Foot Commission	1948
Pillipson-Adebo Commission	1954
Gorsuch Commission	1954
Mbanefo Commission	1959
Morgan Commission	1963
Eldwood Commission	1966
Adebo Commission	1971
Udoji Commission	1972
Dotun Phillips	1985
Decree No. 43	1988
Ayida Review Panel	1994

Source: Ikejiani-Clark (1997), Williams (1997)

As in many African countries the civil service became unnecessarily hierarchical, less results oriented, conflict-ridden and sectarian and was concentrated in urban areas, even following the rapid creation of new states in Nigeria. The environment was clearly not one to encourage high productivity nor was it appropriate for retraining and developing managerial capacities among civil servants.

These shortcomings made another restructuring of the civil service inevitable. This came in the form of the Civil Service Re-Organisation Decree No. 43 of 1988.[4] Its objectives were to promote a better execution of laws and policy; ensure an efficient and expeditious administration of government business; optimise expenditure and improve the economy; and increase efficiency in the implementation of the government's policies and programmes through the encouragement of the specialisation of personnel.

3 See, for example, Williams (1997).

4 See Civil Service Commission (1992) and Williams (1997).

The reforms were also aimed at increasing professionalism; better alignment of the civil service within the presidential system of government; decentralisation and deregulation; combination of authority with responsibility; enhanced accountability; increased checks and balances; general modernisation; and enhanced effectiveness, efficiency and speed of operation.

However, the Decree also introduced a number of rigidities in the system which would harm the reform process. First, the posts of Head of the Civil Service and Permanent Secretary were abolished. The replacement for the latter became a political appointee. Moreover, ministers now became the accounting officers instead of permanent secretaries as in the previous arrangement. The intention had been that a combination of the tasks of chief executive with those of accounting officers would improve the oversight of the ministers over their ministries and departments, thereby enhancing overall efficiency. This was not achieved.

These and other limitations and constraints meant that the Civil Service Reorganisation Decree No.43 of 1988 would not have a lasting impact. Williams (1997) has discussed why this was the case. First, knowledge about its provisions among civil servants and government functionaries was fairly limited. Moreover, for fear that their power would be eroded, some ranking officers slowed down important aspects of its implementation. Above all, the government had had a poor strategy for its implementation. Funds for the introduction and entrenchment of its provisions were lacking, while the deployment of officers, a central feature of the reform, had not been thought through. Thus ultimately, implementation was piece-meal and lacking, for example, sanctions for infringing on the reform's provisions.

To address these issues, the government set up the Ayida Review Panel (1994). It led to the repealing of Decree No. 43 and to a comprehensive overhaul of the civil service. The Ayida Review also depoliticised the civil service. The posts of Permanent Secretary as well as Head of the Civil Service were returned. The former is now the chief accounting officer in the ministry while the Secretary to the Government now acts as the Head of the Civil Service.

2.3 The public sector labour market

Any analysis of the Nigerian labour market is likely to be fraught with difficulties, due to lack of comprehensive statistics on labour force. The existing labour market survey data are limited and highly aggregative in nature, while the quality of official statistics is questionable, as there are wide discrepancies between the information reported by various government agencies. The segmented nature of the labour market, with three distinct categories, urban formal, urban informal and rural sectors, also complicates matters further.

The public sector is the main employer in the formal sector. However, the latter accounts for only about 10 per cent of total employment in the country (Ikpeze, 1996, Collier, 1986). The number of civil servants employed by the Federal government is very small, but with a male bias. Informal estimates from the state-level bureaucracies also indicate that proportionately more men than women are employed by the public sectors. Besides access to education, where men have traditionally been favoured, religious factors have also played a significant role in this differentiation (Table 2).

Table 2

Employment, by gender, in the federal civil service of Nigeria 1988-1993

Year	Total (Number)	Male (%)	Female (%)
1988	255,579	87.2	12.8
1989	270,020	86.9	13.1
1990	287,278	84.5	15.5
1991	182,254	75.4	24.6
1992	191,329	76.0	24.0
1993	197,202	75.9	24.1

Source: Federal Office of Statistics, *Annual Abstract of Statistics*, *1997*

Available statistics indicate a low turnover in the federal civil service, but the bulk of the labour turnover in recent years was on account of retirement rather than outright dismissal or resignation. For example, around 85 per cent of the 373 persons discharged from the Federal civil service in 1993 had attained their retirement age. This figure contrasts sharply with a mere 13 per cent of only 109 civil servants discharged in 1990[5]. Similarly, nearly 30 per cent of discharged civil servants have had their employment terminated in 1991 and 22 per cent dismissed in 1989. The civil service reforms referred to above have had much influence on the timing and pattern of resignations, terminations and dismissal of civil servants in Nigeria.

The government's owned tertiary institutions have been important in providing training and staff development programmes for the public sector. This has been complemented by courses provided by the Administrative Staff College of Nigeria (ASCON), specifically designed for various cadres of civil servants. However, since enhanced skills do not command a premium in an environment that is not supportive of a professional civil service, civil servants have not been too enthusiastic about retraining, with more than 35 per cent offered admissions to ASCON in 1995 failing to take up the offers. This figure is even higher in the case of courses that would normally lead to increased managerial responsibilities such as, personnel management, industrial relations, public administration and project management.

There are two possible reasons why some civil servants see no direct benefits in retraining in programmes that exceed six months. First, there is fear of displacement. Second, for many civil servants the opportunity cost of training (that is the lost income from bribery, corruption and other rent-seeking activities associated with their jobs) is very high. Still, there are some civil servants in the country who, while genuinely interested in acquiring vocational training, are unable to do so for lack of political support at the local level. In many cases, it is a case of superiors seeking to eliminate the competition that would arise if more of their staff were trained and hence liable to promotion.

5 Federal Office of Statistics, *Annual Abstract of Statistics*, Lagos, Nigeria, 1995 and 1997.

2.4 Wage erosion and political patronage

As stated earlier, the successive civil service reforms in Nigeria had one common objective: to enhance the effectiveness and efficiency of the civil service. This became necessary, particularly since the mid-1980s, when the civil service was expected to play an important role in the implementation of structural adjustment and other reforms, introduced by the government. Among others, the reforms tried to address economic growth, wage and employment issues, as well as training and human capital development.

Civil service wages and salaries in Nigeria are not only low, but have also declined in real terms in the past two decades. With the exception of the oil boom period of the 1970s, real wages declined on average by 14 per cent during the period 1970-1992 and 34 per cent during the 1980s (Table 3). Much of this decline was on account of the high rates of inflation that the economy was experiencing. Although successive wage and salary reviews have tried to reverse these trends, it has been on the whole difficult to protect wages from serious erosion.

A number of African countries also suffer from wage declining trends and wage compression. For example, Haque and Sahay (1996) have found that in all but one of thirteen African countries, high-skill wages declined more than low-skill wages during the period 1975-1985. Similarly, Nunberg and Nellis (1995) have found that by the mid-1980s, the salary of top civil servants was less than ten times the lowest-paid rank in many African countries. Although recent attempts have been made by some African countries (e.g. Ghana) to decompress salaries, such reforms fall short of the targeted goal of 13 to 1 (Rose-Ackerman, 1999).

Table 3

Real wages (trends, annual % change)

and inflation rates (period average %) 1970-1997

	1970-1979	1980-1992	1970-1992	1992-1997
Real Wages	5.25	-14.12	-34.17	n.a.
Inflation	14.36	19.79	17.29	36.22
Maximum	29.17	44.00	43.15	72.81
Minimum	3.40	5.56	3.40	7.36

Source: National Salaries, Incomes and Wages Commission of Nigeria, *Revised and Harmonised Public Service Salary Structure and Allowances for the Federal Public Service*, various years; Federal Office of Statistics of Nigeria, *Annual Abstract of Statistics*, various years. The trend in real wages was estimated by regressing the logarithm of real wages against a time trend over the different sub-periods.

Civil servants are the least paid group of workers in Nigeria. Wages in private manufacturing are, for example, much higher than those in the public sector (Table 4). Although there are no comparative data by grade level, anecdotal evidence suggests that public sector wages in Nigeria are lower than private sector wages. Clearly, there is a need to make the salary structure of the civil service more competitive in order to correct the image of the civil service. A demoralised and disgruntled worker whose image has been unduly tarnished cannot be an effective instrument of change. Recently, there have been two successive attempts to increase the public sector minimum wage in Nigeria. The first was introduced by the military regime of General Abdulsalami Abubakar in 1998 when the minimum wage was increased dramatically from US$1.20 to US$41.77 per month (using a parallel market rate of 83.8 Naira to a $1).

The second attempt at raising the national minimum wage was undertaken in May 2000 by the new democratically elected administration of President Olusegun Obasanjo. The public sector minimum monthly wage was raised to US$53.91 (at the parallel market rate of N102.02 = $1.00), that is by about 30 per cent in nominal terms, but without compensating sufficiently for the wage erosion of the past decade. Not only did minimum wages continue to be fixed, and thus quickly eroded by inflation, but were sometimes beyond the budgets of state governments. The latter were thus unable to pay workers, at the new minimum wage, resulting in conflict between labour and state governments. What was meant as an incentive to public sector workers, in a bid to enhance productivity, thus became an impediment to the performance of state governments.

Table 4

Monthly Wages and Salaries per Semi-skilled Worker

in Selected Manufacturing Industries, 1990*

	Naira
Dairy Products	13,000
Grain Mill Products	8,000
Soft Drinks	22,000
Malt Liquor and Malt	13,000
Drugs and Medicine	9,000
Glass and Glass Products	18,000
Tyre and Tubes	23,000
Soap, Detergent and Cosmetics	10,000
Fabricated Metal Products	10,000
Electrical Appliances and Housewares	11,000

Source: Federal Office of Statistics, *Annual Abstract of Statistics*, 1997.

Note: *In 1990, the minimum wage payable to civil servants was about N500 per month. A university graduate on Grade Level 8 Step 10 in the civil service earned less than N5,000 per month.

Political patronage is an important factor in the incentive environment of the public sector in Nigeria. Civil service appointments often tend to reflect this in larger measure than the skills and professional qualifications of the individuals appointed. This has turned the Nigerian civil service into a highly politicised institution. The changes in Nigerian leadership in the past decades have also led to disruptive shifts within the civil service. Given this erratic nature of the institution over the years, constructing workable incentive structures, based on better training, wages, promotion and increased responsibility, has been next to impossible. The civil service, in spite of possessing a highly trained cadre of officers, has tended to drift along, overwhelmed by the expectations placed on it by the government and the general population, and yet having to meet its own daily survival.

2.5 Tension between federal bureaucracy and state bureaucracy

Nigeria operates a three-tier system of government: federal, state and local governments. At present, the country consists of 36 'autonomous' states,[6] each of which has its own civil service. Each state also consists of a number of local administrative units.[7] There is also an administrative gap between the states and between the local administrations within each state.

Generally, there are several formal and informal channels of federal-state co-operation, particularly in areas of housing, national economic planning, agriculture and sourcing of finance from both domestic and international markets. The need for co-operation was clearly spelt out in the 1979 Constitution, emphasising a co-ordinated approach in the field of economic planning and socio-economic development, with the Federal Government playing the leadership role (Okoroji, 1997). Two intergovernmental bodies play a major role in the management of federal-state relations in Nigeria. One set of organ, which enjoys constitutional status, is the Council of State and the National Economic Council, whose responsibility was to advise the President of the federation concerning economic affairs of the federation, especially on measures necessary for the co-ordination of the economic programmes of the various governments of the federation.[8] The other intergovernmental body consists of committees established by convention (formal channels) specifically to deal with matters relating to concurrent list such as education, health and agriculture.

In spite of all this, federal-state relations in Nigeria over the years were largely characterised by issues that were more conducive to tension rather than harmony. Some of these areas of tension between federal and state bureaucracies involve revenue allocation, jurisdictional conflict over the powers of the federal and state governments in certain matters such as land, the role of federal bureaucracy in state capitals and state liaison offices in the federal capital, principle of federal character in civil service

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6 The number of states has increased dramatically over the years: 12 (1967), 19 (1976), 21 (1987), 36 (since 1990).

7 The total number of local governments in the country is 500, ranging from 11 in Yobe State to 18 in Kano State.

8 This power of the National Economic Council is explicitly set out in Section 140, Schedule 3, Paragraph 12 of the 1979 Constitution of Nigeria.

appointments. Of all these issues, revenue allocation is the most contentious. This was demonstrated recently by the proclamation by some state governments to take direct control of the resources (particularly crude oil) found within their own territorial boundaries. Such a decision prompted the federal government to take all the 36 state governments to the supreme court of Nigeria over the resource control issue.

3 Corruption and rent-seeking in Nigeria: an investigation

3.1 Introduction

Mismanagement and corruption are major problems in Nigeria and many African countries, adversely affecting the effectiveness and efficiency of the civil service.[9] The phenomenon of corruption poses a number of questions, not necessarily confined to the civil service. What are its socioeconomic determinants? Is it a culture-bound phenomenon? Has economics, as a discipline, anything to offer in explaining it?

Corruption in Nigeria can be analysed in terms of the forces of supply and demand. There is usually a supply, as well as demand price for corruption. It is often argued that bureaucratic interference in the market mechanism is one of the principal causes of corruption. What sorts of interventions raise the demand-price of corruption by bureaucrats and under what circumstance will the citizens increase their supply price of corruption? Are the demand and supply forces much more different in Nigeria and other developing countries than in developed countries? Do dictatorships such as those, which, until recently ruled Nigeria, increase the demand price of corruption? Equally interesting questions arise in the context of the impact of corruption. Some amount of corruption, it is said, is necessary for the smooth functioning of governance. It oils the wheels of the administration.

The Financial Times (1993) has argued that Nigerians see nothing wrong with “using public funds to disperse favours to a cousin or to build a well for one's village, as it is an informal means of redistributing wealth.” Such an act is considered as a lubricant or a positive sum game of “give and take” which is widely practised in employment offers, award of contracts, import licences and even in obtaining admission to institutions of higher education. The visible riches of the corrupt and the greedy spur the poor to imitate their life styles and modes of wealth acquisition. But does a market-oriented economy necessarily yield corruption free outcomes than a dirigiste economy?

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9 The simplest definition of corruption is that it is the misapplication of public resources to private ends. In a broader sense, however, corruption can be defined as “an arrangement that involves an exchange between two parties (the demander and the supplier) which (i) has an influence on the allocation of resources either immediately or in the future; and (ii) involves the use or abuse of public or collective responsibility for private ends” (Macrae, 1982, p.678).

3.2 Causes of corruption and rent-seeking: an overview

The literature on rent-seeking and directly unproductive profit-seeking economic activities provides some insight into the questions raised above. Policy-induced sources of corruption arise when pervasive regulations exist and government officials have discretion in applying them. Private parties may be willing to pay bribes to government officials in order to obtain some of the rents generated by the regulations. As Tanzi (1994) argues, the problem becomes worse when regulations lack simplicity and transparency.

Table 5

Determinants of corruption

1. Wage incentives	a) inadequate pay b) fringe benefits and other financial incentives
2. Inefficient internal control:	a) inadequate supervision and control systems b) lack of explicit standard of performance for employees and organisations c) poor recruitment and selection procedures for personnel d) too few or too many (non-transparent) rules and procedures (red tape)
3. Insufficient external control:	a) law and order tradition, checks and balances b) lack of information made available to the public and freedom of press c) mechanisms for citizens' participation and complaint d) difficulty of proving cases in court e) high social acceptance of corruption
4. Statutory penalty rate:	a) amount of fine, prison sentence b) administrative sanctions c) prohibition of being ever re-employed in the public sector d) penalties for relatives
5. Amount of distortions:	a) pervasive government regulations b) high statutory tax rates, non-transparent tax regulations c) provision of government services short of demand (government monopolies)
6. Other factors:	a) cultural factors b) culture of bureaucratic elitism and education of civil servants. c) leadership d) ethnic diversity

Source: Van Rijckeghem and Weder (1997)

The following are some of the government-induced sources of corruption that have been identified in the literature (see Mauro 1995, 1997): trade restrictions; government subsidies; multiple exchange rate practices and foreign exchange allocation; and low wages in the civil service relative to private sector wages or per capita GDP. Table 5 shows these and other determinants of corruption, many of which fit Nigeria and many other African countries.

Although the bulk of the theoretical literature on rent-seeking behaviour has generally concentrated on quantitative restrictions on international trade, it can be extended to cover other forms of government restrictions on economic activity. Whilst such rent-seeking competition may sometimes be legal, in many instances it takes illegal forms, such as bribery, corruption, smuggling and other "hidden" activities. Multiple exchange rate practices and foreign exchange schemes (whose importance may be proxied by parallel exchange market premia, such as those used by Levine and Renelt, 1992) also lead to corruption. In developing countries, in particular, where state-owned commercial banks ration foreign exchange at the discretion of bank managers, the supply price of bribes could be substantial.

Table 6 shows the official and parallel exchange rates for the Naira from 1987-2000. The gap between the official and parallel rates, a proxy for incentive structure in the economy as a whole, has increased considerably, particularly during the later part of the Abacha regime (1996-1998) and the Abubakar Abdulsalami's one-year tenure in office (1998-1999) where the official exchange rate was fixed at around Naira 22 to a dollar. The post-May 1999 democratically elected government of President Obasanjo, however, replaced the official rate with interbank foreign exchange market (IFEM) rate. This dramatically reduced the parallel market premium from over 200% to just 4%.

Endowments of natural resources, such as crude oil, provide a major source of economic rents since they can be sold at a price that far exceeds their cost of extraction. Sachs and Warner (1995) argue that resource-rich economies are more likely to be subjected to extreme rent-seeking behaviour than are resource-poor economies. In Nigeria, for example, oil wealth is said to be one of the main causes of the pervasiveness of rent-seeking activities and corruption. The oil boom of the 1970s was responsible for the "Dutch Disease" syndrome in Nigeria; including contraction of agriculture (the principal non-oil tradable sector), appreciation of the real exchange rate and loss of the competitiveness of agricultural exports. Although the appreciation of the exchange rate was an inevitable response to the oil boom and inevitable adjustment to a new equilibrium situation, the use of oil boom resources to finance large-scale public expenditure programmes introduced large scale political corruption in Nigeria. The perennial fuel crisis in Nigeria (the world's sixth largest producer of crude oil) can be attributed to corrupt practices, including hoarding, smuggling and willful damage to government-owned refineries.

Table 6

Official and parallel market exchange rates for the Naira (Naira/$)

Year	Official	Parallel*	Year	Official	Parallel*
1987	4.016	4.601 (15%)	1994	21.996	n.a.
1988	4.537	6.048 (33%)	1995	21.889	n.a.
1989	7.365	10.530 (43%)	1996	21.889	82.300 (276%)
1990	8.038	11.607 (44%)	1997	21.889	83.800 (283%)
1991	9.910	13.425 (35%)	1998	21.889	86.000 (293%)
1992	17.298	22.802 (32%)	1999	94.83	98.150 (4%)
1993	22.065	n.a.	2000	98.05	102.02 ((4%)

Source: World Bank, World Development Indicators 2000; Federal Office of Statistics, Annual Abstract of Statistics, various years.

Note:* Figures in parentheses represent the gap (percentage) between the parallel and the official exchange rates.

Sociological and/or cultural factors such as customs, family pressures on government officials and ethnicity constitute potential sources of corruption. In Nigeria and most African countries, although traditional values of gifts and tributes to leaders often lead to what Brownsberger (1983) describes as “polite corruption”, the extent of such corruption is relatively small. Much of Nigerian corruption is underlined by the ethics of dependency relations, ethnic loyalties and attitudinal tendencies, such as greed or love of ostentatious living, either in the culture at large or among a visible clique. It is also noteworthy that poverty, political instability and other societal forces raise the public servants susceptibility to corruption. This is especially so when public officials feel that opportunities may vanish following a *coup d'etat* or defeat at the polls or when their kinsmen place large demands on them (Colins, 1965; Nye 1961). Similarly, where accumulated wealth for the legal support of their activities or families is lacking, there is pressure on public officials and organisations to use public resources for personal or sectarian ends via embezzlement, the taking of bribes, or by distributing jobs and contracts politically. These sociological and cultural causes of corruption are likely to continue for a long time in Nigeria, unless credible legal enforcement measures are put in place. The forces, which deter corruption are often weak as some, if not most, of the law enforcement agencies are themselves corrupt. In addition, where politicians and civil servants are highly corrupt, professional organisations may be incapable of sanctioning their members. Thus there are no agencies of restraint.

3.3 Magnitude of corruption in Nigeria

Anecdotal evidence on the magnitude of corruption in Nigeria can be found in media sources and proceedings of various tribunals set up to investigate cases of alleged financial impropriety on the part of government officials. These include the following cases: the recent US$4 billion looted money by the Abacha regime in which the UK Financial Services Authority indicted 15 British banks (*Financial Times*, London, October 20 & 21, 2000) and the US$4.5 billion Secret Nigerian Debt Buyback Scheme (*Sunday Times*, London April 2, 2000). The UK Financial Services Authority and the Home Office are now launching their own investigations into the actions of the London banks and financial institutions named in the reports. There is also the $2.5 billion Ajaokuta Steel debt buy-back scam (*Today* Newspaper, Abuja, July 1 1997) involving Abacha's ministers. Similarly, the 'missing' $12.2 billion excess oil windfalls during Ibrahim Babangida's regime were yet to be accounted for (*Newswatch*, January 16, 1995). In addition, *Newswatch* (Vol. 8 No. 12, Nigeria, March 31, 1997) also reported fraudulent activities involving transfer of millions of US dollars abroad by officials of the Central Bank of Nigeria, including $80 million overpayment to Chase Manhattan Bank; reversal of entries on Paris Club debts to the tune of US$10 million; payments of US$27 million to SACE of Italy; large scale pilferage of vital external debts documents thereby making reconciliation impossible; and release of US$25 million to COFACE of France. There are also numerous cases of smuggling of petroleum products which have created unnecessary fuel scarcity in the country.[10]

It is to be noted here that Nigeria is not the only corrupt country in Africa. Cases corrupt practices can also be found in many African countries. The Mobutu episode is still fresh in the minds. Although the extent and magnitude of corruption may differ between African countries, corruption and rent-seeking opportunities are widespread in most African civil services. In Mozambique, for instance, serious cases of corruption were found in customs, business regulations, and foreign aid (Stasavage, 1999). Even Botswana, which provides an exemplary model of good governance in Africa, has had its reputation dented during the early 1990s by a succession of scandals involving powerful politicians (Theobald and Williams, 1999).

In spite of all the widespread of corruption in Nigeria and other African countries, it is noteworthy, however, that documented cases of corruption do not tell the whole story as they relate to isolated acts of corruption. It is therefore crucial to utilise some methodological approaches to measure the magnitude of corruption. One such approach is based on techniques for estimation of the size of the hidden economy. Bhattacharyya and Ghose (1998) argue that the disaggregated hidden economy estimates are very informative in identifying the growth of corruption. Evidence from India shows, for example, that the high rates of growth of the industrial sector's hidden economy during the 1980s and 1990s coincided with the timings of a large number of corruption cases uncovered by the police departments in India (Bhattacharyya, 1999).

A number of techniques have recently been employed to estimate the size of the hidden economy.[11] One such technique is the 'factor analytic' approach, based on the statistical

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[10] Details of some of this large-scale money laundering cases can be found *on Business Age*, Vol. 8, No. 104, December 2000 or their website (www.businessage.net).

[11] For a cogent discussion of these approaches, see Giles (1997).

theory of *unobserved or latent variables*. A variant of this approach is the MIMIC (Multiple Indicators and Multiple Causes) modelling, which is a special case of LISREL (Linear Interdependent Structural Relationship) statistical model of Zellner (1970), Joreskog and Van Thillo (1973), and Joreskog and Goldberger (1975).

A MIMIC is a structural econometric model for estimating an equation in which the dependent variable is unobservable (latent). Frey and Weck-Hannemann (1984) pioneered the use of MIMIC modelling in the context of the hidden economy. Since then, a number of other studies have employed this technique (Aigner *et al*. 1986; Schneider 1997; Giles 1997, 1999; Tedds 1998). It is a powerful technique for estimating the underground economy, as it allows for simultaneous interaction between multiple explanatory variables and multiple indicators of the hidden economy. The latent variable is linked, on the one hand, to a number of observable indicators (reflecting changes in the size of the unreported economy); and on the other hand to a set of observed causal variables, which are considered to be important determinants of the unreported economic activity. The MIMIC model equations can be written as:

$$y = \lambda\eta + \varepsilon \qquad (1)$$

$$\eta = \gamma' x + \zeta \qquad (2)$$

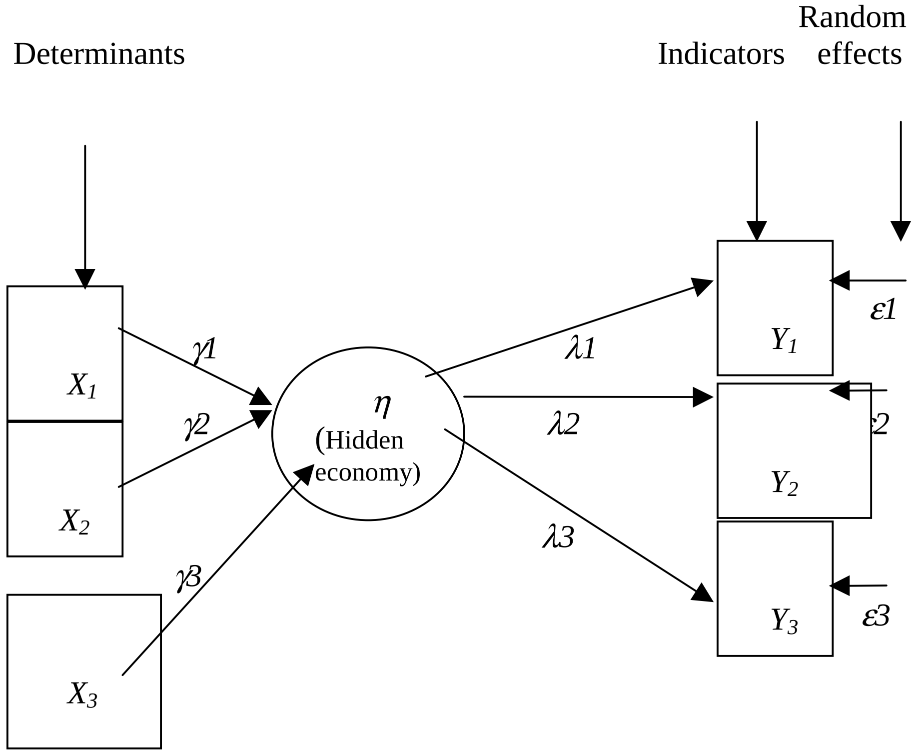
where y is a column vector of indicators of the latent variable, η, and x is a column vector of 'causes' of η. In other words, equation (1) is the measurement model for η and equation (2) is the structural equation for the latent variable, η. ε and ζ are the measurement and structural errors, respectively, and are assumed to be mutually uncorrelated.

Figure 1 shows the interrelationships between the (unobservable) hidden economy (η), its determinants (x) and the indicators (y). The theoretical literature on the hidden economy has identified four broad determinants: burden imposed by the public sector on individuals (TB), tax morality (TM), labour market conditions (L) and structural factors (SF). In this context, and for purposes of estimating the size of the hidden economy (η), equation (2) can be re-written as:

$$\eta = \gamma_1 TB + \gamma_2 TM + \gamma_3 L + \gamma_4 SF + \zeta \qquad (2a)$$

Figure 1

Path diagram for the hidden economy



The burden on the official economy may consist of burden of taxation (measured by either the average or marginal tax rate) and the burden of regulation (measured by the number of regulators or the ratio of the number of public sector employees to total employment). The *a priori* expectation on the coefficient of the tax "burden" is negative, implying that an increase in the burden will drive people into the hidden economy. Tax morality, however, reflects the readiness with which individuals leave the official economy. A decline in tax morality will reduce people's trust in government and will consequently increase their willingness to go underground. Frey, Weck and Pommerehne (1984) suggest that the consequences of tax morality can be checked by a growing intensity of public controls and a rise in expected punishment, which will reduce the return on hidden activities.

In the case of the labour market, it is hypothesised that the incentive to work in the hidden economy is high for the unemployed, since they can work in the underground economy while at the same time receiving unemployment benefits. It is noteworthy, however, that while the demand for underground activity rises with unemployment, it is also likely that the supply of job opportunities in the hidden economy will fall with rising unemployment. Overall, the effect of unemployment on the shadow economy is ambiguous, depending upon the elasticities of demand and supply with respect to the rate of unemployment.

The level of economic development can also influence the hidden economy. Individuals with low per capita real disposable income will have a strong incentive to hold multiple jobs and to pay taxes only on the first job (Frey and Weck-Hanneman 1984). Empirical evidence from Italy, however, suggests that the size of underground economy in the rich North is larger than in the poor South. This positive relationship between per capita income and hidden economic activity suggests that the supply of hidden economy jobs may increase with an increase in per capita income. The expected sign of the coefficient of the level of development, however, is a priori ambiguous.

The theoretical literature on the hidden economy suggests three indicators: the growth rate of the 'official' real GDP, labour market participation rate, and monetary variables. These constitute the elements in the *y* vector in equation (1) above. An increase in the underground economy implies that inputs (particularly labour) move out of the official economy, with a negative effect on the growth of the observed GDP. In the case of monetary aggregates, the literature hypothesises a positive relationship between hidden economy activity and cash-demand ratio, as the bulk of transactions are conducted in cash.

In utilising the MIMIC approach to estimating the size of the hidden economy in Nigeria, we use three types of determinants and two types of indicators of the hidden economy. The causal factors are: tax burden (measured by the share of taxes in GDP), inflation and real per capita income. We have not, however, included unemployment and sectoral variables in the list of determinants due to lack of reliable data. The two indicators used in the MIMIC analysis are changes in male participation rate (DMALEF) and changes in cash-demand deposit ratio (DCPDD). The growth rate of GDP is excluded from the estimation to avoid double counting.

Table 7

LISREL maximum likelihood estimates of the hidden economy in Nigeria

	RPERCAP	TAX/GDP	INFL
Coefficient	-0.32	0.46	-0.42
Standard Error	0.16	0.16	0.13
T-Ratio	-2.00	2.88	-3.21

Table 7 shows the estimated parameters of the MIMIC model for the Nigerian economy for the period 1960-1997. The LISREL coefficients of the tax rate (0.46), inflation (-0.42) and per capita income (-0.32) all possess the expected signs and are statistically significant at the 5 per cent. These estimated coefficients are then normalised to sum up to unity for purposes of determining the size of the hidden economy. Table 8 shows the estimates of the hidden economy for the years 1961-1997. The size of the hidden economy shows a rapidly increasing trend; it increased substantially throughout the seventies and declined in 1984-85 before rising again. The declining trend in mid-1980s probably reflects General Buhari's measures to curb corruption and indiscipline. Tagged 'War Against Indiscipline' (WAI) the short-lived era of the Buhari administration had succeeded in reducing widespread corruption in both public and private sectors of the economy. But with the ascendancy of General Babangida to power and abolition of the decrees, which empowered the WAI campaign, the level of corruption rose once again.

Indeed, the Babangida administration was widely seen as the most corrupt military regime in Nigeria, one that severely marginalised the middle class. Although Babangida's successor, the late General Sani Abacha, has reintroduced General

Buhari's WAI policy, renaming it 'War Against Indiscipline and Corruption' (WAIC), it was unable to stem the tide of corruption, although it is now acknowledged that the establishment of the Failed Bank Tribunals in 1995 had re-instilled some financial discipline in the banking system. Still, the hidden economy grew to record levels (over 60 per cent of GDP) during the Abacha era (1993-1997). The present anti-corruption bill signed by President Obasanjo is designed to put in place an appropriate institutional framework for dealing with the menace of corruption in Nigeria.

Table 8

Estimates of hidden economy in Nigeria, 1960-97*

Year	Naira Million	% of GDP
1960	4910.2	9.64
1965	7327.7	11.54
1970	10076.7	12.83
1973	13185.4	13.49
1974	24392.2	22.45
1975	27217.3	26.43
1980	40610.9	32.54
1981	37567.2	34.65
1982	39555.8	36.57
1983	46875.5	45.76
1984	30303.6	31.08
1985	37972.3	35.50
1986	40187.8	36.65
1987	40995.2	37.65
1988	47578.4	39.76
1989	54313.8	42.34
1990	56267.1	40.54
1991	61690.9	42.43
1992	65152.2	43.54
1993	83575.6	54.65
1994	89138.4	58.65
1995	102020.7	65.43
1996	107250.7	64.65
1997	101304.4	58.76

Note: * Estimates based on the LISREL methodology (see Table 7).

3.4 Impact of corruption in Nigeria

To evaluate the effects of corruption on the Nigerian economy, we utilise the estimated size of the hidden economy (a proxy for corruption) in an economic growth framework. The procedure follows a conventional growth model in which corruption is introduced as an input, in addition to labour and capital.[12] Table 9 shows estimated equations for labour productivity and growth rate of GDP in Nigeria during the period 1961-1997. In the labour productivity equations, the introduction of the time trend is intended to capture the growth (or lack of it) of total factor productivity. In such a framework, the coefficient on *K/L* captures the rate of return on capital (the share of capital in output), whilst the coefficient on *L* tests for returns to scale. The inclusion of exports into the equation follows the large number of empirical studies which investigate the export-led growth hypothesis (e.g. Feder, 1983; Balassa, 1985; Salvatore and Hatcher, 1991; Greenaway and Sapsford, 1994).

All equations were estimated with the ordinary least squares (OLS) method, except equations 1 and 2 which were estimated using the first-order autoregressive (AR1) technique, due to serially correlated errors. As is widely expected, the estimated coefficient on corruption in all the equations is negative and statistically significant at the 10 per cent level or lower. Similarly, the estimated coefficient on domestic investment in equations 1-4 is also positive and statistically significant. It is noteworthy, however, that when an interaction term between capital-labour ratio and corruption is introduced into the equation, coefficients on both the interaction term and *K/L* become negative and statistically significant. This result appears to lend support to the widely held view that corruption encourages capital-intensive projects in Nigeria. In other words, the efficiency of investment is severely influenced by corruption.

This finding concurs with conclusions of a number of empirical studies elsewhere (e.g. Shleifer and Vishny 1993; Mauro 1997; Tanzi and Davoodi 1997; Ades and Di Tella 1997) that corruption adversely affects the productivity of public investment and distorts the effects of industrial policy on investment. In the case of the labour force variable, the estimated coefficient is not statistically significant. In equation 2, in particular, the coefficient of the labour force is negative, suggesting decreasing returns to scale in the production function. In contrast, exports, mainly dominated by oil, appear to have an unambiguously positive and statistically significant effect on economic growth in Nigeria.

[12] For a detailed discussion on the derivation of the growth regression equation in developing countries, see Balasubramanyam, Salisu and Sapsford (1996).

Table 9

Estimated growth equations for Nigeria (1960-1997)

	Dependent variable: Log(Q/L)			Dependent variable: Δlog(Q/L)			Dependent variable: Growth rate of GDP	
	1	2	3	4	5	6	7@	8@
Intercept	3.55 (1.07)	3.64** (6.68)	-0.024 (0.72)	-0.034* (1.99)	-0.034* (1.99)	-0.03+ (1.99)	1.451 (0.22)	0.982 (0.11)
Ln(K/L)	0.074+ (1.91)	0.073+ (2.00)	0.083* (2.07)	0.086* (2.22)	-	-0.12+ (1.66)	-0.072 (0.34)	0.032 (0.56)
Ln(HD)	-0.208** (3.58)	-0.208** (3.67)	-0.207** (3.75)	-0.206** (3.79)	-0.12+ (1.65)	-	-0.058** (4.074)	-0.173* (1.98)
Ln(L)	0.031 (0.03)	-	0.41 (0.34)	-	-	-	0.229 (0.91)	0.178 (0.67)
Ln(X)	0.230** (4.82)	0.23** (4.90)	0.244** (5.09)	0.242** (5.16)	0.24** (5.16)	0.24** (5.16)	0.274** (4.38)	0.274** (4.25)
Ln(HD *K/L)	-	-	-	-	-0.086* (2.22)	-0.205** (3.79)	-	-0.024 (0.74)
Trend	-0.024 (0.77)	-0.023 (4.64)	0.0005 (0.66)	0.0004 (0.62)	0.0005 (0.62)	0.0004 (0.62)	-	-
R-bar sq.	0.91	0.92	0.64	0.65	0.65	0.65	0.58	0.58
Method	AR(1)	AR(1)	OLS	OLS	OLS	OLS	OLS	OLS
LM1	-	-	0.14	0.05	0.05	0.05	2.29	2.29
LM2	-	-	0.30	0.19	0.19	0/19	2.52	2.58
LM3	-	-	1.71	1.78	1.79	1.79	0.09	0.09

Notes: K is the real gross fixed investment, L is labour force, HD, is size of the hidden economy, X is real exports, Q is the real GDP, Ln is natural logarithm. @ For equations 7 and 8, the variables K/L, HD, L and X denote the share of investment in GDP, ratio of hidden economy to GDP, growth rate of labour force and growth rate of exports respectively.

Figures in parenthesis are absolute 't' values. +, *, ** denote an estimated co-efficient which is significantly different from zero at the 10, 5 and 1 per cent levels, respectively.

LM1 denotes Lagrange multiplier test of residual serial correlation, LM_2 denotes Ramsey's RESET test of functional form, LM_3 denotes the Jarque-Bera test for residual normality. On the relevant null-hypothesis these test statistics are distributed as χ^2 with 1,1 and 2 degrees of freedom respectively.

3.5 Real wages and corruption

As noted earlier, most civil service reform commissions established by successive governments in Nigeria have focused on the review of wages and salaries of civil servants in Nigeria. The aim was to motivate and enhance the efficiency and effectiveness of the civil service with a view to increasing productivity, eliminating or curtailing mismanagement, embezzlement, bribery and corruption. However, the implementation of these schemes has been problematic. To what extent have the wage reforms reduced corruption in the civil service?

Table 10

Estimated wage regression equations:

	Equation 1	Equation 2
Intercept	10.48** (2.55)	11.57*** (2.88)
Corruption	-0.54*** (2.93)	-0.56*** (2.99)
Labour Force	0.51 (1.15)	-
R-bar squared	0.354	0.309
LM_1	1.60	1.13
LM_2	0.56	0.38
LM_3	0.52	4.16

LM1 denotes Lagrange multiplier test of residual serial correlation,
LM_2 denotes Ramsey's RESET test of functional form,
LM_3 denotes the Jarque-Bera test for residual normality.
On the relevant null-hypothesis these test statistics are distributed as χ^2 with 1,1 and 2 degrees of freedom respectively

To answer this question, a simple wage function is estimated for Nigeria, with corruption introduced into the wage equation as an additional explanatory variable. Table 10 contains the estimated wage regression equations for the period 1970-1992. The results suggest a negative and statistically significant relationship between real wages and corruption in Nigeria.[13] This is in line with the theoretical proposition that low wages breed corruption in the civil service. But the introduction of corruption into the model renders the estimated coefficient of labour force positive but statistically insignificant. This is unexpected but not surprising. Unexpected because, on the one hand, the correlation coefficient between real wages and labour is negative and statistically significant, which is in line with *a priori* expectations. On the other hand, the estimated regression coefficient is not surprising for two reasons. First, there is a high degree of collinearity between the size of the labour force and corruption. It is this multicollinearity problem that has rendered the estimated coefficient of the labour force inconsistent.[14] Second, it is possible that the estimated relationship depicts a labour supply curve instead of a labour demand schedule, due to identification problems inherent in the wage determination process.

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[13] In fact, the correlation coefficient between real wage rate and corruption is –0.56; between real wage rate and labour force is –0.65 and between corruption and labour force is 0.90.

[14] This problem can be solved by either dropping the labour force or including other variables such as human capital into the estimating regression equation.

3.6 Anti-corruption strategies in Nigeria

The new democratically elected Nigerian government of President Olusegun Obasanjo has recognised the menace of corruption on the economy. Since coming to power in May 1999, the government has drafted an anti-corruption document, passed by the national assembly and has now set up an Independent Corrupt Practices and Other Related Offences Commission to fight corruption. The main powers and limitations of the commission include: investigating allegations of corruption by public officials and others and bring charges against suspects; inspecting bank accounts, share holdings and safe deposit boxes of suspects; ordering the seizure of assets suspected to have been acquired corruptly and their confiscation if the case is proven. More importantly, the commission has the power to appoint an independent counsel to investigate allegations against the President, Vice President, Chief Justice and State Governors. Evidence acquired in such an investigation would then be given to the national assembly or state assembly. It also has a duty to examine the practices, systems and procedures of public agencies and parastatals and can direct them to make changes where they are found to facilitate fraud.

In spite of its noble objectives, the anti-corruption commission is unlikely to succeed in curbing corruption in Nigeria unless appropriate institutional and societal reforms are undertaken. The USAID (2000) has identified a number of anti-corruption measures, including institutional reforms. There are three aspects to the institutional measure: limiting authority, improving accountability, and realigning incentives.

Institutional reforms involving limiting authority consist of genuine privatisation measures, competitive procurement, competition in public service and liberalisation policies. Nigeria has embarked on privatisation of a number of state-owned enterprises, but the process has come under severe criticisms for both sides to privatisation. On the one hand, proponents of privatisation have accused the bureau for public sector enterprises for being sluggish and selective in its privatisation programme. Much of corruption in Nigeria is on account of Nigerian National Petroleum Corporation (NNPC), but the government is extremely scared to privatise the oil sector. On the other hand, opponents of privatisation have deregulating the economy, particularly removal of subsidy on petroleum prices and agricultural inputs, which negates the government poverty alleviation initiative.

In the case of procurement, the World Bank is currently assisting a number of African governments (Uganda, Tanzania, Mali, Malawi, Ethiopia and Benin) reform their procurement procedures. Competitive procurement allows little or no room for personal discretion and lays clear procedures and selection criteria.

Institutional reforms involving transparency and accountability have been emphasised by the Obasanjo administration. This reform measure includes establishing criminal and administrative sanctions, strengthening judicial processes, financial disclosures and open budget process. All these measures are enshrined in Nigeria's anti-corruption law, but unless there is a political will to implement, it will remain just another reference material. President Obasanjo must lead by example; he should declare his assets and must be seen to act in a transparent way. State governors must also do the same. So, only one State Governor has publicly declared his assets upon assumption of office in May 1999. The rest have not done so or they have done it privately. The Nigeria’s Corruption Agency may lack the gut to step on big toes.

Yet another institutional reform measure, which may be relevant to Nigeria and other African countries, is realignment of incentives. This aspect relates to promotion of ethical behaviour in civil service. This is directly related to designing of incentive structures for improving the efficiency and effectiveness of the civil service. It includes civil service reforms in terms of pay incentives, dismissal of dishonest workers. Ghana provides a success model of this institutional reform, where in the 1980s, the government retired or dismissed corrupt tax and customs officials, improved civil servants' pay and conditions of service.

These institutional reforms must be complemented with appropriate societal reforms by way of dramatic changes in attitudes toward political processes and mobilising political will for change. It is this attitudinal laxity on the part of an average Nigerian that provided incentives for the long presence of military dictators in Nigeria and also for the politicians to rig elections with impunity. Without the mobilisation of civil society, governments are unlikely to follow through on anti-corruption reforms once they enter politically complex terrain. Nigeria needs massive societal reforms about civic responsibility which can be a potent and liberating force in improving the quality of governance at all the three-tiers.

4 Designing incentive structures in the civil service

4.1 Political and economic dimensions

The foregoing analysis suggests that in spite of all the civil service reforms in Nigeria, the civil service has so far failed to live up to expectations. Corruption remains endemic as well as extremely low levels of efficiency. However, the problems of the civil service are more to blame on the distorted incentive structure than on the civil servants themselves. Nigeria’s current civilian administration must take issue with corruption, using a broad-based approach mandated by its democratic credentials. The anti-corruption bill recently signed by the President marks a step in the right direction. However, since similar legislation was attempted with little success in the past, appropriate incentive structures need to accompany the current legislation, if current efforts at fighting corruption are to have meaningful results.

The approach should have economic and political dimensions. Politically, the leadership must evolve a culture of honesty based on transparency and credibility. It needs to lead by example, showing zero tolerance on corrupt behaviour, even among the highest echelons of government. The legal and institutional framework for dealing with corrupt practices must be credible and independent of political control in order to ensure it a level of credibility.

On the economic side, the government should scale down regulations on economic activities, as well as other policies, which contribute to the demand and supply of corrupt activities. On the supply side, this can be done by improving public sector wages towards market-based levels, thereby lowering the premium on errant behaviour and making dismissal from the civil service both a painful and credible threat. At the same time public sector efficiency would be enhanced. Attractive wages in the public sector demand urgent attention as the perceived high correlation between corruption and inefficiency of public servants may retard economic growth.

4.2 A question of measurement

The extent to which the civil service efficiency can be improved will partly depend on the extent to which the sector's inputs and performance can be measured. In this regard, civil service productivity is a central measure. It reflects the efficiency with which resources in the production process are put to use. However, while traditional inputs such as labour, capital, land are easier to estimate, measuring inputs and outputs in services requires a degree of innovation. In this case, a *checklist indicator approach*, that is a set of carefully thought out actions or responsibilities which groups of individual workers must carry out in order to accomplish a particular task or project is used to estimate productivity (Ajayi 1998). For example, an agriculture extension worker could be set a target of inspecting at least 15 farming units per day. The cost and quality of such a task will determine the performance of the extension worker during a given period. Target setting can, therefore, play an important part in measuring the efficiency of individual decision making units.

In setting effective targets, the following requirements must be taken into account.[15] Targets must be challenging but not impossible to accomplish. This means that while civil servants should find the tasks challenging, they, at the same time, must be able to derive satisfaction in their resolution. This implies in turn that the targets must be specific and measurable, as in the case of a social worker who attends to a specific number of in-home elderly patients per day. Third, for employees to achieve a sense of participation and motivation to succeed, they must also be involved in the target setting process. Fourth, the evaluation of the performance of the employee should be based on results from a trend, hence the need for periodic feedback from all participants.

It is therefore not possible to have a single indicator for measuring the efficiency of the civil service. Rather, different indicators could be used for different ministries, departments or units. Even within these individual units, several indicators may be used. For example, in measuring the efficiency of the health sector, specific targets could be set for say mortality rate, reduction or elimination of certain kinds of diseases, number of patients treated per doctor. In the cases of education and social services, for instance, targets could be set for levels of literacy rate as well as the reduction of the number of people below the poverty line. It is important to note that in setting targets due regard should be given to both domestic and international considerations. The targets on mortality rate, literacy rate, school enrolment, life expectancy, etc. may be judged over time and in relation to other comparable countries (see DFID, 1997).

The technique of data envelopment analysis (DEA) can also be used to provide a useful framework for measuring the efficiency of the civil service in Nigeria. This technique has the advantage of incorporating multiple inputs and outputs drawn from within ministries or departments and allows for relative efficiency measures to be determined. In addition to estimating the efficiency of each decision making unit within a particular organisation, the DEA method also provides information on what it would take, in terms

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[15] See Ajayi (1998).

of changes in the production mix, to make the relatively inefficient decision-making units efficient. This is done by reference to a weighted combination of the characteristics of the most efficient units. The DEA technique has been widely applied to the evaluation of efficiency of decision making units in education, banking, as well as the manufacturing industry in developed countries.[16] However, the technique is flexible enough to be used with considerable benefit in the ministries or departments of the Nigerian civil service

5 Conclusions

Successive governments in Nigeria have introduced various reform measures with the main aim of improving the efficiency and effectiveness of the civil service. Unfortunately, the Nigerian civil service has remained weak, inefficient and incapable of reforming itself and the rest of the economy. A plausible explanation for all this relates to the endemic nature of corruption and rent-seeking opportunities, inappropriate incentive structures, and lack of political will to implement 'good' reform measures. There are as yet no operational guidelines for assessing the efficiency of the civil service. Hiring and firing of civil servants are often based on personal acquaintances or vendetta rather than on productivity related indicators. Specific targets must be set to which the civil service can strive. An efficiency-based incentive scheme that links reward to performance may provide strong motivation. Political interference, which has seriously undermined the credibility and confidence of the civil service in the design and implementation of government policy, should be minimised.

The paper has also examined the causes of corruption in Nigeria and its impact on productivity and civil service efficiency. The high incidence of corruption and the growth of the hidden economy have combined to render the Nigerian civil service and the rest of the economy inefficient. The phenomenal increase in the hidden or unreported economy, from less than 10% of gross domestic product at independence to over 60% during the Abacha regime in the late 1990s, is reflective of growth of the informal sector, itself fostered by tax burden, unnecessary regulatory regimes, lack of institutional capacity and weak governance.

A number of reform measures to fight corruption and to curtail the growth of the hidden economy were highlighted. These include institutional and societal reform measures aimed at reducing the role of government in economic activities, strengthening transparency, improving incentives in the civil service and dramatic change in attitudes toward the political process. In the absence of these reform measures, the anti-corruption bill of President Obasanjo will be victim of the 'Nigerian factor' syndrome and the efficiency of the Nigerian civil service will be grossly compromised.

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16 For a detailed account of the DEA technique and its application, see Johnes and Johnes (1993).

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Katajanokanlaituri 6 B, 00160 Helsinki, Finland

Camera-ready typescript prepared by Anna Kervinen at UNU/WIDER
Printed at UNU/WIDER, Helsinki

ISSN 1609-5774
ISBN 952-455-296-5 (printed publication)
ISBN 952-455-297-3 (internet publication)