Annals of the Social Science Council of Nigeria, No.4,1992.

# 4

# PATTERNS AND CORRELATES OF DECENTRALISATION IN PRIVATE NIGERIAN ENTERPRISES

# A. U. Inegbenebor

### **ABSTRACT**

The ability of private Nigerian entrepreneurs to initiate and institutionalise effective organisational structures and processes needed to carry out complex industrial activities is crucial to the realisation of the objective of rapid, self-reliant, industrial development of Nigeria. This study examined the patterns and correlates of a key structural variable in the organisational process — decentralisation of decision-making authority.

The study was based on a sample of forty-one manufacturing enterprises in the Midwestern Zone of Nigeria which were wholly owned by private Nigerian entrepreneurs.

The results indicate that decentralisation of decision making was generally limited. Participation of the Board of Directors was restricted. There was marked variation in decentralisation in the functional areas with finance function as the least decentralised and production/operations function as the most decentralised. The response to the contingencies of size and technology was considered appropriate while the response to competition was contrary to expectation. Apart from this, the nature of decentralisation in the enterprises was in the direction generally found in more advanced economics.

#### INTRODUCTION

Private Nigerian entrepreneurs have an important role to play in the industrial development of the economy. This can be readily deduced from

major developments in the economy which include the low level of foreign investment in manufacturing, the recent policy decision reducing public sector ownership and control of industrial establishments, the active promotion of private sector participation in the industry and the philosophy of self-reliance which has become the corner-stone of our national development efforts. It is in this context that the question of the capability of private Nigerian entrepreneurs to initiate and institutionalise effective organisational structures and processes 'needed to carry out complex industrial activities become relevant.

Up to the early 1980s, studies such as those of Kilby (1965,1969); Harris and Row (1966); Harris (1968, 1970, 1972); Nafziger (1967); Akeredolu-Ale (1975); Idemudia (1978) and Osaze (1981) consistently pointed to lack of organisational ability as a major handicap to the development of private Nigerian industrial entrepreneurship. The structure of such enterprises approximated what Mintzberg (1979) described as "simple", i.e. enterprises characterised by a loose division of labour, small managerial hierarchy, limited formalisation of behaviour and centralisation of decision-making authority in thr hands of the entrepreneur who invariably doubled as the chief executive.

The extent to which authority to take decisions is centralised or decentralised has attracted considerable interest among researchers and commentators on private Nigerian enterprises. It is widely believed that decentralisation connotes efficiency and, by extension, indicates the level of organisational ability among Nigerian entrepreneurs. Indeed, Steers (1977) has shown that decentralisation is strongly and positively related to many facets of performance including managerial efficiency. However, the degree of decentralisation that is optional depends on the age, size, environment and other contingencies facing the firm (Child, 1984). Even though some studies (Akeredolu-Ale, 1975; Idemudia, 1978; Osaze, 1981) have analysed the relationship between decentralisation or delegation and performance, adequate attention has not been given to the contextual factors which are considered by entrepreneurs/managers in the choice of the degree of decentralisation.

The objective of this study, therefore, was to analyse the patterns and correlates of decentralisation of decision-making authority in private Nigerian enterprises.

#### RESEARCH METHOD

The firms selected for this study were manufacturing enterprises with employment size of, at least, ten people, and whose ownership and control was fully in the hands of Nigerians. Furthermore, such firms must not have been previously owned by aliens and must have been in continuous existence for at least five years. In view of the size of the country, only firms in the. Midwestern zone (Benin-Sapele-Warri-Ughelli-Agbor and Asaba/Onitsha complex) were used.

A sampling frame was generated from various sources including the *Report of Industrial Directory and Manpower Survey*, 1980, published by the

Statistics Office of the Ministry of Finance and Economic Planning, Bendel State; the 1984 edition of *Who Makes What in Nigeria?* Published by the Manufacturers Association of Nigeria, the Chambers of Commerce, Industry and Agriculture, and the Nigeria Association of Small-scale Industrialists. All manufacturing enterprises which employed 50 people or more were surveyed and a random sample of 40 was taken from firms which employed between 10 and 49.

In the course of the field work, any enterprise which did not meet the previously specified criteria was dropped from the sample. On the whole, 41 firms representing about 42% of the firms in the sampling frame were surveyed.

The industrial categories mostly represented in the sample were wood and wood products (26.8%), fabricated metal products (26.8%), paper and paper products including printing and publishing (22.0%) and rubber products (12.2%). About 56% of the firms in the sample employed between 10 and 50 people, while 37% employed between 51 and 100 people. Only three of the firms (7%) employed more than 200 people with the largest employer having only 350 people.

The operational definitions and scales constructed by the Aston group for centralisation and technology were adapted while the scale for competition sought to measure the perception of the executives (including the entrepreneur) of the intensity of competition in pricing, product quality, number of alternative products available to the customer, the extent of delay in securing the product, the advertising activities of competitors and the importance the executives attach to these modes of competition. Data collection was completed in 1988.

## RESULTS AND DISCUSSION

Table 1 is a detailed analysis of the decentralisation of decision making in the sample of firms studied. The decentralisation scale reflects the various decision-making points in the hierarchy of the enterprises. A score of 1 indicates that a decision was made at the lowest level of the hierarchy — direct worker, while a score of 6 shows that a decision was made at the highest point — Board of Directors. The mode for the decisions was either 4 or 5, while the overall mean was 4.22 with a standard deviation of 0.46. At 95% level of significance, the confidence interval for the mean ranged from 4.20 to 4.24.

The data indicates that decision making on most issues was at the level of either the Managing Director or at the level of Heads of Departments/Divisions. Several of the respondents indicated that decisions were taken by either the Managing Director or the next senior manager depending on the magnitude of the decision.

An examination of Table 1 shows that, statistically, it was rare to find decisions being made at levels lower than that of the head of department/division. For example, only decisions on allocation of work among available workers and representing company in labour disputes were made, on the average, at lower levels even though the mode was the level of

the head of department. Similarly, there is no evidence from the table, of decisions that may only be authorised by the Board of Directors. This was some evidence of the very limited role that the Board played in the management of the enterprises.

While it is evident that there was a great deal of centralisation in the enterprises, it is also clear that decision-making authority was not concentrated at the level of the managing director — a position often held by the entrepreneur. Rather, the next lower level had substantial authority in the management of the affairs of the enterprises. To the extent that the entrepreneurs were willing to decentralise decision-making authority to the next lower level in the organisational hierarchy, one may infer that there exist in the enterprises people perceived to be competent and trustworthy to make decision on behalf of the entrepreneurs.

Whereas entrepreneurs were willing to let senior management personnel have some decision-making authority, they seemed to have severely limited the participation of other Board members in the decision-making process. This seemingly contradictory situation is largely in accordance with the desire of entrepreneurs to exercise personal autonomy in the management of the affairs of the enterprises. Since senior managers are employees, they are more willing to operate as "an extension of the personality" of the entrepreneurs by anticipating decisions than Board members would. In addition, sharing of decision-making authority with members of the Board carries with it a sense of permanent loss of control and flexibility on the part of the entrepreneurs. Hence entrepreneurs can share authority with managers and restrict it in the case of members of the Board of Directors.

In order to examine the nature of decentralisation by function, all the decisions were grouped into five broad areas, namely, general policy decisions, personnel policy decisions, production/operations policy decisions, financial policy decisions and marketing policy decisions. To accomplish this, three lecturers in the Department of Business Administration were requested, independently, to distribute the policy decisions to the five areas. Table 1 was the result of the expert opinion. The means, standard deviation and confidence interval of the mean at 95% confidence level are shown. Table 2 below shows analysis of variance (ANOVA) summary for functional decentralisation.

Table 1

ANALYSIS OF DECENTRALISATION OF DECISION-MAKING AUTHORITY

	Mode	Mean	Standard	95% <i>Confi</i> .	
			Deviation	Interval	
A. General Policy Decisions					
1. Determination of number of supervisors	5.00	4.829	0.587		
2. Buying Procedures	4.00	4.024	1.037		
3.Altering responsibilities of functional specialist departments	5.00	4.171	1.759		
4. Altering responsibilities of line departments	5.00	4.073	1.679		
5. Creation of a new department	5.00	4.829	1.302		
6. Creation of a new job	5.00	4.829	0.919		
Total		4.46	0.38	4.4123-4.5077	

Table 1 cont'd ANALYSIS OF DECENTRALISATION OF DECISION-MAKING AUTHORITY

	Mode	Mean	Standard Deviation	95% Confi. Interval
			Deviation	Intervat
C. Production/Operation				
Policy Decisions				
1. Selection of				
type or brand for new				
equipment	5.00	4.488	0.925	
2. Overtime to				
be worked	4.00	3.512	0.898	
3. Delivery dates				
or priority of				
order	4.00	3.854	1.014	
4. Inspection to				
what items				
processes inspection will				
be applied	4.00	3.878	1.029	
5. Operations that				
will have work				
study made of them	4.00	3.610	1.611	
6. Plans to be	4.00	3.010	1.011	
worked on	4.00	4.073	1.191	
7. Outputs to be	7.00	7.073	1.171	
scheduled				
against plans	4.00	3.585	1.628	
8. Dismissal of				
operative	4.00	4.317	0.650	
_				
9, Suppliers of materials to	:			
be used	4.00	4.024	1.037	
10. Methods of				
work to be				
used	4.00	3.829	0.667	

Annals of the Social Science Council of Nigeria, No.4,1992. 42

# 42 Annals of the Social Science Council of Nigeria, No.4,1992.

Table I cont'd

ANALYSIS OF DECENTRALISATION OF DECISION-MAKING AUTHORITY

	Mode	Mean	Standard Deviation	95% Confi. Interval
11. <i>Machinery/</i> equipment to be used for a job 12. Allocation of work among available	4.00	3.756	0.888	
workers	4,00	3.366	0.888	
Total	_	1X&	0.31	3.8325-3.8875
D. Financial Policy Decisions				
1, Spending of unbudgeted or unalloca-				
ted money on capita! items  2. Spending of unbudgeted or unallocated	5.00	5.073	1.273	
money on	5.00	1 162	1 010	
revenue items  3. Costing — to what costing will be applied	5.00 4.00	4.463 3.927	1.818 1.191	
or approve				
Total	_	4.49	0.47	4.4061-4J735

Table 1 cont'd

ANALYSIS OF DECENTRALISATION OF DECISION-MAKING AUTHORITY

	Mode	Mean	Standard	95%
			Deviation	Confl. Interval
E. Marketing Policy				
Decisions				
<ol> <li>New product or service</li> <li>Marketing territories to be</li> </ol>	5.00	4.439	1.285	
covered	4.00	4317	1.011	
3. Extent and class of market to be aimed for	4.00	4.122	1.166	
4. Price of the				
output	4.00	4317	0.650	
Total	_	430	0.12	4.2815-43185
Grand Total		4.2214	0.4590	4.1982-4.2445

Table 2

ANALYSIS OF VARIANCE (ANOVA) SUMMARY FOR FUNCTIONAL DECENTRALISATION

Source	D.F.	Sum of Squares	Mean Squares	F-ratio	Critical Value,F
Between Groups	4	99.0163	24.7541	169.8794	4.62
Within Groups Total	1512	220.3220	0.1457		
	1516	319.3383	24.7541	169.9251	4.62

P < .001

The purpose of the ANOVA table was to test the equality of the means of decentralisation among the five groups of policy decisions. The table shows that the observed f-ratio was 169.93, which was far greater than the critical f-value at degree of freedom of 4 and 1512 and P<0.001. Thus we reject the null hypothesis of the equality of the means.

A further analysis to compare the means in order to ascertain the nature of differences was carried out using the Scheffe Multiple Comparison test. The Scheffe Multiple Comparison test is one of several methods of comparing pairs of group means. It orders the means from the smallest to the largest, and contrasts those that are significantly different at a defined level which, in this study, was 0.05. The Scheffe Multiple Comparison test is stricter than other multiple comparison tests because it requires larger differences between means for significance and is exact, even for unequal group sizes (Nie *et al*, 1975:428; Neter and Wasserman, 1974).

Table 3 shows the results of the test. Pairs of means that are significantly different are indicated by an asterisk in the matrix.

Table 3

PAIRS OF MEANS SIGNIFICANTLY DIFFERENT AT 0.05 LEVEL F
OR FUNCTIONAL DECENTRALISATION

Functional Groups		$F\iota$	Functional Group				Mean	Std. Dev.
		1	2	3	4	5		
3. 4.	Production/Operations policies Marketing policies Personnel policies General policies* Financial policies	* * * *	*	*			3.86 4.22 4.37 4.46 4.49	0.31 0.45 0.47 0.38 0.47

<sup>\*</sup>Pairs of means that are significantly different at P < 0.05.

The mean of production/operations policy decisions, which was the lowest among the five functional areas, was significantly different from the means of each of all the other areas. The mean of marketing policy decisions was significantly different from the means of general policy decisions and financial policy decisions while the mean of personnel policy decisions was significantly different from the mean of financial policy decisions only. Thus, we conclude that the most centralised area was finance followed in order, by general management, personnel, marketing and production/operations. This means, of course, that the least centralised or most decentralised area was production/operations.

Evidence from this study supports the results of Idemudia (1978) that the functions mostly delegated were operations and the management of the production function. But contrary to Idemudia's findings, the function mostly centralised did not include response to competition (a marketing activity). Indeed, marketing ranked second among the functions mostly decentralised. However, the question that arises is: What accounts for ^the pattern of decentralisation in (he enterprises? In explaining the degree of delegation of operations functions, Idemudia (1978) found that the delegation of this function was positively related to the employment of expatriate managers and negatively related to the employment of kinsmen. This implied that when an entrepreneur perceived his managers as proficient and trustworthy, he would be willing to delegate specific functions to them.

The tasks involved in production/operations function are usually varied and consequently require the use of a variety of skills. As long as the entrepreneur does not have the technical expertise or cannot cope with the volume of work involved, the function tends to be decentralised provided employees are perceived to have the necessary expertise. The nature of the enterprises in the sample demanded substantial expertise and most of the managers appear to be competent in their areas.

The level of decentralisation of marketing decisions is perhaps in accord with the general proposition of the contingency theory which suggests that decentralisation is associated with effectiveness when environmental conditions are dynamic. Even though the level of competition was not perceived to be high among the enterprises studied, the relatively high level of decentralisation provides subordinates some flexibility in responding to market conditions.

The centralisation of financial and *general* management functions may not be surprising. In the first place, finance is a key element in the exercise of control of the enterprise as well as an instrument for the demonstration of ownership rights. In the second place, entrepreneurs demand flexibility in the management of the funds of the enterprise. This is to enable them use the cash of the enterprise as they deem necessary to satisfy personal needs, and inject fund into the enterprise as needed. In most cases, the net worth of the entrepreneurs is several times the value of the assets of the enterprises from which the personal estate was derived (Omavuezi, 1988). The centralisation of general management functions may be due to the substantial effect which decisions in this area have on the overhead costs of the enterprise. Thirdly, decentralisation varies inversely with the effectiveness of the existing control mechanisms of the firm. Osaze (1981) has shown that on the average, financial control systems in the entrepreneurial firms he studied was weak even though rapidly grown firms had more sophisticated financial controls. It becomes clear, therefore, that where an entrepreneur perceives the available mechanism for control in an area to be weak, there is a tendency to centralise decision making in such an area.

In terms of the factors associated with overall decentralisation of decision making in the private Nigerian enterprises, competition, technology and size (total number of employees) were examined. Zero-order correlation coefficients between decentralisation and each of competition, technology and size were - 0.4649, +0.0322 and +0.3547 respectively. The relationship between competition and decentralisation was significant at p > .01. A positive relationship between competition and decentralisation was expected because competition demands adaptive response by the organisation. As competition increases, the need for flexibility in dealing with the task environment increases and decentralisation should be more for the organisation to respond adequately to changes in the market place. Contrary to this expectation, the entrepreneurs found it necessary to decrease decentralisation, (increase centralisation) probably because being relatively small enterprises, their fortunes are directly affected by the mode of response to the changes in the external environment.

The effectiveness of this strategy depends on the rate of changes in competition. When the rate of change is high, centralisation in the face of competition would lead to an overload of the chief executive's role and bring about ineffectiveness. If the rate of change is low, as is often the case in a sellers' market, centralisation might not necessarily lead to ineffectiveness. Among the enterprises studied, competition had a mean value of 9.72 with a standard deviation of 3.39 on a seventeen-point scale. Thus, competition was not perceived to be high enough to induce the expected response. That

competition was not perceived to be high is not surprising. Data collection for tills study coincided roughly with the period of shortage of raw materials and spare parts, resulting in general shortage of goods and services in the economy.

Technology was not significantly related to decentralisation even when size was controlled. This relationship is consistent with the seminal work of Hickson, *et al* (1969). As expected, size was positively and significantly (P > .05) related to decentralisation. Even though the size of the enterprises studied were relatively small, this finding represents a tendency to decentralise when the size of the enterprise becomes larger. This suggests that Nigerian entrepreneurs, like other organisation managers elsewhere, (Pugh *et al*, 1969; Inkson *et al*, 1970; Child, 1984) respond in the same manner to the contingency of size. Since decentralisation is positively related to formalisation and standardisation, it is likely that the often-repeated criticism of private Nigerian entrepreneurs of limited formalisation arises from the size of their operations.

#### SUMMARY AND CONCLUSIONS

The results of this study indicate that decentralisation of decision-making authority in private Nigerian enterprises was generally limited. Most decision-making authority was concentrated in the hands of the entrepreneur and the next lower level in the hierarchy. Participation of the Board of Directors in decision making was severely restricted.

The least decentralised function was finance, followed in order, by general management, personnel, marketing and production/operations decision. The factors that seem to account for the variation in the degree of decentralisation of decision making in the functional areas were the strategic importance of the function to survival, the perceived competence of the employees in the area and the availability/effectiveness of control mechanisms in the enterprise.

Even though decentralisation of decision-making authority was generally limited, private Nigerian entrepreneurs responded appropriately to the contingency of size and technology. Their response to the contingency of competition was contrary to expectation. However, the response was due largely to the fact that competition was not perceived to be high. In an era of shortages, the need to be adaptive in the market place was limited.

It is clear from the above that the private Nigerian entrepreneurs in the study decentralised decision-making authority, taking into account the critical factors they perceived to be relevant to their performance. Given the situation confronting them, the entrepreneurs decentralised in the direction generally found in more advanced economies. Thus, under the appropriate environment, private Nigerian entrepreneurs could be relied upon to organise their enterprises appropriately and play their role creditably in the manufacturing sector.

48 Annuls of the Social Science Council of Nigeria, No. 4, 1992.

## **REFERENCES**

Akeredolu-Ale, E.G. (1975): *The Underdevelopment of Indigenous. Entrepreneurs/lip in Nigeria*, Ib'adan: Ibadan University Press.

Child, J. (1984): *Organisation: A Guide to Problems and Practice*, (2nd edition), London: Harper and Row Publishers.

Harris, J.R. (1968): "Nigerian Enterprise in the Printing Industry", NJESS, Vol. 10, No. 2.

(1970): "Nigerian Entrepreneurship in Industry" in Eicher Carl R. and Liedholm Carl (eds), *Growth and Development in the Nigerian Economy*, Michigan State University Press.

----(1972): "On the Concept of Entrepreneurship, with application to

Nigeria", in Sayre P. Schatz (ed), *South of the Sahara: Development in. African Economies*, London: Macmillan Press Ltd.

Harris, J. and Rowe M.P, (1966): "Entrepreneurial Patterns in the Nigerian Sawmilling Industry", *Tlie Nigerian Journal of Economic and Social. Studies*, Vol. 8, No 1.

Hickson, David J., Pugh Derek S., Pheysey Diana (1969): "Operations Technology and Organisation Structure: An Empirical Reappraisal", *Administrative Science Quarterly*, Vol. 14, No. 3.

Idemudia, T.D.A. (1978): "An Inquiry Into the Performance of Nigerian Indigenous Enterprises", An Unpublished doctoral dissertation, State University of New York at Buffalo. Inkson, J.H.K., Pugh, D.S. and Hickson, D.J. (1970): "Organisation Context and Structure:

An Abbreviated Replication", Administrative Science. Quarterly, Vol. 15, No. 3.

Kilby, Peter (1965): African Enterprise: The Nigerian Bread Industry, Stanford: Stanford University.

----(1969): Industrialisation in an Open Economy: Nigeria 1945-1966,

Cambridge: Cambridge University Press.

Mintzberg, Henry (1979): *The Structuring of Organisations : A Synthesis of the Research*, New Jersey: Prentice-Hall.

Nie, N.N., Hull, C.H., Jenkins, J.G., Steinbrenner, K., and Brent, D.N. (1975): *Statistical Package for the Social Sciences*, 2nd Edition, New York: McGraw-Hill Book Company.

Omavuezi, Paul O. (1988): "Entrepreneurial Succession". An unpublished MBA Project in the University of Benin, Benin City.

Osaze, B.E. (1981): "Financing Small Rapid Growth Firms", An unpublished Ph.D., thesis, University of Bath, UK.

Pugh, D.S., Hickson, D J. Hinings, C.R. and Turner, C. (1969): "The Context of Organisation *Structure" Administrative Science Quarterly*, Vol. 14, No. 1.

Steers, Richard M. (1977): Organisational Effectiveness: A Behavioural View, Santa Monica: Goodyear Publishing Company.