TAXATION AND AGRIBUSINESS TECHNOLOGY INTERFACE: STRATEGIC FINANCIAL MANAGEMENT IMPERATIVES IN NIGERIA

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ABSTRACT: This study examined the moderating influence of technology in the relationship between taxation and return on investment in agribusinesses operating in Nigeria. Seven agribusinesses listed in the Nigerian Stock Exchange (NSE) Fact Book were involved in the study. Adopting the survey research design, questionnaire was administered on general managers, chief accountants, finance managers, and chief internal auditors of the selected firms as well as external auditors and tax administrators. Test re-test of the research instrument revealed very high reliability co-efficient. On account of this, the data generated were presented using tables, frequencies and percentages while the composite research hypothesis was tested regression and t-test analytical tools, aided by Software Package for Social Sciences (SPSS). The results was established a weak moderating influence while reaffirming the inverse relationship between taxation and return on investment. It is recommended that the efficiency-driven ideals of strategic financial management which imperatively underscore effective tax planning in order to justify all ensuing technology-related tax liabilities of agribusinesses for the ultimate sustainable diversification of the Nigerian economy.

KEYWORDS: Agribusiness, Strategic Financing, Taxation, Technology

INTRODUCTION

Like most businesses, one cardinal objective of agribusiness is to maximize wealth and one sure way of achieving this, is through cost minimization. However, business executives understand that tax is a major cost of doing business and therefore constitutes a serious impediment in this regard. Taxation refers to a compulsory fee paid by individual and businesses to the government; a compulsory levy charged by the government on income, profit, property, purchases and consumption of households and firms. The objectives of taxation are to raise revenue for the government, regulate the economy and economic activities, and control income and employment. In Nigeria, taxes are payable to the federal, state and local governments as specified by various legislations. Thus, the decision to pay tax is not voluntary but compulsory for both individuals and corporations (Anyanwu, 1997; Kiabel & Nwikpasi, 2001).

According to Hasan (1994), items of income derived from agribusiness from which taxes are expected to be paid include compensation for condemned stock; depreciation recovered on sale of farming assets; proceeds from sale of minerals, metal, timber, or flax; prize money won at any
agricultural show; estimated value of meat and produce used for private or domestic purposes; grazing fees, leasing and rent from farm property; proceeds from the sale of meat; proceeds from the sale of wool; income equalization deposit. scheme funds and interest; insurance proceeds for crop or stock losses; stud fees; produce, wool; arid livestock on hand at balance sheet date, among others. Apparently, taxation negatively affects the financial performance of business. This is where the intervention of strategic financial management (SFM) ideals becomes quite imperative (Agundu, 2012; Aluko, Gbadamosi & Osuagwu, 1998). By these, agribusinesses may successfully reduce their tax liabilities, especially through the instrumentality of effective tax planning. Basically, effective tax planning hinges on three fundamental SFM principles, namely:

- **Strategic deferment**, that is postponing payment of taxes to future period;
- **Strategic streaming**, that is arbitraging income streams with varying tax treatments; and
- **Strategic bracketing**, that is shifting income from high tax brackets to low tax brackets.

Nonetheless, scholars admit that there is still pronounced dearth of empirical works on taxation and business financial performance in Nigeria, even as the few available rather concentrated on banks, oil and gas firms, and large-scale manufacturing companies (Azziah, 2001; Ademola, 2006). This study, thus, bridges the existing gap, particularly underscoring the quintessence of SFM. In the light of this, a framework connecting taxation to enhancement of return on investment (ROI) of agribusinesses is underscored. Essentially, the overriding research hypothesis (RH) elicited is:

**RH0**: Technology has no significant moderating influence on the relationship between taxation and return on investment of quoted agribusinesses in Nigeria.

**LITERATURE REVIEW**

Technology includes methods, processes, devices, knowledge and facilities, used in the completion of tasks in work organizations. It relates virtually to every function and, therefore, constitutes a key component of work organizations, regardless of their size, shape and composition. Technology has progressively changed business activities and attitudes all over the world and agribusiness in Nigeria is no exception. The focus of this study is not on technology as a major (direct) influence per se, but as moderating variable in the relationship between taxation and ROI of agribusinesses in Nigeria. It is recognized that technology remains is a key factor and anchor of productivity advancements and enhancements. In most work organizations, peoples’ jobs are largely determined by the technology used. With technology, social situations and actions are dramatically influenced. Analysts also contend that technology enhances business efficiency for improved performance. Thus, as profit before tax is improved through technological innovation, taxable income is increased (Akinmayowa, 2006; Patel, 2000; Fama & French, 1998). This clearly shows the connection of technology to the relationship between taxation and ROI.

ROI is usually determined using relevant information contained in financial statements. Basically, financial statements constitute a report on managerial performance, attesting to
managerial success or failure and providing early warning signals (EWS) of impending challenges. Financial statements are essentially historical documents, as they usually state what has happened during a particular period of time. Most users of financial statements are concerned about what will happen in the future. Stockholders, for instance, are concerned with future earnings and dividends; creditors are concerned with the company’s future ability to repay its debts; while managers are concerned with the company’s ability to finance future expansions (Agundu, 2010; Akpan, 1995). Although financial statements are historical documents, they still provide valuable information bearing on all of these concerns. Financial statement analysis involves careful selection of data from financial statements for the primary purpose of forecasting the financial health of the company. For SFM purposes, this requires examining trends in key financial data, comparing financial data across companies and analyzing key financial ratios. Managers are vitally concerned with such financial ratios, as they provide indicators of how well the company and its business units are performing. Also, since managers must report to shareholders and may have need to raise external funds, they must pay attention to the financial ratios that are of interest to external investors, especially ROI which seeks to evaluate the company’s investment reward potentials (Ironkwe, 2011; Kiabel & Nwikpasi, 2001; Anyaduba, 2005).

When a company is truly decentralized, segment managers are given a great deal of autonomy. Profit and investment centers are relatively independent businesses with their managers having about the same control over their decisions as if they were in fact running their own independent firms. With this autonomy, fierce competition often develops among managers as well as between firms, with each striving to make his segment the best in the company or the industry. This is how the much-desired synergy comes true under a functional SFM framework. Competition between investment centers is particularly keen for investment funds, so analysts often seek to come to terms with how corporate headquarters go about deciding who gets new investment funds as they become available, and how they decide which investment centers are most profitable using the funds that have already been entrusted to their care. In SFM perspective, one constructive ways of making such judgments is to measure the rate of return that investment center managers are able to generate, as typically represented by the profitability ratio designated as ROI. Essentially, the standard for economic evaluation is expressed as a rate of ROI, which is linked to cost of capital (Aborode, 2005; Patel, 2000). ROI equally stands as a rather generic financial concept that is broadly and most widely used to measure corporate divisional performance. The ratio is expressed thus:

\[
\text{ROI} = \frac{\text{Net Income}}{\text{Investment}}
\]

**METHODODOLOGY**

In this study, the explanatory and criterion variables are taxation and ROI respectively, while technology constitutes the contextual variable. Technology is, herein, evaluated in terms of the nature and degree of the automation in the agribusinesses. Respondents were asked to indicate (on a 5-point numeric scale) their agreement with statements relating to the extent to which automation (proxy for technology) contextually interfaces with taxation in relation to ROI (proxy
for corporate financial performance). The results are presented using tables, frequencies and percentages; while the test of overriding RH is facilitated by regression and t-test analytical tools, aided by Software Package for Social Sciences (SPSS). Legislative data inputs relating to taxation mainly derives from Section 9(8a) of the Companies’ Income Tax Act (2007), which defines an agricultural trade or business to mean any trade or business connected with:

- The establishment or management of plantations for the production of rubber, oil palm, cocoa, coffee, tea and similar crops.
- The cultivation or production of cereal crops, tuber, fruits of all kinds, cotton, beans, groundnuts, pineapples, bananas and plantains.
- Animal husbandry, that is, poultry, piggery, cattle rearing and the like and fish farming.

Analytically, there is a hidden challenge in ROI reporting, with the realization that when management is faced with persistent low ROI ratios in some corporate operations, it may not be easily admitted that the failure of business segments to meet minimum profitability standards is a good reason for economic evaluations rather than managerial appraisals. Paradoxically, some managers are rewarded for being placed in charge of a profitable operation while some others are (circumstantially) stigmatized for being assigned to activities that are inherently unprofitable. For agribusinesses in particular, tax incentives may be strategically brought to bear on the latter situation for the management to forge the much-desired turnaround. In this study, operational impetus derives mainly from the research insights of Baridam (2001), Cooper & Schindler (2001), and Ezejelue & Ogwo (1990).

RESULTS

A total of seven quoted agribusinesses were involved in the study. In each of the firms data were harnessed from general managers, chief accountants, finance managers, chief internal auditors, including external auditors and tax administrators. In all, 42 respondents were involved in the study. Analytical details are contained in Tables 1, 2, and 3. The response options are strongly agree (SA), agree (A), disagree (D), strongly disagree (SD) and indifferent (I); while the respondents are re-designated ‘a’ to ‘f’ respectively in Table 2. The regression and t-test analytical statistics are presented in Table 3.

Table 1: Highlights of Questionnaire Administration

<table>
<thead>
<tr>
<th>Respondents</th>
<th>No. Administered</th>
<th>No. Retrieved</th>
<th>No. not retrieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Managers</td>
<td>7</td>
<td>7</td>
<td>Nil</td>
</tr>
<tr>
<td>Chief Accountants</td>
<td>7</td>
<td>7</td>
<td>Nil</td>
</tr>
<tr>
<td>Finance Managers</td>
<td>7</td>
<td>7</td>
<td>Nil</td>
</tr>
<tr>
<td>Chief Int. Auditors</td>
<td>7</td>
<td>7</td>
<td>Nil</td>
</tr>
<tr>
<td>External Auditors</td>
<td>7</td>
<td>7</td>
<td>Nil</td>
</tr>
<tr>
<td>Tax Administrators</td>
<td>7</td>
<td>7</td>
<td>Nil</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>42</td>
<td>0</td>
</tr>
<tr>
<td>Percentage</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Table 2: Highlight of Technology Moderating Influence Responses

<table>
<thead>
<tr>
<th>Responses</th>
<th>A</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>e</th>
<th>f</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>16</td>
<td>38.1</td>
</tr>
<tr>
<td>A</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>14</td>
<td>33.3</td>
</tr>
<tr>
<td>D</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>7</td>
<td>16.7</td>
</tr>
<tr>
<td>SD</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>4.8</td>
</tr>
<tr>
<td>I</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>7.1</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>42</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Research Data (Respondents’ submissions)

Table 3: Highlight of RH Test Results

<table>
<thead>
<tr>
<th>Statistical Variables</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-efficient of correlation (R)</td>
<td>0.346</td>
</tr>
<tr>
<td>Co-efficient of determination (R²)</td>
<td>0.120</td>
</tr>
<tr>
<td>t-statistic</td>
<td>0.204</td>
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<tr>
<td>p-value</td>
<td>0.283</td>
</tr>
<tr>
<td>Intercept</td>
<td>349719.897</td>
</tr>
<tr>
<td>Partial regression co-efficient</td>
<td>-4563.453</td>
</tr>
</tbody>
</table>

Source: Research Data (analytical results aided by SPSS version 16)

Table 1 above indicates that six copies of the questionnaire were administered on general managers, chief accountants, finance managers, chief internal auditors, external auditors and tax administrators, in the seven quoted agribusinesses involved in the study. This summed up to 42 copies of questionnaire. All the 42 (100%) copies administered were retrieved and found usable for analysis. With respect to the moderating influence of technology, Table 2 indicates that 16(38.1%) of the respondents strongly agreed; 14(33.3%) agreed; 7(16.7%) disagreed; 2(4.8%) strongly disagreed; while 3(7.1%) were indifferent. This affirmatively implies that technology does have a moderating influence on the relationship between taxation and ROI. In testing the composite RH, the ratings on the extent to which technology influences the relationship between the explanatory and criterion variables were utilized. The responses were then regressed. The results obtained are as highlighted in Table 3. However, Table 3 actually shows an R-value of 0.346, while the R² is 0.120. This indicates weak influence in view of the fact that only 12% of the dynamics of the relationship between taxation and ROI are moderated by technology. On account of this, the null hypothesis is accepted, which prevails that technology does not have significant moderating influence in the taxation – ROI connect.

DISCUSSION

In addition to firm size and political factors, technology is recognized as one variable that should moderate the relationship between taxation and corporate financial performance. In this study, the proxy for corporate financial performance is ROI. Reflecting the obvious state of agribusiness technology, the analytical outcome of the study indicates that the moderating
influence of the contextual variable accounts for only 12% of the dynamics of the relationship between the explanatory and criterion variables. The results are in line with erstwhile empirical submissions which recognize that technology enhances business efficiency for improved performance. As business performance is enhanced through strategic and synergistic technological innovations, taxable income will increase and consequently companies’ income tax will accrue. They noted that small businesses with turnover not more than N1,000,000; which engage in agriculture, mining and manufacturing, enjoy lower income tax rate, that is 20% of total profit for a period of three years from the date of commencement of business.

More specifically, the tax incentives for agribusinesses promotion in the Nigerian economy, as provided by Section 9 of the Companies Income Tax Act (2007) include loan interest earned by banks on lending for agricultural business. Government in a bid to encourage agricultural production, exempted from tax, interest earned by banks on loans granted for agricultural business, and this was with effect from 1991. Against this backdrop, government expects that the loan would have the following features:

- Moratorium period is not less than 18 months; Rate of interest is not more than the base lending rate of the bank granting the loan (base lending rate is the average cost of funds to a bank).

- The rate of initial allowance on plant and Machinery used in agricultural production is 95%, up from 25%. The 5% balance is retained in the books until the asset is sold or otherwise disposed of. Similarly, annual allowance rate on ranching and plantation had been increased to 50% from 15%.

- Plantation equipment expenditure attracts 95% initial allowance, as against the former 20%.

- Small agricultural businesses (those with turnover of less than N1million) in the year of assessment are charged to the lower concessional rate of 20% for the first five years of their operation.

- Loss relief, implying that a loss incurred by a business in agricultural production can be carried forward for an indefinite number of years to be set-off against future profits in the same line of business. In all companies (other than agriculture), the maximum number of years to carry forward a loss is four years after which the loss would lapse.

Where heavy or multiple taxes are prevalent, they may be critically inauspicious, leading to stagnation or eventual collapse of firms that not yet well consolidated.

**CONCLUSION**

Where the agro-industrial sub-sector of an economy is so highly technology-driven, the moderating influence of technology will (not surprisingly) be anything but significant. Basically,
as taxation constitutes a reducing balance, it takes a disproportionately positive synergistic intervention under a highly functional SFM framework to redefine the dynamics of the relevant critical variables. Conventionally, the objectives of taxation include raising revenue for government, regulating economic activities, and controlling income and employment (Abbadi, 2000; Anyanwu, 1997). To achieve the above objectives, taxes are levied by the governments on individuals and corporations including agribusinesses. Like every other business, agribusinesses which aim at wealth maximization require conscientious holistic cost minimization. Taxation remains a critical cost of operation and takes a toll on the fortunes of investors who desire to maximize their wealth. Nonetheless, finance/accounting professionals contend that all theories relating to SFM are built around the wealth maximization target (Patel, 2000; Institute of Chartered Accountants of Nigeria, 2006; Anyaduba, 2005; Adedeji, 2004; Joulfaian & Rider, 1998). The conceptual perspectives that are of critical interest are:

- The wealth indicator,
- The effects of separation of ownership rights from management powers in the pursuit of strategic financial goals,
- The signals shareholders get by judging the available wealth creation opportunity, and
- Managers’ contextual interpretation of wealth in decision making.

Besides assets that are generally regarded as tangible sources of wealth, the alternative measures/indicators are:

- Replacement/liquidation value of the firm’s assets in excess of liabilities;
- Gross market capitalization of the firm;
- Net market capitalization of the firm; or
- The equity (common share) price.

Given that agribusiness has critical link with national economic advancements of most African nations, taxation of allied commercial and industrial organizations is not strategically structured and implemented may undermine growth and development. Taxation of agribusinesses indeed provides revenue for government, but it contrariwise erodes business profit, and by extension the ROI. Where such financial depletion/erosion persists, it may lead to devastating withdrawal of capital by the affected business stakeholders. The relatively low technological infrastructure associated with many critical sectors of the Nigerian economy, including agriculture, accounts for the eventual statistical outcome of the study, to the end that technology wields weak moderating influence on the relationship between taxation and ROI. Since the realistic target of investment optimization is uppermost, the synergistic efficiency ideals of SFM cannot be over-emphasized (Agundu & Anyamaobi, 2014). Imperatively, it is recommended that:

- Accounting and finance professionals in agribusinesses should be more pragmatic in tax planning to minimize ensuing tax obligations;
- Managers of agribusinesses should insist and ensure that records of all transactions, including capital investments, operating logistics, and allied financial documentary effects, are properly kept for tax audit and corporate sustainability-driven process; and
- Government should equally ensure that well thought-out and sector synergy-targeted tax incentive schemes are consistent and strategically sustained.

Where these SFM-related ideals along with robust auspicious tax incentives are spiritedly promoted, it will go a long way in boosting growth of agribusinesses in furtherance of the ultimate economic diversification dream of the Nigerian nation.

REFERENCES


