Effect of Product Diversification on Financial Performance of Selected Banks in Kericho Town

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Abstract

The purpose of this study was to investigate the effects of product diversification strategy on financial performance of a firm. While important insights have been made, prior research has almost exclusively focused on the unidirectional link between product diversification and financial performance. This might represent a crucial omission in the previous literature. The study was guided by Resource based Theory. The perceptions of managers, creditors, and stockholders differ greatly regarding the merits of corporate product diversification. The study employed an explanatory survey design that enabled the study to get information regarding the effects of product diversification on the performance of selected banks within Kericho town. This study was carried out on Commercial Banks in Kericho town. The study targeted all the employees of the Commercial Banks. The sampled population consisted of 140 lower level management, and 43 top level management. The study used questionnaire and interview schedule in data collection. The preliminary survey was undertaken on a similar population to the target population of this study. The findings indicated significant and positive relationship between the vertical product diversification and bank financial performance, horizontal product diversification strategy had positive and significant relationship with financial performance whereas, Conglomerate diversification had positive relationship with firm performance. Further regression results indicated that Conglomerate diversification strategy had highest positive effect on financial performance, vertical product diversification and horizontal product diversification) also had positive significant effect on financial performance. The statistical tests applied in the study corroborate that diversified firms are more risky than non-diversified ones. The study therefore concluded that the increased levels of product diversification have a positive impact on the financial performance of banks. The banks should thus increase the levels of product diversification strategies so as to enhance the performance. The study therefore recommended that the bank diversifies its products and especially focus on the untapped investments which accrue as a result of conglomerate diversification.

Keywords: Product Diversification, Conglomerate Diversification, Horizontal Diversification, Vertical Product Diversification

Introduction

Perhaps the most important decisions made by top managers concerns how to improve and measure financial performance among various business opportunities. In companies with multiple divisions, managers have the ability to shift capital between business units in order to fund the best opportunities, thus creating internal capital markets (Santalo et al., 2008).

To continue growing at the maturity stage, the firms might try to expand internationally into less mature markets. In case they would not, firms might need to diversify into different industries, (Mishra et al., 2007). Entering unrelated areas or industries is referred to as the conglomerate product diversification through which corporations aim to reduce the overall risk exposure and expand growth opportunities. Related product diversification, on the other hand, refers to expanding beyond the existing product lines and/or market of the current industry (Mishra et al., 2007).

Moreover, product diversification feeds on itself. It creates a cadre of aggressive general managers, each running his or her own division, who push for further product diversification and further growth. Thus, most of the giant corporations not only were only able to reach their status by diversifying but also feel great pressures to continue doing so (Mishra et al., 2007). The relationship between product diversification and financial performance has been one of the most debated topics in the field of financial performance and finance (Ramasamy et al., 2002; Santalo et al., 2008). Product diversification issue has been studied mostly in various developed countries (Campa et al., 2002; Geringer et al., 2000; Rumelt, 1982) but limited evidence is available in emerging markets. Diversified
firms have business operations in more than one industry (Hitt et al., 2005).

According to Gourlay et al. (2004) Economies of scope will occur if: there are increasing returns (or indivisibilities) to scale in the use of one or more essential factors of production, transaction costs prevent an efficient market in the relevant factors, forcing integration, and there are limits on obtaining increased factor utilization by expanding the output of any single end-product

Surprisingly, the causal direction in the product diversification-financial performance linkage has been assumed but not tested (Syed, 2004). Results from the research on this question (Syed et al., 2004) are largely mixed and offer little in the way of explanation. Grant et al (1988) reported limited and weak evidence to support the contention that product diversification leads to or is a prerequisite for financial performance. But Syed et al., (2004) contends that product diversification is driven by deteriorating or inferior financial performance. The causal relationship, therefore, is still an important issue within the product diversification strategy literature. On the one hand, the present study confirms that firm financial performance is correlated with product diversification on the basis of market measures of returns, market rate of return.

In addition, studies on product diversification have given much attention to the developed world creating a dearth gap in the existing literature on the effect of product diversification on financial. With exception of Campa, (2002) who found that, non-diversified firms perform better than diversified firms in the emerging Kenyan economy. On the other hand, the statistical tests applied in the studies may not apply to emerging economies corroborate that diversified firms are more risky than non-diversified ones. by asking a question initially posed by Rumelt (1974): as such this study tend to fill the literature gap by assessing the effects of product diversification strategy on financial performance of a firm.

**LITERATURE REVIEW**

Chathoth, (2002) used the sample of 128 firms from Rumelt’s (1974) study and did not find any significant difference in the financial performance of related diversified, unrelated diversified and non-diversified categories of firms. Aggarwal et al., (2003) analyzed the time series data of Beatrice company since its inception in 1891 to its growth as a food conglomerate and reported that the related product diversification of the firm produce value whereas unrelated product diversification could not contribute in terms of value addition of the firm. Aggarwal et al., (2003) created a random sample of 246 Fortune 500 firms to study the relationship of product diversification with risk and return. They found a U shaped graph for the relationship between corporate product diversification and stock return as well as risk.

Ramaswamy et al., (2002) selected a sample of 2,637 US firms for the period 1981-90 to study the difference in financial performance between diversified and undiversified firms and reported that the undiversified firms outperformed the diversified firms. However, in the context of risk, the undiversified firms have a higher risk as compared to diversified firms.

Researchers remained divided on the product diversification effect in the first decade of the 21st century. Lins and Servaes (2002) used a sample of over 1,000 firms from five emerging economies to study whether a diversified firm’s shares were traded at a premium or a discount and found that the diversified firms’ shares were traded on a discount of 7% as compared to undiversified firms’ shares.

**Horizontal Diversification**

Horizontal Product diversification relates to the acquiring or developing new products or offering new services that could appeal to the company’s current customer groups. In this case the company relies on sales and technological relations to the existing product lines. For example a dairy, producing cheese adds a new type of cheese to its products.

Horizontal diversification consists, instead, of corporate expansion into more than one industry across businesses not necessarily related to each other. With respect to vertical integration, the theoretical grounding behind horizontal diversification is less clear-cut. In particular, two partially competing explanations are at work.

Another possible way to go is horizontal diversification. This can be described as the introduction of new products which, while they do not contribute to the present product line in any way, cater to missions which lie within the company’s know-how and experience in technology, finance, and marketing (Igor, 2002). Three studies provide a broad overview of the general effect of horizontal diversification and do not leave much doubt about its financial consequences. Moreck, Schleifer, and Vishny (1990) show that acquiring firms, engaged in takeovers, experience negative returns as an immediate value adjustment to their future expected performance, when they announce unrelated acquisitions; while Lang and Stulz (1994) and Berger and Ofek (1995) find that, in most cases, diversified firms trade at a discount relative to a portfolio of single-segment firms in the same industries.

Numerous studies indeed confirm this and, specifically, show that horizontal expansion often results in lower firm performance because of various agency problems. For instance, these include incompetent or irrational managers, competent but self-interested managers, wasteful spending in general and wasteful investment in poorly performing divisions in particular and, finally, the inability of the internal economy of the firm to correctly signal
to managers good investment opportunities (Rajan, Servaes and Zangales, 1999).

**H01: There is no significant effect of horizontal diversification on the financial performance**

**Vertical Product Diversification**

Vertical product diversification occurs when the company goes back to previous stages of its production cycle or moves forward to subsequent stages of the same cycle - production of raw materials or distribution of the final product. For example, if you have a company that does reconstruction of houses and offices and you start selling paints and other construction materials for use in this business. This kind of product diversification may also guarantee a regular supply of materials with better quality and lower prices (Hill and Jones 1992).

On vertical integration, Coase (1937) sets the foundation of the theory of the firm. Corporations and markets are alternative choices with respect to production organization, and transaction costs are the cornerstone. Corporations vertically expand until the marginal cost of internalizing production equals the marginal cost of outsourcing it in the market. For instance, when buyers incur sunk costs to manage repeated transactions, they develop an incentive to (upward) internalize suppliers into their firm, so as to avoid potential losses linked to the latter’s opportunism. Similarly, sellers are inclined to downward internalize distribution when exposed to potential losses because of high concentration among their customers.

By leveraging on this general rationale, various authors have further discussed the factual consistency of firm expansion. Bain (1956, 1959) points out that vertical integration, like the integration of separate activities along a value chain, reflects the creation of market power. Tirole (1988) sees it as a profitable response to the cost of contiguous monopolies (Tirole 1988). Others think it may facilitate price discrimination (Perry, 1978) or it can be used to raise rivals’ costs by increasing their costs of entry in the industry (Hart and Tirole 1990). Finally, Stigler (1951) advances a life-cycle theory arguing that, in an infant industry, vertical integration is more likely because the demand for specialized inputs is too small to support their independent production.

In general, contractual incompleteness, combined with asset specificity, complexity and uncertainty, play a central role in driving transaction costs and in the increase of the probability that opportunistic behaviour may plague market relations (Carlton, 1979). So, as Joskow (1998) points out, ‘There is clearly no shortage of theories identifying potential incentives for vertical integration.’ With this abundance of hypotheses, empirical studies have obviously thrived and have attempted to assess the factual importance of various factors as principal drivers of transaction costs. Most industrial organization surveys are product-based and focus on single products or services. Among them, studies deal with automobile components (Klein 2000) with coal: (Kerkvliet 1991); with aerospace systems: (Masten 1984); with aluminum (Stukey 1983, Hennart 1988); with chemicals: (Lieberman 1991); with timber: (Globerman and Schwindt 1986)); with carbonated beverages: (Muris, Scheffman and Spiller 1992); with pulp and paper: (Ohanian 1994); with property-liability insurance: (Regan, 1997). In all these studies, the evidence significantly supports the role of transaction costs in driving vertical integration.

**H02: There is no significant effect of vertical product diversification on financial performance**

**2.5.3 Conglomerate Product Diversification**

Maksimovic and Gorden (2002) collected the 3,74,339 segment observations of the US firms for the period 1975-92 to study the optimal size of conglomerates and their growth across different industries. They found higher growth in the conglomerates in similar industry as compared to different industry. Recently, Villalonga (2004), using a new data source of Business Information Tracking Series (BITS), found that diversified firms are traded at relatively larger premium than the firms engaged in specialized businesses.

Concentric and conglomerate product diversifications are the two product diversification strategies that they may follow (Tonglet al, 2005; Stimpertet al, 1997; Singh et al, 2003; Nayyar, 1992). Entering unrelated areas or industries is referred to as the conglomerate product diversification through which corporations aim to reduce the overall risk exposure and expand growth opportunities. Related product diversification, on the other hand, refers to expanding beyond the existing product lines and/or market of the current industry (Nayyar, 1992; Myers, 1984; Lins et al, 2002). Related product diversification is believed to lower the profitability rate in developed countries or economies. Focusing on core competencies are suggested over the conglomerates for the western economies.

In conglomerate product diversification the company is moving to new products or services that have no technological or commercial relation with current products, equipment, distribution channels, but which may appeal to new groups of customers. The major motive behind this kind of product diversification is the high return on investments in the new industry. Furthermore, the decision to go for this kind of product diversification can lead to additional opportunities indirectly related to further developing the main company business - access to new technologies, opportunities for strategic partnerships. Finally Corporate Product diversification involves production of unrelated but definitely profitable goods. It is often tied to large investments where there may also be high returns.

Therefore this study fills the gap not covered by these previous studies by investigating the effects of product diversification on financial performance. This is important as it adds value to these past studies. It provides
more evidences on the importance of product diversification on firm performance, shareholder value creation, firm growth all of which are performance indicators. So product diversification may be linked to these performance indicators so is the need for this study to explore if in the process of these performances, there is financial performance.

H03: There is no significant effect of conglomerate diversification on financial performance

RESEARCH METHODOLOGY

The researcher employed an explanatory survey research design. The population in the study was composed of all the employees, both the administrators, and the members of staff of the eight banks in Kericho town with the target population being 183 (CBK annual reports, 2011) bank employees. Census sampling technique was used in the study. Therefore, a sample size of 183 respondents of both the staff and the management was adopted. The researcher finds the value of n=183 as an appropriate sample size because it is easier to work with. The researcher collected data using questionnaires. Where the reliability of the instrument was tested using crobanch alpha test as shown in table 1

<table>
<thead>
<tr>
<th>Reliability Test</th>
<th>Cronbach's Alpha</th>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical Product Diversification</td>
<td>0.805</td>
<td>0.796</td>
<td>8</td>
</tr>
<tr>
<td>Horizontal Product diversification</td>
<td>0.741</td>
<td>0.701</td>
<td>8</td>
</tr>
<tr>
<td>Conglomerate Diversification</td>
<td>0.822</td>
<td>0.791</td>
<td>7</td>
</tr>
</tbody>
</table>

The data was organized, presented, analyzed and interpreted using descriptive methods of data analysis. It used tables, charts, percentages, and regression analysing the Likert scaled data. From the analysis, data was used to carry out a test on the questions to determine whether the objectives can be accepted or not. The multiple regression model was used in determining the relationship between the dependent variable (performance) which is to the left side of the equation and independent variables which are to the right of the equation shown below.

\[ y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \epsilon \]

**Where**

- Y-performance
- X1 is the level of horizontal diversification
- X2 is the level of vertical diversification
- X3 is the level of conglomerate diversification
- \( \alpha \) = the constant of the equation
- \( \beta_1 \) = partial coefficient of regression for \( x_1 \)
- \( \beta_2 \) = partial coefficient of regression for \( x_2 \)
- \( \beta_3 \) = partial coefficient of regression for \( x_3 \)
- \( \epsilon \) = Error term

**Findings**

This section presents Pearson correlation results used to assess the linear relationship between the variable A correlation model was computed to identify the linear relationship between diversification strategies and firm financial performance.
The correlation model illustrated indicates a significant positive relationship between the vertical product diversification (R=0.559 and p-value=0.001<<α=0.01) and financial performance. This implies that with a unit increase in the vertical product diversification there is approximately 55.9% increase in financial performance. The correlation table above also shows that there is a significant positive relationship between horizontal product diversification and financial performance (r=0.852 and p-value=0.001<<α=0.01). This result indicates that with a unit increase in horizontal product diversification there is a corresponding 85.2% increase in the financial performance of the bank. The relationship between the vertical and horizontal product diversifications indicates a significant positive relationship (r=0.254 and p-value=0.033<α=0.05). It implies that with a unit increase in either vertical or horizontal product diversification there is approximately 3.3% increase in the corresponding product diversification strategy. The table also shows that there exists a significant positive relationship between conglomerate diversification and financial performance (r=0.221 and p-value=0.021<α=0.01). This result indicates that with every unit increase in conglomerate diversification, there is approximately 22.1% increase in financial performance of a bank. The table also indicates a significant positive relationship between conglomerate diversification and vertical and horizontal product diversification (r=0.11 and p-value=0.002<α=0.01 and r=0.754 and p-value=0.001<α=0.05). The most significant relationship is that one between horizontal product diversification and conglomerate diversification which indicates that there is up to 75.4% increase in product diversification with every unit percentage increase in conglomerate diversification. We also found out that the most influential factor for performance was horizontal product diversification i.e. 85.2%.

**Multiple Regression model for financial performance of banks**

On determining that all the variables of product diversification had an effect on financial performance the study computed an overall regression model. The model summary above indicates that 79.8% of the variation in the dependent variable is accounted for by the independent variables. This relationship is strong and significant, this is shown by the value of R-square=0.636.

Table 3 shows that the regression model is significant (F-value=219.685 and p-value=0.000<α=0.05 at 3 degrees of freedom).
Table 3 Overall Regression Model for Financial Performance of Banks

<table>
<thead>
<tr>
<th></th>
<th>Standardized Deviation</th>
<th>Standardized Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>6.714</td>
<td>1.411</td>
</tr>
<tr>
<td>Vertical Product Diversification</td>
<td>0.591</td>
<td>0.26</td>
</tr>
<tr>
<td>Horizontal Product diversification</td>
<td>0.558</td>
<td>0.252</td>
</tr>
<tr>
<td>Conglomerate Diversification</td>
<td>1.162</td>
<td>0.234</td>
</tr>
<tr>
<td>R Square</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>219.685</td>
<td></td>
</tr>
</tbody>
</table>

Dependent: Financial Performance

The table above indicates that the regression model can be summarized as:

Financial Performance = \(6.714 + 0.591 \times \text{Vertical Product diversification} + 0.558 \times \text{Horizontal Product diversification} + 1.162 \times \text{Conglomerate Product diversification}\).

Where \(6.714 = \beta_0\), \(0.591 = \beta_1\), \(0.558 = \beta_2\) and \(1.162 = \beta_3\).

The table also shows that all the model parameters are significant at \(\alpha = 0.05\). This is indicated by the calculated \(t\)-values which are all significant i.e. all the \(p\)-values are all less than \(\alpha\).

The financial performance of banks depends on the implementation of product diversification strategies. The employment of horizontal product diversification strategies, vertical product diversification strategies such as investment in technology, operationalization of bank incomes to clients’ loans and putting in place strategies that enhance bank deposit will enhance the performance of banks. Also, implementation of conglomerate product diversification strategies such as trading in real estates and charging mortgages with an aim of making profits, participating in community development projects, getting involved in policy making that leads to laws that favour banks’ performance and reporting in the economic conditions of the country are part of strategies that will promote the performance of banks.

From the regression model computed in table 3, the research hypotheses were tested using the significance level of the coefficients; the research aimed to test the hypothesis with an aim of accepting whether there was any effect of the variables on financial performance of the firm. The research hypothesis for the study included;

The regression results in table 3 shows that vertical product diversification has an effect on the financial performance with a beta coefficient of 0.591, the effect is significant at \((p<0.01)\). This result supports existing literature, in concurrence to Thomas, (2006) that vertical product diversification has a significant impact on the financial performance of the organizations. Thomas, (2006) also points out that organizations can broaden their assets base through investments in shares and opening many branches. Nachum, (2004) contended that technology has changed the performance of banks positively. It has led to efficiency of banks’ operations and as a result there has been improved financial performance of the banks who have invested in technological equipment and devices such as ATMs.

The regression results in table 3 show that horizontal product diversification has significant effect on financial performance with a beta coefficient of 0.558, the effect is significant at \((p<0.007)\). There has been improvement in financial performance of the banks as a result of investments in assets such as having many branches. The banks also issue shares to shareholders in IPOs in order to get capital for enhancing the financial performance of the organization. Thomas, (2006) points out that organizations can widen their assets base through investments in shares and opening many branches thus enhancing their financial positions.

The regression results in table 3 shows that conglomerate product diversification has significant effect on financial performance with a beta coefficient of 1.162, the effect is very significant at \((p<0.006)\). The banks have benefitted by getting involved in the drafting of government policies and the policy makers have come up with policy frameworks that favour bank operations. This finding is consistence with Santalo, (2008) who states that many banks have gained because governments of many nations both in developed and developing countries have welcomed the participation of banks in drafting of policies especially those relating to finances. There have also been an increasing number of customers registered by banks over the past two years because banks have supported
community activities like paying school fees to children from poor family backgrounds.

Through this kind of bank undertaking the members of the community have felt that they are part of the ownership of the company and as a result they put their resources in the companies as investments. This finding is in consonance with the results of Ramaswamy, (2002) who argues that companies who get involved in the developments projects that are beneficial to the community will also benefit since the members of the community will feel that they are part of the ownership of the company and as a result they put their resources in the companies as investments.

CONCLUSION AND RECOMMENDATIONS
The level of vertical product diversification has an effect on the financial performance of the banks. The banks gain financially if it invests in technological equipment such as ATMs that enhances and simplifies bank’s transactions and make services to customers more convenient. The bank also benefit financially if it opens many of its branches across many regions. This is because the bank’s services will be easily accessed by many people and thus the bank will register an increased number of customers. The financial status of the banks will also be favoured if the banks changes some of its income to loans to its customers since it will earn interest from the loans. The financial performance of banks is also influenced by the level of horizontal product diversification. The financial performance of banks is enhanced when it provides a number of loan products to different customers. This will ensure that the different financial needs of the customers are taken care of and the customers will borrow loans that are capable of repaying. The bank will benefit from the interest that will be charged on the loans. The banks also gain financially when they act as agents for businesses wishing to send money to other countries. When the banks develop supplementary products and services for example MPESA services to support customer banking needs and undertake certain businesses on behalf of customers, they gain some profit. These measures ensure that the bank is able to retain existing customers as the customers are satisfied with the service delivery at the bank.

The level of conglomerate product diversification has some impact on the financial performance of the banks. When government policies that favour financial activities of banks are formulated and implemented, the banks’ financial statuses are improved. The involvement of banks by the policy makers in drafting these policies has led to the policies that have improved banks’ performances. The financial positions of banks will also be enhanced if banks trade in real estates and charge mortgages. Most banks have gained financially by getting involved in activities and development projects that are of benefit to the members of the community. This is because the community will be interested in the banks’ initiatives and they will be able to be attracted to become customers of those banks. When the banks report on issues affecting economic situations in the country, the attention of the government is arrested to take the necessary action. For example when the country’s economic conditions are not good, the government’s action will be to take steps that will improve the economic conditions. In this way the bank will also benefit because of the favourable economic conditions.

The research made the following research recommendations based on the factors that were computed as contributing more significantly to the regression models of the effects of product diversification on the financial performance of banks. The banks should increase the levels of vertical product diversification by increasing the investments on assets such as having many bank branches spread across all the regions of the country so that they can broaden their customer base and place measures that will lead to more horizontal product diversification through provision of a number of loans products for different customers and needs. Similarly, increase the levels of conglomerate product diversification by engaging in activities that are of benefit to them such as trading in real estates and assisting policy makers draft policy frameworks that favour financial performance of banks.

This is a case study research of banks in Kericho Town in Kenya and thus the results of the study may not generalize the state of affairs in other regions. A similar study should be carried out in other regions. The suggestion for further study should be effect of product diversification on financial performance of banks in other regions. The study also suggest the inclusion of corporate governance in product diversification process.

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