Impact of Product Branding on Sales Revenue of Listed Companies in Ghana

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Abstract
This paper investigates short-run and long-run impact of product branding on sales revenues of Unilever (Ghana) Limited. The paper focused on Unilever (Ghana) Limited because it is one of the distribution companies listed on Ghana Stock Exchange with more strategic focus on product branding. Time series regression was used to investigate the impacts of product branding on sales revenue and data covered 1984-2014 financial years. The paper adopted VECM for impact estimation. The results indicate that product branding has long-run positive impact on sales revenue but did not have significant short-run impact on sales revenue. The paper recommends a continuous product branding to ensure sustainable growth in sales volumes and higher profits.

Keywords Product Branding. Sales Revenue

1 Introduction
In the increasing monopolistic competitive business environment, consumers have more information on products, access to more products, creating more product alternative choices and as a result have higher expectations than ever. The end result of this for marketers and firms is to create more product differentiation to avoid their products being seen as commodities. To cope with this increasing demand, firms and marketers have intensified the branding of their products to be unique from their competitors (Mitchell et al, 2001). One of the strategies is product branding. Product branding involves the process of creating unique name and image for a product in the minds of customers. This makes a product unique from other products, thereby differentiating products in monopolistic market. Product branding comprises of design, logo and messaging. The idea of product branding is to trigger an emotional connection in consumers and this connection will last throughout the whole life of the product (Xie and Boggs, 2006). It makes product have unique image and identity and this makes firms to position all their products differently. Blair (2013) added that product branding helps in market segmentation, customer franchising and facilitates purchasing of products.

The long term impact of product branding is expected to sustain corporate profit. Hofstrand (2009) in describing profitability distinguished accountants ascertainment of profit from

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economists estimation of profit. Accounting profit measures the viability of a firm in its current state but does not reflect long term impact. Economic profit shows future viability of an emerging business and to demonstrate how income would exceed expenses over long period of time. Every firm desires to be profitable over long-term but being profitable on sustainable basis is a challenging task and only few firms with product branding focus meet this goal (Parkitna and Sadowska, 2011).

One of these firms constantly seeking to brand its products is Unilever (Ghana) Limited. According to (Unilever.com, 2015). Unilever's product includes; personal foods, beverages, and detergents. The company is credited with over 400 brands, grouped into four main categories – Personal Care products, Food products, Refreshment products and Home Care products. The company’s current largest-selling brands include: Axe/Lynx; Ben & Jerry's; Dove; Heartbrand; Flora/Becel; Knorr; Lipton; Hellmann's/Best Foods; Lux/Radox; Rexona/Sure; Omo/Surf; Sunsilk; Magnum; VOSToni and GuyTRESemmé. The study enquires whether the branding of Unilever (Ghana) Limited products has significantly impacted positively on its profit or sales revenue. Though many empirical studies have considered this issue in the past but they focused on some elements of product branding without focusing on branding as a whole. For example, Millot (2011) conducted study in France and Germany and concluded that trademarks have significant and positive correlation with market innovation. Mehrazeen et al (2012) also found in Iran that there is a significant positive relationship between a firm’s trademark and performance indicators such as; Return on Equity, Return on Assets, Return on Sales and Net Income. The purpose of this study is to investigate the impact of product branding on the profitability of Unilever (Ghana) Limited. By conducting this research, a deeper insight into the subject of product branding with regards to consumer products will be obtained.

1.2 Literature Review

In the view of Heaton (2011), branding is what you are. It involves the process of distinguishing a firm’s product from competing products offered for sale. Harris and de Chernatony (2001) have identified six elements of product branding as brand domain, brand value, brand heritage, brand assets, brand reflection, brand personality and Other brand elements include logos and symbols, packaging and slogan. Brand name properties have been extensively studied by scholars like Klink (2000), Yorkston and Menon (2004), Zhang and Schmitt (2001) and Tavassoli & Han (2002). However, logo design and other visual properties have not been thoroughly reviewed in academic research. In recent times, Packaging is receiving greater academic research attention (Folkes and Matta, 2004).

Based on literature review, positioning; communicating, delivery, leveraging (PCDL) Model has been proposed as conceptual model for brand building in competitive business environment. The model is shown in Figure 1.
From the PCDL Model, the four elements of brand building in any company are positioning the brand, brand message communicating, brand performance delivering and leveraging the brand equity. Brand positioning is creation of perception of brand in the customer’s mind, making product unique from competitors’ product and meeting customers’ expectation. From Figure 1, marketers use feature-driven, benefit-driven, functional-driven and operational-driven as positioning tools. The brand message is communicated to consumers through advertisement, celebrities, events, shows and consumers. Delivering brand performance is done through equity product performance, customer care, customer satisfaction and delight. Keller (2003) defined leveraging process as a link of branding to firms that create a new set of associations from the brand and that affect their brandings. Many companies nowadays employ different techniques to leverage their brandings. They engage in brand extensions, line extensions, ingredient branding and co-branding, etc.

Though product branding has many benefits to a firm, the ultimate expected outcome of product branding is increased profit. Product branding creates product image, makes purchasing easier and develops customer franchise so that the “search costs” on customers may decrease so that firms could charge exorbitant price and still enjoy high profits margins. Product branding encourages firms to make huge investment in product quality which leads to higher returns. This has been confirmed by Llonch-Casanovas (2012) that product branding allows firms to differentiate their products to make their products unique in the eyes of consumers. Many empirical studies have confirmed the assertion that product branding increased product sales. One of these studies is by Griffiths et al (2005) who conducted a study in Australia using cross-sectional data of 300 firms over 1989 to 2002. Their study concluded that product branding through trademarks is a significant determinant of company profits. Stock market values are positively related with firms trademark by UK manufacturing firms, service-sector large firms, and firms with a trademark enjoy significantly higher value added than non-trade institutions between 10% and 30% for all firms (Greenhalgh and Rogers 2007). Millot (2011) conducted similar study in France and Germany and concluded that product branding such as trademarks have significant and positive correlation with market innovation. Mehrazeen et al (2012) also found in Iran, significant and positive relationship between product branding and performance indicators.
Not only does branding through trademarks, motivate sales, but its awareness is equally important since brand awareness influences consumers’ decision-making. For example when a consumers know a certain brand they include that brand name in their daily purchase (MacDonald & Sharp, 2000). This suggests that a well-known brand is more likely to have more patronage than a less known brand (Yoo et al, 2000). Haung and Sarigollu (2012) emphasized brand awareness increases brand market performance, hence it is not enough to just brand your products to companies should factor into their product branding, the component of awareness creation of the brand through regular advertisement of the brand.

A study by Bansah et al (2015) on “effect of branding on consumer buying behaviour of Ghana textile fabric users in Ho Municipality of Ghana” concluded that branding positively affects sales of textiles in Ghana. They established that customers recommendation are geared towards their favourite textile brand to their families, relatives and friends and this will finally increase sales volumes of their favourite brand. The study further indicated that customers are loyal to their favourite brand and would continue to buy when there is slight rise in price of the brand.

Anabila and Awunyo-Vitor (2014), assessed the role of branding in marketing pharmaceutical products in Ghana. The study was done on three pharmaceutical companies in Accra, the capital of Ghana, targeting pharmaceutical companies within Greater Accra Region. The study found that branding improves sales of pharmaceutical products in Ghana. The study indicated that customers’ perception of brand significantly influence their buying decision as well as sales of pharmateutical products. Pharmaceutical firms used branding to communicate the value of their product and tangible differences to consumers.

However, Yeboah et al (2013) conducted as similar study on the role of branding in Ghanas’ Telecommunication Industry. The study took place in Kumasi Metropolitan, focusing on Kumasi Polytechnic, Amakom, Asafo, Asowasi and Bompata with sample size of 120 individuals. Their findings stated that, there was statistically insignificant correlation between trademarks and the choice of network, indicating that trademark does not significantly impact on sales of mobile networks. The study however found that brand quality significantly impact on sales of mobile network in Ghana, though it is not the most important factor in the telecommunication industry.

Though all the studies considered the impact of branding on sales or consumer buying behaviour, the studies failed break the impact into short run impact and long run impact. The time period in business is very important since this informs investor when returns on branding should be expected. Should returns (positive impact) of branding be expected in the short run or long run or both? This is what this study seeks to answer as a way of bridging the gap in literature.

From the above literature, the following hypothesis would be tested in this paper:

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1. \( H_0 \): There are no significant short-run and long-run impacts of trademarks on profit in Unilever (Gh.) Limited.
   \( H_1 \): There are significant short-run and long-run impacts of trademarks on profit in Unilever (Gh.) Limited.

2. \( H_0 \): There are no significant short-run and long-run impacts of brand awareness on profit in Unilever (Gh.) Limited.
   \( H_1 \): There are significant short-run and long-run impacts of brand awareness on profit in Unilever (Gh.) Limited.

3 Methodology
3.1 Research Design
A quantitative research method was employed to diagnose the effect of product branding on profitability of Unilever (GH) Limited. This is because the hypothesis formulated in the study could be best tested with mathematical models (Lisa, 2009). The study focused on Unilever (GH) Limited. Unilever (GH) Limited is of the largest listed companies in Ghana with long track records of brandings, which is in line with the vision of the firm. The company owns more than 400 brands, which are put into four main categories - Refreshments, Foods, Personal Care and Home Care.

3.2 Data
Data was compiled on product brand and company’s profit over the period of 1984-2014 Financial Statements ascertained from Ghana Stock Exchange Database. The study followed Bae (1997), Scott-Morton (1999), Rudholm (2001) and Daunfeldt et al (2005) and used sales revenue as proxy for profit. Elements of branding mostly used in empirical researches include logo (Schmitt & Smionson, 1997), packaging (Garber et al, 2003; Folk and Matta, 2004), brand name (Yorkston and Meno, 2004) and advertisement (Edell and Keller, 1999). The study however, gathered data on cost on branding Unilever’s product. The products as used in the study included all Unilever’s products on Ghanaian market.

Model specification
The model is specified as \( S = f(PC, BWC) \)
Expressed explicitly in log linear form as shown in equation 1
\[
\ln SR = \beta_0 + \beta_1 \sum LnTMC + \beta_2 \sum LnCAD + \varepsilon \quad \text{eqn}(1)
\]
Where,
\( SR \)= annual sales revenue of Unilever’s (GH) Limited products
\( TMC \)= annual trademarks cost of Unilever’s (GH) Limited products. This included all cost associated with products design in a financial year.
\( CAD \)= Cost of advertising the products through all recognized form of media like TV, radio, billboard and other medium recognized by the company as product advertisement.
\( \beta \)=parameters to be estimated, where \( \beta_0 \) is the intercept or constant term and \( \beta_1 \) is the coefficient or magnitude of impact of branding cost on sales revenue
\( \varepsilon \)= is the stochastic terms
3.3 Measurement
In this study, Unilever’s profit is measured by sales, which has been used in past studies to assess the impact of innovation activities to improve firms’ performance and growth (Ernst, 1995; Artz et al., 2010). Sales revenue is dependent variables in the study. Independent variables are trademarks cost (TMC) and cost of advertisement (CAD). This study used these variables other than cooperate branding because of their relative objectivity, readily availability (Greenhalgh and Longland, 2005; Belderbos et al., 2010).

3.4 Estimation Methods
The first step involves unit root test of the time series data, to determine whether they are stationary or otherwise. To ascertain this, Augmented Dickey Fuller (ADF) unit test were used. The acceptance of the null hypothesis (ADF) means the existence of unit root (non – stationary). The Johansen Cointegration test was performed to determine the number of cointegration equation (s). Johansen Cointegration was employed because the variables were considered to be stationary at similar order. Lastly VECM was then estimated to determine both long-run and short run impact of product branding on sales revenue.

4 Results
1.4.1 Test for Stationarity
Augmented Dickey-Fuller test indicated non-stationarity of trademarks cost (ADF=-1.062266; p=0.916), advertising cost (ADF= -2.125892; p=0.5099) and sales revenue (ADF=-1.746610; p=0.7009) at their levels. The trademarks cost (ADF= -8.221155; p=0.000), advertising cost (ADF=-4.413199; p=0.0085) and sales revenue (ADF= -7.159934; p=0.000) were however stationary after 1st difference (see Table 1A, Table 1B and Table 1C for unit root tests).

| Table 1A: Unit Root Test for Trademarks Cost (TMC) |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| Level           | t-stats         | p-value         | t-stats         | Prob*          |
| ADF test stats  | -1.062266       | 0.9165          | -8.221155       | 0.0000         |
| test of critical value  |                |                |                |                |
| 1%              | -4.356068       |                | -4.356068       |                |
| 5%              | -3.595026       |                | -3.595026       |                |
| 10%             | -3.233456       |                | -3.233456       |                |

Source: Field Data (2016), **Mackinnon (1996) One-sided p-value
### Table 1B: Unit root Test for Advertising Cost (CAD)

<table>
<thead>
<tr>
<th>Level</th>
<th>First Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t-stats</td>
</tr>
<tr>
<td>ADF test stats</td>
<td>-2.125892</td>
</tr>
<tr>
<td>test of critical value (1%)</td>
<td>-4.356068</td>
</tr>
<tr>
<td></td>
<td>-3.595026</td>
</tr>
<tr>
<td></td>
<td>-3.233456</td>
</tr>
</tbody>
</table>

Source: Field Data (2016), **Mackinnon (1996) One-sided p-value

### Table 1C: Unit Root Test for Sales Revenue (SR)

<table>
<thead>
<tr>
<th>Level</th>
<th>First Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t-stats</td>
</tr>
<tr>
<td>ADF test stats</td>
<td>-1.746610</td>
</tr>
<tr>
<td>test of critical value (1%)</td>
<td>-4.356068</td>
</tr>
<tr>
<td></td>
<td>-3.595026</td>
</tr>
<tr>
<td></td>
<td>-3.233456</td>
</tr>
</tbody>
</table>


#### 1.4.2 Cointegration Test

Trace test and Max-Eigen tests were used to test for number of cointegration equation(s) (Table 2). Trace and Max-Eigen tests indicated one cointegration equation; hence trademarks cost, advertising cost, and sales revenue have long-run association.
Table 2: Trace and Max-Eigen Tests

<table>
<thead>
<tr>
<th>Hypothesized No. of CE (s)</th>
<th>Trace Test</th>
<th>Max-Eigen Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Eigenvalue</td>
<td>Trace stats</td>
</tr>
<tr>
<td>None*</td>
<td>0.576196</td>
<td>30.06910</td>
</tr>
<tr>
<td>At most 1</td>
<td>0.235084</td>
<td>7.748495</td>
</tr>
<tr>
<td>At most 2</td>
<td>0.029584</td>
<td>0.780786</td>
</tr>
</tbody>
</table>

Source: Field Data (2016), * Denotes reject the Hypothesis at critical 0.05 level
**MacKinnon-Haug-Mchells (1999) P-value

4.3 Model Estimation

Estimation result is given Table 3. From Table 3, sales revenue, trademarks cost and advertising cost have significant positive long –run association and long-run impact of trademarks cost and advertising cost on sales revenue ($\beta= 0.131305; p=0.0126$). Therefore, null hypothesis ($H_0$) is rejected in accordance of the alternative hypothesis ($H_1$) that trademarks cost and advertising cost have significant long-run positive impact on sales revenue. However, Wald test (see Table 4) indicates no short-run impact of trademarks and advertisement on sales revenue. The study therefore accepts null ($H_0$) that there is no significant short-run impact of trademarks cost and advertisement cost on sales revenue. This study therefore confirms previous studies like Griffiths et al (2005) and Greenhalgh and Rogers (2007) that trademarks cost significantly impact on profit. Haung and Sarigollu (2012) noted that brand awareness through advertisement promote market performance of the product. This study though supports these previous empirical findings, shows that Unilever’s (GH) Limited branding strategies did not significantly have short run impact but long run positive impact. This is possible because, it takes time for consumers build brand loyalty which ensures repurchase of the products and favourable recommendation of the products by customers to relatives and friends (Haung & Sarigollu, 2012).

Trademarks and advertisement explain 51.31% of variation in sales revenue ($\text{Adj. } R^2=0.51310$). The model as wholes is statistically significant ($F$-stats=26.4913; $p=0.000$). The estimated model equation is given in equation 2

$$D(S)=C(1)*(S(-1)-2.56680952581*PC(-1)+24.4881604121*CAD(-1)+C(2)*D(S(-1))+C(3)*D(S(-2))+C(4)*D(TMC(-1))+C(5)*D(TMC(-2))+C(6)*D(CAD(-1))+C(7)*D(CAD(-2)))…………………………………..\text{Eqn (2)}$$

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Table 3: Model Estimation (VECM)

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Stats</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C(1)</td>
<td>0.131305</td>
<td>0.047693</td>
<td>2.753149</td>
</tr>
<tr>
<td>C(2)</td>
<td>-0.122163</td>
<td>0.263579</td>
<td>-0.463479</td>
</tr>
<tr>
<td>C(3)</td>
<td>-0.405602</td>
<td>0.255111</td>
<td>-1.589903</td>
</tr>
<tr>
<td>C(4)</td>
<td>-0.304633</td>
<td>0.324161</td>
<td>-0.939759</td>
</tr>
<tr>
<td>C(5)</td>
<td>-0.350885</td>
<td>0.379044</td>
<td>-0.025711</td>
</tr>
<tr>
<td>C(6)</td>
<td>32.29969</td>
<td>29.09807</td>
<td>1.110029</td>
</tr>
<tr>
<td>C(7)</td>
<td>-41.05164</td>
<td>32.74073</td>
<td>1.253840</td>
</tr>
</tbody>
</table>

$R^2=0.62837$

Adj. $R^2=0.51310$

F-stats=26.43913 (p-value=0.000)

Durbin-Watson Test=1.917495

Source: Field Data (2016) Dependent Variable ([D(S)], significant level=0.05

Table 4: Wald Test for Short-Run Impact

<table>
<thead>
<tr>
<th>Hypothesis: C(4)=C(5)=0</th>
<th>Hypothesis: C(6)=C(7)=0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Stats</td>
<td>Value</td>
</tr>
<tr>
<td>F-stats</td>
<td>0.625430</td>
</tr>
<tr>
<td>Chi-sq.</td>
<td>1.250859</td>
</tr>
</tbody>
</table>

Source: Field Data (2016)

Conclusions and Recommendations

Many studies have investigated into impact of branding through its aspects like brand name, logo, trademarks and brand awareness on company’s performance, this study has shown that branding (trademarks and brand awareness) significantly have long run positive impact on sales in Unilever (Ghana) Limited. Companies which create and effectively manage their brand stand to gain more sales in the long run and the focus should not be on immediate impact of branding.
but its long run impact. Product branding is increasingly important in the phase of increasing competition in product market. Unilever (Ghana) Limited should continue to improve its product brand to ensure sustainable increasing sales revenue. Unilever (Ghana) Limited could adopt trademarks or packaging best packaging strategies such as green packaging, tiered branding, feel-good factor, adding personality, speed to shelf and multisensory packaging (Ghidossi et al, 2012).

The study recommends the following:

1. Unilever (GH.) Limited should continue to improve its product brand to ensure sustainable increasing sales revenue. Unilever (GH) Limited could adopt trademarks or packaging best packaging strategies such as green packaging, tiered branding, feel-good factor, adding personality, speed to shelf and multisensory packaging.
2. Unilever (GH) Limited should continue to use appropriate advertising medium to reach Ghanaian market. The company should constantly consider TV stations and Radio stations with wider listeners in their advertising drive to reach more consumers for improved long run sales.

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