The Effects of Commodity Price Fluctuations on the Performance of Manufacturing Firms; a Case of Cascade Steel Rolling Mills.

Background of the Study

It is without a doubt sensible to focus on the biggest risks from a corporate perspective. However, when one compares the variation of varied financial, including interest rates, exchange rates and stock market indices, reveal even a higher volatility than interest and foreign exchange rates (Gynther, 2014). Subsequently, the effect of changes in price on commodities is a vital corporate management issue. According to Hinterhuber and Liozu (2012), businesses in the manufacturing sector are the most affected by price volatility since they depend on raw material products that any service or trade firm. With the existing unfavourable conditions in business, manufacturing firms have had to make tough decisions and cushion themselves against the rising cost of overhead expenses and raw materials. These high prices may be difficult especially for the consumers and retail market to take, but even large firms are also going to be affected by this inflammatory trend in economic production.

Statement of the Problem

Most of the literature utilised majorly focusses on the impact of price fluctuations and unanticipated change that arises in the foreign exchange rates and interest rates of a firm value. Thus to contrast this, the effect of changes in commodity prices in firms is analysed in a few studies only and for selected corporations. Prices of commodities are highly volatile and thus represent a vital risk to manufacturing firms. Manufacturing companies of today, to be precise, experience fluctuating costs of factors of production including labour, capital and raw material inputs. As the costs of raw materials rise, most manufacturers always push prices towards customers. And as the cost of supplies utilised in consumer and industrial products rises, most manufacturing firms seek ways of passing the expense to the consumers.
Declarations of changes of prices upwards has become an everyday occurrence (Meehan, Simonetto, Montan & Goodin, 2012).

**Research Question**

The specific objectives of the study were to determine the effect of fluctuation in prices of commodities on the performance of Cascade Steel Rolling Mills.

The study sought to answer following research question:

How does fluctuation of commodity price affect the performance the firm?

**Ethical Considerations.**

One of the major limitations of the study was the use of data and information on previous studies done on the same subject. There are very few empirical studies that try to relate the changes in prices to growth in sales of manufacturing concerns. Thus leading to inadequate literature to draw the hypothesis of the study from. Some of the information required are considered to be too confidential for most organizations. The issues of pricing and profitability are mainly for the owners and shareholders consumption thus generating the above data is challenge and may take a lot of convincing. The fear is basically that the information may be used for other purposes other than the study or leakage to competitors and other unauthorised parties.

**Research Strategy**

Performance in business refers to the achievement of a certain task measured against current standards cost, completeness, accuracy and speed. A fundamental building block of economic theory is the theory of price. One of its contentions is that prices are always sticky downwards but very flexible upwards. Therefore prices for products are likely to show inflationary trends as opposed to deflationary trends (Liozu & Hinterhuber, 2014). However,
this position might not hold in the current turbulent and competitive market environment where firms are at price war with each other.

Ramanujam and Tacke (2016) emphasize that companies occasionally make price dips (or discounts) to accelerate their stock turnovers. This in essence is a price reduction aimed at encouraging customers to buy the products and to empty the warehouses. A business entity depends heavily on it is stakeholders—especially its customers for survival and success. Prices are set for customers to pay in order to obtain the products. Therefore, what happens when people shun the product because of prices they think too high (hence unaffordable) or too low (hence they view the product as inferior)? The answer to this question will explain how price changes affect the survival of the business. The companies can take a more proactive approach by ultimately leverage pricing to drive a more efficient supply chain that better balances the cost of manufacturing, with seasonal demand, competitive pressures, and unforeseen market events.

In advice, Bodea & Ferguson (2011) asserts that a winning pricing strategy involves a thorough understanding of an offering’s value to the end-user, along with effect on commodity price and capital to the organization. With the knowledge there are significant opportunities to capture additional profits throughout the organization, many manufacturers can benefit from first conducting a performance assessment at each stage of the pricing process. Liozu & Hinterhuber (2014), argues that although senior sales and operational decision makers understand these concepts in theory, many are restricted by manual, home grown technologies that provide a lack of visibility into the nature and causes of pricing trends. As a result, they can be completely blind as to how to capitalize on opportunities for improvement. This leads to decisions that are made on gut instinct alone, rather than scientific or market-based analysis. In order to support a more dynamic pricing process,
dynamic, multi-method price management solutions are needed so companies can take advantage of a closed-loop environment that provides a mechanism to continually set, monitor, and manage the right prices in real time to maximize value and accelerate time-to-benefit (Ramanujam & Tacke 2016).

While the best starting point varies from company to company—most experts believe that starting with an analysis of historical pricing practices provides the best starting point—improvements come from an effective price analyses, manufacturers can gain a better understanding of where their current policies are causing the company to lose deals, or where money is potentially being left on the table. Once a manufacturer has gained better control over its approach to the pricing process, the company can start to use pricing as a strategic device within the supply chain, allowing it to help shape demand to accomplish business objectives while, at the same time, justifying the real-time variables. For example, when a company increases its product’s price to a particular level such that the change in price have influence on behavior on the demand side.

**Research Design**

According to the researcher, for this study, the appropriate technique is the case study design. Subsequently, the study will focus on a particular industry i.e. Cascade Steel Rolling Mills ltd as opposed to the study of the entire international company. This design is advantageous because of its immediacy and earlier contact to data.
Sample Population

The sample population for this study is 70. The population is categorized as shown in Table 1 below.

Table 1: Population

<table>
<thead>
<tr>
<th>Category</th>
<th>Size</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top management</td>
<td>13</td>
<td>19</td>
</tr>
<tr>
<td>Middle level management</td>
<td>21</td>
<td>30</td>
</tr>
<tr>
<td>Supervisors</td>
<td>36</td>
<td>51</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>70</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: (Ramanujam & Tacke, 2016)

Sampling Design

This study will adopt stratified sampling design. The target population will be stratified into top management, middle level management and supervisors as shown in Table 2 below.

Table 2: Sample

<table>
<thead>
<tr>
<th>Category</th>
<th>Size</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top management</td>
<td>6</td>
<td>19</td>
</tr>
<tr>
<td>Middle level management</td>
<td>10</td>
<td>30</td>
</tr>
<tr>
<td>Supervisors</td>
<td>17</td>
<td>51</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: (Ramanujam & Tacke, 2016)

Data Collection Instruments and Methods

The study will use primary data. A structured questionnaire will be used as the main method of data collection. The questionnaire will make use of close-ended questions to ease
data collection and analysis. The questionnaire will be administered to the respondents within their work units for filling in at their convenient time and collected later.

**Data Analysis and Measurement Strategy**

All the collected data will be analysed using inferential and descriptive statistics. To be concise, the research will utilise frequency tables, averages and percentages. This being a descriptive type of study, it is expected that summaries obtained from descriptive statistics approach should provide a basic view of the statement. However, with more advanced statistical methods would have provided a clear cut basis of making conclusions other than descriptive statistics. In this case, due to the sensitivity and volatility of sourcing information, data analysis will involve simple presentation and tabulation of reports. A time series analysis will be used in comparing price changes over periods and the movement in measurable variable such as profits and cash flows. Percentages will be used to explain the fluctuations in the variables.

**Results**

The study is expected to conclude that price fluctuations, in a manufacturing concern, is likely to be on an upward trend. As the prices of capital goods increase, they also push up the costs of producing goods. In addition, as prices increase the amount of cash flows to the company also increases. However, the relationship between frequency of and price fluctuation is found to be blurred. Prices are expected to be less likely to affect the frequency of cash flows.

**Copy of Questionnaire.**

**QUESTIONNAIRE**

This questionnaire’s purpose is to collect data on the effects of commodity price fluctuations on the performance of the manufacturing industry. The details obtained shall be
treated with utmost confidentiality and shall only be used for the intended purpose. Your input shall be highly appreciated.

1. Position in the organization (choose from the following categories)
   - Senior management
   - Middle level management
   - Junior employee

2. Was there a price fluctuation in the past one year?
   - Yes
   - No

3. How have the prices for your products behaved in the past one year (tick one)
   - They have been on an inflationary trend
   - They have been on a deflationary trend
   - Prices have been stationary

4. What was your observation on the price of commodities in the past one year? Choose from the options below
   - Our price of commodities ratio decreased
   - Our price of commodities ratio increased
   - Our price of commodities ratio remain unchanged

5. How can the effects of price fluctuation be mitigated?

   __________________________________________________________

6. What should be done to manage price fluctuation?

   __________________________________________________________
References


