The Competitiveness of Saudi Pharmaceutical Industry Using Porter 5 Forces Analysis

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Abstract
Pharmaceutical industry is a challenge in both the developed and the developing countries. If a company wants to survive, it should be able to compete well in the domestic and in the international markets. The main purpose of this paper is to examine the competitiveness of the Saudi Pharmaceutical Industry (SPI) using Porter 5 forces analysis. A questionnaire has been designed, distributed and filled up by experts from the Saudi Pharmaceutical Industry. The findings show that SPI has a favorable advantage in terms of bargaining power of suppliers, bargaining power of buyers and rivalry among competitors. However, it lacks a favorable advantage concerning threat of substitutes and threat of local and global entry. Depending on the literature and the questionnaire findings, a number of strategies were recommended to SPI companies, which can also be adopted by companies in other developing countries.

Keywords: Competitiveness, Pharmaceutical industry, Porter five forces, rivalry, bargaining power

1. Introduction
The pharmaceutical industry is a complex, potent, and greatly globalized industry. It allocates the majority of its resources to the process of drug discovery, manufacturing, marketing, and logistics (Halliday et al. 1997). It requires concentrated research and development (R&D) high expenditures and extensive regulation of its products compared with other manufacturing sectors (Michels et al. 1999).

The pharmaceutical industry is one of the main sensitive industries in the world as more countries are developing constantly. It is a strategic activity as it concerns people's well being and cares for public health. This research is divided into five main parts; the first one contains an introduction containing the research problem and the research objectives. The second part contains a literature review that provides an overview on the pharmaceutical Industry in KSA with a focus on the components that are relevant to the competitiveness in this industry. This section also presents Porter’s theory with its five forces of competitiveness.

The research methodology was introduced in section three, which includes the sample population, data collection methods and the applied statistical data. Part four displays the study results, while the fifth part presents the discussion of findings and the important recommendations related to the study.

1.1 Research Problem
The pharmaceutical market in Saudi Arabia is considered one of the largest and the richest markets in the Middle East and North Africa. The Saudi Arabia citizens are the largest consumers of pharmaceutical products in the Gulf region, as the consumption of medicines is estimated to be $52 per capita, compared to about $20 in the rest of the Arab world (Issa et al. 2009). In 2014 the total pharmaceutical expenditure (TPE) in the Saudi market represented 25% of the total spending on health care which is estimated at SR. 20 billion (5 billion Dollars) and growing to an average of 10 % annually (U.S Commercial Service Healthcare Technologies Resource Guide 2015). The Saudi market is highly competitive, open for all companies and there is a lack of control over the prescribed medication by physicians thus makes the national firms find it difficult to compete. The lack of information in the pharmaceutical industry sector makes investors reluctant to pumping huge money without having sufficient information about the market, as the investment in this sector needs huge capital, thus it is important to study the attractiveness and competitiveness of the Saudi Pharmaceutical industry, thru applying Porter's model in order to determine the intensity of competition within the industry and to support analysis of the driving forces in the market. Furthermore, it helps management to decide how to develop particular characteristics of the industry.

1.2 Research Objective
This study is intended to describe the rivalry factors in Saudi Arabia pharmaceutical industry using the 5 forces theoretical models of Porter.

2. Literature Review
2.1 Industry Definition
The pharmaceutical industry is responsible for the development, production and marketing of medications (John L. McGuire et al., 2007). However, companies that operate in the industry are required to comply with the laws and regulations governing the production, distribution, and consumption of the products besides the “patenting, testing and ensuring the safety, efficacy, and marketing of drugs” (Harrigan 1984, p.2).
The total industry can broadly be classified into two categories:

a) Patented Medicines
b) Generic Medicines

According to Kheir et al. (2008), patented medicines are the products that are invented by the companies, who have their own research team working on their own laboratories. These companies range from very large multinationals to small management establishments (SMEs). These products are patented for many years to enjoy the monopoly market. After years of business, the formulation is sold in the market so that others can go into mass production.

Generic medicines are products that are produced by several companies using a business model aimed at the development of a medicine which is identical or equivalent to Patented Medicines under different brand names in mass scale. These are marketed as soon as the originator encounters loss of exclusivity. The Generic medicines are sold at a much lower price than the original product.

2.2 Global Pharmaceutical Industry
Given the strong dependency on innovation, some issues such as the high risks in R&D as well as supply chain (Jaberidoost et al 2013), cause to decrease the attractiveness of the pharmaceutical industry compare to other industries (Gassmann et al 2008).

The development of a new drug is expensive, time consuming and the underlying process is extremely risky. Based on studies, an average cost of approximately $800 million is the cost of bringing a new drug to the market (DiMasi2002 & 2003). Moreover, it is estimated that an average of 12 years would have been passed from the synthesis of the new active pharmaceutical materials to launch a new drug to the market (Matias – Reche 2010). Thereby, on average, out of every 10,000 ingredients synthesized in the laboratories, only one or two will successfully pass all the steps to become marketable medicines (Festel et al 2010). Meanwhile, international competitiveness is becoming more crucial for the pharmaceutical industry.

2.3 Saudi Pharmaceutical Industry:
Building a life sciences industry in Saudi Arabia is one of the government’s top economic priorities. In addition to transforming the economy and its infrastructure to support knowledge-based industries, the government is supporting the sector’s development through a variety of direct and complementary investments. The domestic production in Saudi Arabia supplies only 15% of the market need and 85% of the market need is imported.

According to Bawazer (2013), Saudi Arabia consumes about 80% of the innovative medicines and the remaining 20% goes for the generic medicine. This gives great opportunities for the development of investment in the field of medicine in Saudi Arabia.

2.4 Porter’s Five Force Analysis:
Michael Porter’s initial thoughts on how competitive forces shape strategy, were formed in 1980 and later expanded in 2008 (Kotler & Armstrong 2010). He created a “Five Forces” model that outlines the competitive forces.

Recklies (2001) and Lee et al. (2010) indicated that Porter’s forces determine the intensity of competition and subsequently, the profitability and attractiveness of an industry. The objective of this model is to modify these competitive forces in a way that improves the position of an industry and provides an analytical view of the forces in the market (Bingham & Eisenhardt 2008). Furthermore, it helps management to decide how to develop particular characteristics of their industry.

2.4.1 Rivalry Within The Industry:
Grant (2010) considered the force that commonly gains the most attention in the industry regarding the existing competitors. Rivalry among the existing competitors is very large if there are many competitors. The intensity of rivalry can increase if the industry growth is slow, since more firms compete in gaining larger market share. Competition within an industry can also be more intense if the barriers to exit are high (Bruzelius & Johansson 2012).

2.4.2 Threat of Substitute Products:
It exists if there are alternative products with lower prices of better performance parameters for the same purpose (Barney 2006). As substitute products affect product’s price elasticity, more substitutes become available (Braithwaite 2013). With multiple alternatives and substitute products to select from, elasticity of demand occurs, which is an inhibiting factor for price increase.

Substitute products have an adverse effect on the profits of a company that sells patented products. Existence of similar, suitable and affordable substitute will encourage consumer to shift to the cheaper price if he is concerned about the price. On the contrary, if the product is unique or novel, the consumer will accept it even at higher price. On the other meaning, the lack of substitutes will decrease the consumer sensitivity to the price (Bruzelius & Johansson 2012).
2.4.3 Barriers to New Entrants / Threat of Entry:
Threat of New Entrants refers to the degree to which new competitors can join an industry (Porter 1985). New entrants result in entrance to profitable markets that yield high return. The profit rate will fall towards a competitive level (perfect competition).

The established firms have differentiated from one another via construction of a strong brand name with loyal customers, making it hard for new companies to build up a brand name (Carter 2005). A new entrant is mainly faced with entry costs. If an entrant would like to enter a market it can be necessary to invest in a large amount of advertising and R&D. That will prevent new entrants with weak finances from entering an industry (Grant 2010).

2.4.4 Bargaining Power of Buyers:
“Buyers” refers to both a firm’s retailers and consumers. When buyers have details about the cost of industry and the price levels, the buyers bargaining power will increase. While, as soon as buyers have access to information, they can use their power to play off firms against each other by demanding lower prices, a higher quality and a higher level of service and thus increase competition within an industry (Cabral 2000).

2.4.5 Bargaining Power of Suppliers:
Lynch (2006) emphasized that; the bargaining power of suppliers refers to the ability of suppliers to influence cost, availability, and quality of input materials to firms within the industry. A supplier of the pharmaceutical industry could be anyone from the provider of raw materials, labor forces and the makers of active ingredients, packaging, distributors and consulting agencies (Weir 2013).

3. Research Methodology
3.1 Research Type
This research adopts an original survey-based quantitative approach to examine the Saudi Pharmaceutical Industry competitiveness at the international level. Based on the nature of relationship between variables, it is considered descriptive compared to causal.

3.2 Measurement Tool
The measurement tool is a questionnaire that consists of six main sections with a total number of 28 questions. This questionnaire was used to collect the quantitative data. These sections include questions related to biographical data (3 questions) which categorized on the basis of the participant’s position, years of experience, and educational degree. The bargaining power of suppliers contains (5 questions). The bargaining power of buyers consists of (5 questions). The threat of entry consists of (7 questions), the threat of substitutes (3 questions) and the rivalry among competitors (5 questions).

The Likert scale which is in grades from one to five: (1 strongly disagree, 2 disagree, 3 neutral, 4 agree, 5 strongly agree) was used. A Likert scale is a type of research method tool frequently used in research surveys. It allows respondents to indicate how far they agree with the statement that is posed.

To determine the agreement degree three levels were identified (High, Medium and Low).

- The Low level agreement degree has a mean below three and a P-value below 0.05%
- The Medium level agreement degree has a P-value above 0.05%, whatever the mean below or above three.
- The High level agreement degree has a mean above three and a P-value below 0.05% and this is has favorable advantage.

3.3 Sample Population
The research population consists of experts, who are known for their extensive knowledge on basis of education, profession and prolonged or intense experience in the field of pharmaceutical Industry in Saudi Arabia.

The questionnaire survey has been distributed by hand to 28 experts who belong to four major pharmaceutical companies (Tabuk Pharmaceuticals Company, Baxter Company Limited, Dammam Pharma Company and Riyadh Pharma Medical & Cosmetic Products Co. Ltd). 24 responses were received from the participants with 85.7% response rate.

3.4 Statistical Techniques
Survey results were analyzed using Statistical Package for Social Studies (SPSS) technique to calculate frequencies and percentage were used to describe the sample. Mean, std. deviation and p-values were implemented to analyze the attractiveness of each force of Porter 5 forces, as well as analyzing the overall model. (when the mean is greater than 3 with p-value less than 0.05 the force is favorable).

Independent samples T-test utilized to examine if there is a different between the responses to the study questions based on differences between the respondents on their positions, years of experience, and educational degrees.
4. Results and Analysis
4.1 Sample Description
The experts sampled are managers in marketing, financial, operations, sales, quality assurance and quality control department. 9 of them were top managers(37.5%) and 15 were middle managers(62.5%) Table (1). 8 experts have 5 to 10 years’ experience (34.8%) and 16 experts have more than 10 years’ experience (65.2%) Table (2). The experts are educated, and 11 of them have undergraduate degree (47.8%) and 12 hold graduate degree (52.2%) Table (3).

<table>
<thead>
<tr>
<th>Position</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>top management</td>
<td>9</td>
<td>37.5</td>
</tr>
<tr>
<td>middle management</td>
<td>15</td>
<td>62.5</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 1: Sample description based on positions

<table>
<thead>
<tr>
<th>Experience</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-10 year</td>
<td>8</td>
<td>33.3</td>
<td>34.8</td>
<td>34.8</td>
</tr>
<tr>
<td>more than 10 years</td>
<td>15</td>
<td>62.5</td>
<td>65.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>95.8</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Sample description based on experience

<table>
<thead>
<tr>
<th>Degree</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>undergraduate</td>
<td>11</td>
<td>45.8</td>
<td>47.8</td>
<td>47.8</td>
</tr>
<tr>
<td>graduate</td>
<td>12</td>
<td>50.0</td>
<td>52.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>95.8</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>4.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Sample description based on degree

4.2 Data Analysis
Overall analysis of the SA pharmaceutical industry:
Table 4 shows a summary of the overall competitiveness of companies involved in the pharmaceutical industry in Saudi Arabia based on Porter 5 forces. The overall mean of the five forces is 3.1352 and a p-value of .030. According to this outcome, the competitiveness of pharmaceutical industry in Saudi Arabia is favorable.

<table>
<thead>
<tr>
<th>Overall competitiveness</th>
<th>Mean</th>
<th>p-value</th>
<th>Competitive advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.1352</td>
<td>.030</td>
<td>Favorable</td>
</tr>
</tbody>
</table>

Table 4: Overall analysis of the KSA pharmaceutical industry

Porter’s five forces Analysis:
Based on Table 5, the averages of three Porter forces were greater than 3 and P-value less than 0.05. Thus, the null hypothesis was rejected. The three forces include the bargaining power of the suppliers, which has got the highest mean (3.42) and a P-value .006, followed by the bargaining power of buyers (3.28) with a P-value .009, and then the rivalry between competitors (3.23) with a P-value of .002. On comparing with the p<0.05, the results were deemed to be in favor of competitiveness for the involved companies in the pharmaceutical industry. However, the means for the threat of new entrants into the industry and the threat of substitute products scored (2.91) and (2.81) consecutively, and both forces obtained a p-value of .524 and 0.173. In both cases, the p-values are more than 0.05 thus the results show a moderate competitiveness in the pharmaceutical industry in Saudi Arabia.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Variables (Porter 5 forces)</th>
<th>Agreement degree</th>
<th>Mean</th>
<th>p-value</th>
<th>Power</th>
<th>Competitive advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power of supplier</td>
<td>High</td>
<td>3.4271</td>
<td>.006</td>
<td>Low</td>
<td>favorable</td>
</tr>
<tr>
<td>2</td>
<td>Power of buyer</td>
<td>High</td>
<td>3.2833</td>
<td>.009</td>
<td>Low</td>
<td>favorable</td>
</tr>
<tr>
<td>3</td>
<td>Competitors rivalry</td>
<td>High</td>
<td>3.2333</td>
<td>.002</td>
<td>Low</td>
<td>favorable</td>
</tr>
<tr>
<td>4</td>
<td>Threat of substitute</td>
<td>medium</td>
<td>2.9167</td>
<td>.524</td>
<td>Medium</td>
<td>moderate</td>
</tr>
<tr>
<td>5</td>
<td>Threat of entry</td>
<td>medium</td>
<td>2.8155</td>
<td>.173</td>
<td>Medium</td>
<td>moderate</td>
</tr>
</tbody>
</table>

Table 5: Porter’s 5 forces analysis

a) Bargaining Power of Suppliers Analysis:
Through analysis of the statements in Table 6, the scores of P-value on three variables were less than 0.05 (p<0.05), thus, the null hypotheses that these variables are favorable was rejected. These variables were ranked on basis of
the mean values. The variable "It is difficult for suppliers to enter the pharmaceutical industry and become direct competitors" got the highest mean (M = 3.79) and got the most attractive factor related to supply. The variable "Purchases of pharmaceutical companies represents a large portion of suppliers business" got a mean (M=3.67), and the statement "There is a large number of potential input suppliers to companies of pharmaceutical industry in KSA" (M = 3.50). However, the P-value on one variable was more than 0.05. This variable got the lowest mean value represented by "Input products for the pharmaceutical industry are ordinary (not differentiated) which makes it easy to transfer from a supplier to another" reached 2.75 with a least attractiveness.

**Overall results**, Saudi Pharmaceutical Industry has a favorable advantage in the bargaining power of suppliers.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Variables (statements)</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>P-value</th>
<th>Agreement degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>It is difficult for suppliers to enter the pharmaceutical industry and become direct competitors (B4)</td>
<td>3.79</td>
<td>.833</td>
<td>.000</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>Purchases of inputs by companies of pharmaceutical industry represent a large portion of suppliers business(B3)</td>
<td>3.67</td>
<td>1.007</td>
<td>.004</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>There is a large number of potential input suppliers to companies of pharmaceutical industry in KSA(B1)</td>
<td>3.50</td>
<td>1.063</td>
<td>.031</td>
<td>High</td>
</tr>
<tr>
<td>4</td>
<td>Input products for the pharmaceutical industry are ordinary (not differentiated) which makes it easy to transfer from a supplier to another (B2)</td>
<td>2.75</td>
<td>1.294</td>
<td>.354</td>
<td>Medium</td>
</tr>
</tbody>
</table>

**Table 6**: Bargaining Power of Suppliers results

b) Analysis of the Buyers Bargaining Power:

Based on the results of the statements analysis as presented in Table 7, there is only one variable less than 0.05. The indicator "A large sales percentage of pharmaceutical companies in KSA goes usually to a few number of buyers" got a mean of (M=3.96) and this is the most attractive factor related to buying customers. However, the P-values on the other four variables were more than 0.05. These variables got mean values ranked between (M=3.38) as reflected in the statement "the government is the major buyer from the pharmaceutical companies in KSA" and the lowest mean for the variable "Products of the pharmaceutical companies in KSA are unique" which makes it difficult for a buyer to transfer from their products to competitors’ products" (M=2.79).

**Overall results**, Saudi Pharmaceutical Industry has a favorable advantage in the bargaining power of buyers.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Variables (statements)</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>P-value</th>
<th>Agreement degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A large sales percentage of pharmaceutical companies in KSA goes usually to a few number of buyers (C4)</td>
<td>3.96</td>
<td>.955</td>
<td>.000</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>The government is the major buyer from the pharmaceutical companies in KSA (C5)</td>
<td>3.38</td>
<td>1.209</td>
<td>.142</td>
<td>Medium</td>
</tr>
<tr>
<td>3</td>
<td>There is a large number of buyers from Saudi pharmaceutical companies, such that losing a buyer isn’t critical to their success(C1)</td>
<td>3.17</td>
<td>.963</td>
<td>.405</td>
<td>Medium</td>
</tr>
<tr>
<td>4</td>
<td>Expenses on products of the pharmaceutical companies in KSA represent a small portion of the buyers total expenses (C2)</td>
<td>3.13</td>
<td>.992</td>
<td>.543</td>
<td>Medium</td>
</tr>
<tr>
<td>5</td>
<td>Products of the pharmaceutical companies in KSA are unique, which makes it difficult for a buyer to transfer from their products to competitors’ products (C3)</td>
<td>2.79</td>
<td>1.103</td>
<td>.364</td>
<td>Medium</td>
</tr>
</tbody>
</table>

**Table 7**: Bargaining Power of buyers’ results

c) Analysis of the Entry Threat:

Among the variables that constitute the threat of entry force, there were two variables statistically have P-value less than 0.05. These variables are "The government of KSA puts restrictive regulations to establish a pharmaceutical company which makes it difficult to go into this business" and "Investors will hesitate to establish a new pharmaceutical company in KSA because of possible reaction and retaliation from the existing companies". The means of these variables were 2.42 for the first and 2.38 for the second with the least mean values for the threat of entry variables. The other five variables got a P-value score more than 0.05. These variables got mean values ranked between (M=3.17) for the statement "Products of pharmaceutical companies in KSA are
differentiated and customers are loyal to their brands" and \( \text{(M}=2.75 \) for the statement "It is not easy to establish a pharmaceutical company in KSA because of the high start-up costs" (see Table 8).

**Overall results** on threat of entry factor showed that SPI does not have a favorable advantage.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Variables (statements)</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>P-value</th>
<th>Agreement degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Products of pharmaceutical companies in SA are differentiated and customers are loyal to their brands (D1)</td>
<td>3.17</td>
<td>0.963</td>
<td>0.405</td>
<td>Medium</td>
</tr>
<tr>
<td>2</td>
<td>Investors will hesitate to establish a new pharmaceutical company in KSA because of difficulty of reaching the breakeven and economy of scale(D7)</td>
<td>3.13</td>
<td>1.227</td>
<td>0.622</td>
<td>Medium</td>
</tr>
<tr>
<td>3</td>
<td>A new competitor in pharmaceutical industry in KSA will have difficulty acquiring/obtaining channels of distribution (D3)</td>
<td>2.96</td>
<td>0.955</td>
<td>0.833</td>
<td>Medium</td>
</tr>
<tr>
<td>4</td>
<td>A new competitor in pharmaceutical industry in KSA have difficulty acquiring/obtaining needed inputs to compete efficiently (D4)</td>
<td>2.92</td>
<td>1.213</td>
<td>0.739</td>
<td>Medium</td>
</tr>
<tr>
<td>5</td>
<td>It is not easy to establish a pharmaceutical company in SA because of the high start-up costs (D2)</td>
<td>2.75</td>
<td>0.989</td>
<td>0.228</td>
<td>Medium</td>
</tr>
<tr>
<td>6</td>
<td>The government of KSA puts restrict regulations to establish a pharmaceutical company which makes it difficult to go into this business (D5)</td>
<td>2.42</td>
<td>1.176</td>
<td>0.023</td>
<td>Low</td>
</tr>
<tr>
<td>7</td>
<td>Investors will hesitate to establish a new pharmaceutical company in KSA because of possible reaction and retaliation from the existing companies(D6)</td>
<td>2.38</td>
<td>0.824</td>
<td>0.001</td>
<td>Low</td>
</tr>
</tbody>
</table>

Table 8: Threat of Entry results

d) Analysis of the Threat of Substitutes:

the variable "It is costly for customers of pharmaceutical companies in KSA to switch to substitute products" is the only variable among the threat of substitutes that statistically gained the respondents’ lower estimation in the pharmaceutical industry in KSA (p-value = 0.025), with a mean of 2.46. However, the P-value on the other two variables was more than 0.05. The variable "Prices of products provided by pharmaceutical companies in KSA are not high to push for emergence of new substitutes" got a mean value of (M=3.17), and the variable "Saudi pharmaceutical industry company's products are more favorable comparing to other possible substitutes" which got a mean of (M=3.13).

**General results** in Table 9 shows that KSA pharmaceutical Industry does not have a favorable competitive advantage over the substitutes’ threats.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Variables (statements)</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>P-value</th>
<th>Agreement degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prices of products provided by pharmaceutical companies in KSA are not high to push for arisen of new substitutes(E3)</td>
<td>3.17</td>
<td>0.963</td>
<td>0.405</td>
<td>Medium</td>
</tr>
<tr>
<td>2</td>
<td>Saudi pharmaceutical industry company's products are more favorable comparing to other possible substitutes (E1)</td>
<td>3.13</td>
<td>0.850</td>
<td>0.479</td>
<td>Medium</td>
</tr>
<tr>
<td>3</td>
<td>It is costly for customers of pharmaceutical companies in KSA to switch to substitute products (E2)</td>
<td>2.46</td>
<td>1.103</td>
<td>0.025</td>
<td>Low</td>
</tr>
</tbody>
</table>

Table 9: Threat of substitute analysis
e) Analysis of Rivalry Among Competitors:

It is evident from table 10 that the hypothesis suggesting Saudi pharmaceutical market is not growing, has been rejected (p-value = 0.00) with a mean of 4.04. However, the other variables concerning rivalry among competitors obtained means ranked between 3.38 for the variable " It is not easy for a current pharmaceutical company in KSA to exit in the industry due to difficulty in firing Saudi employees " and 2.63 for the variable " There is a small number of competitors in Saudi pharmaceutical industry (local or exporting international companies) ". These variables were not supported by this research as their p-values were greater than 0.05 (accept the null hypothesis that these variable are existing in KSA pharmaceutical industry).

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The general results confirm that SPI has a favorable advantage regarding rivalry among competitors.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Variables (statements)</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>P-value</th>
<th>Agreement degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Saudi pharmaceutical market is growing (F3)</td>
<td>4.04</td>
<td>.690</td>
<td>.000</td>
<td>High</td>
</tr>
<tr>
<td>2</td>
<td>It is not easy for a current pharmaceutical company in KSA to exit the industry because of the difficulty of firing Saudi employees (F5)</td>
<td>3.38</td>
<td>.780</td>
<td>.083</td>
<td>Medium</td>
</tr>
<tr>
<td>3</td>
<td>It is not easy for a current pharmaceutical company in KSA to exit the industry because of the high investment in fixed assets (F4)</td>
<td>3.13</td>
<td>1.076</td>
<td>.575</td>
<td>Medium</td>
</tr>
<tr>
<td>4</td>
<td>Competitors of the pharmaceutical industry are close with each other in market shares (F2)</td>
<td>3.00</td>
<td>1.013</td>
<td>1.000</td>
<td>Medium</td>
</tr>
<tr>
<td>5</td>
<td>There is a small number of competitors in Saudi pharmaceutical industry (local or international companies export to it (F1)</td>
<td>2.63</td>
<td>1.096</td>
<td>.107</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Table 10: Rivalry among competitors’ result

5. Discussions, recommendations and conclusion
5.1 Discussion & Evaluation of the findings

The suppliers lack the bargaining power because, the input products purchased by the companies of pharmaceutical industry from suppliers represent a high portion of their business, and the relative size of the suppliers in the industry is big. The competitive advantage is based on the assumption that the number of companies that provide input products for the manufacturing of pharmaceutical products is large and diverse.

The suppliers in the Kingdom cannot enter the industry business and sell the products directly to the consumers and become a direct competitor because of the government regulations, and in order to avoid operating costs and also because of the presence of the dominant national and international industry players which have already established a large distribution channels and supply chain systems.

The results show that the KSA Pharmaceutical companies use good quality input products and this makes them reluctant to switch to cheaper suppliers.

The results show, as well, that the bargaining power of buyers is classified as low concerning the companies that are interested to invest in the pharmaceutical industry, because a considerable number of the pharmaceutical companies sales go to the buyers. The statistical data that provide empirical evidence show a mean of 3.96 and a standard deviation of .955 indicate that the KSA market is large.

The Saudi government is a medium level buyer (not major), and the number of Saudi pharmaceutical customers in the market is medium (not large), the cost of Saudi pharmaceutical products is medium (not cheap) and there is a medium difficulty for buyers to transfer from Saudi Pharmaceutical products to competitors’ products.

The threat of new entrants into the industry is an additional source of forces that shape competition and strategy. It is possible for the profits enjoyed by companies in the market to fall rapidly if barriers are not established to deter new entrants from joining the market. However, the booming economy of the government of KSA supports the trend in which new companies thinks to enter into the industry at a 40% rate. The observed trend is in agreement with the observed responses, (M=3.13) where consumers seem to prefer locally manufactured products to the imported pharmaceutical products.

The power of new entrants in Saudi pharmaceutical industry is classified as medium power because customers have a medium loyalty to Saudi pharmaceutical brands, investors shows medium hesitation to establish a new pharmaceutical company in KSA regarding the difficulty of reaching the breakeven point and economy of scale, and a medium difficulty in obtaining channels of distribution or needed inputs. The startup costs to open a new pharmaceutical company represent a medium barrier (not high) barrier of entry. In addition, the regulations as set by the Saudi government has no restriction to establish a new pharmaceutical company, the investors also show no hesitation to establish a new pharmaceutical company in KSA regarding possible reaction and retaliation from the existing companies.

The power of the substitutes factor in KSA pharmaceutical industry is classified as medium because the Prices for KSA pharmaceutical products are medium(not low) compared to other possible substitutes. KSA pharmaceutical products have a medium favorable factor compared to the other substitutes. It is not costly and easy for KSA pharmaceutical company's customers to switch to other substitute products because the switching costs are low.

The power of competitors rivalry is classified as low, because Saudi pharmaceutical industry has a significant market growth. Pharmaceutical companies in KSA have a medium difficulty to exit from the industry and the pharmaceutical companies in KSA have neutral range (not close) with each other in the market shares with clear local and international leading companies in the market. Saudi pharmaceutical industry has a medium number
of competitors. However, more companies could be interested to enter the industry because of the high profitability and the dynamic growing markets, a fact that is likely to increase rivalry among the competitors.

5.2 Recommendations
The companies of the KSA pharmaceutical industry have already established strong links with the suppliers and the market. Their strong brand names help them to challenge the threats from substitute products and from new entrants. However, the threat of incoming substitute products should not be ignored and product development should be one of the main strategies of SPI companies in order to remain competitive. Additionally, marketing strategies should focus on the advantages of their products against the substitutes in order to satisfy the buyers’ concerns related to product specifications in terms of cost and quality.

Rivalry among competitive companies is fierce as there is a quite a number of equally balanced companies with low differentiation. However, in order to survive the global competition and low cost, high quality should be targeted by SPI Companies . Yet, the size; the location and the technical know-how are still important parameters that would affect SPIC in configuring their strategies.

Since SPIC exports are focused on GCC customers and around 85 per cent of which, is directed towards the GCC market, in order to reduce bargaining power of buyers, a good export strategy is to diversify and spread exports as far as possible because higher concentration and lower spread of the exports strengthen the bargaining power of buyers and makes the exporter more vulnerable to market disturbances whereas, a lower concentration and higher spread makes the exporter less vulnerable to the market disturbances.

5.3 Conclusion
Understanding competitiveness in KSA pharmaceutical industry is a major concern of the policymakers and a major challenge to provide evidences for decision making. This study provides a fundamental evidence for policymakers in pharmaceutical industry to enable them formulating better policies to be proactively competitive and responsive to the markets’ needs.

SPI was analyzed within the frame of Porter’s five forces model. The results show that SPI has a favorable advantage on the bargaining power of suppliers, bargaining power of buyers and rivalry among competitors. However, it doesn’t have a favorable advantage on the threat of substitutes and threat of entry. The study concludes that there are a positive nature of competition among the pharmaceutical industry in KSA.

References
Bruzellus Ylva, Johansson Hanna, 2012, Entry into the Coffee Shop Market- Starbucks establishes in Gothenburg- The demand and supply of the domestic coffee shop market
Grant, R. M. 2010. Contemporary Strategy Analysis(7 Ed.)
Halliday R, Drasdo A, Lumeny C, Walker S, 1997, The allocation of resources for R&D in the world’s leading pharmaceutical companies, R&D Management, 27, 1, 63-77


Weir Andrew, 2013, Branded Generic Pharmaceuticals; Strategic Analysis and Comparison of the North American and Indian Marketplace


http://mci.gov.sa/Pages/default.aspx Visited 2/7/2014

http://www.sfda.gov.sa/ar/Pages/default.aspx Visited 2/7/2014


http://www.al-madina.com/node/524670 Visited 15/8/2014

http://en.wikipedia.org/wiki/Porter_5_forces_analysis Visited 19/8/2014