FACTORS AFFECTING THE COMPETITIVENESS OF THE FOOD INDUSTRY BY USING PORTER'S FIVE FORCES MODEL CASE STUDY IN HAMADAN PROVINCE, IRAN

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ABSTRACT

Competitiveness can be defined as a firm's success in comparison with other firms in the industry, national and international scene. According to the internationalization of markets, the loss of long distances and countries borders and simplify the entry of firms to international competition than in previous decades, In this study, the researcher will study factors affecting the competitiveness of the food industry by using Michael Porter's competitive forces model includes five axes: competition among competitors, bargaining power of buyers, bargaining power of raw material suppliers, threat of entry of new competitors and the threat of the substitute products and Next, the researcher presents strategies to improve competitive situation of the food industry with primary data (such as the Internet, articles in the field, etc.) and open interviews with several experts in the food industry that can be concluded each Porter's five forces play a role in improving competitiveness. But the competition between competitors is identified as the most important indicator for the industry that can be used to create opportunities for the firm and play a better performance than the competitors in the competition scene. In addition to Porter's five competitive forces, we could also mention the most important factors in the success of firms such as: the quality and reasonable prices, modern technology, have strong management, rich investors and government support.

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Keywords: Michael Porter's competitive model competition of competitors, Threat of new entrants, Threat of the substitute goods, Purchasing power of buyer's power of suppliers of raw materials.
Contribution/ Originality

In this paper, using Porter's competitiveness model Conditions and approach to competitiveness in food industry is examined and concluded each Porter's five forces play a role in improving competitiveness. But the competition between competitors is identified as the most important indicator.

1. INTRODUCTION

With different theoretical study of Scholars and Researchers shows that there is no single definition and interpretations of competitiveness. In general, competitiveness is the abilities that a business, industry, region or country have them and can maintain it to make high returns on factors of production in international competition and put their Manpowers in a good condition. Khodamoradi, et al. [1], Moradi and Shafahi [2] Competitiveness is namely: the competences and power and ability of a firm. The other competitors are prevented from having access to it or less than the firm. According to Michael Porter’s opinion on Competitiveness factors are divided into five categories that include: competition among competitors, bargaining power of buyers, bargaining power of raw material suppliers, threat of entry of new competitors and the threat of the substitute products that with attention to each of these factors, the firm is closer to achievement of successful and entrance of the competition field. Intensive competition from the five-factor indicates the industry structure and the nature of competitive relationships in the industry. Despite the impact of Porter's competitive model on competitiveness, as well as other factors contribute to success of organizations in moving toward foreign markets and to accelerate this process that Researchers from different perspectives have received part of it. [3]

Among these factors can be pointed to management factors such as: internal factors and external factors of the organization’s environment. Karadeniz and Göcer [4] That external factors can be interpreted as the negative or positive forces that impact on the company's growth in competitiveness field. Of these factors, it can be noted that the intensity of competition, government policies and growth opportunities. Note, however, based on interviews conducted, we reach the conclusion that in addition to Porter's five forces and its sub-indices, as the most important factors affecting competitiveness, also we can mention: having strong management, good quality and reasonable price, capital-rich, efficient access to modern technology, skilled manpower.

One of the priorities and agendas of governments in developing countries is paying special attention to the food industry that the main reasons are:
1. Increasing importance of the food industry in terms of job creation and increased participation directly or indirectly in the production of national income.
2. Changes in the composition of world exports of raw materials to products with higher added value.
3. Facing developing countries with limited resources and the need to plan for the optimal use of them is one of the issues in developing countries and the lack and absence of management
skills in large-scale investments. The expansion of industrial activities related to resources such as the food industry, especially in small quantities, is the Governments priorities.

4. Rising income levels and changing lifestyle patterns guide's changes in consumer behavior towards food products with quality higher and more nutritious. [5]

The present research aims to develop theories and propose a comprehensive model, in addition to combining existing views, offers a comprehensive conclusion. For this purpose, we defined the issue of competitiveness, Industry and Michael Porter's five forces competitive and illustrated its conceptual aspects. Using the existing literature, is to identify the factors and criteria of the researcher’s opinion and the results of an interview with managers, food industry and research experts work in the areas of competitiveness, provide usable and reliable and comprehensive results.

2. RESEARCH CONDUCTED IN THE FIELD OF COMPETITIVENESS

1) In a study entitled: “competitiveness of Iranian industries in the process of accession to the WTO” by Nikooeghbal and Valibeigi have proposed way to identify vulnerable industry competitiveness, guidelines to reasonable support the competitiveness of industries, adoption preventive measures and policies to reduce potential damages. [6]

2) In a study entitled: “Analysis of automotive industry competition based on Michael Porter's model “by Wafa et al. have proposed analysis of competitive affecting forces on the automotive industry with using five competitive forces.” [7]

3) In a study titled: ”Export Competitiveness of Food Industry” by Safari and Dehghan to identify indicators of RCA of stable market share, business plan of products have a competitive advantage, have proposed the operation and evaluation indicators for using the their research results to improve investment in export and production. [8]

4) In a study entitled: “Ranking of factors affecting the competitiveness of carpet industry using topsis of fuzzy “by Haghshenas and Saeedi have carried ranking of factors affecting the competitiveness in handmade carpet industry based on multi-criteria decision of fuzzy. Haghshenas and Saeedi [9]

5) Akimova: “In this study, It has been studied the relationship between the level of development of market-oriented and competitive of company in economies in transition and in a turbulent economic environment. “ This article states that recent studies are needed to explore the development of market-oriented in economies in transition under conditions of recession and major systemic changes. [10]

6) Jatner & verly:” considers the organization competencies as combining its resources and recognizes the organization resources as the most important factor of competitive advantage“ [11]

7) Rivarda et al.: “with using Michael Porter's competitive forces model and the resource-based view, they offer competitive factors affecting the information technology industry and the results of this study are: the intensity of Competition between competitors, threat of substitute
products and power purchasers were identified as the most influential factors in the efficiency and profitability of firms. [12]

8) Carayannis & Sagi: In this paper, have been studied the relationship between competitiveness, innovation and productivity and at the end, the executable model is proposed to evaluate them. [13]

9) McGhan: In this article, 96% of the profitability of firms and industries depend on the properties and abilities of them. [14]

10) Wagner & Schaltegger: they studied the relationship between economical and environmental performance impact of corporate environmental strategy choice in this regard and corporate environmental strategies have been identified based on their orientation to shareholder value. The analysis shows that for companies with shareholder value strategies based on the relationship between environmental performance and various dimensions, Economic performance is much more positive than companies without such a strategy. [15]

11) Yang Lee: He provided to identify and evaluate competitive factors in the several industry and to calculate the relation between the level of competitiveness of firms in an industry and the innovations created in the industry. The results show that in industries with greater creativity and innovation in the field of technology, Competitiveness of companies in the industry is more. [16]

3. INDUSTRY

Industry consists of a group of companies that produce the same goods and services. The industry definition in the competition, it is important to analyze that industry. Of course, the goal is not only to develop strategy and determine the boundaries of and business. Many mistakes of strategy are derived from over-broad or narrow definition of the strategy. Industry definition, the form is too wide to hide the differences between products, customers and geographic areas. All of which are important for competition, determination of competitive position and profitability. Industry definition, the form is too limited, causes to overlook commonalities and relationships among related products with geographic markets which are very important for competitive advantages. One of the major industry sectors in all countries is the food industry, which is associated with food security.

With a shortage of food and overpopulation, the development of food industry is essential. The use of new technologies in this sector is a new approach that can be considered. Our country (Iran) is one of the largest importers of food and if today is not the idea of self-sufficiency and food production, Food imports are added every day. We must pursue sustainable development in this sector of industry and with the help of technology, we must note that the development of productivity. [17]

4. MODEL OF MICHAEL PORTER'S COMPETITIVENESS

In Porter’s model, we deal with five main competitive forces, as shown in the following figure: [18].
Michael Porter requires the five factors in industry analysis. Impression on each of the five factors will determine the nature and intensity of competition in the industry. The collective strength of the forces is that will determine the capacity of the ultimate profitability of a business. Porter believes that all companies seek profits and a factor that will determine the amount of profit.

Factor is the intensity of competition and if is known the intensity of competition, profitability is also determined. In this context,

![Figure-1. Model of Michael Porter's](image)

The task of strategists is seeking a position in the industry. Where companies can defend themselves against these forces or influence them in its favor. [18]

4.1. Bargaining Power of Buyers

Powerful customers, who are on the other side of powerful suppliers. Able to achieve greater value by being forced to reduce prices, demanding better quality or more services and collaboration with other actors. If buyers are powerful, they are able to have a high bargaining power, especially if they are sensitive to prices.

4.1.1. The Number of Buyers

The higher in the number of buyers, the bargaining power of buyers is reduced, because if they don’t buy a product, someone else buys it.

4.1.2. Backward Vertical Integration Power of Buyer

If the buyer has the power of backward vertical integration, namely: the fact that, buy or build the previous unit in the industry, its bargaining power increases. For example, car manufacturers, if it is possible to manufacture parts, can have higher bargaining power against the Auto Parts Manufacturer, i.e.: if the auto parts manufacturer offer higher prices, the car manufacturers could be a threat him to manufacturing parts.
4.1.3. The Vitality Rate of Product

The product is more important to the buyer, the buyer's bargaining power increases and the product is more vital (E.g.: nuclear energy, oil, pharmaceuticals), comes down to bargaining power.

4.1.4. Purchase Volume

The higher purchase volume of buyers, increase their bargaining power and the lower the purchase volume of buyers, reduce their bargaining power.

4.1.5. The Buyer Information that how to Manufacture and other Technical Information Relating to the Product or Process

If the buyer has full information of the above, increases the bargaining power of the buyer. Of course in any of the above, we assume that the previous factors are constant, only changing factor are discussed. Buyer power depends on the following factors:

- A buyer purchased a large portion of the seller's goods or services.
- The buyer is able to produce his required product.
- Product is standardized or there is no difference between products with different names.
- Cost sellers (resources) is too low.
- Purchased product form a large percentage of the cost of the buyer. Thus buyer does a greater effort to find the same product or a similar product with a lower price.

4.2. Bargaining Power of Suppliers

In a competitive industry, suppliers as well as buyers, can have bargaining power. Suppliers, when they see the buyer, have less of a choice power. With its ability, to increase the price or reduce the quality of purchased goods and services can impact an industry. Powerful suppliers, the more value they have for themselves where to set higher prices, limiting quality of services or shift costs to industry participants. Powerful suppliers, including suppliers of labor, can be in their power, the profitability of an industry. So that by raising prices to cover their costs.

4.2.1. Qualifications of Suppliers

Companies rely on a wide range of different suppliers. One group of suppliers is strong, if:

- Focused practice.
- Group of supplier does not depend on the industry for revenue.
- Suppliers to offer products that are unique.
- There is no substitute for the services of a group of suppliers.

4.2.2. Also, To Cope With Power of Suppliers, We Need To Know

- There are several companies and monopolized distributor of food?
- What is the distribution of food systems in the country?
- How is the sale of food and distributors companies' situation?
4.3. Threat of Substitute Products or Services

This products may look different in appearance, but they have the potential that as a substitute products, attract the customer's satisfaction. Porter says about the substitute products: “these products, often, limit the potential benefits to industry. Because it creates the maximum price for the products of industry and limit its profitability. “In the area of food, according to the company's product diversity and difference in price (because of having different technology), differ purchasing power of people according to their social class and income.

4.4. Threat of New Entrants

New entrants of one industry bring new capacity for themselves and tend to gain market share. That it is a lot of pressure on prices, costs and necessary investment rates to compete. Specifically, when the new entrants begin to diversify their products for entering to other markets, they can expand the existing capabilities and use the new cash flows to increase competition. That is, where did Pepsi Co. When Pepsi Co. entered into the mineral water industry.

When new competitors to enter the competition, they interested in gaining market share and ultimately, create new capacities. Generally, these forces include factors that facilitate to allow new competitors to enter the competition in the industry or vice versa, it's difficult. In such circumstances, if it is higher barriers to entry for new entrants, New entrants have to endure a lot of pressure meanwhile of his strongest competitors. Threat of entry in an industry depends on the height of entry barriers and reaction of new entrants. If barriers to entry are low, allow new entrants to quickly become a rival. The threat of entry will be very high and the profitability of the industry. Thus, the threat of entry did not prevent its entry, but seriously lowered profitability.

Due to problems, such as difficulty of entering, sanctions, investment problems and high costs for setting up distribution channels, also, various problems in the entry of spare parts and components to Iran, (because of the sanctions), Enter a company with a new brand to the market is faced with many barriers.

4.5. Rivalry among Existing Competitors

Competitive intensity refers to the amount of domestic and international competition. According to Bekly international theory, until development costs in the domestic market aren’t more than the cost of developing the international market, companies operate in the domestic market. When domestic markets are saturated, this case will happen. (Karadeniz and Golier, 2007) Therefore, the major and driving factor for the internationalization of firms, there is saturation of the domestic market. (Shamsoudha and others, 2009). As regards, competitive market in our working field is a fully competitive market, Competition is between several different companies and this competition will depend on the competitiveness of companies known in the whole world that different services, they offer to their customers. For example, Coca-Cola and Pepsi brand, due to global fame, have higher sales than other competitors. Some forms of competition, particularly price competition aren’t stability greatly and is likely to undermine the entire industry, in terms of: profitability. On the other hand, promotional campaigns may increase demand or a variety of
industrial goods to the benefit of all companies. Intense competition was the result of a number of structural factors, which are mutual influence on each other.

4.5.1. Several or at One Level Competitors
When the number of firms is great, the possibility of a solitary and self-centered companies was high. Out of habit, some companies may believe that can be done without it being considered.

4.5.2. Slow Growth of the Industry
Slow growth of the industry, makes the competition for companies that are looking to develop, turn to ask for a share of the market.

4.5.3. Lack of Differentiation or Changing Costs
Where, products or services are viewed as the goods or like goods, Selection by the customer is mostly on the basis of price and service which would increase pressure on the prices and services to intense competition.

4.5.4. Different Competitors
Competitors, in terms of the initial strategy and how their relationship with the parent company, pursue different goals and adopt different strategies to track their competition.

4.5.5. Increase Capacity in Large Sizes
Where the scale is commitment, capacity should be increased to large sizes. Increase capacity can have a negative impact on the balance between supply and demand. In particular, when it is probable the risk of additional capacity’s aggregation increasing.

4.5.6. High Strategic Volume of the Industry
If some companies have a high volume in the industry, competition will be more unstable.

4.5.7. Numerous Barriers to Exit
Exit barriers are factors: economic, strategic and emotional that contribute to the persistence of competition between firms. Of course, it may small or negative, return to investment of these companies. The main factors and sources of exit barriers are:
- Specialized assets.
- Fixed costs of exit.
- Internal relationships of Strategic.
- Emotional barriers.
- Governmental and societal restrictions.

However, many critics believe that Porter ever don’t mention, in industry analysis, the issue of possible cooperation between competitors and peer companies. In any case, it is recommended to pay attention to these five forces for a successful business and guidance's of Mr. Michael Porter could be a solution for all businesses. In the end, we could say that competitive forces of Porter are
the appropriate tools for the analysis of competitors in the industry. Because it is useful in the products and services sector.

5. PORTER'S DIAMOND MODEL

Michael, in 1990, introduced the book: “the competitive advantage of nations” in which it is presented the diamond model in competitiveness. Porter, in this model, has presented competitiveness, as the result of the interaction of four factors.
- Internal factors.
- Domestic demand conditions.
- Related and supporting industries.
- Strategy, structure and rivalry.

According to Porter, these four factors mutually influence each other and changes in any of them can be effective on the other factors conditions. In addition, two external factors: government and unforeseen events, as well as, indirectly, have an impact on the four factors and through their influence, also, they can have an impact on competitiveness. [19]

6. A METHOD FOR THE ANALYSIS OF COMPETITOR

The goal of competitive strategy, however, is that we put business in a situation that to maximize the value of the capabilities that distinguishes the company from its competitors. The purpose of competitor analysis: “Explain the nature and how possible changes is that a competitor may provide in its strategy.” Or “Understanding the possible reaction of each rival against other strategic actions of competitors.” [18]

6.1. Competitor Analysis Components

Not easy to predict potential competitors, but we can be recognized them from the following groups: [19]
- The companies which are not within the industry, but they can pass the entry barriers with low-cost.
- Firms that their presence in the industry, has made an obvious partnership.
- The companies which for them is competition within the industry, as part of a team working.
- Customers or suppliers which may be to do integrate backward or forward.

6.2. Portfolio Analysis and Rival Goals

Portfolio analysis of the parent company, which gives us information about: What should be the objectives of the business unit, Unit what size will attempt to maintain the status of their performance in the aspects, such as: return on investment, share of cash flow, etc. and so to what extent is likely changes in the strategic position of the unit. [18]
6.3. Rivals Objectives and Strategic Positioning

One way to design a strategy: we are looking for opportunities in the market that the company will continue to operate without being considered to be a threat to competition. Competitor analysis is essential because, it helps the company to avoid from doing strategic actions, which leads to intense conflict by threatening to competitors abilities to achieve key objectives.

Any type of analysis that is done about the competitors, it comprises four sections in the identification process. The four sections are: “Future goals, current strategy, assumptions and capabilities.” Understanding these four factors provides the possibility to anticipate how the competitors reacts, as the key questions listed below. Before discussing the components and parts of competitor analysis, we have determined that what companies need to be studied? It is clear that we must review all existing competitors.

But it may sometimes be necessary, which we studied potential competitors, who are likely to enter the scene of competition. Another valuable work is trying to predict the companies, who are looking to buy other companies and is the educational activities and acquisitions which may be done by the external companies or companies in the industry. [19]

7. ASSESS THE COMPETITIVENESS OF EXPORT FOOD INDUSTRY

According to Food industry experts and managers, increasing success of Food products is dependent on offering good quality and competitive prices. Also, however, play an important role: effective advertising, charming brand reputation, a research and development unit and strong marketing in the competitiveness of the food industry and other industries. However, to be successful, organizations must choose unsaturated and appropriate markets for their products.

Increased sales and satisfaction with products which are supplied in saturated markets, would not be possible increasing sales and satisfaction with the products that are offered in saturated markets or face with export restrictions. [20]

8. GLOBAL COMPETITIVENESS INDEX (GCI)

Global Competitiveness Index offers a collection of various factors with each having different coefficients, they reflect certain aspects of competitiveness. In this index, factors affecting on
competitiveness, divided into 12 groups, as pillars of competitiveness, including: institutions, infrastructure, stable government accounts, health and primary education, higher and professional education, goods market efficiency, labor market efficiency, advanced financial market, technological readiness, market size, sophisticated enterprises Business and innovation. [21]

According to research and studies in an article titled: “Factors affecting on competitiveness in Iran and the Southwest countries of Asia”, Iran has taken on the basic requirements: ranking ninth and on the efficiency and innovation: ranking thirteenth, in this region. This indicates, due to: the abundance of raw materials, abundant labor and abundant capital, our country is suitable for manufacturing organizations. But, large segment of our helplessness are in innovation and efficiency that we can provide the groundwork for the power of innovation, by: Increased attention to appropriate training, so that adjusted the distance from the workplace and in times of unemployment of workers, providing facilities of welfare and satisfaction of managers and employees, Also, meet their financial needs for assured and more attention to weaknesses in the firm. [21]

9. INTERNATIONALIZATION

The important reason for the failure of Iranian manufacturing and service companies in the international markets, It can be noted the lack of their competitiveness in global target markets. If, we can identify the root of the lack of competitiveness and the factors affecting the competitiveness of these companies, can be proposed strategies to increase the competitiveness power of companies in the Iran business environment. [22]

The previous literature of international, multinational corporations are the actors in the competition scene. But now, this attraction and interest has been directed toward businesses which are international. Pangarkar [23] Internationalization is positive and helpful from Provision of the underlying toward changes. In fact, growth of companies provide a background as they are pushed towards internationalization. So far, growth and internationalization have become in two words perfectly aligned together. [24]

According to Perkez and Hawks, for success on the international stage, simultaneously must be considered in two categories: internal factors and external factors. Another important feature of internationalization is a strong management team with excellent mental attributes. These include understanding high, in relation to the benefits of exporting and understanding Low, in relation to export barriers. [25]

10. CONCLUSIONS AND RECOMMENDATIONS

According to open interview, which was conducted by a manager and an expert in the food industry, from supportive government policies was named as the first step to enter the industry and the competitive scene. But strong management, for the systematic and strategic planning and coordination between organization units that is the main reasons for the success of the firm. A rich capital, to escape the mono-product economic, progress towards joining the global competition, skilled manpower, which prevents the creation and enhancement problems have been raised as a serious competitive challenges. However, purchasers acceptable quality, reasonably price which is
both responsive to customer demand, the other hand, responsive to the shareholders capital that among the main priorities of the firm's work has been recognized and in a sense, can be named, it is part of Porter's scale advantage. According to this view, the increased production reduced cost per unit of product due to the constant variable cost.

The second factor from the perspective of managers is threat of raw material suppliers. the reason of food industry inability in the production of required raw materials, increasing the need for firms to suppliers because of population growth and need more food than in previous decades and the inability of backward vertical integration is the more serious this issue. On the other hand, also, the entry of new competitors could be a serious threat for business. If the new entrants have strong financial backing and support from the government, can have a significant role to domestic competitors and day to day, increase their sales and profits. Most respondents know, roughly equally, threat of the buyers and the substitute goods. However, if carefully pay attention to this issue, it can be perceived a little more important, threat of buyers. Because buyers can cooperate with other competitors, if they aren’t satisfied from specific products or the more profit with buying of another product and by informing and advertising on anti-business, reduce the firm’s sales.

The increasing need of food and food ingredients, lots of research reveals for the benefit of the industry. Our country, with the nature of the four seasons and abundant labor force and the creation of modern teaching spaces, can train employees and managers and optionally, can use from young and skilled workforce to reduce the path to success. However, organizations working in the industry, with a change of attitude and using the capabilities of organizations and individuals can enter in a short time to domestic and international competition.

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