

# **The Effective Factors on Iran Khodro Company (IKC) Competitiveness Trends for Iran's Accession into the WTO**

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*This research performed here concerns the cognizance of effective factors on IKC competitiveness trends for Iran's accession into the WTO. The research includes the applications of purpose and descriptive existence. The statistical population has a high degree managers and experts of the IKC. The sample size is 471 persons that were selected by stratified random sampling. A questionnaire with 21 closed questions based on a Likert scale format was used for data collecting. Questionnaire reliability is calculated in two methods, Split-half and Cronbach,s alpha. The results declare that environmental capabilities dominate on IKC competitiveness and that it is in accordance with other industrial theorists.*

## **INTRODUCTION**

The opinions of various experts and scholars show that with competitiveness, there is no single definition. In general, competitiveness includes the capabilities and vacancies that cause an increase to the market share, profitability, value added growth and remanding in fair competition and international for a long time.

World Economic Forum (WEF) defines competitiveness as national economic ability to sustain growth or maintain the standard of living. The Organization for Economic Cooperation and Development (OECD), says it is the ability of a nation's competitiveness in the production of goods and services in international markets and simultaneously to provide, maintain and promote long-term income citizens. Based on Institute Management Development (IMD) theory, national competitiveness is following different factors such as economic leading procedure by government, social politics and value creation process. In all above definitions, achieving proper position in the global markets is considered for domestic products.

Competitive advantage is the ability and talent to do a job in a company, through one or more units, better than that of its competitors and there is not an ability or desire to develop it. Kotler also defined competitive advantage as an organizational capability to perform in one or many ways and that competitors find difficult to imitate now and in the future. [Kotler 1997]

Nevertheless, Porter recognized competitive advantage as a strategic goal; that is a dependent variable and the reason behind this is that the good implementation is related to achieving a competitive advantage [Richard 1990].

One of the criteria that can impact Iran's accession into the WTO for industrial countries is the power of competitive domestic products. If a product has high level power of competitiveness and a producer country joins into the WTO, producer industries or units will profit. Profitability is a result of easy access of productive industries or unit to the global market and entrance to new markets. Otherwise, if industrial products do not have competitive power, the country's accession into the WTO not only disables to access

new market for their products but also its domestic supported market will lose. In result, if industries do not improve their structures, it will be a detriment in opening conditions of trade.

Iran joined the WTO and short-term consequences arising from it was an unemployment crisis and the decline of industrial sectors and enterprises due to their inefficiency. Calling for understanding, the globalization process and to ability to adopt appropriate strategies to take advantage of these benefits, were scheduled to take place. Today, the automotive industry because of the potential benefits for economic growth and development has been highly regarded by executives and economists. Although Iran's automobile industry is in a closed economic space, it is a profitable industry, but the non-competitive atmosphere makes it out of the necessity of knowing the world market and any changes in its productive thinking. One of the effects of accession into the WTO is effectiveness of a country's competitive power and their industries. Also, the automobile industry is one of the most competitive industries all over the world and is called the locomotive of economic growth. The automobile industry in Iran is the most significant as it was the first automobile manufacturer in the Middle East. KIC, first rank<sup>1</sup> among the top 300 companies in 2010 and 48% global market was enjoyed. Also, according to statistics published by the Association's automakers in 2009, IKC products ranked nineteenth in the world, tenth in Asia and first in the Middle East, respectively. Therefore, factors' affecting the competitiveness of IKC in Iran's accession into the WTO is important.

## **RESEARCH THEORY FRAMEWORK**

Factors related to competitive advantage and various opinions have presented. Industrial organization theorists recognize the environmental factors as main and determinant factors on competitive advantage. The first theorist of the group is Bine who presented his idea in 1986. Nonetheless, the most well known theorist of the group is Michel Porter. Based on the Porter model, the main unit of analyzing is industry. He believes that the profitability of companies depends on the industry attractiveness and the respective condition of the country with the industry. According to this model, if the strategy is distinct and different from that of its competitors, then core competencies and diversity of choice to facilitate differentiation and gain competitive advantage for the organization is apparent. [Toni 2003]

Another group of theories can offered. According to Amit and Shoemaker, company profitability in an industry depends on the compatibility of strategic assets and strategic factors and the basis of competitive advantage is based on industrial organization theory. [Amit 1993]

In contrast to these theories, a number of theorists have emphasized the importance of inter-organizational competitive advantage in business. Resource-based approaches, looking at organizations as a collection of resources and beliefs that form the basis of competitive advantage, provided that the rarity of features, value, functionality and low replacement imitation are present. [Lismen 2004]

Relational capabilities base approach, the relational factors between organizations and their synergy are the competitive advantage resource and the inter-organizational domain is as analyzing unit and the competitive domain.

## **THE EFFECTIVE FACTORS ON COMPETITIVENESS**

According to theory framework of this research, all the effective factors on competitiveness are in three groups' environmental capabilities, organizational capabilities and relational capabilities and that they have interaction together. Some of the varieties can be taken in two groups. Therefore, the existence of varieties in a group depends to the researcher idea and it is not any effect on the process of research.

### **Environmental Capabilities**

Environmental capabilities are an industrial organization theorist's based approach. This approach knows the environmental factors as the determining factors on competition. Its indicators are national infrastructures, industry structure, the national demand conditions, regulations, supplier industries and related and the strategy of country industrial development and the consumption culture.

Michael. E. Porter as a theorist in competitive strategy, believes that a company is more concerned about increasing competition within a range of industries in which it operates. Based on Michael. E. Porter's theory, the competitive forces and key factors, including suppliers, buyers, substitute products, competitors and potential competitors as industry the intensity of this competition determine the competitive environment. He believes that the total power of these forces will determine the potential profitability of the industry. Whichever strength of these forces is more, smaller companies can increase their prices and earn greater profits. Therefore, any force that is strong, that company is considered a threat, because it will reduce profits. In contrast, any force that is weak, can be seen as an opportunity, because it gives companies the opportunity to make more profit. In short, these forces and limiting the activities of a company are and in the long run, companies with the selection of appropriate strategies to diminish the impact of these factors. [Porter 1980]

A company rather than do surveys and research on their own industry; must evaluate the importance and rule of each of the five factors for its success. These five factors are threatening newcomers, competition among existing firms, threat of substitute goods and services, the bargaining power of buyers, and bargaining power of suppliers. [Quinn 1977]

### **Organizational Capabilities**

Organizational capabilities are based on a recourse approach. According to this approach, the organizations are a set of effective resources for competitive advantage. The indicators of this capability are: technical capabilities, marketing capabilities, financial capabilities, brand and human resources.

Management of resources and organizational capabilities can be recognized as a procedure that by synchronization between them make a space for optimum utilization of all facilities and resources to achieve the goals of the organization.

Productivity reflects the combined performance factors in the production process. It means that, if the facilities are used appropriately, productivity will be increased. Overall productivity has two components, efficiency and effectiveness. Data output from less efficient to acquire the ability to be applied and effectiveness of implementing the results of work intended to be applied.

### **Relation Capabilities**

Relation capabilities are relation based approach. This approach uses processes of inter organizational relations and the activities that assist in the combination of them as a source of competitive advantage. The indicators of these capabilities are: after sale services, distribution and sale network, relationship with customers, inter-organizational relations, informational systems and relationship with suppliers.

Global industry is an industry in which the strategic positions of competitors in major markets and in different geographical areas are affected by the global environment. The global industries obligate the company to a competitive position based on synchronization at the global level; otherwise it will be faced to strategic losses. In 1970s, increasing number of industries were globalized and this important process is developing. [Kevin 2008]

There are many differences between international and national competitive advantage and these differences usually play the important role in adapting the international competitive strategy; such as the difference between cost factors between countries, different conditions in foreign markets, different role of foreign governments and difference in goals and resources and the ability of monitoring of international competitors. Nevertheless, structural factors and market forces which active in globalization industries are equal to factors and forces in national industry. [Quinn 1977]

## **HYPOTHESIS AND CONCEPTUAL MODEL OF RESEARCH**

The purpose of this research is to survey the effective factors on IKC competitiveness trends for Iran's accession into the WTO and determines the strategies to improve the IKC competitiveness. Accordingly, the research hypotheses are:

- 4.1 Iran's accession the WTO influences on competitiveness of IKC.
- 4.2 subsidiary hypotheses
  - 4.2.1 Environmental capabilities of IKC are effective on its competitiveness.
  - 4.2.2 Relation capabilities of IKC are effective on its competitiveness.
  - 4.2.3 Organizational capabilities of IKC are effective on its competitiveness.
  - 4.2.4 Iran's accession the WTO influences on environmental capabilities of IKC.
  - 4.2.5 Iran's accession the WTO influences on relation capabilities of IKC.
  - 4.2.6 Iran's accession the WTO influences on organizational capabilities of IKC.

The conceptual model of research is in figure 1.

## RESEARCH METHOD

This research includes applied results and its method is descriptive. For data collection and obtaining the IKC executives and experts perceptions for identifying weaknesses, strengths, opportunities and threats, a questionnaire comprising 21 closed questions Likert scale was used. Also, library resources used to produce and develop theoretical research was used.

Considering that this research requires heterogeneity and homogeneity in the population, there was a question as to whether subgroups could be used to classify and represent the entire community being investigated, therefore, using stratified random sampling was done for selecting the sample size.

According to being infinitive of statistics population and based on the Morgan table and the below formula, the sample size is 384 persons but base on the distribution of 500 questionnaires in 4 steps, 471 persons has been applied as sample size particularly. (The test was 95% statistical confidence level).

$$n = \frac{Z_{\alpha/2}^2 pq}{d^2}$$

## DATA DESCRIPTION

For analyzing the data, at the first using KS<sup>2</sup> test the normalizing of the data had been confirmed. Then, reliability of questionnaires had been computed in two methods split-half and Combach, s alpha that they are 0/718 and 0/791, respectively. Also, the validity of questionnaire by KMO<sup>3</sup> test is equal to 0/774. These results indicate the high validity of it. These results present the utility reliability and validity of the questionnaire. Also, descriptive statistics indicators such as mean, standard derivation and als tests inferential statistics same as simultaneous regression, Z test, and Pearson correlation coefficient and Friedman test and SPSS, MIN-TAB and Lisrel softwares has been used in data describing and analyzing. (See Table 1)

In a simultaneous regression test used for sub-hypothesis test 1-3 (the influence of capabilities on competitiveness) the  $\beta$  value shows the influence ratio. (The influence of environmental capabilities is more than the other capabilities). (See Table 2)

In Z test that had been used for 4-6 sub-hypothesis (the influence of the WTO on capabilities) value z shows the influence ratio. (The influence of the WTO on organizational capabilities is more than the others). (See Table 3)

In Pearson correlation coefficient test (based on normalizing data) that had been used to show the relationship between the capabilities together, r shows the rate of relationship. (The relationship between environmental and relational capabilities together is more than the others). (See Table 4)

In a Friedman test that has been applied for showing the mean of each of the capabilities indicators and ranking of them, through the environmental capability indicators, the indicator of regulations and through the organizational capability indicators, marketing indicator and through the rational capability indicators, inter-organizational relations indicator have the most mean, respectively. (See Table 5)

## **DATA ANALYZING AND RESEARCH FINAL MODEL**

As mentioned previously, three sets of attitudes can be explained in relation to competitive advantage. Each of these theories is viewed from an angle to the issue of competitive advantage and their main difference is how they look to the domain of competition. The first approach, the theory of competitive advantage based on the features of industrial organization (environmental theory) that emphasize the importance of structural factors and the industry's position in the market and analyze the territorial boundaries of the industry sees as competition. The second approach, the theory of competitive advantage based on resources and organizational capabilities and are based on the analysis that takes into account the organizational boundaries and territorial competition. And, the third approach, the theory of competitive advantage based on institutional resources and communication between the organization and synergy between the borders of its domain as the unit of analysis takes into account the competition.

Since the findings of this study suggest that environmental factors are more influencing on competitiveness and it can be concluded that this research is according to the industry organization theorists as Michael. E. Porter, Bine, Amit and Shoemaker that in addition of emphasis on the structural and opportunity factors of IKC in market, based on IKC analyze and competitive domain are the industry boundaries.

By considering to the performed tests, the results have been given as below:

7.1 According to test hypotheses 3-1, all potential environmental, organizational and communication have a positive impact on the competitiveness of IKC. The environmental features have the greatest impact. According to Friedman-test, among the indicators of environmental capability, regulations and suppliers industries indicators are the most important, respectively. This means that IKC with environmental monitoring capabilities, especially the parameters, the maximum benefit from their fate will join WTO. After environmental capabilities, relational capabilities are in the second level of importance. Among relational capability indicators, inter organizational relations indicator and distribution and sale network indicator are very important respectively. This means that IKC by monitoring and improving above mentioned indicators can be more competitiveness than to other competitors in process of Iran's accession to the WTO. Finally, among effective capabilities of IKC competitiveness, organizational capabilities are in third level of importance, and among its indicators, marketing indicator and human resources indicator are very important respectively. Therefore, IKC prevents itself of threat of Iran's accession to the WTO by improving above mentioned resources.

7.2 By considering to testing 4-6 hypotheses, Iran's accession the WTO has the positive influence on all capabilities, through all of them the effect of it on organizational capabilities is more. Therefore, IKC can experience less damage to contact other competitors in Iran's accession to the WTO by improving the monitoring the above capabilities. The effect of Iran's accession the WTO is more on the relational and environmental capabilities are more effective and the most effect on the organizational capabilities, respectively.

7.3 By considering to Pearson correlation coefficient that has been done to evaluate the influence of each of the capabilities on each other, it is considered that the effect of IKC environmental and relational capabilities on together is more. It means that IKC can increase its competitiveness by improving the synchronization between the above mentioned capabilities in trend to Iran's accession to the WTO. Then the environmental and organizational capabilities have more influence on together and organizational and relational capabilities have less influence on each other, respectively. (See Table 6 and Figure 2)

## **CONCLUSION**

According to the governmental structure of Iran's auto industry IKC (Iran Khodro Company is a public company) it is suggested that before Iran's accession to the WTO, IKC needs to improve its infrastructure (amended weaknesses and reinforce strengths).

8.1 By considering to the extended influence of environmental capabilities on competitiveness, IKC will be able to acquire more benefits by improving monitor on regulations such as consultation to labor law

reform and investment and monitoring on the supplier industries such as making industrial cluster of suppliers to presenting standard of its products.

8.2 Given the widespread influence of Iran joining the WTO through organizational capabilities, IKC can strengthen marketing activities, such as establishing the areas of sales and marketing departments of various marketing strategies according to market conditions and attention to human resources, such as hiring staff to monitor and evaluate the ongoing performance of their organization's needs and create effective incentive systems, the most profitable returns on their fate.

8.3 According to the considerable effects of environmental and relational capabilities together, IKC can acquire more benefits by better monitoring and improving organizational groups through the correlating and combining of them resulting in synergy.

## ENDNOTES

1. [www.ivma.ir](http://www.ivma.ir)
2. Kolmogorov-Smirnov Test
3. Kaiser-Meyer-Olkin and Bartlett's Test

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**TABLE 1**  
**VARIABLES CONDITION IN EACH OF THE RESEARCH HYPOTHESES**

Hypothesis	Independent variable	Dependent variable
Main hypothesis	accession to the WTO	Competitive advantage
Sub hypothesis 1	Environmental capability	Competitive advantage
Sub hypothesis 2	Organizational capability	Competitive advantage
Sub hypothesis 3	Relation capability	Competitive advantage
Sub hypothesis 4	Accession to the WTO	Environmental capability
Sub hypothesis 5	Accession to the WTO	Organizational capability
Sub hypothesis 6	Accession to the WTO	Relation capability

**TABLE 2**  
**THE INFLUENCE OF CAPABILITIES ON COMPETITIVENESS**  
**(Regression Simulation Test)**

Statistics indicator	R <sup>2</sup>	p-value (sig)	β
variable			
The effect of environmental capability on competitiveness	0/62	0/027	0/58
The effect of organizational capability on competitiveness	0/47	0/011	0/41
The effect of relational capability on competitiveness	0/59	0/024	0/53

**TABLE 3**  
**THE INFLUENCE OF ACCESSION TO THE WTO ON CAPABILITIES**  
**(Z Test)**

Statistics indicator	p-value (sig)	Z	Derivation regression	mean	Number sample (n)
Variable					
Effect of the WTO on environmental capability	0/0000	8/27	0/28	3/116	471
Effect of the WTO on organizational capability	0/0000	11/93	0/32	3/192	
Effect of the WTO on relation capability	0/0000	9/14	0/28	3/127	

**TABLE 4**  
**THE RELATIONSHIP BETWEEN CAPABILITIES**  
**(Pearson correlation coefficient)**

Variable	Statistics indicator	p-value (sig)	Correlation coefficient(r)	Sample number (n)
Environmental/Organizational		0/0000	0/215	
Environmental/Relational		0/0000	0/455	471
Relational/Organizational		0/0000	0/158	

**TABLE 5**  
**THE INFLUENCE OF EACH OF CAPABILITIES INDICATORS ON COMPETITIVENESS**  
**(Friedman Test)**

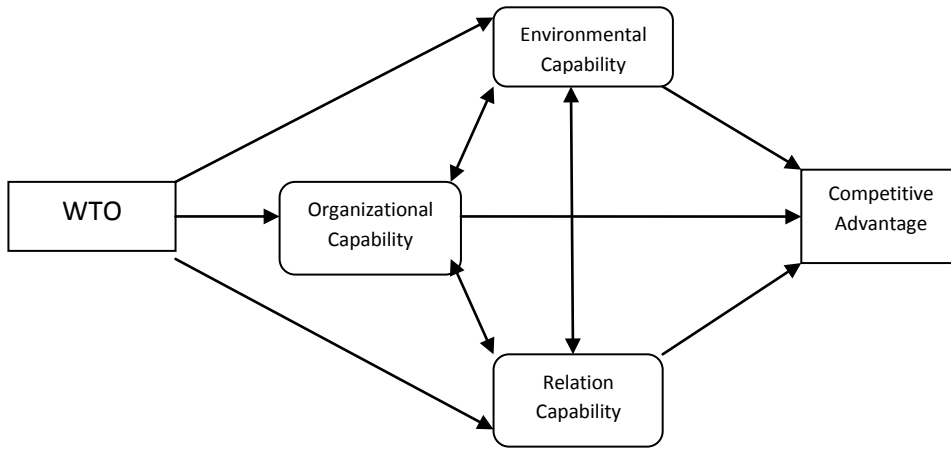
Variable	Ranking mean	$\chi^2$	df	p- value (sig)
Q1- national infrastructure	2/43	855/025	6	<b>0/0000</b>
Q2- industry structure	2/26			
Q3- national demand condition	2/09			
Q4- regulations	4.42			
Q5- supplier industry	3/81			
Q6- country industrial development strategy	3/66			
Q7- consumption culture	2/02			
Q8- technical	1/96	922/606	4	<b>0/0000</b>
Q9- marketing	4/42			
Q10- human resource	3/69			
Q11- financial resource	3			
Q12- brand	1/93			
Q13- after sale services	2/55	1057/31	5	<b>0/0000</b>
Q14- distribution and sale network	3/94			
Q15- relationship to customers	3/78			
Q16- inter-organizational relationships	5/3			
Q17- informational systems	1/83			
Q18- relationship to customers	3/59			



**TABLE 6**  
**THE INDICATORS REGULARITY OF EACH OF THE CAPABILITIES BASED ON**  
**FRIEDMAN TEST**

Mean variable	Preference	Capability indicator	Ranking mean
Relational capability	1	Inter- organizational relations	5/3
	2	Sale and distribution net work	3/94
	3	Relationship with customer	3/78
	4	Relationship with supplier	3/59
	5	After sale services	2/55
	6	Informational systems	1/83
Organizational capability	1	Marketing	4/42
	2	Human resources	3/69
	3	Financial resources	3
	4	Technical	1/96
	5	Brand	1/93
Environmental capability	1	regulations	4/42
	2	supplier industries and relations	3/81
	3	Country industrial developing strategy	3/66
	4	National infrastructure	2/43
	5	Structure industry	2/26
	6	National demanding condition	2/09
	7	Consumption culture	2/02

**FIGURE 1  
CONCEPTUAL MODEL OF RESEARCH**



**FIGURE 2  
RESEARCH FINAL MODEL**

