Gender Gap Impact on Global Competitiveness in Iran through Studying Selected Middle East Countries

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Abstract

Human capital and the effect it has on the economic growth of countries have been the focus point of economists in the past few decades. There has been a serious consideration over the uneven distribution of the two genders amongst the human capital and the effect this has on the economic growth. Experimental evidence from different countries reveals that Gender Inequality paralyses the economic functionality of the countries, deteriorates their ability to take advantage of their potentials, and finally, it slows down the economic growth and efficiency as well as the pace of the human development. The aim of the current research is to analyze the status of the Gender Inequality in Iran and to compare it with seven Middle Eastern countries and then to evaluate the Gender Gap trend and its impact on Global Competitiveness in Iran, utilizing the data from the Gender Gap Report and Global Competitiveness Report from 2006 to 2015. The data from the Gender Gap Report and the Global Competitiveness. The results show that, despite some improvements in certain areas, the Gender Equality condition in the country is not acceptable compared with the other countries studied in the research between 2006 and 2015. Iran was ranked 141 in Economic Participation and opportunities, 106 in Educational Attainment, 99 in survival and health, and 137 in political achievements among 145 countries in 2015. Key words: Women's empowerment, Gender Gap, Economic Participation and opportunities, Political Empowerment, Health and Survival, Educational Attainment, Global Competitiveness

Introduction

Gender Inequality in different areas is one of the most significant challenges that the developing countries face. Gender Inequality can have negative effects on the efforts for human development and escalating the quality of human capital. Gender Inequality limits the economic growth and disturbs the possibility of tackling poverty. Comparative analysis of different variables in different countries reveals that the countries that invest in girls' education have higher economic growth rate. Moreover, Gender Inequality results in lack of authority and security which will eventually deteriorate the quality of life of both men and women (Ghobadi,2005). That is why economists insist to pay attention to the Gender Inequality issue and its different aspects regarding education, health, wage and employment.

Gender Inequality is so important that the World Economy Forum has introduced the issue as one of the ten challenges of the world and has appointed teams with aims to attract the contribution of governments and private sector to reach Gender Equality. The UN is also aiming to reach Gender Equality by the year 2030. However, there are women in many parts of the world who have access to limited resources, rights and opportunities to make improvements in their lives. They are limited in certain areas such as education, ownership, income, financial and decision making opportunities at family and society levels.

The limited resources available to women and their limited opportunities in decision making are significantly linked with poverty and lack of development in the world. It has been reported, for instance, that almost all the five richest countries in the world have offered equal social and economic opportunities for women whereas such opportunities are not available to women in the five poorest countries in the world (Humana ,1992).

Women empowerment and elimination of inequality have been considered by many international organizations. One of the UN Millennium Development Goals, for example, has been specifically the elimination of Gender Inequality. The goal of the UN has been defined as "to eliminate gender disparity in primary and second education by 2005, and in all levels of education, by 2015" (UN,2006). Other than Gender Inequality, the impacts of such inequality at smaller and larger scales make the issue worth considering. Research shows that fair distribution of opportunities and resources amongst men and women will result in faster economic growth and more efficiency and that the countries that invest in girls' education have higher economic growth rate (Sadeghi& Kalhor,2007). Moreover, there is evidence indicating that in the countries with equality in relationships, mortality rate is lower. More importantly, the Gender Equality level is linked with economic growth (Gatti & Dollar, 1999; Klasen, 1999).

Considering the fact that Iran is relatively a traditional country, there is still a deep Gender Gap despite the incredible achievements that women have reached in higher education, taking jobs, and in politics. That is why the researcher, who also conducted an extended study in her thesis in her postgraduate studies on women's development, has decided to take

advantage of the latest index, the Gender Gap Index, in order to portray a general picture of Iran's status and comparing to seven neighboring countries. The data in the Global Competitiveness report were also used to examine the link between Gender Gap and the Global Competitiveness in different countries. In that regard, the theoretical issues related to Gender Gap and Global Competitiveness have been mentioned. Later in the third section, the literature on the subject has been referred to. The model and the analysis of the results have been dealt with in the fourth section. And finally, the results and suggestions have been mentioned in the last section.

Theoretical principals of the research

Gender Inequality

Economists have always paid attention to theoretical and experimental factors in economic growth, but more recent theories underline the impacts of gender differences on economic growth as the role of human issues in development is especially considered more recently. Schultz and Denison made efforts in the early 1960s to include human capital among other determining factors in production. The role of inequality in available opportunities to human capital has been considered ever since in different areas in economy especially in the process of production and economic growth by economy researchers. Gender Inequality can be considered as a condition in which women are generally under the domination of men. The position of men and women has also been divided into two sections of private and public. The different types of contributions that the two genders make in the public section and in society have deepened the differences and gives more weight to the social representation of men (Ham and Gamble, 2003).

The Gender Gap Index is one of the most recent indexes to measure the Gender Inequality which was introduced in the World Economy Forum in 2006. The index studies the life of women in four different areas and ranks the countries through a binary (0-1: absolute discrimination versus absolute equality) evaluation system (The Global Gender Gap Report ,2015).

Gender Gap Index

The Global Gender Gap Report divides the Gender Gap Index into four major sections based on the gap between men and women:

1: Economic Participation and Opportunity

This field has been measured with three indicators: Participation Gap, Wage Gap, and Improvement Gap. Participation Gap has been measured through the difference in the contribution rate of the labor force. Wage Gap has been measured through women's income indicator over men's income estimation and the quality variable by the operators of the World Economy Forum Approaches Campaign. Finally, the gap between the improvement of men and women has been measured through the number of male and female legislators, senior officials and managers, as well as professional and technical workers.

2: Educational Attainment

In this section, the gap between the availability of education to men and women was measured through the presence of women and men in primary, secondary and tertiary, and higher education. The long term view of the capabilities in the equal education for men and women has been measured through the literacy rate of women over the one of men.

3: Health and Survival

A brief image is presented in this section of the difference between the health status of women and men. To reach that image, two variables have been used. The first one is the gender ratio in birth rates. This variable is to identify the Missing Women phenomenon as there are strong preferences in some countries for having male children. For the second variable, the gap between the healthy life expectancy of women and men, measured by the WHO, has been used. This measurement is an overall indication of the years men and women can expect to have a healthy life considering the years they have missed having faced violence, illnesses, malnutrition or other related factors.

4: Political Empowerment

This section is about the gap between men and women in making political decisions at senior levels. The concept has been measured through the number of women ratio over the number of men at ministerial positions as well as the number of women ratio over the number of men having won parliamentary seats. Moreover, the number of women over men and the number of years as a Prime Minister or a President in at least the past fifty years has been reported as another measuring indicator. The highest possible score, 1, indicates Gender Equality and the lowest score, zero, indicates Gender Inequality for all these indicators. The final indicator is also between one and zero. The report covers 115 countries in the first year, 2016. The number of countries has reached 145 in 2015. Iran ranks 141 which is unacceptable considering the advanced human capital and potential resources in Iran (Global Gender Gap Report, 2015).

Specifications of Global Gender Gap Index

Previous indexes used in international reports such as Gender Empowerment Index and Gender Development Index were not capable of measuring Gender Inequality despite their useful roles in gender issues. This was because of filtered human capital based on gender differences. The difference between the Human capital Index and the Gender Development Index looked minor and offered a misleading picture of the Gender Gap. Therefore, because of conceptual and psychological limitations in these two indexes, a new index called Gender Gap Index was introduced and the World Economy Forum has been issuing reports on the Gender Gap Index since 2006. The index captures the gap between men and women in four critical areas of Health and Survival, Educational Attainment, Economic Participation, and Political Empowerment and is considered as a framework to measure the inequality based on gender and the changes over time. The methods and quality analyses through this index, are aimed to introduce grounds upon which ways for closing the Gender Gap can be designed (Global Gender Gap Report, 2006).

The three concepts used in the Gender Gap Index are as follows:

Focus on measuring the distance not the level

The most important feature of this index is the focus on the distance between men and women in different fields regardless of the development and the income rate of countries. The Gender Gap Index measures the resources and opportunities available to women and men in each country, and not the current rate of such resources and opportunities. In other words, the indexes rank countries based on the Gender Gap and not the development level. In education, for instance, countries are ranked based on the distance between women and men in education, and not the education level of each country. In a country like the Philippines, where resources and opportunities are distributed more evenly amongst women and men, the rank is considerably higher than the USA with higher level of income and development, according to this index.

Ranking the countries based on the output variables and results

In the Gender Gap Index, the criteria to rank the countries are the output variables and result, and not the policies or the actions taken. To measure the Gender Gap between men and women at the managerial level, for example, the maternity leave length which is one of the policy-making variables is not considered.

Ranking the countries based on Gender Equality and not empowering women.

This index is not aimed to indicate the areas in which women have overtaken men, but to determine whether or not the gap between men and women in selected areas has been closed. In the areas where women have overtaken men, the value calculated for the absolute equality is 1. In other words, there is no room to indicate the inequality against men (Global Gender Gap Report, 2010).

The Global Competitiveness Index

World Economic Forum report has examined the competitiveness of the countries based on statistics provided by these countries in different areas and has ranked and compared the countries using a quantity index: Global Competitiveness Index (The Global Competitiveness Report, 2012-2013).

According to the Global Competitiveness Report, competition is defined as a collection of institutions, policies, and factors determining the efficiency level. The efficiency level is defined as part of the welfare level which can be attained through economy. The efficiency level is also determined through the return of capital rate which is a principal factor for the growth of a country. It can be said that an economy is more competitive when it grows faster over time. The National

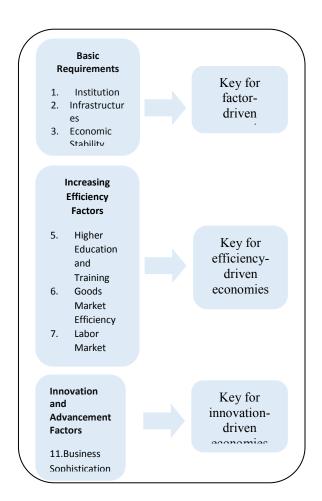
Competitiveness Index also indicates an endless dimension of competitiveness through introducing the average weight of different elements each of which reflecting one aspect of what we know as competitiveness (Schwab, K & Porter, 2008).

Global Competitiveness Index, in fact, includes the average weight of different parts measuring different aspects of competition. These parts fit in three general categories of basic requirements, increasing efficiency factors, and innovation factors. These three general categories themselves are divided into 12 subcategories. Each of the 12 subcategories are divided into a number of smaller groups (111 subgroups) (Mirahsani, 2014).

The model used in this research to examine the Global Competitiveness Index had been introduced by Michael Porter and Charles Schwab already issued by the World Economic Forum.

In this model, the Global Competitiveness Index are categorized by 12 competitiveness categories. The categories are as follows:

- 1. Institutions
- Infrastructures
- 3. Microeconomic Stability
- 4. Health and Primary Education
- 5. Higher Education and Training
- Goods Market Efficiency
- Labor Market Efficiency
- 8. Financial Market Development
- 9. Technological Readiness
- 10. Market Size
- 11. Business Sophistication
- 12. Innovation (Schwab, 2012)



The link between the Gender Gap Index and the Global Competitiveness

Human and his capabilities are the major factors of a long term and sustainable economic growth. The most important factors in the competition amongst countries in the modern world are the capabilities, of individuals, their skills, training and the efficiency of the labor force. This is while women are practically half of the potential capability of each country. Therefore, strengthening women and taking advantage of their capabilities is linked with the competitiveness of nations over time.

One of the most important factors determining the competitiveness of countries is the capabilities of its labor force which translates as skills, training, and efficiency of the labor force. Closing the Gender Gap is an issue that does not only refer to the human rights and justice issues, but is also related to effectiveness. Women's education and Gender Equality in education have been discussed more recently in the field of economic development and growth as they are determining

factors in reaching economic development and growth. "In political economic growth, nothing is more important than proper understanding of political, social and economic participation of women in leadership and that is, in fact, the important aspect of development as freedom", the Noble Memorial Prize winner in Economic Sciences in 1998, Amartya Sen believes. (Amartya Sen, 2002)

Women were considered as "target" groups in development programs prior to 1930s. The approach was called "woman and development" which implies women did not have an efficient role to reach development goals despite the fact that they were benefiting from those plans. The approach, however, changed into "women and development" between early 1980s and late 1990s. Women were introduced as active and dynamic elements in reaching development goals in the new approach and that was why "Gender Equality" was introduced as the goal of development plans (Leach, 2009) and (March, 2009).

Through all these changes, a new concept was formed regarding the way the women's role is considered and the role they have in the development process. This indicated an escalation in both quality and quantity factors of women's lives and an effort to increase the availability of resources to women and their control over resources. This was called empowerment. Women's empowerment is a concept to change the existing approaches and forming new ones regarding the evaluation of social structures. It also helps reform the systems that are based on traditional power model and male dominancy. The concept is defined through a historical paradigm and has an extended role now in development plans and the evaluation of women's roles in societies.

The traditional socio-economic patterns were designed based on indicators that were affected by conventional power frameworks which led to marginalizing women, Paradham believes, but the model has changed in the modern world and women's empowerment is now evaluated in economic, demographic and social aspects in the new approach. When you empower women, as Paradham argues, you are, in fact, empowering their children (Taneja Group, 2008) so the development of a country is bound to the development and the empowerment of the women of that country (Sahay, 1998). Therefore, women's empowerment and Gender Equality are considered as key goals for many humanitarian organizations as well as the UN as these concepts can prepare women to take new roles and can be considered as an effective solution to tackle poverty, hunger, and illnesses and to reach conscious and sustainable development (World Bank, 2012).

Solow's neoclassic growth model (Solow, 1956) says the labor force includes many factors such as literacy, education expenses, enrollment rates, etc. when evaluating the growth and its impacts on economic growth. The Endogenous Growth Theory was later introduced by Lucas and Romer which in fact stresses on human capital as an endogenous factor in the production model. In the Endogenous Growth Theory, the economy of thought concept has been introduced in which the human capital help reach an escalating efficiency leaving the competition market and they are then considered as uncompetitive goods. In the recent decade, however, the issue of Gender Inequality and its effect on economic growth has been raised. As well as economic effect, human capital also have social effects such as raising better children by parents (especially by women), decreasing the mortality rate in children, increasing life expectancy, etc. (Mahon Mc, 2000).

The issues related to full participation of women in national development plans were gradually included in national and international development organizations during the 1970s. Ester Boserup explains well and simply through an innovative work how women were neglected and forgotten in development plans. In the numerous and wide range of works done regarding economic growth and development, the reflection of women's issues is little and inadequate, he explains. Most of the research on the role of women in social and economic development plans around the world were conducted after the publication of the book Women's Role in Economic Development by Ester Boserup tried to define the concept of the role of women in development in an international framework. He believes that the efficiency gap between men and women was little before the emergence of urbanization and economic growth of the market. The efficiency gap grew as discrimination against women and depriving them of being present in modern sections went on through economic process (Morrison and others, 2005). Through a series of studies that Boserup conducted, he concluded that economic growth does not affect the role of women in the development process if social dependences and cultural obstacles are also strong and that women will still be away from modern sections and technological advances and will be employed in more traditional and underdeveloped sections (Khani, 2010). Based on Boserup's theory, Marian Schimink argues that social and economic changes in developing countries are different from developed nations as far as quality is concerned. He argues, according to Venezuela studies, that many skilful individuals have lost their jobs due to entering advanced technologies and that such technologies as well as more educated working force will decrease the capacity of the workshop sector to

employ working force. He also concludes that the development taking place in industries will end up more job seeking by men. Moreover, neglecting of the role of women in development and large scale plans, development process will have mixed implications for women, and women will be marginalized and exploited as cheap labor force (Same).

Overall, it seems that if women are kept away from competition due to lower education levels and skills, development not only does not result in closing the Gender Gap, but it also deepens the gap.

Having said that, the role of social conventions in societies especially in the Middle Eastern countries, should not be ignored. Parpart, for example, refers to social conventions which are rooted in institutionalized male-dominated family structures and Gender Inequality and argues that economic growth will result in more vulnerability of women. In a historical analysis, Gity Neshat explains that the situation of women in the Middle East, their solitariness, their Hijab and subjection to men, which have wrongly been referred to as Islamic lessons by those who are either for and against Islam in the west, refer to the pre-Islamic era and tries to offer a solution based on a logical choice. In the solution, the reasoning is based on the loss and gain to understand the individual and social actions showing that individual decisions, unlike what activists expect, bring along different results. For example, the decisions by individual women who, for a reason or another, put their effort on raising children and activities inside home, can decrease the social power of women in long terms.

When such a pattern is applied in the Middle East, each woman is more involved in her own family affairs and pays less attention to critical decisions for her own society. This will end up deteriorated power of women as a group and will enable men, as a group, to expect from women more than they are capable of. In other words, it paves the way for exploitation of women in the Middle East (Koulaee, 2006: 25-6).

Existing literature on the subject

Only limited number of growth patterns have explicitly considered the effect of Gender Inequality and only a part of the Gender Inequality literature has been allocated to the analysis of the effects of this issue on how the Global Competitiveness ranking may grow. But there has been to research no study the effect of Gender Inequality on the Global Competitiveness of the country in Iran.

Klasen has used cross-country and panel regressions to show to what extent Gender Inequality in education and employment may reduce growth and development. He has found a considerable impact of Gender Inequality on economic growth. Gender Inequality in education has a direct impact on economic growth because it lowers the quality of human capital, but economic growth is indirectly affected by the impact of gender Inequality on investment and population growth. He concludes that between 0.9 and 0.4 percent of the differences in growth rates between East Asia and Sub-Saharan Africa, South Asia and the Middle East can be accounted for by the larger Gender Gap in education. Moreover, analyses show that Gender Inequality in education prevents progress in reducing fertility and child mortality (Klasen, 1999).

Dollar and Gatti (1999) have studied the link between Gender Inequality in education and economic growth. Based on data from over 100 countries, 5-year gaps in growth (between the years 1975 and 1990), they have concluded that more education of women in secondary school has resulted in higher growth rate. This is while more education of men during the same period has resulted in less growth rate. In countries with lower education rate for women, the increase in education for women has had little impact on economic growth while in countries with higher education rates for women, the economic growth has significantly increased along with the increase in education for women.

In a research conducted by Papageorgio and Stoytcheva in 2006, inequality in human capital was first evaluated using the data from a number of countries. They will then evaluated the impact of mortality rate of children on economic growth. Their findings showed that inequality in human capital has positive impact on mortality rate of children and negative impact on economic growth. (Papageorgio & Stoytcheva, 2006)

Research assumption: Gender Inequality in human capital has impact on the variables of Global Competitiveness of the country.

Methodology of the research

The research was done using the document-library as well as secondary analysis of data related to Gender Inequality methods. The main aim of the current article is to examine the Gender Equality status in Iran and to compare it with certain Middle Eastern countries and then to evaluate the Gender Inequality trend and its impact on Global Competitiveness in Iran. Comparative study shows the position of countries and the actions taken to decrease the Gender Inequality. Eight countries from the Middle East were selected because they are all located in the same geographical region. They are also relatively similar to each other from social, economic, cultural and religious aspects most of which having Islamic culture. The countries are the UAE, Iran, Azerbaijan, Turkey, Pakistan, Saudi Arabia, Kuwait, and Yemen. The gist of the current research is a description and an analysis of the Gender Inequality status in Iran and a comparison with ones in the selected Middle Eastern countries. The impact of Gender Gap on Global Competitiveness in Iran and the other seven countries mentioned above will also be studied.

Research findings

In the research findings section, the information taken from the Word Bank reports on Gender Gap comparing Iran to seven neighboring countries will be studied. The impact of Gender Equality on Global Competitiveness of Iran and seven neighboring countries will then be examined. The economic and demographic status of the selected countries are shown in table 1 to portray a clear picture of the demographic and economic status of these countries. The equal opportunities and Economic Participation Index, Educational Attainment, Health and Survival Index, and Empowerment Index will be presented later on.

Demographic and Economic Status of the Selected Countries in the Study
Table 1

Country	GDP (in dollars)	GDP Growth (in billion dollars)	Population Growth (percent)	Population (in million)
Azerbaijan	16710	31.24	1.28	9.54
UAE	60578	243.44	1.06	9.45
Iran	15573	231.43	1.31	87.47
Pakistan	4619	151.60	1.63	185.13
Turkey	18884	672.82	1.02	75.84
Saudi Arabia	52096	523.35	1.86	29.37
Kuwait	79395	101.55	3.24	3.48
Yemen	3832	18.12	2.27	24.97

As can be found in Table 1, the highest numbers of population belong to Pakistan, Iran, and Turkey. Countries with the lowest population are the Kuwait, the UAE, and Azerbaijan respectively. The highest growth in population belongs to Kuwait, Yemen, and Pakistan, and he lowest to Turley, the UAE, and Azerbaijan. The highest GDP belongs to Kuwait, the UAE, and Saudi Arabia respectively comparing the economic status of the countries.

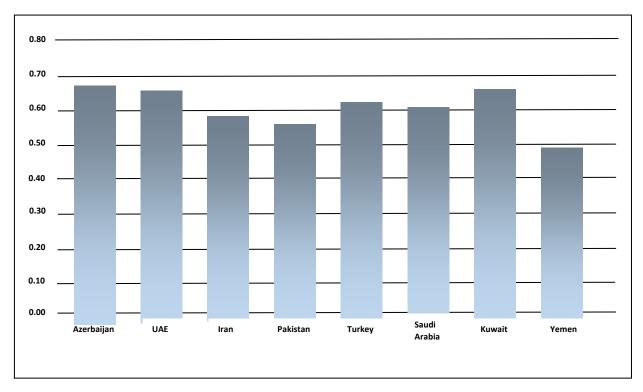
Gender Gap Overall Index

Among the selected countries, the UAE, Kuwait, and Azerbaijan had the best ranking between 2010 and 2015 regarding the Gender Gap Overall Index indicating more Gender Equality in these three countries. On the other hand, Iran, Yemen, and Pakistan had the worst situation regarding Gender Equality between 2010 and 2015. It should, however, be noted that during the mentioned years, the coverage of the report expanded to five more countries. Most of the countries in the region had generally a falling pattern or no considerable rise. Only, Azerbaijan has had some progress in lowering Gender Inequality.

Gender Gap Index Changes Status between 2010 and 2015 Table 2 $\,$

Year	20	015	201	14	201	13	201	12	201	11	201	10
Number of countries studied	14	45	14	12	130	6	13.	5	13	55	13	34
Gender Gap	Ratio	Rank										
Azerbaijan	0.675	96	0.675	94	0.658	99	0.655	99	0.658	91	0.645	100
UAE	0.646	119	0.644	115	0.637	109	0.639	107	0.645	103	0.640	103
Iran	0.580	141	0.581	137	0.584	130	0.593	127	0.589	125	0.593	123
Pakistan	0.559	144	0.552	141	0.546	135	0.548	134	0.558	133	0.546	132
Turkey	0.624	130	0.618	125	0.608	120	0.601	124	0.595	122	0.588	126
Saudi Arabia	0.605	134	0.606	130	0.588	127	0.573	131	0.575	131	0.571	129
Kuwait	0.646	117	0.646	113	0.629	116	0.632	105	0.632	105	0.632	105
Yemen	0.484	145	0.515	142	0.513	136	0.505	135	0.487	135	0.460	134

Gender Equality Index in 2015



Gender Gap Subindex

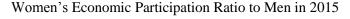
As mentioned in the psychology section, Gender Gap Index has measured the gap between men and women in four dimensions: 1) Economic Participation Index, 2) Education Attainment Index, 3) Health and Survival Index, and 4) Political Empowerment Index each of which are divided into other subindexes.

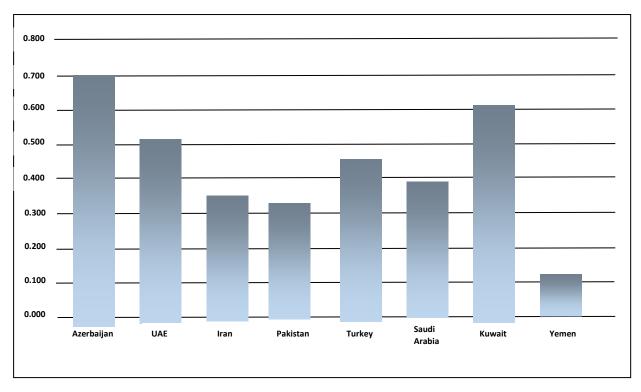
Economic Participation Index

Economic Participation Index is the first subindex in the Global Gender Gap Report. In this section, the achievements of the eight selected countries in this index will be described. The Economic Participation Index is divided into five subcategories itself which will be explained in the next section. The highest Gender Equality in 2015 (Table 3) belongs to Azerbaijan and Kuwait. Yemen, Pakistan, and Iran are in the worst conditions regarding Gender Equality in the Economic Participation Index in the region and in the world. Turkey and Saudi Arabia have better conditions than Iran regarding Economic Participation. The subcategories of Economic Participation include: 1) Labor Force Participation, 2) Equal Wage for Similar Work, 3) Income estimate, 4) Senior Legislators, and 5) Technical and Professions Workers. The indicators of Economic Participation of the selected countries in the study are shown in Table 3. Azerbaijan and Kuwait have the best conditions regarding Economic Participation of women in employment. Iran stands sixth among the eight countries after Azerbaijan, Kuwait, the UAE, Turkey, and Saudi Arabia.

Economic Participation Indexes Status in 2015 Table 3

Economic Participation	20	15	20	14	201	13	203	12	203	11	2010	
Index	Ratio	Rank										
Azerbaijan	0.701	54	0.709	52	0.659	72	0.649	74	0.642	70	0.635	73
UAE	0.519	128	0.515	123	0.467	122	0.475	122	0.490	119	0.461	120
Iran	0.357	141	0.359	139	0.365	130	0.412	130	0.444	125	0.426	125
Pakistan	0.330	143	0.309	141	0.311	135	0.310	134	0.345	134	0.306	133
Turkey	0.459	131	0.453	132	0.427	127	0.414	129	0.389	132	0.386	131
Saudi Arabia	0.387	138	0.389	137	0.322	134	0.340	133	0.358	133	0.358	132
Kuwait	0.615	104	0.608	106	0.525	115	0.557	106	0.541	107	0.537	107
Yemen	0.225	145	0.360	138	0.358	132	0.342	132	0.318	135	0.195	134





The findings of Table 4 show that Economic Participation Index is divided into five subindexes of: 1) Labor Force Participation, 2) Wage Equality, 3) Income Estimation, and 4) Presence Rate amongst Senior Legislators, and 5) Professional Workers. Analyzing subindexes will provide a clearer picture of the Economic Participation Index. Azerbaijan ranks 20th in women's labor force participation in the world. The statuses of the rest of the selected countries do not have significant differences with each other while Iran ranks 143 in the world and is at the bottom of the table after Pakistan and Yemen. Considering the fact that there is a high rate of female graduates from universities, lower participation of women in the market is questionable. Iran ranks 8 in this subindex in the Middle East. In the Wage Equality Subindex, the UAE, Azerbaijan, and Kuwait have the highest rates respectively while Iran stands 7th. This means the wage equality conditions in Iran are worse than Saudi Arabia and even Pakistan. Yemen has not declared its statistics in that regard and that is why Iran stays at the bottom of the table there and ranks 98 in the world. The next index indicates the Gender Equality in income in which Kuwait and then the UAE are at top and Iran is 8th. Regarding presence rate amongst senior legislators, Azerbaijan ranks 56 in the world and first in the table while Iran is 106 in the worlds and 3 in the table standing below Turkey.

Regarding the subindex of the ratio of female professional workers versus men, Azerbaijan stands first in the world while Iran is 108^{th} in the world and 3^{rd} in the table after Azerbaijan and Turkey. In the general Economic Participation, Iran stands 141^{st} in the world among 145 countries and 6^{th} among the eight selected countries which is not an acceptable status and requires more consideration by officials. The value of Iran's achievement in the general Economic Participation is 0.357 which is lower than the 0.592 world average.

Economic Participation Subindexes Status in 2015 Table 4

Economic Participation Subindex		Force ipation	for Si	Wage Equality for Similar Work		Income Estimation		Senior Legislators Professional Workers				nd Ratio conomic pation ndex and ual unities in
World Average	0.	67	0.0	60	0.5	54	0.2	27	0.0	54	0.5	92
Country	Ration	Rank	Ration	Rank	Ration	Rank	Ration	Rank	Ration	Rank	Ration	Rank
Azerbaijan	0.93	20	0.72	33	0.44	124	0.49	56	1	1	0.701	54
UAE	0.51	128	0.77	19	0.59	85	0.11	115	0.28	123	0.519	128
Iran	0.23	143	0.59	98	0.17	142	0.17	106	0.54	108	0.357	141
Pakistan	0.30	140	0.61	88	0.19	140	0.03	124	0.28	122	0.330	143
Turkey	0.43	131	0.62	82	0.39	130	0.15	109	0.59	103	0.459	131
Saudi Arabia	0.27	141	0.60	95	0.44	123	0.07	122	0.31	119	0.387	138
Kuwait	0.53	125	0.67	54	0.97	9	0.16	107	0.52	110	0.615	104
Yemen	0.36	135	-	-	0.27	137	0.02	125	0.18	124	0.225	145

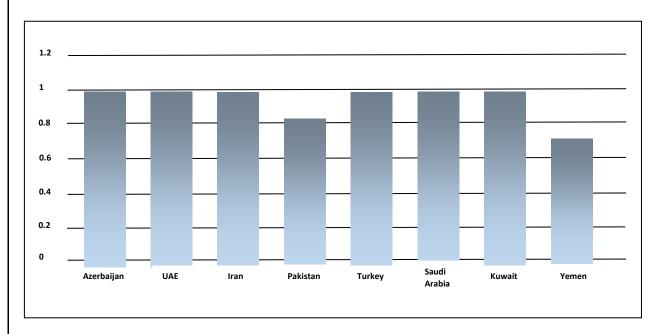
Educational Attainment Index

The Educational Attainment Index consists of four other indexes of literacy rate, enrollment rate in primary, secondary, and higher education which are shown in the following table. Table 5 shows the Educational Attainment changes status between 2010 and 2015. Iran ranks 106 in the world and 6 in the table after Kuwait, the UAE, Azerbaijan, Turkey and Saudi Arabia regarding Educational Attainment while Pakistan and Yemen stand below Iran.

Educational Attainment Index Changes Status between 2010 and 2015 Table 5

Educational Attainment			201	13	20:	12	20:	11	2010			
	Ratio	Rank										
Azerbaijan	0.984	90	0.984	92	0.982	85	0.983	84	0.989	73	0.967	93
UAE	0.987	86	0.988	83	1.000	1	1.000	1	0.991	59	0.998	37
Iran	0.954	106	0.957	104	0.965	98	0.953	101	0.925	105	0.959	96
Pakistan	0.813	135	0.805	132	0.768	129	0.762	129	0.778	127	0.770	127
Turkey	0.957	105	0.953	105	0.943	104	0.930	108	0.920	106	0.912	109
Saudi Arabia	0.988	82	0.987	86	0.976	90	0.976	91	0.967	92	0.967	92
Kuwait	0.991	77	0.991	76	0.994	57	0.994	60	0.983	84	0.986	83
Yemen	0.720	142	0.707	140	0.698	134	0.684	133	0.642	134	0.657	132

Women's Educational Attainment Ratio to Men in 2015



Educational Attainment Subindexes are divided into four sections of literacy rate, enrollment in primary, tertiary, and higher education; these subindexes will provide a clear image of Iran's status regarding the areas that are to be examined more carefully to be compared with the neighboring countries. Table 6 shows the Educational Attainment Subindexes in 2015. Iran stands 106th in the world while it ranks 6 among the selected countries. Kuwait has the best Educational Attainment in which the Primary Education Enrollment rate is 99% and ranks 68 in the world. The enrollment rate in primary education in Iran is 90% ranking 110 in the world. Although the ranking is close to Iran's ranking in Absolute Gender Equality rate, it still implies that there are at least 109 countries with better conditions than Iran. This shows a huge gap between the current situations and the goals defined in Iran's 20-year Perspective Document. Women's entering higher education rate is 94% in Iran while this rate is 100% in the neighboring countries of Kuwait, Saudi Arabia, and Azerbaijan.

Researcher's interpretation: As mentioned for the Gender Gap Index, the index only examined the gap between men and women in countries and does not analyze the governments' actions and their policies. However, the researcher believes that the areas for which the Gender Gap Index is defined are limited and the indexes do not provide an accurate picture of the studied countries. For instance, how can Iran have lower ranking than Saudi Arabia regarding Gender Equality while Iranian girls have taken more than fifty percent of the seats at universities and they constantly succeed in international sports and scientific competitions? This is while similar achievements for women in Saudi Arabia have not been reported and women in Saudi Arabia have just been given the right to vote and are still not allowed to drive. In the researcher's opinion, neglecting women's movements and their potentials as well as the reactionary of religious governments result in a fabricated picture of the Gender Gap status in countries and this cannot be the reference for analysis and providing solutions.

Educational Attainment Subindex in 2015 Table 6

Educational Attainment Subindex	Litera	cy Rate	Prin Educ Enrol	ation	Terti Educa Enroll	ation	Higher E Enroll		Overall Index among 145 Countries in the Middle East		
World Average	0.	89	0.9	93	0.6	54	0.9)2	0.9	46	
Countries	Ratio	Rank	Ratio	Rank	Ratio	Rank	Ratio	Rank	Ratio	Rank	
Azerbaijan	1.00	55	0.98	114	0.98	93	1.00	1	0.984	90	
UAE	1.00	1	0.98	115	1.00	1	-	1	0.987	86	
Iran	0.90	110	0.98	109	0.95	106	0.94	101	0.954	106	
Pakistan	0.60	136	0.87	134	0.74	124	0.98	99	0.813	135	
Turkey	0.93	105	0.99	100	0.97	101	0.86	110	0.957	105	
Saudi Arabia	0.94	103	1.00	1	1.00	1	1.00	1	0.988	82	
Kuwait	0.99	68	0.98	106	2.00	1	1.00	1	0.991	77	
Yemen	0.65	138	0.85	136	0.66	127	0.44	134	0.720	142	

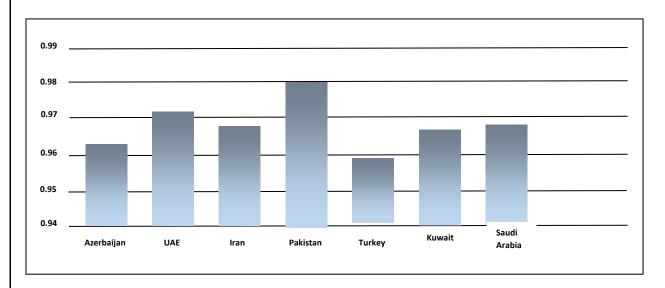
Health and Survival

It is shown through the Health and Survival Index (Table 7) that the female birth rate is lower than the rate for male in all the countries, but Iran ranks 99 in the world and Turkey is the best country in this category with 98% equality. The value of this index has remained the same from 2010 to 2015 and no positive action has been taken to increase the rate. Iran stands second after Turkey, with the rate of 100% for access to Health and Survival for women, among the selected countries. The subindex of the Health and Survival Index are shown in Table 8.

Health and Survival Index Status in 2015 Table 7

Health and	2015		202	14	201	13	201	12	201	11	2010	
Survival	14	45	14	12	13	6	13	5	13	5	13	34
Country	Ratio	Rank										
Azerbaijan	0.950	139	0.944	137	0.925	136	0.920	135	0.933	132	0.929	134
UAE	0.961	133	0.961	132	0.961	112	0.961	111	0.961	111	0.961	110
Iran	0.971	99	0.971	89	0.971	87	0.971	87	0.971	85	0.971	83
Pakistan	0.967	125	0.967	119	0.956	124	0.956	123	0.956	123	0.956	122
Turkey	0.980	1	0.980	1	0.976	59	0.976	62	0.976	62	0.976	61
Kuwait	0.957	137	0.957	134	0.961	112	0.961	111	0.961	111	0.961	110
Saudi Arabia	0.966	129	0.971	90	0.967	52	0.976	55	0.976	53	0.976	53
Yemen	0.967	123	0.967	117	0.973	81	0.973	82	0.973	83	0.973	81

Women's Health and Survival Ration to Men in 2015



Studying the figures in Iran shows that the gender rate at birth is almost even and that Iran ranks first while Azerbaijan which ranks higher in other Gender Equality Indexes, stands 141 in the world and stands last among the selected countries in this regard. The rest of the selected countries have similar status as Iran. Azerbaijan and Turkey rank first in the world in the Life Expectancy Subindex while Iran is 108^{th} in the world and 3^{rd} among the selected countries standing after Azerbaijan and Turkey. Turkey is one of the best countries in the world regarding this index in which Gender Equality in birthrate as well as Healthy Life Expectancy for women is similar to the rates for men.

Health and Survival Subindex Status in 2015 Table 8

Health and Survival		Gender Ratio at Birth		ectancy	Health and Survival Overall Index		
World Average	0.	92	1.04		0.9	57	
	Ratio	Rank	Ratio	Rank	Ratio	Rank	
Azerbaijan	0.90	141	1.06	1	0.950	139	
UAE	0.94	1	1.00	139	0.961	133	
Iran	0.94	1	1.03	108	0.971	99	
Pakistan	0.94	1	1.02	131	0.967	125	
Turkey	0.94	1	1.06	1	0.980	1	
Kuwait	0.94	1	0.99	143	0.957	137	
Saudi Arabia	0.94	1	1.02	136	0.966	129	
Yemen	0.94	1	1.02	129	0.967	123	

Women's Political Empowerment

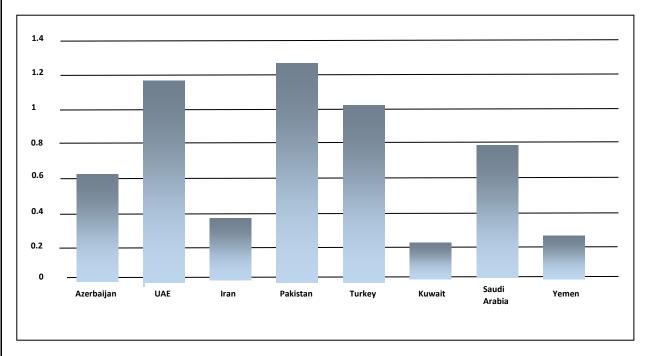
The findings through the table for women's Political Empowerment show that Pakistan and the UAE have the best conditions among the Middle Eastern countries of the selected countries ranking 87 and 92 respectively while Iran ranks

138 at the bottom of the table after Pakistan, the UAE, Saudi Arabia, and Azerbaijan. The world average for Political Empowerment is 23% and the huge gap between Iran's rate and the world average is considerable and a good reason for decisions to be made by the officials and policy makers in that regard. Iran ranks 6 among the selected countries regarding the Political Empowerment Index which shows it does not have an acceptable ranking even among the countries in the region.

Women's Political Empowerment Status between 2010 and 2015 Table 9

Year	20	15	20	14	201	13	201	12	201	11	20	10
	Ratio	Rank										
Azerbaijan	0.063	129	0.064	127	0.066	114	0.066	113	0.066	103	0.047	113
UAE	0.115	93	0.111	96	0.121	81	0.121	81	0.139	62	0.139	60
Iran	0.037	137	0.037	135	0.035	129	0.035	126	0.017	130	0.017	129
Pakistan	0.127	87	0.127	85	0.149	64	0.164	52	0.155	54	0.155	52
Turkey	0.103	105	0.88	113	0.087	103	0.087	98	0.097	89	0.077	99
Kuwait	0.022	141	0.027	137	0.037	126	0.016	130	0.043	116	0.043	114
Saudi Arabia	0.077	121	0.77	117	0.077	105	0.00	133	0.00	132	0.00	131
Yemen	0.026	140	0.025	138	0.023	131	0.023	128	0.016	131	0.016	130

Women's Political Empowerment Ration to Men in 2015



As for the women in the parliament indicator, the UAE, Azerbaijan, Pakistan, Turkey, and Saudi Arabia have better conditions than Iran among the selected countries. This is while the selected countries do not generally have acceptable

conditions regarding the Women's Empowerment Index. Pakistan, Turkey, and Kuwait have better conditions than Iran regarding ministerial positions in the past fifty years. The world average for the number of women in the parliament is 27% while Iran is far behind with 3%. The rate for ministerial positions for women is 11% in Iran while the word average is 24% and the large gap shows that women have been kept away from important and determining positions in the policy making field. There has not been a woman president in Iran while the index for Pakistan and Turkey is in better conditions which shows the trend for weakening the presence of women in key positions. Despite the significant presence of women in higher education comparing to men, the government's policies have kept the key positions for men through legal obstacles.

Women's Political Empowerment Subindex Status between in 2015 Table 10

Women's Political Empowerment		nen in ament	Wom Minis Posit	terial	Years Women Served as Head of State		Overall	Index
World Average	0.	27	0.3	24	0.20		0.23	30
	Ratio	Rank	Ratio	Rank	Ratio	Rank	Ratio	Rank
Azerbaijan	0.18	99	0.03	140	0.00	64	0.063	129
UAE	0.21	87	0.20	87	0.00	64	0.115	93
Iran	0.03	139	0.11	114	0.00	64	0.037	137
Pakistan	0.26	72	0.00	141	0.10	26	0.127	87
Turkey	0.22	86	0.04	139	0.06	36	0.103	105
Kuwait	0.02	140	0.07	126	0.00	64	0.022	141
Saudi Arabia	0.25	79	0.00	141	0.00 64		0.077	121
Yemen	0.00	142	0.11	117	0.00	64	0.26	140

Global Competitiveness

Analyzing the Competitiveness Indexes in Iran and comparing the annual ranking of the countries with each other, the potentials, strengths as well as challenges and weaknesses in different areas can be shown. This is while the changes in the ranking and the Competitiveness Indexes comparing the previous year, requirements and legal obstacles as well as redundant and challenging regulations and their consequences can all help policy makers to plan for future.

The Global Competitiveness Report which is issued by the World Economic Forum (WEF) each year is based on the data from the studied countries, reports from international organizations, and the Global Competitiveness Index (GCI) to analyze and compare the GCI of these countries in different areas. Iran has also cooperated with the Forum through the Research and Development Center of the Chamber of Commerce, Industries, Mines, and Agriculture of Iran in the past four years in this regard (Mirhasani, 1392).

The latest statistics by the World Economic Forum show a 9-spot rise in Iran's ranking regarding the competitiveness capability among other countries in the world. Iran previously ranked 83 among 222 countries in the world regarding the Competitiveness Index according to the Global Competitiveness Report, but it ranks 74 in the 2015-2016 report among 140 countries.

A point from 1 to 7 is given to each of the criterion in the Competitiveness Index. Iran's score has increased 0.07 and has reached 4.1 from 4 in the past year. The Competitiveness Index has had a falling trend since 2012 and it has had a 1-unit drop each year. The falling trend stopped in 2015 and the Competitiveness Index reached the 2013 level with a slight increase. The highest scores of Iran in the main determining factors, are for health, Primary Education, market size, and microeconomic environment just like the previous year. The increase in Iran's scores in Competitiveness Index is mostly due to the increase in the scores of institutions, labor force market, and technologic readiness. Different criteria are

considered to analyze each of the triple principles of competitiveness. The criteria in which Iran has had the weakest and the strongest performances comparing to other countries are shown in Table 12 and Table 13.

Key Indicators of Competitiveness in Iran in 2015-2016 Table 11

Key Indicators	2014-2015	;	2015-2016		Index Changes
	Rank among 144 Countries	Score	Rank among 140 Countries	Score	
Institutions	108	3.4	94	3.6	Progress
Infrastructure	69	4.1	63	4.2	Progress
Microeconomic Environment	62	4.8	66	4.8	No Change
Health and Primary Education	52	6	47	6	No Change
Higher Education	78	4.2	69	4.3	Progress
Goods market Efficiency	120	3.9	109	4	Progress
Labor Market Efficiency	142	3	138	3.2	Progress
Financial Market Development	128	3	134	2.8	Decline
Technological Readiness	107	3	99	3.2	Progress
Market Size	21	5.1	19	5.2	Progress
Business Sophistication	110	3.5	110	3.5	No Change
Innovation	86	3.1	90	3.1	No Change
Competitiveness Index	83	4	74	4.1	Progress

Selected Criteria for Competitiveness Index Compared to the Best Performance of Iran versus Other Countries Table 12

	Iran's Rank
AIDS Epidemic (among adults)	1
General Government Debt	9
Gross National Savings	11
Primary Education Enrollment	14
Malaria Epidemic	17
Impact of Malaria on Business	17
Domestic Market Size Index	18
GDP	18
Landline	32
Domestic Market Size Index	28

Selected Criteria for Competitiveness Index Compared to the Weakest Performance of Iran versus Other Countries Table 13

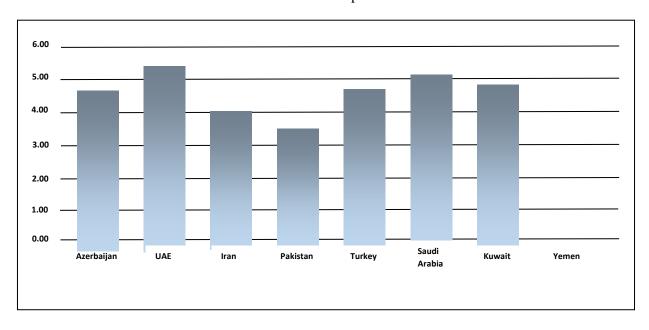
Criteria	Iran's Rank		
Commercial Tariffs	140		
Encouraging Foreign Ownership	140		
Women's Share of Labor Force	139		
Ease of Access to Loans	138		
Imports as a Percentage of GDP	137		
Inflation (annual changes)	137		
Rules and Regulations Encouraging Foreign Direct Investment	135		
Access to Financial Services	135		
Capacity to Attract Talents	134		
Attracting Technologies at Enterprise Level	132		

Analyzing the indexes affecting the Global Competitiveness shows that one of the effective factors weakening the position of Iran is the limited share of women in labor market comparing to men which determines the efficiency of the labor force in the market. The capability of the country to attract talented individuals is also limited which results in the lack of talented human capital at international levels. Analyzing the position of Iran and the Middle Eastern countries shows that countries with smaller Gender Gaps have better positions regarding Global Competitiveness. An evidence for this is to compare the deeper Gender Gap in Iran, Yemen, and Pakistan and how they rank last among the selected countries regarding the Global Competitiveness.

Global Competitiveness Index Status between 2010 and 2015 Table 14

Year	2015-2016		2014-2015		2013-2014		2012-2013		2010-2011		2009-2010	
Number of Countries Studied	140		145		148		144		135		134	
Global Competitiveness	Ratio	Rank										
Azerbaijan	4.52	40	4.53	38	4.51	39	4.41	46	4.31	55	4.30	51
UAE	5.24	17	5.33	12	5.11	19	5.07	24	4.89	27	4.92	23
Iran	4.09	74	4.03	83	4.07	82	4.22	66	4.26	62	-	-
Pakistan	3.4	126	3.42	129	3.41	133	3.52	124	3.58	118	3.58	101
Turkey	4.37	51	4.46	45	4.45	44	4.45	43	4.28	59	4.15	61
Saudi Arabia	5.07	25	5.06	24	5.10	20	5.19	18	5.66	16	4.75	28
Kuwait	4.59	34	4.51	40	4.56	36	4.56	37	4.62	34	4.53	39
Yemen	-	-	2.96	142	2.98	145	2.97	140	3.06	138	-	-

Global Competitiveness in 2016



Global Competitiveness Subindexes Status between 2010 and 2015 Table 15

	Basic Requirements		Efficiency Factors		Innovation Factors		Economic Competitiveness Overall Index		
Global Competitiveness	Ratio	Rank	Ratio	Rank	Ratio	Rank	Ratio	Rank	
Azerbaijan	4.92	43	4.05	69	3.59	66	4.50	40	
UAE	6.17	4	5.11	17	4.83	21	5.24	17	
Iran	4.64	63	3.77	90	3.33	102	4.09	74	
Pakistan	3.37	131	3.57	107	3.44	89	3.45	126	
Turkey	4.68	57	4.33	48	3.71	56	4.37	51	
Saudi Arabia	5.70	17	4.69	30	4.18	29	5.07	25	
Kuwait	5.18	33	4.03	72	3.48	82	4.59	34	
Yemen	-	-	-		-	-	-	-	

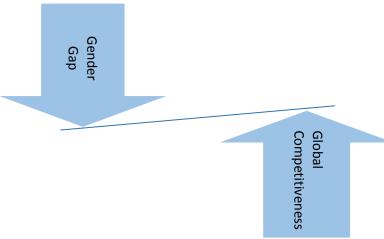
The link between Gender Gap and Global Competitiveness

Gender Gap consists of four groups of variables including Equal Opportunities, Economic Participation, Educational Attainment, Health and Survival, and Political Empowerment. Global Competitiveness also consists of three categories of basic requirements, factors determining efficiency, and factors determining innovation.

As mentioned earlier, the Health and Primary Education variable, as the subindexes forming the basic requirements, is one of the triple factors of Global Competitiveness. The rationale behind choosing this variable among the twelve variables of Global Competitiveness is that this variable is related to human capital. With the same rationale, the efficiency of the labor force variable has also been chosen among all the variables of the efficiency of Global Competitiveness.

Hypothesis 1: There is a link between the variables of Gender Gap and the variables of Primary Education in the basic requirements section.

Hypothesis 2: There is a link between the variables of Gender Gap and the variables of efficiency of labor force in the factors determining the efficiency section regarding the Global Competitiveness.



Independent variable: the subindexes of the Gender Gap Report include equal Economic Opportunities and Economic Participation, Educational Attainment, Health and Survival, and women's Political Empowerment.

Dependent variable 1: The Health and Primary Education variable in the basic requirements section of the Global Competitiveness Report.

Dependent variable 2: The efficiency of the labor force variable in the factors determining the efficiency section in the Global Competitiveness Report

The Pearson Correlation analysis was used to examine this issue.

Table 16

		Equal Opportunities and Economic Participation	Educational Attainment	Health and Survival	Women's Political Empowerment
Health and Primary Education	Pearson Correlation	0.182	0.713 (*)	(a)	0.232
	Sig. (2-tailed)	0.770	0.036		0.707
Efficiency of Labor Force	Pearson Correlation	0.046	0.878 (*)	(a)	-0.074
	Sig. (2-tailed)	0.942	0.040		0.906

- (*) Correlation is significant at the 0.05 level (2-tailed).
- (a) Cannot be computed because at least one of the variables is constant.

The result of the analysis revealed that among the four categories of sub-variables of Gender Gap including Economic Participation, Educational Attainment, Health and Survival, and Political Empowerment, there is a significant link between Educational Attainment Index from the Gender Gap Index and the Primary Education and health variable (in the basic requirements section of the Global Competitiveness Report) indicating that an increase in Gender Equality leads to better ranking in Primary Education and Health Indexes while Health and Primary Education as parts of Global Competitiveness will also increase. There is also a significant link, with a 5 percent deviation rate, between the independent variable of Educational Attainment and the determining factors of efficiency. In other words, Educational Attainment as one of the Gender Gap Indexes is linked with determining factors of efficiency of labor force in the Global Competitiveness report with a 5 percent deviation rate. This means that the efficiency of the labor force increases as the Gender Equality rate in Educational Attainment increases. Therefore, the policies of the government to eliminate gender discrimination at universities and in higher education will escalate Iran's ranking in the Global Competitiveness.

Researcher's interpretation: Considering Iran's conditions regarding Gender Gap and the considerable effect of Gender Inequality on political and economic development of countries, and also considering the situation in the Middle East and Iran's position among the Middle Eastern countries, it seems that different actions should be taken at small and larger scales by governments including considering the parameter of presence of women in decision making and policy making positions. Governments should also eliminate the obstacles preventing women from appearing in the society. The presence rate of women with higher education background in the work market has considerably decreased in the past few years and reforming current methods along with taking policies to employ female working force can help use the huge potential of this silent population. Changing the stereotypical and ideological approaches regarding the presence of women in the society ad having equal opportunities requires publicizing and the will from officials, but the Iranian government has, unfortunately, not provided any support in that regard so far.

References

- 1. Dollar, D. & R. Gatti. (1999). Gender inequality, income, and growth:
- 2. are good times good for women?. Washington, DC: The World Bank. Times Good For Women", World Bank Working Paper.
- 3. Gamble, Sarah & Humm Maggie (2003). The Dictionary of Feminist Theory (Translator: Ahmadi, Noushin & Mohajer, Firouzeh & Gharedaghi, Farrokh, Tehran: Development.)
- 4. Ghobadi, Nasrin (2005). Impact of ITC on Gender Inequality. Economy and Commerce Seasonal: 2 Novin, 67-85.
- 5. Humana, Charles (1999), World Human Rights Guide. 3rd ed., New York: Oxford University Press.
- 6. Klasen, Stephan (1999). "Does Gender Inequality Reduce Growth and Development? Evidence from Cross Country Regressions, Policy research report on gender and development", Working Paper Series, No. 7.
- 7. Khani, Fazileh (2010) Analytic Framework for Global Gender Inequality Studies, Woman in Development and Politics (Women's Studies) 30, Autumn, 3, Issue 8, Period 7.
- 8. Klasen, S. (1999). Does gender inequality reduce growth and development? Evidence from cross-country regressions. Policy Research Report on gender and development, Working Paper Series, No. 7.
- 9. Koulaee, Elaheh & Hafezian (2006), Women's Role in the Development of Islamic Countries, University of Tehran.
- 10. Leach. Fiona,(2009). Practicing Gender Analysis in Education, Oxfams Skills and Practice (2nded), United Kingdom. Oxfam Press 2nd Published
- 11. March.Candida, (2009).A Guide to Gender Analysis Framework. OXFAM Skills and Practice (6th Ed), United Kingdom, Oxfam Press.
- 12. Mc Mahon, W. W. (2000). The impact of human capital on non-market outcomes and feedbacks on economic development. in The Contribution of Human and Social Capital to Sustained Economic Growth and WellBeing. John Helliwell, ed, Government of Canada and OECD, 136-71.
- 13. Mirahsani, Monirsadat (2014) Analyzing the Changes in the Competitiveness Index in Iran during the previous Years and Iran's Position among the Countries in the Region and in the World during 2012-2013. Economic Magazine, Issue 1 and 2, 24-25.
- 14. Morrison et al. (2005). The impact of social institutions on the economic role of women in developing Studies. OECD Development Center Working Paper, No 213. Paris.
- 15. Papageorgio, C., & Stoytcheva, P. (2006). Female human capital inequality, infant mortality and growth. Journal of Applied Econometrics, 23, 121-154.
- 16. Parpart, Jane L. (2005). Rethinking empowerment, Taylor and Francis
- 17. Ricardo Hausmann, Harvard University Laura D. Tyson, University of California, Berkeley Saadia Zahidi, (2010)World Economic Forum, Gender Gap Report.P3
- 18. Sadeghi Fasaee Soheila & Kalhor, Samira (2007). Gender Gap Size and Its Closure during the Third Five-Year Development Plan, Women's Studies, Period 2, Issue 2
- 19. Sahay. Sushama, (1998). Women And Empowerment; Approaches and Strategies, New Delhi, Discovery Publishing House.
- 20. Schwab, K. & Porter, M. E., (2008). The Global Competitiveness . Report 2008-2009. Geneva: World Economic Forum.
- 21. Schwab, K. (2012). The Global Competitiveness Report 2012–2013. Geneva: World Economic Forum.
- 22. Taneja. Sonia, Pryor. Mildred Golden, et al, (2009), Empowerment from the Gender Perspective, Journal of Delhi Business Review X, Vol. 10, No. 2 (July December), pp:17-26.
- 23. The Global Gender Gap Report. Geneva, Switzerland World Economic Forum (2006-2015).
- 24. WorldBank, (2012), The Millennium Development Goals; Chapter IV: Gender Equity, and Women's Empowerment.
- 25. UNFPA (2005). State of World Population 2005. New York: United Nations.
- 26. United Nations. "The Millennium Development Goals Report 2006." New York: 2006.