

Global Competitiveness: Case Study of Iran

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Abstract – The main purpose of this article is to study how competitiveness is economy of Iran. To do so, a wide literature such as global competitiveness index, global innovation index are reviewed. And also comparisons with other economies are done to make a clear picture about the status of economy of Iran. Findings reveal that despite of the huge revenue source of Iran from exporting gas and oil, the economy of Iran is not globally competitive and Iran encounters with serious shortages in the globalization path. It is also exposed that performance of Iran in “institutions”, “macroeconomic environments”, “labor market efficiency”, “goods market efficiency”, “financial market efficiency”, and “innovation” is poor. Hence, to improve performance of Iran in global competitiveness, it is recommended to Iran to expend more to higher education and training to improve its human resource capabilities and then to improve the macroeconomic environment to persuade the educated people to stay in Iran (because Iran also suffers from brain-drain) and after that to spent more on research and development processes and motivate the human resources to be more innovative so that moving in global value chain curve where the attempts are directed toward innovation and idea generation rather production.

Keywords – Global Competitiveness Index, Global Innovation Index, Economy of Iran, Value Chain Curve.

I. INTRODUCTION

Since 1990s, enhancement in telecommunications and Information Technology (IT) have marked remarkable improvements in access of information and they role have increase in economic activities. This advancement in technologies has led to the growth of various sectors of economies throughout the world. Apart from this, the advancement in technology and improved communication network have facilitated the exchange of goods and services, resources, and ideas, irrespective of geographical location. In this way, advanced technologies have led in economic globalization.

Consequently, advancements in IT cause consumers become well aware about products and services available in other countries and it develop a demand for the products and services of other countries, which impel many organizations to work in association with foreign players for catering to the needs of the domestic market. As economists are in agreement that physical distance is the most robust proxy for international trade costs Head and Mayer (2014).

Globalization is defined as a process by which businesses or other organizations develop international influence or start operating on an international scale. Yip et al. (1988) believe that competitive, economic, market and environmental are the main driver factors of globalization.

Globalization is a complicated issue. On the one hand, the proponents say globalization represents free trade which promotes global economic growth; creates jobs, makes

companies more competitive, and lowers prices for consumers. On the other hand, the opponents say globalization is destroying the culture and heritage of a number of countries and the ethnic groups surviving in it; and west is clearly dominating the entire world as it is killing the nationalism under the shadow of globalization.

Anyway, entering into this globalization movement and taking advantage of its benefits is required preparations and initials an economy should has. Become a globalized economy has two aspects. The first is how the economy can be successful in competition with other economies and the second aspect is how the economy is ready to deal with the consequent of opening the doors to the other economies. To evaluate the power of the economies World Economic Forum has prepared an index calling Global Competitiveness Index (GCI) which is able to assess the competitiveness of the economy in regarding globalization issues. In this essay it is tried to study the situation of economy of Iran in global competitiveness based on GCI and also some comparison with other economies will be done to make a clear picture about the status of economy of Iran.

II. GLOBAL COMPETITIVENESS INDEX

The World Economic Forum (WEF) is a Swiss nonprofit foundation, based in Cologny, Geneva, Switzerland. Its mission is cited as "committed to improving the state of the world by engaging business, political, academic, and other leaders of society to shape global, regional, and industry agendas". This foundation releases annually “Global Competitiveness Index (GCI)” report. GCI clarifies how powerful the world economies (countries) in global competitions are. To evaluate the GCI, WEF has considered 3 main criteria which are basic requirements, efficiency enhancers, and innovation and sophistication. In order to assess each criteria of an economy, WEF has considered sub-indices for each criterion as institutions, infrastructure, macroeconomic environment, health and primary education as the sub-indices of basic requirements. And higher education and training, goods market efficiency, labor market efficiency, financial market development, technology readiness, and market size as the sub-indices of efficiency enhancers. WEF also utilizes business sophistication and innovation to evaluate innovation and sophistication of an economy.

WEF use numbers to show the status of each economy in each 11 pillars (all the 11 sub-indices of the three criteria) as the value an economy can acquire in each these pillars is between 1 to 7 where 1 represents the lowest performance or value the specific economy has in that pillar and 7 is the highest value which can be gained for an economy which shows the highest performance the economy in that pillar. It is worth mentioning that, WEF evaluated 138 countries

in their last report in 2016 and they evaluated 140 countries in 2015.

Switzerland, Singapore and United States are the first three economies have gained the most score in GCI which their score is respectively 5.8, 5.72 and 5.70 (as it mentioned above this score is out of 7). It means that Switzerland is the country having the most global competitiveness power among 138 countries. As it the graph 1 shows, the average score of Switzerland in basic requirements is 6.3, and in efficiency enhancers is 5.6 and in innovation and sophistication is 5.8.



Graph 1. The detail of GCI score of Switzerland

	Rank / 138	Score (1-7)	Trend	Distance from best
Global Competitiveness Index	76	4.1		
Subindex A: Basic requirements	61	4.6		
1st pillar: Institutions	90	3.6		
2nd pillar: Infrastructure	59	4.2		
3rd pillar: Macroeconomic environment	72	4.6		
4th pillar: Health and primary education	49	6.1		
Subindex B: Efficiency enhancers	89	3.9		
5th pillar: Higher education and training	60	4.6		
6th pillar: Goods market efficiency	111	4.0		
7th pillar: Labor market efficiency	134	3.2		
8th pillar: Financial market development	131	2.9		
9th pillar: Technological readiness	97	3.3		
10th pillar: Market size	19	5.2		
Subindex C: Innovation and sophistication factors	101	3.3		
11th pillar: Business sophistication	109	3.5		
12th pillar: Innovation	89	3.2		

III. GLOBAL COMPETITIVENESS INDEX OF IRAN

Iran is located in the heart of Middle East and it hugs more than 80 million. Iran is also one of the biggest exporters of oil and gas in the world and the GDP per capita in this country is USD 4877.1. Despite of the huge income of Iran from exporting the oil and gas, the economy of Iran is ranked 76th among 138 countries based on its global competitiveness, according to the WEF. The GCI score of Iran is 4.1 (out of 7) and to compare with last years it has not had a meaningful changes.

A deep study on the details of GCI score of Iran reveals that the score of Iran in basic requirements is 4.6, in efficiency enhancers is 3.9, and in innovation and sophistication factors is 3.3 (see figure 1). Now it has cleared that nonetheless Iran has a relatively the basic requirements to be competitiveness, Iran suffers from the lack of effective enablers and the innovation necessities to improve the competitiveness.

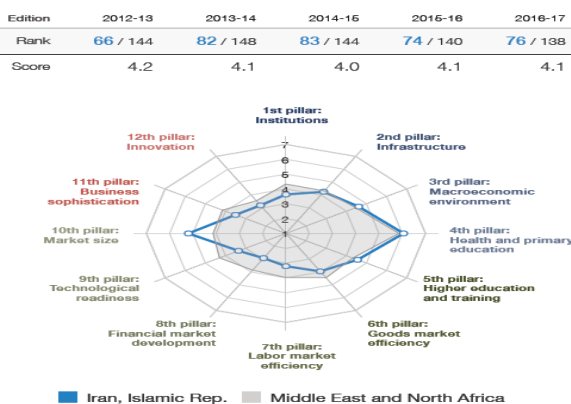


Fig. 1. The Detail Related to Global Competitiveness Index of Economy of Iran

In the basic requirements, as it is clear in the figure1, the performance of Iran in primary education and health issues is satisfactory (6.1 out of 7) as well as the average of all the Middle East and North Africa countries. But the problem is Iran has not gain a good score in the institutions pillar. Figure2 show the detail related to the elements measure the institutions pillar. A glance on figure2 has been exposed that the performance of Iran in almost all of the pillars is poor especially in “wastefulness of government spending” (2.8 out of 7), “burden of government regulation” (3.1 out of 7), “efficiency of legal framework in challenging regs” (3.0 out of 7), “intellectual property protection” (3.2 out of 7), and “diversion of public funds” (3.3 out of 7) (see figure 2).

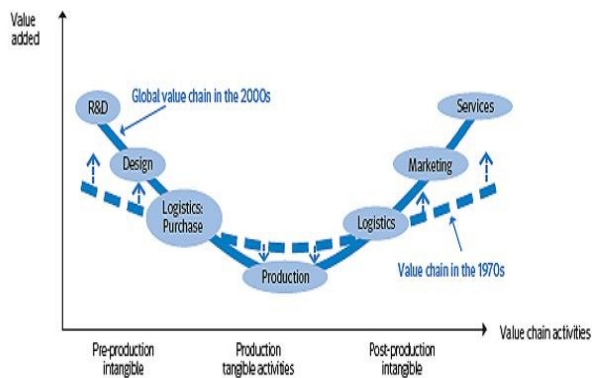
	Rank / 138	Value	Trend
1st pillar: Institutions	90	3.6	
1.01 Property rights	104	3.9	
1.02 Intellectual property protection	126	3.2	
1.03 Diversion of public funds	83	3.3	
1.04 Public trust in politicians	52	3.4	
1.05 Irregular payments and bribes	92	3.5	
1.06 Judicial independence	91	3.5	
1.07 Favoritism in decisions of government officials	49	3.4	
1.08 Wastefulness of government spending	81	2.9	
1.09 Burden of government regulation	97	3.1	
1.10 Efficiency of legal framework in settling disputes	76	3.5	
1.11 Efficiency of legal framework in challenging regs	96	3.0	
1.12 Transparency of government policymaking	116	3.5	
1.13 Business costs of terrorism	105	4.5	
1.14 Business costs of crime and violence	79	4.4	
1.15 Organized crime	90	4.3	
1.16 Reliability of police services	73	4.3	
1.17 Ethical behavior of firms	85	3.6	
1.18 Strength of auditing and reporting standards	116	3.8	
1.19 Efficacy of corporate boards	128	4.0	
1.20 Protection of minority shareholders' interests	117	3.5	
1.21 Strength of investor protection 0-10 (best)	117	4.0	

Fig. 2. Details Related to Performance of Economy of Iran in Institutions

The score of Iran in efficient enhancer is 3.9. This criteria reveals that although, Iran has a relatively good performance in the pillar of higher education and training (4.6), the efficiency of financial market (2.9), labor market (3.2), and goods market (4.0) is very poor. On the other hand, figure 1 shows well that how poor is the technological readiness in Iran (33).

And finally, the weakest part of economy in Iran is on innovation and sophistications factors where the score is 3.3 out of 7. This criteria is measured by two pillars of business sophistication and innovation. As it is shown in the figure 1, the score of Iran in business sophistication pillar is 3.5 and in innovation pillar is 3.2. While innovation is one of the most important factors for each economy.

According to the global value chain curve, the most value adding steps of a production process are in the first step and last step. If a value chain includes steps like the idea is creation step (R&D), design, purchase, production, logistics, marketing, and after sale services, the most value adding steps are in R&D and after sale services steps where there is high knowledge and expertise and high salary and the lowest value adding step is producing step where there is just labor level and low salary (see figure 3).



Source: "Interconnected Economies Benefiting from Global Value Chains", OECD 2013.

Fig. 3. The Smiling Curve, Value distribution along the Global Value Chain

Iran spends USD 0.7 billion on R&D which is only 0.12% of the GDP and has the rank of 50 in world based on the amount of expenditures on R & D, while the USA spends USD 473.4 billion on R&D and it equals to 2.742% of GDP.

On the other hand Global Innovation Index (GII) which is published by INSEAD (World Intellectual Property Organization) is an index shows how an economy is innovative. According to latest reports, the GII of Iran is 30.5 out of 100 and its ranks is 78 among 128 economies, in 2016. The both the expenditure of Iran on R&D and GII confirm the score of Iran in Innovation and Sophistication pillar of the global competitiveness of Iran.

IV. IRAN IN GLOBAL VALUE CHAIN

As it is mentioned above, the most value adding stage of global value chain are in R&D and after sale services stages and least value adding stage is in the production stage. With a simple analysis on the activities in the economy of Iran it

has been illustrating that Iran is in the production stage in the global value chain curve. Because, there are lots foreign companies in Iran producing their product in Iran.

Iran is a type of the country buy the licenses and produce them in the country in many cases export them. It is worth mentioning that the production is not done fully in Iran and the companies in Iran only assemble the products. It means that addition to importing the idea of the developed countries, Iranian companies buy and import mostly all the parts of the product and just assemble it and again export them. Importing the knowledge and ideas and even the primary material and exporting the final production. Samsung's, LG's, KIA's, Benz's, Tata Motor's products are the examples of such companies produce their products in Iran.

Even in the oil and gas industry in which Iran has a great position in the world, the primary knowledge of beyond of this industry has been imported from the other countries like Russia, and South Korea. Therefore, it can be claim that Iran is placed in the lowest part of the global value chain.

V. THE MOST GLOBALIZED COUNTRIES

KOF Swiss Economic Institute, Zurich, has introduced The KOF Index of Globalization which is a ranking of the most global countries based on three dimensions of globalization: economic globalization, social globalization and political globalization.

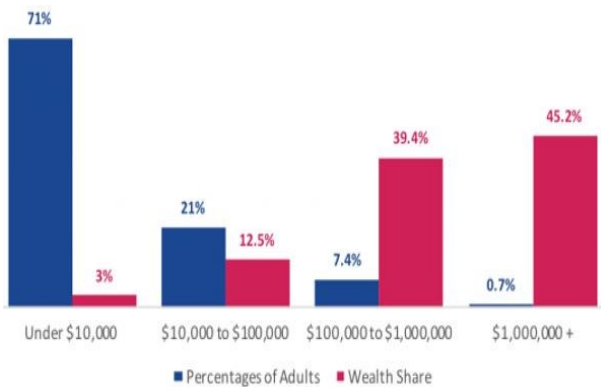
According to the KOF, and as it shown in the figure 4, Netherland is the most globalized country as its KOF Index of Globalization equals to 91.7 (out of 100) and Ireland and Belgium are the second and third most globalized countries in the world which their KOF Index of Globalization is respectively 91.64 and 90.51. The interesting thing is that the countries like France, UK, Germany, USA, and Russia are not in the first ten most globalized countries and their ranks is respectively 19th, 20th, 25th, 32th, and 43th. As it was predictable, Iran is not even among the first 100 globalized countries. Although, the political decisions and the economic sanctions against Iran can be one of its main reasons, the poor performance of Iran in economy is not ignorable and it has been one of the main barrier preventing Iran to have a better performance in become globalized.



Fig. 4. The Most Globalized Countries based on KOF Globalization Index

VI. DISCUSSION AND CONCLUSION

According to Global Wealth Report, 45.2% of the world wealth is belong to only 7% of the world population and 71% of world's population have only 3% of the 45.2% of the world wealth (see graph 1). But I personally hold the belief that to reach the wealth, to improve an economy, a will of change, first of all, is need. Although, there are countries or international organizations willing to help the undeveloped countries to develop, the change should be done from inside of the economy.



Source: Credit Suisse Research Institute, *Global Wealth Report 2015*, October 2015

Graph 1. Global Adult Population and Share of Total Wealth by Wealth Group

According to the results of analysis of GCI and GII of Iran, it is recommended that to improve the economy situation of Iran and to improve the GCI of Iran, the attempts should be directed to improve and reconsider the place of economy of Iran in the global value chain curve. Instead of focusing only on production and export the products, the focus of the both economic activities and political decisions should be on developing a human capital and creating idea and exporting the idea instead of products-which has the lowest value adding step. Based on the GCI the score of Iran in “innovation” is 3.2 out of 7 and based on GII the score of Iran in “innovation” is 30.5 out of 100.

Hence, it is recommended that Iran spend more on higher education and training to empower a trustfulness human capital who are empowered well by the cutting edge knowledge and are able to generate idea and solve the problem independently. After that the attempts should be directed to providing an environment in which the educated people prefer to stay in Iran to help the economy so that it is able to use its investment on the human capital. The score of Iran on higher education and training is 4.6 and its rank is 60 among 138 country. It shows that Iran is needed to spend more on its human capital. But the problem Iran is encountering with is that it is spending on the higher education but it is not able to use the educated people. There is two main reasons behind. The first reason is the poor performance of Iran in creating an economic environment in which the educated people like to work in, and the second reason is the pleasure environment and opportunities the developed countries provide for the educated people. After empowering the human capital, Iran should spend more on

R&D to make the new ideas and improve the situation of Iran in the global value chain.

On the other hadn, the second recommendation is Iran should try to improve its macroeconomic environment as it is reported the score of Iran in this pillar of global competitiveness index is 4.6 out of 7.

On the other hand, Iran has achieved a very poor score in goods market efficiency, labor market and financial market. It is recommended that to improve the score of Iran in market efficiency Iran first of all should facilitated running business process as it is vary time and money consuming to run in Iran now. Then, encouraging foreign investors to share their value and benefit with Iran. Although it is mentioned that Iran does not have a good performance in becoming globalized. As the score of economy of Iran in “prevalence of foreign ownership” is 2.4 out of 7.

To improve the score of Iran in labor market efficiency is to improve “female participation in the labor force” as its rank 137 among 138 country. Besides, Iran has not good scores in “cooperation in labor-employer relations”, “reliance on professional management”, “country capacity to retain” and country capacity to attract talent” also.

REFERENCES

- [1] Head, K., Mayer, T., 2014. Gravity equations: Workhorse, toolkit, and cookbook. In: Gopinath, Gita, Helpman, Elhanan, Rogoff, Kenneth S. (Eds.), *Handbook of International Economics*, vol. 4, Elsevier Ltd., Oxford (Chapter 3).
- [2] https://en.wikipedia.org/wiki/List_of_countries_by_research_and_development_spending.
- [3] https://en.wikipedia.org/wiki/World_Economic_Forum
- [4] <https://publications.credit-suisse.com/tasks/render/file/?fileID=BCDB1364-A105-0560-1332EC9100FF5C83>.
- [5] <https://www.globalinnovationindex.org/analysis-comparison>
- [6] <https://www.statista.com/statistics/268168/globalization-index-by-country/>
- [7] World economic forum. (2016). *The Global Competitiveness Report 2016-2017*. [Electronic resource]. Retrieved from http://www3.weforum.org/docs/WEF_globalcompetitivenessreport_2016-17.pdf>. [atsauce 2017.04.01],
- [8] Yip, G. (1988). How to exploit globalization forces. George-town University Working Paper, (88-08).