

## KNOWLEDGE-BASED ECONOMY AND ITS ROLE IN THE RESISTANCE ECONOMY

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**Abstract.** Resistance economy is one of the concepts in today's global economic literature. Hence, it is necessary to provide practical and appropriate strategies to provide grounds for the conversion of science to technology in the country. This will be possible when the knowledge-based companies literally play the role in the economy do not experiencing recession, but in line with the developments in the international community try to achieve innovations and new technologies. Accordingly, the current paper investigates the concept of knowledge-based economy and resistance economy as well as resistance economic requirements using library sources.

**Keywords:** Economy, Knowledge-based economy, Resistance economy

### 1 Introduction

Knowledge is the most strategic resource for competitiveness maintaining and strengthening with effective management of knowledge as one of the most serious challenges organizations, given the accelerated competitive environment changes and environment uncertainty in today's world. Knowledge management turns asset lies in the minds of people to institutional assets so that a wide range of people involved in decision-making have access to this wealth to use it. The first priority of resistance economy is the pressure points analysis. This means to review the foreign powers issues of sensitivity in the use of sanctions. Generally, those points of sensitivity have been our signs of weakness and our dependence on foreigners identified by the enemy, which we should focus on so that to convert weaknesses to strengths and threats into opportunities. It is obvious that being a country under sanctions requires adopting policies and measures causing growing trend in various aspects in addition to maintaining economic stability to the country.

Resistance economy is a practical way to deal with possible sanctions using it can reduce the negative effects of sanctions.

Knowledge-based companies are including institutions with special place in the resistance economy idea by the supreme leader; because these companies turn ideas and knowledge into products and services, and play an important role in the growth and economic development, while can apply to private and public sector participation in the economic development of the country. This is well understood in the speech of the leader of the Islamic Republic of Iran.

Hermans & Castiauu (2007) believed that university is a prime source of knowledge production and the knowledge can flow between private spheres and academia through making connections between university and industry.

In recent years, economic pressures caused by sanctions taken against Iran made Iran to adopt "resistance economy" as a strategy to cope with the situation raised concern among economic experts inside and outside the country. Knowledge-based economy is an important part of realizing the resistance economy with a double importance in today's world.

Although the optimal use of knowledge and apply it consistently to meet human needs attracted the attention of countries especially during the Industrial Revolution, but in today's world taking advantage of the knowledge by trying to overtake countries has become important more than ever in the international arena.

### 2 Knowledge-based economy

Over the past decade the awareness of the role of knowledge in economic development and its importance in the development of knowledge-based industrial activities has been increased.

For example, the Government of Norway in a comprehensive innovation plan 1 highlighted the importance of further research in industry and market research capabilities based on knowledge. However, it is proved that the commercialization of knowledge at the national level is not fully developed (Spellin & Stencil, 2003). Where, human societies move with unprecedented momentum towards a knowledge driven society, evidence and global trends indicate that competitiveness lies in the ability of creation, deployment and transfer of technological knowledge. Hence, we are faced with the worldwide adoption of strategies to increase the effectiveness of activities and transfer of scientific and technological achievements in industry and the market (Izadiyan, et al., 2013). In today's world, knowledge-based economy undeniably plays an important role in the economic development of many countries. The importance of this type of economy is to the extent that many countries make lots of investments to realize it. Recently, there has been considerable attention to this important issue in Iran years but it seems that conditions and grounds must be provided to should be considered achieve the goals. The term "knowledge-based economy" refers to the role of science and technology on economic growth. Knowledge has always been important for economic development, but in recent years the importance and its relation to economic growth is increasing. A certain number of factors, including technological advances, economic globalization, the importance of specialized knowledge, increasing awareness of the importance of knowledge for economic development of a country and the creation of new jobs are related to economic development. This trend shows that the knowledge economy describes the positive effect of knowledge on the economic growth (Kurtic and Donlagic, 2012).

Experience shows that countries that focus on research and benefit from the outcomes have achieved more success in the field of development. What is clear is that Iran to achieve a high level of economic development has no choice but to use the power of their scientific researchers many of them active in universities and higher education institutions that necessitates paying more attention to scientific production of universities and higher education institutes. Accordingly, it must be said that knowledge-based companies that constitute the main elements of the knowledge-based economy are with undeniable role in the resistance economy. The current circumstances of the country require the knowledge-based economy to be out of sanctions.

Knowledge-based economy and resistance economy are interdependent and chained together; because provide the motivation for the use of various opportunities and deal with problems such as unemployment, inflation, economic dependence, inappropriate consumption and so forth each of the requirements of fulfilled resistance economy.

### 3 Resistance economy

Iran's economy has always been subject to the disabilities in international relations due to the impact of the global environment and the ability in different scientific business, political and energy fields, the more recent one would be the economic sanctions on Iran. The proposed plan of resistance economy for retrofitting the economy is a necessity more than ever before as a means of defense and protection of the Iranian economy in times of economic crisis. In fact the proposed pattern is a macro outlook of in the economy requiring the long-term measures (Ebrahimi & Zirak, 2012). One-dimensionality of a country's economy and its negative impact on the dynamics of the economy have been considered by the economic experts for

years and in some ways it can be considered an economic downturn.

Needless to say, oil-dependent economy can cause irreparable damages to country and that's why the tendency to diversify of economic activities and the use all the capacities of the country is a way to achieve resistance economy. Accordingly, reliance on domestic power would be a strong barrier against external pressures to dominate the country's economy. The economic pressure and sanctions is not limited to Iran and much of the countries have experienced this situation for a variety of reasons and still trying to find fundamental solutions to deal with it. In other words, making policies that vaccinates a country's economy against pressure and sanctions and make it be self-sufficient is the core concepts of the words of the leader of the Islamic Republic of Iran as well as many economists and economic experts.

#### 4 Resistance economic requirements

##### 1- pragmatism in economic activity

There should be sustained efforts to work on theories to make them operational in order to be successful in economic activity. The cliché of slogan is a large drop in resistance economy realization with a large gap between rhetoric and action, in other words a country can take steps toward dynamics economic in case that provided it is necessary requirements in practice. According to Iran's supreme leader pragmatic view of the economy requires action, initiative and activity. This means that the country must use all their capacities for entrepreneurship, production and commercialization of scientific outcomes to the best possible use. Realizing the economic pragmatism occurs when it is institutionalized and acculturated among the nation. It also requires the institutionalization of a culture of understanding in the international community. In the current circumstances all countries are planning to expand their economic activities around the world, to achieve high profitability. Countries like Iran have the ability to take advantage of its capabilities in global markets with decent contribution.

##### 2- The knowledge-based economy

The discourse of knowledge economy has been derived from the report, compiled by a group of intellectuals and economists in the 1960s including Firenze Jelapp, Peter Drucker, Daniel Bell implying that industrial societies are becoming capitalist, industrial and knowledge-based economy societies. Manuel Castells is a prominent writer believing that the knowledge is fundamental and new factors of production is in conflict with the traditional argument that land (natural resources), labor (human effort) and capital goods are the three main factors of production (Robertson, 2008). Production and commercialization of science and technology are obvious signs of development of a country. Although science and technology is crucial to the success of communities, experience has shown that without a roadmap and policy for science and technology and to interpret brighter achieve a competitive advantage in the intense global competition is basically impossible in the absence of adjustment, development and implementation of accurate and correct policies and strategies for creating value (Bagherizadeh, 2011). Commercialization of scientific research outcomes in knowledge-based companies is a strategy in response to the country's macro objectives in line with the emphasis on national self-sufficiency, benefit from the ability and talent of young people of the country, resistance economy and achieve development has gained the increasing importance on relying on domestic force in recent years given that our country is faced with problems such as economic sanctions, therefore, identify and explain all the factors affecting the commercialization of scientific research outcomes is very important because the results of the studies will be used in presented or modified strategies in the area of commercialization of scientific research results.

##### 3- Expert human resources

Human resources as smart assets are the greatest assets of any organization. Organizations look at their human capital based on knowledge, competence and capability as a competitive advantage (Abili & Movafaqi, 2007). Human economic efforts have always been toward obtaining the maximum results out of the minimum resources. This tendency can be termed achieve efficiency and higher productivity.

Productivity is a broad concept constituting many aspects of economic and social life of a community, and is interconnected with the community aspiration on achieving economic growth and sustainable development, economic justice, social justice, the elimination of poverty, increase national prosperity, efficiency and effectiveness of management systems and human capital, and thus the ability to interact actively with the global economy, so that productivity will not be achieved regardless of close attention to each of these goals. Ideals of society realization depend on the productivity of the resources, including physical, human and social resources (Qabezi, 2013). No doubt, human resources are the most important factor in all organizational activities. Expert human capital is of a country's economic pillar; because it plays an important role in achieving the economic goals utilizing the intelligence and knowledge.

Creative and efficient workforce is a valuable asset ignoring it is associated with many negative consequences for any country. Resistance economy goals realization necessities all educated and skilled individual's involvement to provide economic success of country through implementation of their knowledge and experience.

##### 4- Domestic production

The national production is main important point in the context of the country's economy driven wheel. The strength of this axis is the guarantor of the country's economic health, self-sufficiency and economic and social independence from various perspectives ultimately leading to economic development and improves the welfare and living standards. Iran benefits from the key factors needed to strengthen national production, such as human resources, raw materials, land and energy and the art of integrating facilities referred to as management in macro and micro level can increase productivity and efficiency in production, decrease waste reduction as well as the use of science and technology to achieve expected boom. The experience of successful countries such as Japan's economy shows that Japan achieved high percentage of economic growth and development in light of the country's national effort and successful management (Asgari, 1993). The country is required to pay special attention to domestic production ultimately leading to economic self-sufficiency to achieve the resistance economy objectives. One of the main problems underdeveloped or developing countries that faced with is the welcomed use of foreign goods that in turn decreases domestic products production. This requires the acculturation. The economic growth and development will never be attained provided that all individuals in a society accept that the only way to self-sufficiency is the reliance on domestic production.

##### 5- Consumer management

Currently, despite considerable progress in the field of industry and technology, man needs to observe the pattern of consumption more than ever. He needs to deal with the problems of individual and social life with the most appropriate solutions without any adverse effects (Kalantari, 2008). Mismanagement principled consumption is one of the main problems underdeveloped or developing countries faced with. This is one of the most important concerns of state and governments in such countries. The consequence of mismanagement causes resource waste and imposes additional costs on the economy. Consumer management plays a major role in the realization of resistance

economic since it leads to saving and efficient use of all resources available in a country.

### 5 Conclusion

Knowledge Production is one of the most important indicators of growth and development but this requires the conditions necessary for the commercialization to turn it into wealth. In today's world wealth creating knowledge has attracted increasing attention; therefore, the scientific community of the county is required to pursue the production of knowledge able to bring the industry and the economy wheel to move and provide grounds for economic growth of the country. Clearly, the application of the produced knowledge is more important and valuable than its production, because the application of science creates wealth and on the other hand, by making use of knowledge helps to launch a variety of small and large industries and thereby contribute to the development of country. Commercialization of knowledge is one of the most important strategies in achieving resistance economy in underdeveloped and developing countries, so far is not taken into account by such countries. Although in recent years the Iranian government has developed programs and measures to achieve this important objective in support for knowledge-based companies, evidence suggests that more effective measures should be taken to reach the ideal situation. One of the most important challenges now the country is facing is lack of applying the results of researches done at universities and research centers without any will to make them applies, as well. In other words, knowledge production costs a lot each year in the country, without any practical measure to transform to wealth, while this can be done with proper planning and help the economic growth and development. According to definition, the economic growth and development are completely dependent two concepts, on the other hand economic growth is a prerequisite for economic development and there would be no economic development unless there is economic growth. However, in today's world knowledge-based companies can accelerate economic growth and development, paved the way for achieving the two concepts. These companies, with fundamental changes in technology and optimum use of the knowledge generated, help the economy with more accelerated move in the path of growth and development and provide grounds for economic self-sufficiency.

### References

1. Abili, k., Movafaqi, H.: *A window on modern management concepts (with an emphasis on human resources)*, Second Edition, Tehran, Sargl, 2007.
2. Asgari, J.: *National production in the mirror of input-output table of Iran economy*, Journal of Economics, 1993. Vol. 35, p. 92-100
3. Bagherizadeh, S.M.: *Science and technology policy making as a unique element of value creation*, Industrial Technology Development Quarterly, 2011. Vol. 17, p. 5-14.
4. Ebrahimi, M., Zirak, M.: *Causal relationship involved resistance index and investment in Iran: an empirical analysis of economic resistance -based approach*, Economic Journal, 2012. Vol. 10, p. 46-25.
5. Hermans, J., Castiau A.: *Knowledge creation through university – industry collaborative research projects*, in proceeding of the 7 th European conference on knowledge management, 233, 2007.
6. Izadiyan, Z., Abdullahi, B., Kiani V.: *knowledge management as a model for knowledge based enterprise management based in technology parks*, Technology growth quarterly, 2013. Vol. 27, p. 64-70.
7. Kalantari, A.: *Human and consumption patterns*, Fourth Edition, Qom: Bostan-e ketab Institute, 2008.
8. Kurtic, A., Donlagic, S.: *Determining Key Factors for Knowledge Economy Development in Bosnia and Hercegovina*, Management and Learning, International Conference, 2012. P. 421-413.
9. Qabezi, R.: *To investigate the factors affecting the productivity of human capital in research centers (Case Study: Oil Industry Research*, Journal of innovation and value creation, the first year, 2013. Vol. 3, p. 111-121.
10. Robertson, I.: *Learners' attitudes to wiki technology in problem based, blended learning for vocational teacher education*, Australasian Journal of Educational Technology, 2008. Vol. 24(4), p. 425-441.