

---

## The State of Iran's Economy in the Global Value Chain (1979 – 2018)

---

Balal Khalili<sup>1</sup>, Mir Ebrahim Seddigh<sup>2\*</sup>, Mohammad Mehdi Mirzaei<sup>3</sup>

<sup>1,2,3</sup> Department of Political Science, Karaj Branch, Islamic Azad University, Karaj, Iran

---

Received: 23 March 2020

;

Accepted: 20 Dec 2020

---

### Abstract:

In the coming decades, global competition will be defined as competition over the global value chain. Given the importance of these issues, it is necessary to address the situation of Iran's economy and the global value chain, which in this article will be examined in the period between 2007 and 2018. The present article is of descriptive-analytical research type and from the perspective of purpose; it is of applied research type. Accordingly, the main question is: What effect do Iran's economic characteristics have on the country's position in the global value chain?

The temporal hypothesis of the present question is: Focus on "domestic markets" and "resource-oriented" are the two main features of Iran's economy that have led to a lack of extroverted outlook and put Iran's economy at the bottom of the global value chain between 1979 and 2018. The findings show that the implementation of more than three decades of import substitution policy, which has caused Iranian industries and producers to focus mainly on the domestic market, and the extroverted view is not a priority for them; but in the current context of the domestic and global economy, adopting an export development policy with a focus on participation in the global value chain can be helpful in facing its requirements and preconditions.

**Keywords:** Iran's economy, Global economy, Value chain, Globalization, Domestic market, Resource-oriented

---

### 1.Introduction

Globalization is one of the real and prominent aspects of the new world order and one of the most effective forces determining the future course of the world. This phenomenon has many dimensions: economic, political,

social, cultural, environmental, security and so on. This concept has different meanings for different people, and in part this is why "globalization" has met with so many different reactions. Some see it as a serious threat

---

\*Corresponding Author's Email: [912308@kiaau.ac.ir](mailto:912308@kiaau.ac.ir)

to the world economic system, while others see it as an engine for global economic development. In the meantime, the free flow of foreign goods and capital and the huge increase in the volume of foreign capital, the maturity of the World Trade Organization and the World Bank and the International Monetary Fund, the development and competition between countries for the use of these foreign investments, has caused; To countries that have based their strategy on economic development and do not have sufficient resources to implement their development plans to look at these foreign investments as an opportunity to compensate for the lack of domestic capital.

Nowadays, with the joining of developing countries to global markets, companies in these countries are facing increasing competitive pressure. Policies, businesses and enabling environments for participation in global value chains in Iran need serious consideration; According to which understanding the current business and industrial governance structures without a proper understanding of global value chains is also useless; because the value chain encompasses all activities related to the flow of goods and the conversion of materials, from the stage of preparation of the raw material to the stage of delivery of the final product to the consumer. In addition to the flow of goods, there are two other flows (the flow of information and the flow of financial resources and credits). The activities that make up a value chain can be divided into one company or between different companies. The issue of global value chain has received more attention in the last 10 to 15 years. However, the history of this issue in international companies goes back more than a century. Also, given that global competition in the coming decades, competition over the global value chain will be de-

finied. Given the importance of these issues, it is necessary to address the situation of the Iranian economy and the global value chain, which in this article examines this issue in the period between 2007 to 2018. The present article is a descriptive-analytical research from the perspective of purpose, since it seeks to solve the problem and provide solutions for living and dynamic organizations; It is of applied research type. First, to create a theoretical insight of the research, the necessary resources have been studied using the library method; and the theoretical foundations of the research are formulated. And the indicators required for the research are extracted using different sources and then using data analysis, the effect of variables on each other (between 1979 and 2018) will be analyzed. Accordingly, the main question is: What effect do Iran's economic characteristics have on its position in the global value chain?

The provisional hypothesis to the present question is; "Focus on domestic markets" and "resource orientation" are two key features of Iran's economy that have led to a lack of extroversion; And has put the Iranian economy at the bottom of the global value chain between 1979 and 2018.

#### 1) Research literature:

Records of research on the subject indicate that the issue of the global value chain has received more attention in the last 4 to 4 years. This is despite the fact that this has a history of more than a century in international companies. Research records show that global value chain theory has identified four patterns of governance and coordination of relationships between value chain activities, which are:

- 1) Market-based global value chain.
- 2) Global network value chain.

- 3) Quasi-hierarchical value chain.
- 4) Hierarchical value chain.

Bozorgi (2016). in his study entitled "Participation in global value chains: a new development strategy" believes; with the expansion of international production networks or global value / supply chains, traditional strategies have more or less lost their meaning and credibility since the mid-1980s. And now the need to go beyond the duality of import substitution of export development and the need to integrate and participate in these networks and integrated or multilateral policy at the international level is spoken of as a new strategy.

Rezaei and Yaghoubi Manzari (2016). in their research "The situation of Iran-Turkey commodity trade from the perspective of the global value chain", have discussed the developments of Iran-Turkey commodity trade in the global value chain over the past two decades. The results show that Turkey's interest in the global value chain has increased due to its increasing share of world exports of finished products; But in exporting global intermediate and final goods, Iran has not only benefited less from the global value chain compared to Turkey, but has also failed to benefit from the global value chain compared to the world average.

Ismail Malek Akhlagh et al. (2013). in their research entitled "The role and position of promotion techniques in global value chains", have discussed the concepts of promotion and global value chain.

Mohammadi et al. (2017). in their research "Explaining the effective components on structuring the value chain of creative industries in Iran" have taken a structural look at the creative industries and extraction and explaining the effective components in struc-

turing the value chain of creative industries in Iran.

Xuemei Jiang and Yifang Liu (2015). in the article "Global Value Chain, Trade and Carbon: The Case of the ICT Manufacturing Sector" to cut the value chain and carbon dioxide emissions associated with the international trade of the ICT manufacturing sector; They have dealt with it as the most dynamic and scattered part of the world in the world economy. The results show that emerging economies benefit so much by engaging in global ICT products that advanced economies have always been major consumers and importers.

Mohtarami and Tafreshi (2003). in the article "The effects of information technology on the organizational value chain" examine the effects and various effects of information technology throughout the value chain of the organization. Finally, by reflecting on the current situation of the country's organizations and paying attention to the existing experiences in the world and offers suggestions on the requirements and investment priorities of domestic organizations in each of the various aspects of information technology.

In general, the history of research shows that most of the researches have only dealt with the issue of value chain and its role in economics and economic management; and there are gaps in the few studies that focus solely on the position of the Islamic Republic of Iran in the global value chain.

## 2) Theoretical framework:

### 2-1) Interdependence approach:

Changes in the international system have led to the introduction of new liberal theories by theorists called the theory of interdependence, with new features, assumptions and principles that include more international developments and cooperation. Therefore,

this theory has some differences with the convergence theory, the most important of which are two points.

1) The theory of interdependence is not purposeful while the theory of convergence is purposeful.

2) Convergence theories have basically explained the developments of a particular region, while the theory of interdependence seeks to explain it in the international system; Also, this theory does not attach much importance to the issues of higher and lower politics and does not consider military security as the most important demand of countries (Dehghani Firoozabadi, 2013, pp. 44-43). Interdependence theorists have extended many approaches to regional convergence theory to a range of issues related to international economic interdependence (raised in the 1970s). Cohen and Nye consider the theory of interdependence as one of the theories in international relations that has been proposed in order to link the two levels of micro and macro analysis in the study of international relations. They tried to understand "world politics with explanations at the level of the international system", but at the same time they pay attention to domestic trends (Moshirzadeh, 2007, p. 48).

In the late 1960s and 1970s, thinkers such as Edward Morse, Robert Gilpin, Robert Keohane, Joseph Nye, and Richard Cooper generally sought to address new issues of international affairs. They sought to demonstrate the vulnerability of governments to events and developments in other countries; And show the impact of these vulnerabilities on international relations (Rosecrans and Alexandroff, 1977, pp. 427-431). Therefore, the policy of the theory of interdependence can be considered derived from liberal internationalism. In his book, *The Economics of Interdependence*, Richard Cooper sees inter-

dependence as the core of the international political economy of liberalism; and examines the problems that arose for the industrialized nations of the West after World War II in the areas of trade, investment, and economic exchange (Cooper, 1968).

## 2-2) Globalization:

Globalization is not a new phenomenon. Undoubtedly, the interaction of societies is as old as human history. Globalization is not separate from the logic of systems at which development is central. Pre-capitalist social systems based on regions of economic life following the requirements of the reproduction of ideological political order. Capitalism overturns these relations. In earlier systems, power was the source of wealth, but in capitalism, wealth creates power. This apparent difference between the old and new social systems causes a significant difference between the mechanisms and effects of globalization of previous eras of certain periods of capitalism (Amin, 2008, p. 1).

Globalization (both theoretical and situational) covers a wide range of issues and therefore cannot be comprehensively defined and constrained. This wide range, in addition to the type of view and affiliation to which school and defining intellectual approach, adds to the acuteness of the problem and ultimately leads to a distinction between definitions. To think of globalization as "internationalization," "liberalization," "universalization," "westernization," or "de-territorialization" is very effective in our definition of this category.

This lack of consensus on a single definition comes as some Western thinkers, such as Ferguson, Gary, Saul, and Rosenberg, speak of the end of the globalization era, as opposed to the likes of David Held (Held, 2002), Anthony McGrew (Held and

McGrew, 1993) and Anthony Giddens (Giddens, 1999) critique these views. The most important argument of the first group, which speaks of the end of the period of globalization, is that the main premise of globalization; That is, they consider convergence among members of human societies unrealized. And they believe that events such as 9/11, the energy crisis and the economic crisis have shown that not only has this convergence not taken place, but that conflicts have intensified. In contrast, the second group (proponents of globalization) considers this kind of view of globalization to be the result of ideological interpretations.

Emphasis on the unprecedented increase in social, economic, and cultural interactions and interactions is another feature of most of the definitions of globalization offered. In almost all works related to globalization, the vast amount of communication at various levels and areas of the global community is described as part of the process. In some cases, these communications are conscious and voluntary, and in other cases, they are unconscious, involuntary and inevitable. Individuals, groups, institutions, and governments may also be the founders of such extensive communications. Also, the rate of involvement and participation in the global communication network varies according to individuals, groups, ethnicities, countries and regions and continents.

Such large-scale communications and trade-offs imply an increase in interdependence on the world stage, which is another common aspect of the definitions of globalization. From this point of view, globalization is aimed at increasing the ties and solidarity between the states and societies that make up the modern world system. The strengthening of the influential factors in global networks and the interdependence and intensification

of global entanglement have increased the scope and degree of influence of various individuals and communities located on the planet; And reduces the possibility of isolation and exclusion from the effects of the global environment (McGrew, 2010, p. 23).

Addressing the socio-cultural aspects of globalization, Robertson sees the process of globalization as far more complex as economics-based theories can describe and explain. Thus, in his theory, the world system has a very sub-position and emphasizes the element of consciousness (Friedman, 1998, p. 196). Accordingly, Robertson offers two aspects of globalization that include both the objective aspect of globalization and its subjective aspect. According to him, globalization is a concept focused on the compactness of the world and the intensification and increase of awareness of it as a whole. The present recognizes the entanglement and interdependence at the global level, but at the same time goes beyond that stage, emphasizing the element of consciousness. In fact, the prominence and distinguishing feature of his definition and theory stems from such emphasis (Robertson and Khondker, 1998, p. 28).

Opponents of globalization generally ignore its benefits. But globalization advocates do not look beyond them. For them, globalization, which is typically synonymous with the acceptance of successful American-style capitalism, is progress in itself. And developing countries, if they want to grow and fight poverty effectively, must accept it (Stiglitz, 2003, p. 27). Globalization has clearly shown that it is a challenging phenomenon. Its dimensions encompass the realm of many classical concepts such as order, government, authority, sovereignty, culture, identity and security, and provide the basis for their reinterpretation and redefinition.

That a number of multinational corporations today are exerting power over the process of economic production, and this is thought to have originated from globalization; In itself, it sends opponents of these companies and their policies into opposition to globalization.

Discussions in favor of globalization suggest that we live in an age in which economic interdependence is more profound; Information technology and revolution play an important role in disseminating knowledge and ideas and in this process, these developments provide the necessary material infrastructure to strengthen social interdependence. In addition, globalization seems to be on track despite all the opposition that is or will be, and some international issues can only delay it.

### 3) Expansion of global value chains:

Global value chains, global supply chains, international or global production networks, trade in value-added, trade in tasks, production sharing, production fragmentation, outsourcing, off shoring, vertical integration, vertical specialization. Some of these terms may be used interchangeably, but many authors have distinguished between these terms to rely on some features of co-production structures. However, in these writings, there is no consensus on the meanings of these terms, and overall, their essence is the international co-production (Park and et al, 2013, p. 12). International production and supply networks combine such diverse policy areas as commodity trading, the purchase and sale of services, and intellectual property rights; which have made international coordination in these areas very necessary. And so in the last few decades we have seen a rapid increase in multilateral (global) trade organizations and regions with vast capabilities. It is now said that any discussion of trade and in-

vestment policies that ignores the centrality of global value chains is invalid (Elms and Low, 2013, p. 14).

Global value chains, once more restricted to developed countries, are increasingly extended to developing countries. Previously, these chains covered only a few economic sectors of countries, most of them developed countries, and the participation of developing countries in those chains was small and limited to user processes. Since the 1990s, the reduction in the cost of international trade due to trade liberalization, technological advances, improved support and transportation management, as well as the increasing industrial capacity of developing countries, has led to a further fragmentation of global supply chains. And gradually integrate developing countries into manufacturing networks.

The global value chain includes emerging and developing countries. The whole process of producing goods, from raw materials to final products, takes place dramatically in some places; where the necessary skills and raw materials and intermediaries are available at a cost and quality that can compete with other alternatives. Services, meanwhile, not only connect global value chain links, for example through transportation; rather, it helps companies create more added value in their products and make their products more competitive with their competitors. For developing countries, the flow of trade, investment and knowledge that underlies the global value chain can create a mechanism for rapid learning, innovation and technology updates in these countries (Lall, 2000, p. 337).

Developing countries that are heavily connected to the global value chain, improving their business process sometimes creates opportunities for the growth of their export sectors and firms. In other words, the global value chain causes the business process to be

exported to all countries of the world, including developing countries (Ketels and Memedovic, 2008, pp. 376-377). As developing countries 'links to the global value chain improve, so do their firms' domestic markets. This benefit is due to the fact that domestic companies, due to their country's entry into the global value chain, have access to foreign intermediary institutions that may have better quality and price compared to domestic institutions.

Over the past decade, global production has continued to rise but trade has fallen by 6.5 percent. This decline does not indicate trade disputes or the impending slowdown in economic growth, but rather healthy economic development in China, India and other emerging Asian countries. In other words, as consumption increases, most of what is made in these countries is now sold inside these countries instead of being exported to the West. Over the past decade, China has nearly tripled its production of consumer goods, from \$ 1.3 trillion to \$ 8.8 trillion. Meanwhile, China's share of net exports fell sharply from 5.15 percent to 3.8 percent. India has

also exported a smaller share of its production. This means that more goods are consumed domestically. In addition, emerging economies in the region create new industrial capabilities that lead to more advanced products (Tonby and et al, 2019, p. 3).

China is climbing the ladder of the global value chain, and other countries around Asia are replacing China. Vietnam in particular has become a major manufacturing hub for the export of consumer products. The country has attracted a huge flood of foreign investment in new fields to cities like Hai Phong. In addition to Hai Phong in Vietnam, Ho Chi Minh City in Vietnam, Bekasi in Indonesia and Xi'an in China are growing electronics manufacturers. As new countries take on new roles in the industrial value chain, a new set of cities will benefit from capital inflows. Investing in factories leads to new roads, new jobs and urbanization. Most of the capital in Vietnam comes from South Korea and Japan. These new production centers not only promise the emergence of emerging Asian countries, but also promise a more relevant region with joint ventures (Tonby and et al, 2019, p. 7).

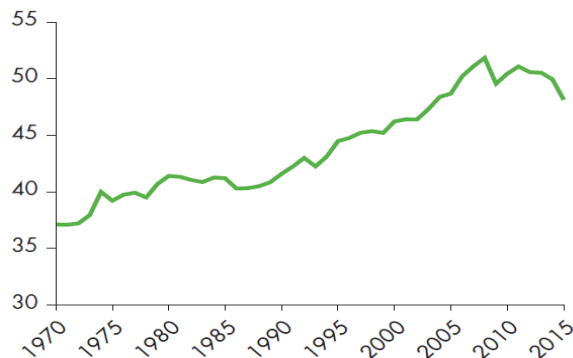


Figure 1) the share of the global value chain in world trade between 1970 and 2015 as a percentage (World Bank, 2020, 19)

Figure 1 shows that the global value chain has grown on average from 1970 to 2008. This growth has stopped from 2008, when the economic crisis began until 2015.

4) Interdependence in the global value chain:

Today, international trade has made it possible to purchase products on a large

scale. Since production and consumption often take place at great geographical distances; the expansion of the business paradigm of tasks and the possibility of division and dispersion of activities between different companies located in geographical areas of the world, has led to the creation of global value chains. Increasing global competition, shortening the product life cycle and barriers to entry for many industries require continued innovation and increased efficiency through entry into the value chain (Abonyi, 2007, pp. 2-3). There are two ways for local companies to participate in the global economy; the first way is to be on the "post road"; which actually means competing in global markets at the lowest cost, producing standard, tax-free goods. The second way is to be on the "high road"; this makes competition possible through upgrades in process, product, and tasks, and requires more costs. In developed countries, companies face new competitors in global markets that these companies and industries must increase value in products, processes or distribution systems in order to be competitive; all of which themselves require significant investment (Chaminade and Vang, 2008, pp. 65-66).

Three factors explain the changes in the global value chain:

1. Growth of consumption share of emerging markets
2. Reducing the dependence of emerging economies on imports of goods and intermediate inputs due to the creation of inclusive domestic supply chains
3. The impact of new technologies on the transformation of global value chains. New generation technologies such as digital platforms, block chain technology, IoT, automation and artificial intelligence have changed the way logistics, production methods, and products are produced. Also, the flow of

cross-border data exchange in global value chains has become (Lund and et al, 2019: p.1).

The global value chain has profound and far-reaching implications for global interdependence, some of which, especially for policy-making, include:

1. Increasing interdependence in international production through global value chains indicates an increase in interdependence in policy-making. In this situation, international cooperation requires policy-making with a comprehensive and integrated approach.

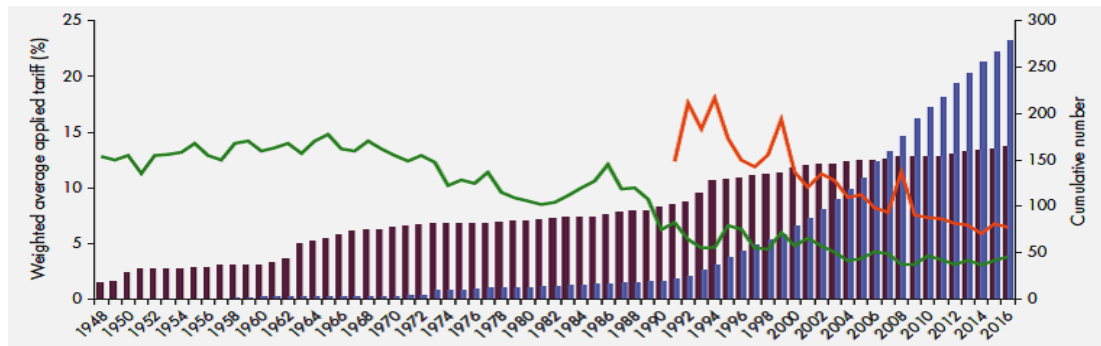
2. The arrangement and supply of supply chain needs shows that markets can no longer be considered as separate as in the past. Markets are complementary, and whatever affects supply and demand in one market will affect other markets.

3. The participatory and group nature of global value chains doubles the impact of a country's upstream policy on the supply chain, as goods and services move from different realms to the lower echelons. This is one of the important dynamic consequences of interdependence in policy making.

4. In the context of global value chains, the cost of protectionism is higher. The higher the foreign content of a country's exports, the greater the double impact.

The global value chain strengthens economic ties between countries. In fact, instead of selling the final goods separately, countries compete with the same customers, which is increasingly connected through rigid production links; It connects them to a common destiny. This international interdependence, meaning the political and economic conditions of a country, affects business partners, and as a result, the benefits of international coordination (and the costs of non-coordination) have increased (World Bank, 2020, p. 103).





Applied Tariffs, Developed Countries (Left Axis) ——— Green line  
 Applied Tariffs, Developing Countries (Left Axis) ——— Red line  
 WTO member countries (right axis) ■ Dark purple bars  
 Regional Trade Agreements in effect since 2019 (right axis) ■ Blue bars

Figure 2: Tariff Reduction Multilateral and Regional Trade Agreements between 1948 and 2016 (World Bank, 2020, p. 21)

5. Multiple crossings within global value chains increase the importance of trade facilitation. Studies by the Organization for Economic Co-operation and Development (OECD) show that trade facilitation can benefit all countries (exporters and importers); And increase their access to production inputs and their participation in global value chains (Elms and Low, 2013, p. 17).

5) Review of Iran's economy 2018-1979:  
 Comparison of world GDP in the last 40 years with Iran's GDP shows that during this period, the world's GDP has increased about 10 times, while Iran's GDP has grown only 5 times. During the same period, the world

average per capita income has increased six fold, while Iran's per capita income has increased only 2.5 times forty years ago. This comparison shows that Iran's total economy has grown less than half of the world average over the past four decades. Meanwhile, Iran's per capita income growth has been nearly three times lower than the world average per capita income growth. The value of Iran's GDP in 1392 was 368.90 billion dollars. The value of Iran's GDP represents 0.60% of the world economy. Iran's average GDP from (1965) to (2013) was 137.51 billion dollars. The highest gross domestic product was \$ 528.43 billion in 2011 and the lowest in 1965 was \$ 6.15 billion.

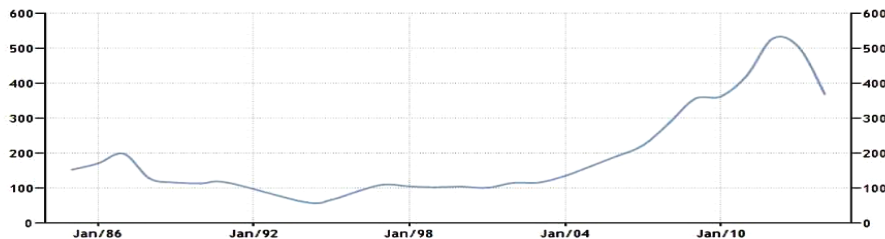


Figure 3) the trend of changes in Iran's GDP between 1984 and 2014 (www.tradingeconomics.com, 2019)

**Table 1.**  
*Forecast of Iran's GDP by 2050*

Forecast	Real	The first three months of 2015	The second three months of 2015	The third three months of 2015	The fourth three months of 2015	2020	2030	2050	Unit
GDP	217	186	156	125	125	528	534	555	Billion Dollars

**Table 2.**  
*Forecast of Iran's inflation rate until 2050*

Forecast	Real	The first three months of 2015	The second three months of 2015	The third three months of 2015	The fourth three months of 2015	2020	2030	2050	Unit
Inflation	16.16	17.91	16.09	5.34	5.34	4.38	4.52	4.52	Percent

**Table 3.**  
*Predicting Iran's Unemployment Rate by 2050 (www.tradingeconomics.com, 2019)*

Forecast	Real	The first three months of 2015	The second three months of 2015	The third three months of 2015	The fourth three months of 2015	2020	2030	2050	Unit
Unemployment rate	10.58	11.22	10.4	10.21	10.21	10.14	10.14	10.14	Percent

If we compare Iran's economy during these four decades with Iran's neighbor, Turkey; We must say that while Iran's GDP was higher in this country forty years ago (Iran's GDP was more than \$ 90 billion, Turkey's GDP was \$ 89 billion); Turkey's economy is now more than twice as large as Iran's. Over the past four decades, Iran's per capita income has almost doubled at current prices. During the same period, per capita income in Turkey has increased 6 times and increased from \$ 1820 to \$ 10940 (Behzadi, 2019, p. 3).

Turkey's current account was relatively balanced until 2000, and in 2015, the country was fully integrated into the global value chain; and its share of foreign value added in

exports reached 30 percent (almost 10 percent higher than the global average). But between 2015 and 2018, the real effective exchange rate fell by 25 percent. And such a big move has only taken place with an average growth of 5% in exports (much slower than the growth of world exports, which was 8% in the same period); and 11% growth in imports (Knight and et al, 2019, p. 32).

The Turkish government has achieved significant success in achieving development through extensive reforms in political, economic and legal policies such as privatization, greater engagement in foreign relations and the attraction of capital through it, align with the global economy and bring its domes-

tic laws in line with EU law, thus increasing the transparency of government activities and reducing corruption, Rational planning for development as well as alignment of various government policies for development and with the aim of development.

According to Figure 4, which deals with the share of Iran and Turkey in the total exports of the world's final goods during the two decades 2015-1994; it shows that Iran's share decreased from 0.6% in 1994 to less than 0.20% in 2015; while this share has been on the rise for Turkey over the past two decades; So that it increased from 0.3% to about

0.9%. In 1994, Iran exported about \$ 1.4 billion worth of these products, which grew by about 1.4 percent to \$ 1.8 billion. Turkey also exported \$ 7.9 billion at the beginning of the period, rising 11.9 percent to \$ 84 billion at the end of the period. It should also be noted that the export of final goods in the world during the same period grew by an average of seven percent per year (compared to the growth rate of 1.4 percent in exports of Iran). As a result, it can be seen that during 1994-2015, Iran's share in the export of these goods decreased and Turkey's share increased.

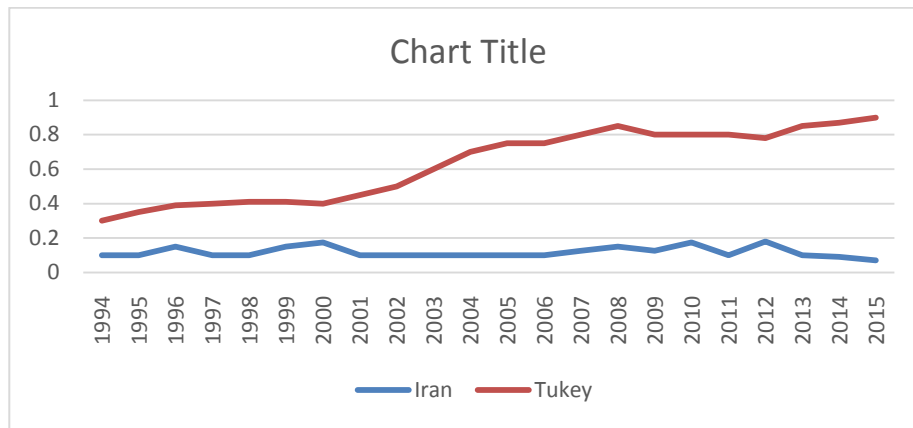


Figure 4) the share of Iran and Turkey in the export of final goods (consumer and capital) of the world between 2015-1994 (World Bank, 2018)

In addition to Turkey, the situation in Iran can be compared with other countries in terms of the type of export products. Canada and Saudi Arabia are two countries with natural resources. Canada is a developed country and Saudi Arabia is an oil-rich country. China is also an emerging country that plays a significant role in world trade and is one of the important players in the global value chain. Canada, China and Saudi Arabia accounted for 2.8%, 5.5% and 0.8% of total global intermediate goods exports in 1994, respectively; which in 2015 reached 2.2, 11.3 and 1.1 percent. Canada's share of global exports of finished goods has been declining

since 1994-94; This means that the export of the final products of this country has not kept pace with the world average during this period; But this share has grown for China and Saudi Arabia; Especially for China, where this share has more than doubled (Rezaei and Yaghoubi Manzari, 2016, p. 36).

Saudi Arabia, which is an oil country like Iran, has increased its share of exports of final goods such as its share of global intermediate goods exports. Its share of exports of final goods has almost doubled on average during the period 1994-1994, and is more than its increase in exports of intermediate goods during the same period; In general, it

can be seen that Saudi Arabia has been able to improve its position in global exports (its share of total global exports of intermediate and final goods has improved) (Rezaei and Yaghoubi Manzari, 2016, pp. 37-36).

In Iran, despite the fact that the deepening of industrial exports based on comparative advantage has been on the government's agenda since the implementation of the Third Development Plan, there has been no fundamental change in high value-added exports. The share of exports of raw materials and raw materials from the total exports of the country during the last 15 years is a constant figure between 50 and 60%, which has not changed significantly. It seems that the implementation of more than three decades of import substitution policy, which has made Iranian industries and producers mainly focused on the domestic market and the extroverted view is not a priority for them, will not be a better performance for the country's economy. Also, the resource-oriented nature of Iran's economy has caused Iranian industries to be mainly at the bottom of the global value chain, so the deepening of industrial exports will not happen with the continuation of the current trend. Therefore, with a better understanding of the structure of global value chains and a change in the introverted approach in Iranian firms, we must move in the direction of producing higher value-added goods and services domestically. In this regard, adopting an export development policy with a focus on participation in the global value chain can be a solution, which of course has requirements and preconditions.

In this context, despite the geographical location, market size, cheap natural resources, quality and costs of factors of production, skilled labor and relatively suitable business environment, which are important factors that can help a country enter the global value chain; However, the challenges of developing countries' participation in global value chains, such as Iran, are more than import restrictions or liberalization; The management of relations between leading foreign firms and domestic firms present in the lower links of the value chain is aimed at promoting industry and raising their position in the chain (Kamali Ardakani, 2019, pp. 1-2).

6) The importance of linking Iran's economy with the world economy:

From 1995 to 2007, trade grew in almost all global value chains. Recently, the intensity of trade (i.e. the ratio of gross exports to gross production) has decreased in almost all value chains of manufactured goods. Trade is still growing in absolute terms, but the share of world production has fallen from 28.1% in 2007 to 22.5% in 2017. Trade volume growth has also slowed. Between 1990 and 2007, global trade volume grew on average 2.1 times faster than real GDP, but since 2011 it has grown only 1.1 times faster than average real GDP. Reducing the intensity of trade, especially in the most complex and tradable value chains, does not indicate a failure in globalization; Rather, it reflects the development of China and other emerging economies that currently consume more than they produce (Lund and et al, 2019, p. 5).

**Table 4.**

*Changes in the intensity of trade in global value chains by commodity groups (McKinsey Global Institute analysis, 2019, p. 6)*

Changes in the intensity of trade in global value chains by commodity groups				
Group	Value Chain	Trade intensity of 2017	Changing of Trade intensity	
			2000 to 2007	2007 to 2017
Global innovations	Chemical	27.4	7.8	-5.5
	Transportation equipment	38	11	-6.2
	Car	29.1	8.9	-7.9
	Electric machines	27.9	6.2	-8.3
	Equipment and machinery	29.5	7.3	-8.9
	Computers and electronics	43.8	13	-12.4
Labor-based goods	Furniture and other products	24.2	7.3	-0.8
	Textiles and clothing	27.3	8.2	10.3
	Paper and printing	15.6	3.7	0.3
Regional processing	Made of metal products	17.8	5.5	-0.6
	Rubber and plastic	22.8	7.6	-0.9
	Food and beverage	12.7	2.4	-0.9
	Glass, cement, ceramics	8.7	2.2	-3.2
	Agriculture	8.4	0.6	-0.7
Resource-based goods	Energy	20.6	7.4	-1.2
	Basic metals	19.6	5.1	-6.2
	Mining	25	11.4	-14.4
	Wholesale and retail	10.7	3.5	2.4
Labor-based services	Health and medicine	0.5	0	0.1
	Shipping and storage	14.6	1.7	2.5
	IT services	18.4	5.6	4.9
Knowledge-based services	Professional Services	9.8	0.3	0.1
	Financial intermediation	3.6	3.6	-0.8

Countries trade in the global value chain, with countries with higher levels of production producing more value-added products. Countries with a lower level of development export low-value raw materials and intermediate goods, and countries with a higher level of development export capital and consumer products or high value-added intermediate goods.

Iran is a country that has metallic and non-metallic minerals, including fuel minerals. This feature is a great advantage for Iran. From the perspective of the global value chain, since the beginning of all global chains begins with the exploration and extraction

sector; there will be no global value chain in the world without mining activities, while the activities of these sectors have little dependence on imported inputs (UNCTAD, 2013). The export of minerals is considered a kind of sale of raw materials and more processing of these minerals will bring more profit. For a country like Iran, the development of mining industries, including downstream oil and gas industries, as well as downstream industries that demand mineral products, along with the expansion of exploration and extraction sectors, brings more benefits to Iran.

The issue of integration with the global economy and the effective and active pres-

ence of international organizations and institutions in the current conditions of the international economic system is not an option among several alternatives, but is a kind of inevitable choice. In the field of domestic macroeconomics, integration requires and at the same time reduces many administrative controls, approving managements and non-market allocations. Convergence of production facilities and activities of the real sector of the economy to maintain the scope of external competitiveness, basing on accepted international standards and criteria and, of course, facilitating the activity of commodity and financial markets are other achievements of this process (Broome, 2010, p. 41).

Some economic analysts believe that the next destinations for international investment after the BRICS countries are Turkey, India, Nigeria, Mexico, Vietnam, the Philippines, Pakistan, Indonesia, Bangladesh, South Korea, as well as Iran. These 11 countries are known as Group 11 and their selection criteria are rapid population growth, high consumption growth, increasing average income and appropriate industrial capacity. The member countries of this group differ in terms of macroeconomic stability, political maturity, degree of economic openness, type of investment and trade policies, and quality of education; They can be classified into three groups: developing (Iran, Nigeria, Pakistan, Bangladesh), newly industrialized (Turkey, India, Indonesia, Mexico, Vietnam, Philippines) and developed (South Korea). Meanwhile, Iran has a high and educated population, relatively good economic and production infrastructure, and due to its remoteness from the global economy, it can become the largest economy with growth capacity. Staying away from the global economy and relying on finite oil revenues has weakened the competitive production infra-

structure and the lack of domestic and foreign investment in the country's economy and has played a role at the lowest level of the global production and trade chain. It seems that Iran's presence in the Asian region is a great opportunity to take advantage of the economic benefits of these countries in order to make the country's economy competitive and promote Iran's position in the global value chain (Tehrani, 2019, p. 7).

In the current context of the global economy, the international fragmentation of different processes and stages of production in the form of global value chains gives more opportunities to developing countries and even countries with the least degree of development; To enter a stage or level of the global value chain based on their relative resources and advantages, including cheap labor, and to gradually strive to rise to higher levels.

But it must be said that participation in the global value chain brings not only opportunities but also challenges. The benefits of "climbing the global value chain" are not evenly distributed. Large, professional, high-tech companies with diversified export markets and skilled workers benefit from more formal contracts. The global value chain is important in developing societies, and there is still debate as to whether it is a framework for advancing neoliberal goals or pro-poor. In fact, both arguments are valid. While the explosion of inter-firm trade in intermediate products and "trade in labor" has changed the way we view global competition and trade; Global value chain researchers have designed a new development plan by identifying the risks and opportunities associated with participation in the global value chain, and assess how social and economic progress in developing economies (Liu, 2014, p. 16).

Iran's economy has a high potential to be included in global supply chains in various

sectors, provided that the place of entry into global supply chains is properly identified. It is possible to use this potential to reach higher segments of the global supply chain and only distance oneself from being a supplier of raw materials.

#### Conclusion:

With the deepening globalization and increase of trade, the countries of the world, based on their comparative advantage, produce and trade products that enter the product creation chain in the global arena, which is called the global value chain. The chain starts with raw materials and ends with consumer goods, capital goods and final services. In the current context of the global economy, the international fragmentation of different processes and stages of production in the form of global value chains gives more opportunities to developing countries and even countries with the least degree of development; To enter a stage or level of the global value chain based on their relative resources and advantages, including cheap labor, and to gradually strive to rise to higher levels. A developing country like Iran must engage with leading companies in the global value

chain (transnational corporations). Implementation of more than three decades of import substitution policy, which has made Iranian industries and producers mainly focused on the domestic market and the extroverted view is not a priority for them; However, in the current situation of the domestic and global economy, the adoption of an export development policy with a focus on participation in the global value chain by observing its requirements and preconditions can be a way forward. In view of the above, the following strategies are recommended to strengthen Iran's presence in the global value chain:

- Deeper political-economic connection with the world economic system
- Improving productivity by equipping the resources needed for investment
- Management of labor markets, money and capital
- Reforming the banking system
- Transparency of business environment and elimination of rents and equal opportunities
- Gradual liberalization of imports
- Encourage foreign direct investment
- Establishing a floating exchange rate system in order to curb inflation
- Strengthening democracy and religious democracy.

## References

- Abonyi G., (2007). **Linking Greater Mekong Sub Region Enterprises to International Markets: The Role of Global Value Chain, International Production Networks and Enterprise Clusters**, New York, ESCAP
- Amin, Samir, (2008). "Geopolitics of Globalization", translated by b. Saturn, available at: <http://www.aftabir.com>
- Behzadi, Shahrokh, (2019). "Improvement in the economic structure of Iran is not possible without a profound change in the political structure of the country", *World Economy*, available at: <http://www.rfi.fr/fa>
- Bozorgi, Vahid, (2016). "Participation in Global Value Chains: A New Development Strategy", No. 305, **Political-Economic Information**
- Broome, A., (2010). "The International Monetary Fund, Crisis Management and the Credit Crunch", Vol. 64, No. 1, **Australian Journal of International Affairs**
- Chaminade, C., and Vang J., (2008). "Upgrading in Asian Clusters: Rethinking the Importance of Interactive Learning", Vol. 13, No. 1, **Science Technology & Society**
- Cooper, Richard, (1968). **The Economics of Interdependence**, New York, McGraw-Hill
- Dehghani Firoozabadi, Seyed Jalal, (2013). **Various Theories in International Relations**, Booklet of Theories of International Relations (M.Sc.), Tehran, Allameh Tabatabaei University
- Elms, Deborah K., and Patrick, Low, (2013). Geneva: WTO Publications, **Global Value Chains in a Changing World**
- Friedman, J., (1998). "The World City Hypothesis", No.17, **Development and Change**
- Giddens, A., (1999). **Runaway World: How Globalization Is Reshaping Our Lives**, New York, Routledge
- Held, David, (2002). **Globalization and Anti-Globalization**, Cambridge, Polity Press
- Held, David, and A. McGrew, (1993). "Globalization and the Liberal Democratic State", Vol. 28, No. 3, **Government and Opposition**
- Jiang, Xuemei, and Yifang, Liu, (2015). "Global value chain, trade and carbon: Case of information and communication technology manufacturing sector", No. 25, **Energy for Sustainable Development**
- Kamali Ardakani, Massoud, (2019). "Pre-conditions for promoting Iran's position in the global value chain", *Logistics Analytical-News Database and Supply Chain*, Available at: <http://logiscm.ir/7677>
- Ketels, Christian H.M, and Olga Memedovic, (2008). "From Clusters to Cluster-Based Economic Development", Vol. 1, No. 3, **Int. Journal Technological Learning, Innovation and Development**
- Knight, David, and Stephen, Milan Nedeljkovic, and Alberto, Portugal-Perez, (2019). "Turkey: An Empirical Assessment of the Determinants of the Current Account Balance", Washington, DC: World Bank, **Policy Research Working Paper 8982**
- Lall, Sanjaya, (2000). "The Technological Structure and Performance of Developing Country Manufactured Exports, 1985-98", *Oxford Development Studies*, Vol. 28, No. 3, **Taylor & Francis Journals**
- Liu, Shobi, (2014). "Opportunities and Threats of Participation in the Global Value Chain", translated by Mojgan



- Soleimani Aghchai, No. 3250, **Donya-e-Eqtasad newspaper**
- Lund, Susan, and James, Manyika, and Jonathan, Woetzel, and Jacques, Bughin, and Mekala, Krishnan, and Jeongmin, Seong and Mac, Muir, (2019). **Globalization in Transition: The Future of Trade and Value Chains**, New York, McKinsey & Company
- Malek Akhlaq Esmaeil, and Zahra, Ayagh, and Mahsa, Farkhondeh, (2013). "The Role and Position of Upgrading Techniques in Global Value Chains", Year 9, No. 34, **Technology Growth Quarterly**
- McGrew, Anthony, (2010). "Globalization and global politics" In: John Baylis and Steve Smith, (eds.) *The Globalization of World Politics*, Fifth Edition, **Oxford, Oxford University Press**
- McKinsey Global Institute analysis, (2019). **Globalization in Transition: The Future of Trade and Value Chains**, New York, McKinsey & Company
- Mohammadi, Mehdi, and Mehrdad, Madhoushi, and Abdolhamid, Safaei Ghadiklaei, and Hassan, Ali Aghajani, (2017). "Explaining the effective factors on the structure of the value chain of creative industries in Iran", No. 38, **Management Improvement Quarterly**
- Mohtarami, Amir and Majid, Tafreshi, (2003). "The effect of information technology on the value chain of the organization", No. 139, **Tadbir Magazine**
- Moshirzadeh, Homeyra, (2007). **Evolution in theories of international relations, third edition**, Tehran, Samat Publications
- Park, Albert, and Gaurav, Nayyar, and Patrick, Low, (2013). **Supply Chain Perspectives and Issues: A Literature Review**, Geneva, WTO Publications
- Rezaei, Mehdi, and, Parisa, Yaghoubi Manzari, (2016). "The situation of trade between Iran and Turkey from the perspective of the global value chain", **Business Studies** No. 81,
- Robertson, Roland, and Habib, Khondker, (1998). "Discourses of Globalization: Preliminary Considerations", Vol. 13, No. 1, **International Sociology**
- Rosecrans, R., and A., Alexandroff, (1977). "Whither Interdependence", Vol. 31, No. 2, International Organization
- Stiglitz, Joseph, (2003). **The Role of Government in the Contemporary World, in Government, Corruption and Social Opportunities**, Translated by Hossein Raghfar, Tehran, Naghsh and Negar Publications
- Tehrani, Zahra, (2019). "Iran's position in the global value chain is improving", No. 1467, **Samat newspaper**
- Tonby, Oliver, and Jonathan, Woetzel, and Wonsik, Choi, and Jeongmin, Seong, and, Patti, Wang, (2019). **Asia's future is now**, New York, McKinsey & Company
- UNCTAD, (2013). **World Investment Report, Global Value Chains: Investment and Trade for Development**, Geneva, UNCTAD
- World Bank, (2018). **World Integrated Trade Solution (WITS)**, Washington, D.C
- World Bank, (2020). **World Development Report 2020: Trading for Development in the Age of Global Value Chains**, Washington, DC
- [www.tradingeconomics.com/iran/indicators](http://www.tradingeconomics.com/iran/indicators), (2019)