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ANALYSE THE DEVELOPMENT OF FOREIGN TRADE PERFORMANCE AND INDICATORS IN THE IRAQI ECONOMY USING THE GRAVITY MODEL

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Abstract

The study aims to measure the determinants of foreign trade in Iraq using the Gravity Model and the adoption of data of Iraq with the most important trading partners for the period 2003-2018. It relies on the descriptive analytical approach, in studying the model of gravity of foreign trade in theory, then examining the reality and development of foreign trade in Iraq and its indicators. The study showed that Iraq is largely open to foreign trade, which represents approximately 80% of the country's gross domestic product. The new trade policy of the Iraqi government aims to integrate the country's economy into regional and international markets, and therefore the country has very few trade barriers. Crude oil represents 90% of Iraqi exports, while the remaining from petroleum products. The rate of exports of output recorded a decline, from 7.69% in 1990 to 43.97%, and yet it is still far in the last decade. Its importance to the economy is increasing as it is the first source of output. The study also found that Iraq exports five products with a comparative advantage.

Key words: Trade Policy, Foreign Trade, gravity model, GDP, Iraqi economic. JEL classification: F13, F1, E1, D24, P4.

1. Introduction

Trade policy is one of the most important total economy policies in a market economy, which directly effects on commodity trading, which contributes to promoting activities in the economy, especially investment. Trade policy is an important variable affecting institutional investment decisions. There is a body of literature focusing on the impact of trade policy on the entire economic activity.

International trade represents a complex network of trade relations between pairs of countries in the world. Represents nodes (or summits) of the countries and represents the edges (or ties), its weighted trade ties in the global economy that stretches across the national borders, there is a growing interest in understanding the mechanisms involved in trade interactions and how a country's position within external trade can affect its economic growth

and integration.(1) Moreover, in the wake of recent financial crises, the interconnectedness of economies has become a source of concern as a source of instability. (2) Since the modern architecture of industrial production stretches across multiple countries across geographically wider supply chains, sudden changes in a country's exports (due to unexpected financial, environmental, technological, or even political conditions) can quickly spread to other countries via ITN. The associated business risk assessment requires detailed information on the main network infrastructure.(3) In general, among the possible channels of interaction between countries, trade plays a major role.(4, 24)

In recent years, there has been much interest in gravity model of international trade and is now one of the most widely applied tools in the applied international economy. This paper traces the history of the gravity model and assesses recent methodological and theoretical developments.(5) gravity model of trade is an important model in the international economy. It is like other gravitational models found in the social sciences. Makes forecasts on bilateral trade flows and these predictions base on the distance within two units as well as the economic dimensions of each. During 1954, Walter Essard used the model for the first time. It may be called a theoretical model at the basic level for the purposes of trade between the two countries. The theoretical foundations and experimental estimation strategy for gravity models have progressed significantly over the past years. By tracking the history of this development and providing a rich sample of applications.

The idea of models of gravity in foreign trade is based on Newton's Law of Universal Gravitation, which states that the force of attraction between two objects is directly proportional to the product of their masses and inversely with the square of the distance between them. The importance of using gravity models in the field of foreign trade has increased, especially in light of the increasing international economic blocs, as these models have great importance in this field, given that the determinants of foreign trade flows depend on the distance between countries and the size of their economies. (6, 25) Accordingly, it is assumed that the volume of trade exchange between countries increases with the increase of the gross domestic product and the decrease in costs related to freight and transportation with the shortening of the distance between the countries.(7)

Iraq has the fourth largest oil reserves in the world. Despite the improvement in security in recent years, the political situation in Iraq remains largely unstable and the difficulty of developing economic policy is constrained by weak central government control. The government's primary goals are to continue expanding the oil sector and improve project implementation to raise the level of basic services, such as electricity, water, and housing. Iraq does not deviate from this rule, as the trade has taken many directions and paths and has been subject to different considerations in different circumstances, times and political stages. It has varied in the extent of its impact on economic development, but those who follow the indicators of Iraq's foreign trade find that the changes in oil production are largely. Production has been disrupted in recent years due to security concerns and the ban on international trade and export infrastructure

under pressure from high oil production capacity. Iraq relies heavily on imports of consumer goods and capital inputs. Major export partners include the United States, European Union, India, Italy, South Korea, Taiwan, China and the Netherlands. Given its oil potential, Iraq is seeking a greater role in the Organization of the Petroleum Exporting Countries (OPEC) and strengthening his ties with its Arab neighbors.

As Iraq member of the Arab League and the Greater Arab Free Trade Agreement. In 2012, Iraq ratified the Trade and Investment Framework Agreement (TIFA) and the Partnership and Cooperation Agreement with the European Union.(8)

2. Research Methodology.

1.2. Objectives of the research:

The study aimed to analyze the determinants of foreign trade in Iraq using the Gravity Model and the adoption of data for Iraq with its most important trading partners for the period 2003-2018. Some economic and geographical variables are used.

2.2. Problem of the research;

The Iraqi foreign trade suffers, although it is considered the first contributor and the main actor in the Iraqi economy, from the clear openness to the world, which makes it vulnerable to global fluctuations, which are characterized as sharp and periodic.. Also, foreign trade in Iraq suffers from a single resource, the oil, which has international conflicts and which carries permanent tensions. In light of this, study questions can be crystallized in the following;

What is the gravity model and what are its developments at the theoretical level

What is the current state of performance and indicators of foreign trade in Iraq within the framework of the gravity model?

2.3. Research hypothesis:

The Iraqi foreign trade suffers from being dependent on a single source, the oil, and this suffering increases with its inability to deal with the vicissitudes of the outside world.

4.2. Empirical Methodology:

Empirical Methodology relies on the descriptive analytical approach, in studying the model of gravity of foreign trade in theory, then examining the reality and development of foreign trade in Iraq.

5.2. Research Excellence:

The current research is distinguished by an extensive theoretical study on the gravity model with application to the foreign trade sector in the Iraqi economy during the period (1990 - 2018), through the use of descriptive analysis of the variables under consideration.

Literature Review

Although the traditional international trade theory explains the reason for trade and many studies conclude that trade is good for the economic development of participating countries and increases welfare, but it has not sufficiently explained the main factors of trade flows. Hence the search for a model or an equation to fill this void. The gravity model was the current backbone of trade theory, which was recognized as a contributor to determining the extent of trade between countries with its sizes, distances, and relative trade barriers, Jan Tinbergen (9) first developed it in 1962. It begins with a discussion of traditional macroeconomic models of international trade, which have mainly focused on trade volume (i.e., in dollars) for intercountry trade, due to a large extent to the economic literature sees that trade volumes are pre-presented. Obviously, the observed heterogeneity of trade volumes between different country pairs is not described by a purely "binary" description, in which all the links are actually given the same weight. Based on this argument, the focus was on explaining the (expected) trade volume between two countries, given some of the country's macroeconomic characteristics. Second, Jan Tinbergen introduced the so-called Gravity Model (GM) of trade. The global mechanism aims to infer trade volume from knowledge of GDP, exchanged geographical distance, and possibly additional macroeconomic factors. (12) In one of its simplest forms, the Global Mechanism predicts that if you name two different countries ($i, j = 1, \dots, N$ where N is the total number of countries in the world), if the expected trade volume is;

$$\langle w_{ij} \rangle = c \text{ GDP}_i^\alpha \text{ GDP}_j^\beta R_{ij}^{-\gamma} \quad c, \alpha, \beta, \gamma > 0, \quad (1)$$

The advantages of using the gravity approach to modeling transitions in foreign trade in ability of gravity models to explain international trade patterns under the relatively few data conditions and the validity of the model's theoretical background for economies in transition. Both advantages are important when modeling transitions. . The results of using the gravity approach to explore international trade patterns in any country with a small, open, and relatively successful transitional economy allow us to conclude that economies in transition must seek a regional position to penetrate it into the global market. Perhaps Tinbergen's use of the concept of gravity force as a measure to explain the scale of bilateral trade flows at first was not based on the theoretical model, but only intuition. The major comparative advantage of the gravity model lies in its ability to use real data to assess the sensitivity of trade flows in relation to the policy factors that we are interested in. Among other things, in general, the gravity model assumes that the trade volume between any two economies will be directly proportional to the output of their economic blocs (measured by gross domestic product [gross domestic product] or gross national product] and inversely proportional to the distance between them. Per capita income

(Measured by output Of GDP per capita or gross national product) a common variable in gravity models.(10)

The gravity model has been used for commerce in a large number of areas such as international relations for example. In the field of international relations, to judge the influence of alliances and treaties on commercial activities.

This model has also been used to analyse the efficiency of trade agreements and organizations such as the World Trade Organization and the North American Free Trade Agreement. From the empirical point of view, the trade gravity model has been successful. However, there were some reservations about the theoretical justifications that were put forward in favor of the model. This model is commonly used to assess trends in the world trade world. Although the theory covers factors such as distance and geography, but also used to test matters related to pure economics. Over the years, the trade gravity model has played an important role in estimating trade patterns. (11, 26) Hence, trying to understand the pattern of trade in the globalized world needs more, and economists have often used the gravity model, which was first introduced in 1962 by Jan Tinbergen, who suggested that the volume of bilateral trade flows between either country could be approximated by using the "gravity equation", which is derived from Newton's theory of gravitation. Fifty years ago, Jan Tinbergen (1962) used a simulation of Newton's Law of Universal Gravitation to describe patterns of bilateral gross trade flows between two countries A and B as "proportional to the gross national product of those countries and inversely proportional to the distance between them, with α , β , $\delta \approx 1$." The so-called "gravity equation" in international trade is surprisingly stable over time and across different samples of countries and methodologies. It stands between the empirical progression, more stable and powerful in economics. Whereas the role of economic size ($\beta \approx 1$, α) is well understood in a group a variety of theoretical environments, to this day no explanation for the role of distance ($\delta \approx 1$) has been found. This paper introduces such an interpretation for the first time. (13)

$$T_{A,B} \propto \frac{(GDP_A)^\alpha (GDP_B)^\beta}{(Dist_{AB})^\zeta}$$

In equation 1, \ln represents the natural logarithm; $TRADE_{ij}$, measures in thousands of tons, is the total freight exchange between provinces i and j . Gross Domestic Product (GDP_i , GDP_j) is the gross domestic product (in Chinese currency) of the provinces of I_{th} and J_{th} . $GDPPC_i$, $GDPPC_j$ is the GDP per capita (in Chinese currency) in I_{th} and two provinces of I_{th} and J_{th} . $DISTANCE_{ij}$ is the distance between the geographical centers of gravity of the provinces of E_{th} and G_{th} (km). $ADJACENT_{ij}$ is a dummy variable, which takes a value of 1 for the provinces i and j to have common boundaries and otherwise. $ETHNIC56_{ij}$ represents the extent to which the I_{th} and J_{th} districts are bound together.

Perhaps many applications are looking at different types of factors that affect trade costs, and their effects on trade flows such as (transport costs, tariffs and

Non-customs barriers, regional integration agreements, currency unions, GATT / WTO, time delay in export / Import and Trade Facilitation, Governance, Corruption and Contract Enforcement)

The relative size is determined according to the current GDP, and the economic proximity is determined by the costs of trade - the more economic "spacing" the greater the costs of trade. The gravity model indicates that the relative economic size attracts countries to trade together, while large distances from this gravity weaken. Initially, the gravity model was seen as an empirical model, without any special basis in trade theory, but the widespread reliance of the gravity model to explain trade patterns was seen by economists as an important development on previous theoretical models. This includes Ricardo model, which explains trade patterns in terms of differences in technology distribution, and the Heckscher-Ohlin model, which relies on differences in endowments between factors as a basis for trade. In these pre-gravity models, the size of the economy was not important, and the stability of the gravity equation and its ability to explain bilateral trade flows led to the development of theories that could include the model. The gravity model is now viewed as the backbone of trade theory, particularly with regard to anticipating the impact of changes in trade policy on trade costs. Because the model of gravity has a high degree of flexibility in that "distance" between countries, it can include a set of related variables, including cultural and political differences between trading nations. Current theoretical models can easily explain the role of economic volume in shaping trade flows, but nothing explains the role of distance. The gravity equation in international trade states that bilateral exports are proportional to economic size and inversely proportional to geographical distance. While the role of scale is well understood, but the distance remains mysterious. I explain the role of distance: if (1) the distribution of company sizes is Pareto, (2) then the average square distance of the firm's exports is an increased energy function of its size, and (3) suspension of parameter constraints, then the trade distance is elastic and constant over long distances when it follows size of the company distribution the Zipf law, the trade is inversely proportional to the distance .(14)

Although the gravity model was accepted as part of the core of discipline, it was limited by its minimal theoretical basis for the first forty years of its existence. Gravity models have become a complex business, as returning to different exact basics includes different estimation techniques. The use of sectorally disaggregated data, and broad country samples, highlight new issues of theory and empirical case. To conduct applied research / good policy, it is important to be on top of recent developments in literature. The advantages of using the gravity approach to modeling transitions in foreign trade are the ability of gravity models to explain international trade patterns under the relatively few data conditions and the validity of the model's theoretical background for economies in transition. Both advantages are important in modeling transitions .The results of using the gravity approach to explore international trade patterns in any country with transitional, small, open, and relatively successful economy allow us to conclude that economies in transition must seek a regional position to penetrate it into the global market.

The gravity model provided the basic theoretical framework for predicting the effects on trade flows as a result of the UK's departure from the European Union⁽¹⁵⁾ (Britain's exit from the European Union). The gravity model was popularly used by international and regional economists to study trade, and the classic early application of the model was (Linnemann 1966), who first worked on the Tinbergen model 1962) and then in Pöyhönen) (1963)). The main impetus for Krugman's (1980) (16) contribution was the empirical uniformity of the gravity equation, where his model shows how total trade flows are proportional to the size of the country, and is inversely related to trade barriers to the extent that agents operate remotely to trade barriers, and his model has also been able to explain why distance effects on trade flows in general, but he has nothing else to say about the exact role of distance. And the Bruce (2018) study (18) argued that commercial theory of gravity was first developed by Adam Smith in Wealth of Nations. Moreover, it is clear that Smith's statement on the relative relationship between economic size and distance came as an application of his general theory of differential capital productivity in various economic sectors, and his clarification of the theory of gains resulting from trade generated by David Hume. It was also clear that Smith had an explanation of the extent of the boundaries that influenced trade volumes, and the theory of gravity of trade restrictions.

SECTION TWO

The development and performance of foreign trade in Iraq under gravity model

Iraq is ranked 43rd in the world and is considered one of the largest export economies in the world. In 2017, Iraq exported 60.8 billion dollar and imported 29.7 billion dollar, resulting in a positive trade balance of 31 billion dollar. In 2017, the gross domestic product of Iraq reached 192 billion dollar, and the per capita GDP reached 16.9 thousand dollar. Exports in Iraq increased to 87,260 million dollars in 2018 from 57,559 million dollars in 2017. Iraq exports five products with a comparative advantage (which means that its share of global exports is greater than expected from the size of its export economy and from the global market for the product). The first exports of Iraq are crude oil \$ 57.5 billion dollar), refined oil (1.47 billion dollar), gold (1.4 billion dollar), oil gas (92.5 million dollar) and tropical fruits (66.7 million dollar), using the 1992 Harmonized System review (HS) Classification. Its main imports are jewellery (960 million dollar), packaged medicines (677 million dollar), poultry meat (643 million dollar), cars (629 million dollar), and gold (621 million dollar). As for export destinations, the largest export destinations for Iraq (36) are India 14 billion dollars), China (12.5 billion dollars)

The United States (10 billion dollars), South Korea (5.74 billion dollars) and Greece (3.25 billion dollars). The largest import assets are Turkey (9.1 billion dollar), China (8.31 billion dollar), South Korea (1.46 billion dollar), India (1.19 billion dollar), and Brazil (810 million dollar). With regard to imports in 2017, Iraq imported 29.7 billion dollars, making it the fifth largest importer in the world. During the past five years, Iraq's imports decreased at an annual rate of -2.1%, from 32.9 billion dollar in 2012 to 29.7 billion dollars in 2017. The

latest imports are driven by jewellery, which accounts for 3.23% of Iraq's total imports, followed by packaged medicines, which account for 2.28%.

In terms of the trade balance, as of 2017, Iraq had a positive trade balance of 31 billion dollar in net exports. Compared to the trade balance in 1995 when they had a negative trade balance of 98.4 million dollar in net imports. (32, 27) Imports in Iraq increased to 45736 million dollar in 2018 from 38766 million dollars in 2017, according to the Trade Economics database.

In light of the foregoing, we show the most important indicators of output, exports and related matters in the Iraqi economy, during the period (1990-2018), as follows;

1-The evolution of the gross domestic product in Iraq: Table (1) indicates to the development of the gross domestic product during the period (1990 - 2018) at constant prices of the US dollar in 2010, which recorded in 1990 a value of 710.26 billion, then it fell to 460.94 billion Dollars, but it did not last long and quickly doubled to 10106 billion dollars in 2000. Although it lost more than a third of its value after the American-British aggression against the country in 2003, it returned in 2005, amounting to 104 billion dollars, then an upward trend followed from 13805 Billion dollars in 2010 to reach its highest level ever in 2016, recording 217014 billion US dollars, meaning that in about a decade, the value has doubled, before declining slightly to 210,53 billion in 2018. Despite this development is still a development Iraq's gross domestic product under threat. The escalation of geopolitical tensions at the international level, notably the tensions between the United States and China as well as Iran, can disrupt global oil supplies, harm the prevailing mood, and weaken the commercial investment that is still in its infancy. In addition, the internal situation in Iraq, the escalation of social unrest, eroding confidence in institutions and the lack of adequate representation in governance structures, can disrupt economic activity, complicate reform efforts And it weakens the prevailing mood, which brings growth to below expected level.

Wherever these pressures exacerbate the already deep slowdown (19, 26).

2- Trade to output: Table No. (1) Indicates the evolution of the trade ratio - to-output from 15.12% in 1990. Although it fell below one percent during most of the 1990s, it returned to record 10602% in 1997. And this percentage escalated to one and a half times of the gross domestic product registered 154.2 per cent, but in 2010, it lost half to become 73.5 per cent. In 2018, it increased to 79.92 percent.

Table (1) also indicates the development of commodity exports as a percentage of output from

9.36 percent in 1990 to its highest level ever and 106.78 in 2004. However, it declined to 61.19 percent 2018. Also, trade in services declined to output, 12.91 percent to 10.51% between 2005 and 2018.

3- Evolution of the total exports of Iraqi goods and services: At the time it recorded 41.33845 trillion Iraqi dinars in 2014, up to 43.9694 trillion dinars in 2018, at constant prices of the local currency, data on exports of goods and

services at current prices of the US dollar(37, 38) indicate an upward development of \$ 13.85 billion US \$ to 66.24 billion dollar in 2008, and despite the decline in 2009, it returned to escalate in 2014, to record 96.9 billion dollar and despite the laxity and decline again during the period (2015-2017), and the loss of more than a third of its value, returned in 2018, to record its highest value Absolutely 98.59 billion dollars.

4-The ratio of exports to output: it recorded an evolution from 7.69 per cent in 1990 to 75.7 per cent in 2000. This means that it nearly doubled ten times, and its importance increased to the economy, being the primary source of output and the most prominent contributor to it. But the situation changed in the following decade, as it fell to 39.4%, losing nearly half of its contribution. Although it returned in 2018 to 43.97 percent, it is still far in the last decade from its predecessor.

The structure of Iraqi exports

Exports are one of the main tributaries of countries 'progress and prosperity, and the higher their value and growth rates, the more countries will help in achieving prosperity and welfare and vice versa. The Iraqi economy has witnessed openness to the outside world since the implementation of trade liberalization programs, as the decline in the relative prices of imported goods has resulted compared to domestic goods.

Table No. (1) The commodity composition of Iraqi exports and their relative weights (1985-2017)

Year	Total	Goods not classified by type	Various crafts	Machinery and transport equipment	Classified items	Chemicals	Animal oils and fats	Mineral fuels and related lubricants	Raw materials other than tobacco	Drinks and tobacco	Food and live animals
1985	39.957	0	0.11	0.17	1.1	0.07	0.01	28	1.9	0.097	8.5
1986	22.58	0	0.13	0.16	0.21	0.09	0	6.02	2.65	0.01	13.31
1987	51.52	0	0.02	0.19	3.96	1.24	0	13.15	7.24	8.55	17.17
1988	533.61	0	0.2	0.29	505	5.2	0	5.57	5.17	0.13	12.05
1989	231.813	0.01	0.55	1.29	207	4.49	0	0.65	3.973	2.92	10.93
1990	233.75	0	0.94	0.28	206	6.95	0	0.15	12.18	1.2	6.05
1991	3.49	0	0.07	0.02	0.15	0.2	0	0	1.45	0	1.6
1992	0.71	0	0.03	0.01	0.02	0.1	0	0	0.32	0	0.23
1993	0.2	0	0.01	0	0	0.06	0	0	0.08	0	0.05

1994	0.03	0	0	0	0	0.01	0	0	0.02	0	0
1995	0.009	0	0	0	0	0.002	0	0	0.005	0	0.002
1996	0.025	0	0	0	0.001	0.004	0	0	0.01	0	0.01
1997	0.023	0	0	0	0.001	0.002	0	0	0.01	0	0.01
1998	0.223	0	0	0	0.003	0.01	0	0	0.01	0	0.2
1999	0.051	0	0	0	0.001	0.01	0	0	0.01	0	0.03
2000	0.042	0	0	0	0.002	0.01	0	0	0.01	0	0.02
2001	0.052	0	0	0	0.002	0.01	0	0	0.01	0	0.03
2002	10175	1	5	2	18	23	1	9256	721	0	148
2003	10079.7	0	60	10	90	100	50	8459	806.6	0	504.1
2004	17809.8	0	0	0	17.8	0	0	17703	53.4	0	35.6
2005	23697	0	0	0	15	0	0	23578	44	0	60
2006	30528	8	0	72	16	2	0	30298	46	0	86
2007	39587	0	0	79	40	0	0	39270	79	0	119
2008	63726	0	0	127	64	0	0	63216	128	0	191
2009	39427	8	0	95	20	4	0	39131	59	0	110
2010	51755	10	0	124	26	5	0	51367	78	0	145
2011	79681	16	0	191	40	8	0	79083	120	0	223
2012	94209	19	0	226	47	9	0	93503	141	0	264
2013	89769	18	0	215	45	9	0	89096	135	0	251
2014	85369	0	0	0	50	0	0	85209	102	0	8
2015	51328	0	0	0	3	0	0	51313	8	0	4
2016	41298	0	0	0	1	0	0	41292	4	0	1
2017	57559	0	0	28	1	0	0	57489	13	0	28

Source: Preparing the researcher based on the Central Bureau of Statistics data

conclusion

The study aimed to measure the determinants of foreign trade in Iraq using the Gravity Model and the adoption of data for Iraq with most important trading partners for the period 2003-2018. Some economic and geographical variables are used. It relies on the descriptive analytical method, in studying gravity model of foreign trade in theory, then examining the reality and development of foreign trade in Iraq and its indicators. The study showed that Iraq is largely open to foreign trade, which represents approximately 80% of the country's

gross domestic product. The new trade policy of the Iraqi government aims to integrate the country's economy into regional and international markets, and therefore the country has very few trade barriers. Crude oil accounts for 90% of Iraqi exports, while the oil products make up the rest.

In 2018, it increased to 79.92 percent. The evolution of merchandise exports as a percentage of output from 9.36 percent in 1990 indicates an all-time high of 106.78 in 2004. However, it declined to 61.19 percent 2018. Trade in services to output also declined, 12.91 percent to 10.51 percent between 2005 and 2018. The rate of exports of output recorded a decline, from 7.69% in 1990 to 43.97%, and yet it is still far in the last decade. Its importance to the economy is increasing as it is the first source of output. In terms of the trade balance, as of 2017, Iraq had a positive trade balance of 31 billion dollar in net exports. Compared to the trade balance in 1995 when they had a negative trade balance of 98.4 million dollar in net imports. Imports in Iraq increased to 45,736 million dollar in 2018 from 38,766 million dollar in 2017, according to the Trade Economics database.

Iraq exports five products with a comparative advantage (which means that its share of global exports is greater than expected from the size of its export economy and from the size of the global market for the product). The first exports of Iraq are crude oil (57.5 billion dollar), refined oil (1.47 billion dollar), gold (1.4 billion dollar), oil gas (92.5 million dollar) and tropical fruits (66.7 million dollar), using the 1992 Harmonized System review (HS) Classification. Its main imports are jewelry (960 million dollar), packaged medicines (677 million dollar), poultry meat (\$ 643 million), cars (\$ 629 million), and gold (621 million dollar). As for export destinations, the largest export destinations for Iraq (39) are India (14 billion dollars), China (12.5 billion dollars), the United States (10 billion dollars), South Korea (5.74 billion dollars) and Greece (3.25 billion dollars). The largest import assets are: Turkey (9.1 billion dollars), China (8.31 billion dollars), South Korea (1.46 billion dollars), India (1.19 billion dollars), and Brazil (810 million dollars). With regard to imports in 2017 Iraq imported 29.7 billion dollars, making it the fifth largest importer in the world.

During the past five years, Iraq's imports decreased at an annual rate of 2.1-%, from 32.9 billion dollar in 2012 to 29.7 billion dollars in 2017. The latest imports are driven by jewellery, which accounts for 3.23% of Iraq's total imports, followed by packaged medicines, which account for 2.28%. Here are some recommendations;

- 1- Reconsidering the trade agreements between Iraq and the neighbouring countries.
- 2- Promote the trend towards developing an application framework for the gravity model in the Iraqi economy.
- 3- Work to further enhance trade cooperation in the regional environment of Iraq, especially in the Middle East and Arab countries.

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