T.C. ISTANBUL GEDIK UNIVERSITY INSTITTUTE OF GRADUATE STUDIES



A STUDY ON THE INDUSTRIALIZATION EXPERIENCE OF IRAQ AND THE POSSIBLE EFFECTS OF THE WORLD TRADE ORGANIZATION ACCESSION

MASTER'S THESIS

Karrar Ghazee Mohsin AL-SHAMMARI

Department of Business Management

Business Administration Thesis Master's Program in English

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Öğretim Üyesi Adı Soyadı

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1) These Danışmanı: Prof. Enver Alper GUVEL

2) Jüri Üyesi: Dr. Öğr. Üyesi Ahmet ERKASAP

3) Jüri Üyesi: Dr. Öğr. Üyesi Ali ÖZCAN

DECLARATION

I, Karrar Ghazee Mohsin Al-Shammari, do hereby declare that this thesis titled as "A Study on the Industrialization Experience of Iraq and the Possible Effects of the World Trade Organization Accession" is original work done by me for the award of the masters degree in the faculty of Engineering Management. I also declare that this thesis or any part of it has not been submitted and presented for any other degree or research paper in any other university or institution. (28/09/2021)

Karrar Ghazee Mohsin Al-Shammari

DEDICATION

I dedicate this work to my family and many friends. A special feeling of gratitude to my parents father whose words of encouragement and push for tenacity ring in my ears, my brother Haider whom i have always been looking forward to, my dear mother who was the biggest supporter of me in my academic journey, and most of my friends for their support during my journey, in addition to all the teachers who passed by me where i am very lucky and grateful for everything i learned from them, to all who helped me in my academic journey from All the bottom of my heart thank you.

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ABBREVIATION

GDP : The Gross Domestic Product
 GNP : The Gross National Product
 WTO : World Trade Organization
 MOT : Ministry of Transport
 NC : National Committee

MFTR : Memorandum of Foreign Trade Regime

EU : European Union

IT : Information Technology

NICs : Newly Industrialized Countries
 ISI : Import Substitution Industrialization
 EOI : Export Oriented industrialization
 RBI : Resource Based Industrialization
 ITI : Industrialization Trough Innovation

R&D: Research and Development **GIP**: Green Industrial Policies

NISs : Newly Industrialized Economies

EPZs : Export Processing Zones SEZs : Special Economic Zones

GATT: General Agreement on Tariffs and Trade

IMF : International Monetary Found

FTAs : Free Trade Agreements

SMEs : Small and Medium enterprisesVERs : Voluntary Export Restraints

NTMs : Non-Tariff measures

NAFTA: North American Free Trade Agreement

UNCTAD: United Nation Conference on Trade and Development

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A STUDY ON THE INDUSTRIALIZATION EXPERIENCE OF IRAQ AND THE POSSIBLE EFFECTS OF THE WORLD TRADE ORGANIZATION ACCESSION

ABSTRACT

The industrial sector is the mainstay in the development and GDP growth but the entry of foreign goods imported into Iraq in heavy bushes after the war in 2003 and the lack of government support for the industrial sector and the effects of the security situation that led to the closure of many factories in the industrial sector and privatefold role in the economy. But the manufacture industry is considered as the main driven engine of economic in many nations and its effective role and performance in formation of the local output. The importance of the manufacture industry lies in its effective roles in protection of the national industry by increasing the exports and decreasing imports as well as equipping the huge numbers of manpower, in addition to its ability to achieve technology progress. The manufacture industry in Iraq is suffering from many problems and obstacles which caused rapidly decreasing in economic performance. For that; the government should have future vision for the industry aims to build advanced manufacture industry sector and enhance industrialization in Iraq. At an informal meeting of the Working Party on the Accession of Iraq held on 17 November 2017, the world trade organization members welcomed Iraq stated determination to resume its WTO accession process after nine years of dormancy. The meeting further provided the opportunity for the government of Iraq and members to exchange views on next steps for that formal resumption in the near term. This research aims to analyse and discuss the effects of Iraq's accession to the world trade organization (WTO) on the Iraqi industry and the national economy as a whole. by reviewing the goals and functions of the international organization and the positive and negative advantages of joining for developing countries in general, and the rule of the government to support and provide a plan for the industrial sector in Iraq, and the thesis proceeds to analyse the positive and negative effects of Iraq's accession and the challenges and problems that may be faced as a result of that in the reality of Iraqi industry, the national economy, and the laws of the WTO.

Keywords: Iraqi industrialization process, Iraqi industry, Iraq's development model

IRAK'IN SANAYİLEŞME TECRÜBESİ VE DÜNYA TİCARET ORGANİZASYONU KATILIMININ OLASI ETKİLERİ ÜZERİNE BİR ARAŞTIRMA

ÖZET

Sanayi sektörü, kalkınma ve GSYİH büyümesinde temel dayanak noktasıdır, ancak 2003'teki savaştan sonra ağır çalılıklarda Irak'a ithal edilen yabancı malların girişi ve sanayi sektörüne devlet desteğinin olmaması ve güvenlik durumunun etkilerine yol açan güvenlik durumunun etkileri. sanayi sektöründeki birçok fabrikanın kapanması ve ekonomide özel sektör rolü. Ancak imalat sanayii, birçok ülkede ekonominin ana itici motoru ve yerel çıktının oluşumundaki etkin rolü ve performansı olarak kabul edilmektedir. İmalat sanayinin önemi, teknolojik ilerlemeyi başarabilmesinin yanı sıra, ihracatı artırarak ve ithalatı azaltarak ülke sanayisinin korunmasında ve çok sayıda insan gücü ile donatılmasında etkin rol oynamasında yatmaktadır. Irak'taki imalat sanavi, ekonomik performansın hızla düsmesine neden olan birçok sorun ve engelle karşı karşıyadır. Bunun için; Hükümet, Irak'ta ileri imalat sanayi sektörü inşa etmeyi ve sanayileşmeyi geliştirmeyi amaçlayan sektör için gelecek vizyonuna sahip olmalıdır. Irak'ın Katılımına İliskin Calısma Grubu'nun 17 Kasım 2017'de düzenlediği gayrı resmi toplantısında, dünya ticaret örgütü üyeleri, Irak'ın dokuz yıllık uykunun ardından DTÖ üyelik sürecini yeniden başlatma kararlılığını memnuniyetle karşıladı. Toplantı ayrıca, Irak hükümeti ve üyelerine, yakın vadede bu resmi yeniden başlama için atılacak adımlar konusunda görüş alışverişinde bulunma fırsatı verdi. Bu araştırma, Irak'ın dünya ticaret örgütüne (DTÖ) katılımının Irak endüstrisi ve bir bütün olarak ulusal ekonomi üzerindeki etkilerini analiz etmeyi ve tartışmayı amaçlamaktadır. uluslararası örgütün amaç ve işlevlerini ve genel olarak gelişmekte olan ülkeler için katılmanın olumlu ve olumsuz avantajlarını ve hükümetin Irak'taki sanayi sektörünü destekleme ve bir plan sağlama kuralını gözden geçirerek ve tez analiz etmeye devam ediyor. Irak'ın katılımının olumlu ve olumsuz etkileri ve bunun sonucunda Irak endüstrisi, ulusal ekonomisi ve DTÖ yasaları gerçeğinde karşılaşılabilecek zorluklar ve sorunlar.

Anahtar Kelimeler: Irak sanayileşme süreci, Irak endüstrisi, Irak'ın kalkınma modeli

1. INTRODUCTION

1.1 Background

The industrial sector failure in Iraq is certainly not the result of a specific stage as much as it is a series of failures witnessed in the previous stages, and therefore any attempt to advance industrialization must requires understanding and absorbing all the variables, and harnessing them to develop future visions for industrial development In Iraq. Perhaps one of the first requirements for the advancement of the manufacturing industry is to start from the available capabilities and build an industrial development model by making use of the past experiences and all the efforts (Yahia, 2017: 4).

Meanwhile one of the most significant successes of the WTO in the past two decades has been the growth of WTO membership and also the continuing stream of applications of countries to accede to the WTO. Of the 43 countries that have applied to associate to the WTO under Article number 12 since January 1st in 1995, approximately half of them are nations in the course of change to a more dynamic market economy. The WTO represents a powerful attraction for countries, seeking admission into the international community and treats their WTO membership as a 'stamp of approval of their policies' (Sabah, 2013: 51).

Furthermore, the debate has been going on for a while about the possibility of Iraq joining the WTO and whether joining is in the interest of the country. It is a serious challenge and has many scenarios and consequences. At the start of 2004, Iraq applied for WTO to gain membership. It was granted as an Observer status from the WTO in February 2004. On December 13, 2004, a working party was established to examine Iraq's accession to the WTO. The working party met for a second time in April 2008 (WTO, 2009: 73). Since then Iraq is negotiating to obtain full membership.

Despite that Iraq is not a member of WTO, though it requested accession in September 2004, that because the EU's commitment towards peace, stability, and

security of Iraq has reiterated in the council conclusion on Iraq due to the many circumstances that accrued in Iraq most notably the Islamic State Of Iraq and Syria invasion in 2014 and other conditions that made Iraq to be considered as a postconflict nation, based on that accession negotiations pose a major challenge for Iraq and other post-conflict countries. After several years of dormancy and due to the internal warfare and economic anguishes, Iraq wants to resume its efforts to gain full membership from WTO. Currently, more than 90% of world trade in merchandises and facilities is conducted among WTO members. To remain secluded from the activities of the WTO and to trade under different guidelines and principles from the ones that were applied by WTO member countries, those are likely to have serious negative economic consequences on Iraq's economy. Iraq has a responsibility to actively and openly consult with the private sector and the citizenry of Iraq as part of their WTO Accession process (Sabah, 2013: 80). Meanwhile, there are many contradictory opinions about the feasibility of joining the organization. Some prefer joining because of its positive effects, and some are against it warn of the repercussions of joining the industry and the economy as a whole. To conduct a scientific assessment of the feasibility of joining, it is necessary to examine the advantages and disadvantages of Joining and put in perspective the reality of the Iraqi industrial sector and the national economy as a whole, to determine the position on the possibility of joining based on the results of the analysis and the internal economic data of the country, and to the nature of the work of the relevant (WTO) and its laws And practices (DiCaprio et al,2006: 787).

1.2 Context

This research aims to discuss the industrial reality in Iraq in terms of looking at the history of the industrial experience in Iraq and the recent developments that have occurred to it, by relying on theoretical analysis to form a future view of the industrial reality in Iraq, taking into account the exceptional circumstances that may face the country, on the other hand, this research will discuss the possibility of Iraq obtaining membership from the World Trade Organization and discussing the problems and challenges that the country may face in this matter, by presenting the organization's guidelines and discussing the terms of development and its negative

and positive effects, and also through comparison with some developing countries that joined the organization and presenting the results obtained from their experience.

1.3 Purpose

The main purpose of this research is to attempt to answer the many questions that deal with the reality of the Iraq industrial sector, and its implications for defining new policies and strategies that the industrial sector must work on it. As the need arises now to limit the losses within the narrow limits and maximize the gains as possible. As well as this research aims to analyze and discuss the option of joining the world trade organization and its effects the positive and the negative on the industrial sector and the national economy in total, and the role of the state by providing the right strategies to minimize the losses and to avoid the obstacles resulting from joining WTO. Joining the organization and becoming a member brings many benefits like most countries that already have a membership, but on the other hand, it is a challenge especially for the developing countries and specifically for Iraq, who passed exceptional circumstances. However not joining is also has a negative effect, therefore, the research problem is represented in the presence of problems in both options, and it is necessary to analyze scientifically to reach an appropriate conclusion.

1.4 Research Methodology

The research methodology is based on a descriptive economic theoretical analysis of the implications of Iraq's accession to the organization for the Iraqi industry and the economic situation in general, both positive and negative, and diagnosing the required position in light of the results of the analysis. The extent of the possibility of achieving the goal of the development of the industrial sector in Iraq is represented by the outcome of the level of compatibility of policies, strategies, and established standards in order to achieve the goals that were set, and thus the causal relationship between the independent variable of objectives, and the dependent variable is the policies and strategies that will work with which can be represented by the relationship of action and reaction. To achieve the validity of this hypothesis, the study now focuses on this hypothesis, to see its effectiveness and this is what the study will follow.

1.5 Thesis Hypothesis

The main hypotheses on which the research relied, it was deduced from previous studies:

• Industrialization is a key factor in the economic growth of countries and is considered a basic pillar in the process of economic progress, as the role of the government in supporting the industrial sector is important for industrialization and for the globalization process, a country like Iraq the main income comes from oil even though the country has all the potential to develop industrialization and support the national product and start to export it instead of importing it, with the accession of the WTO discussion it is an opportunity for the developing countries to enhance their industrialization.

2. CONCEPTUAL FRAMEWORK

With the increase in human needs greatly as a result of tremendous developments that have occurred in human societies in recent centuries, the need has become urgent to meet these needs, by increasing production rates, and harnessing all energies and capabilities, this has led to the emergence of many important concepts and perhaps the most prominent of them is the concept of industrialization.

Industrialization is defined as the process by which goods are produced from raw materials in a manner that meets human needs either directly or indirectly (Marwan 2017: 14). And industrialization is one of the basic processes for the rise of societies and their growth especially at the economic level, which prompted the man to develop them in pursuit of increasing production, and thus increasing the volume of benefits accruing from it.

The industrialization process in general and with all its branches needs a suitable environment for it, and here the role of the state emerges in enacting laws and policies that create this environment. In addition, the states contribute to preserving the various rights of manufacturers with their factories and their workers in regulating the competition process. On the other hand, the state is responsible for providing educational institutions capable of graduating individuals that are qualified to work in the industrial sector as well as providing manufacturers with all the numbers and statistics that benefit them in their work and help them reach their work to the highest ranks (AL-Tai, 2011: 119).

Being the most effective and dynamic sector in the ability to achieve the requirements of economic development by expanding and diversifying the production base and providing job opportunities, the importance of the industrial sector increases in its ability to solve structural imbalances and diversify sources of income commensurate with the economic structure and development of productive capacities and the exploitation of the available resources, whether material or human (Sahib, 2016: 63).

In this chapter, this research will explain what is industry and industrialization and what is the relationship between industrialization and technological change, economic growth, and development. As well as explaining what are the strategies and policies and their principles, concepts and types, and the concept of exporting and importing and what are the industrialization policies and policy tools.

2.1 Industry and Industrialization

Industrialization can be defined according to Chang (2002) as the process of developing the internal multi-branched economic structure, equipped with modern technology, which is characterized by a dynamic transformational sector, which owns and produces the means of production and consumer goods, and is capable of ensuring high growth rates for the entire economy and achieving economic and social progress. Industrial activity has engorged its scope and scale dramatically in the late seventeenth century, as machine facture began to replace manufacture. Historically, Industrialization studies have always been mainly concerned with the (industrial Revolution) period as it was known by that name, even though in geography this area of inquiry has been the focus of many geographers that interested in economics as they known as economic geographers, as they are interested in the existing logic of the global economic landscape (Barnes, 1993: 114).

Two types of economic change can be distinguished by using the criterion of the abruptness of change (Simandan, 2020: 255): events (swift singular changes) and processes (protracted cumulative changes). Industrialization is a process, not an event. A process that evolving the property of a system (country or region) resulting from a collection of events that share many connections and that unfold over a slower span than that of its component events. If one entrepreneur decides to starts an industrial plant in an agrarian region, that particular event cannot be labeled as industrialization. If a group of events of the same kind achieves sufficient meaning for the local economy, (scholars and policymakers) are entitled to refer to it at a higher level of generalization, that is, they can state that the process of industrialization as changing the aspect of that regional economy (Wafa, 1999: 165).

Individual methodologies and strategies of industrialization have been occupied after different times and places with unstable degrees of success. The Industrial Revolution in Europe and the United States at first took place under generally

mercantilist and protectionist government policies that cultivated the early development of industry but were afterward related with a more laissez-faire or free-market approach that opened markets to remote exchange as an outlet for industrial output (Fuchs, 2014: 519).

In the post-Second World War period, developing countries across Latin America and Africa embraced a strategy of import-substituting industrialization, which included protectionist barriers to exchange coupled with direct subsidization or nationalization of domestic industries. Nearly at the same time, parts of Europe and a few East Asian economies sought after an elective technique of export-led development. This procedure emphasized the deliberate interest of outside exchange to construct trading businesses and mostly depended on maintaining a weak currency to make exports more attractive to foreign buyers. In general, export-led growth has outpaced import-substituting industrialization. Lastly, communist countries of the 20th century repeatedly embarked on various cautious, centrally planned programs of industrialization almost entirely independent of either domestic or foreign trade markets. These include the first and second five-year plans in the Soviet Union and the Great Leap in China (Fuchs, 2014: 520).

An industry is defined as "a group of corporations that are related based on their main business activities, as in modern economies, there are loads of industrial establishments, industry classifications are normally grouped into larger categories called sectors" (De Valence, 2012: 53). For example, the car industry makes cars and car parts. The foodservice industry plans nourishment and conveys it to inns, schools, and other huge offices. Industry comes from the Latin industria, which suggests "tirelessness, difficult work," and the word is still utilized with that meaning. On the off chance that you construct a house in three weeks when the same work takes everybody else three months, you are showing impressive industry. (Bickerstaff et al, 2003: 92).

According to Kragh (2007), there are three sectors determine the activity of industries based on the (Three sector model in economics):

• Primary industry consists of any kind of industries related to the extraction of raw materials and their production, the likes of fishing, mining, management

- of agricultural fields and other activities that contribute to the production of raw materials (Chand, 2006:268).
- Secondary industries depend on the production that comes from the primary industries, in other words, the raw materials that have been produced, where they are re-produced as commodities and products and then sold to corporations or consumers. It has the right to convert raw materials into different products to put them on the market or to export them abroad. The products in this type vary according to the raw materials and the industrial capacity of the country, but in general it includes every industrialized local product (Kragh, 2007: 79).
- Tertiary industries are not mainly productive industries, as they do not depend
 on the production of goods or the extraction of raw materials. Rather, this
 type includes services in businesses and corporations ,such as export
 operations, transporting and importing goods, calculating quantities, directing
 industrial products and putting them on the market (Mohanty, 2001: 33).

There are other sectors that are complementary to the industrial sectors related to the services sector, as they branch off from the services sector to establish a quaternary industries concerned with collecting information and a quinary industries concerned with human resources management (Quiggin, 2014: 136).

- Quaternary industries depend mainly on the economic activity of the country, which includes information technology IT and R&D centers, meaning that it is based on the activities that enables the economy to develop, such as consulting, creating designs and setting financial plans for the implementation of huge projects. (Busch, 2016: 21).
- Quiggin (2014) mentioned that quinary industries are the ones that include charitable institutions or associations that are based on helping humanity, in other words, they include non-profit activities, the most prominent examples of which are the education, health and police, where the government does not profit from these activities..

Industrial systems work according to a specific pattern, where factories have inputs, processes and outputs. The inputs are often raw materials, the inputs can also be in the form of labor, investment, or machines. Operations include the movements that

take place inside the factory, which is generally the way to form goods and produce goods and at the same time the operations can be a design or a specific research result that helps to produce something. Outputs are simply the final creation of the operations, and that includes the final product (Quiggin, 2014: 141).

2.1.1 Industrialization and technological change

According to Bruland (2004), Technological change was a vital component in the industrialization process in the making of the modern world economy, started in the late eighteenth and early nineteenth centuries. Yet, more than two centuries after the beginnings of industrialization, our understanding of the factors that encouraged and shaped the development, circulation, and impact of the new technologies of early industrialization remain far from complete.

Technical developments also played a key role in the way humans produce things. Which was completely different from the past, the set of steps into production technology which was also called the industrial revolution. The new production technologies basically changed the lifestyles of people and the working settings as well. There are four different eras for the technological revolution throughout history (Freeman et al 2001: 264).

- The 1st Industrial Revolution began around the eighties of the eighteenth century with the introduction of hydro and steam energy, which aided in mechanical production and greatly improved the agricultural sector (Freeman et al 2001: 266).
- The 2nd Industrial revolution began in the 19th through the discovery of electricity and assembly line production. The idea of mass production was taken from a slaughterhouse in Chicago as Henry Ford (1863-1947) was inspired when he saw the pigs hung from conveyor belts and each butcher performed only a part of the job of butchering the animal. Henry Ford carried these principles into other manufactures specifically automobile production and drastically altered them in the process. While before an entire automobile was gathered from, now the vehicles are being formed in partial steps on the conveyor belt which is considerably faster and also at a lower cost.
- The 3rd revolution began in the 70s in the 20th century arose with the arrival of the digital revolution which is more conversant compared to the first and

second revolution as learning on digital technologies in production became very common and essential. (Liao et al, 2017: 3609).

We are currently implementing the Fourth Industrial Revolution; the 4th has
carried change to many businesses. People have always been obligated to
learn new tasks every day in their careers but now they are also required to
use hi-tech gadgets which essential and very important factors in their lives
(Gorecky et al, 2014: 289).

The fourth industrial revolution which is known as ''Industry 4.0" It can be imagined as a comprehensive change for all parts of the organizations. This includes manufacturing as well, where the development continues, and the operating companies continue to learn modern technologies, in addition to research and development. It will facilitate the concept of an industry and make it able to enter the market and more receptive to the world (Marcos et al, 2017: 1229).

This turn out to be offering self-customization, self-cognition, and self-optimization into the business. When the producers will be capable to communicate with computers rather than operate them. The chart figure of the overview for the industrial revolutions is exemplified in Figure 2.1.

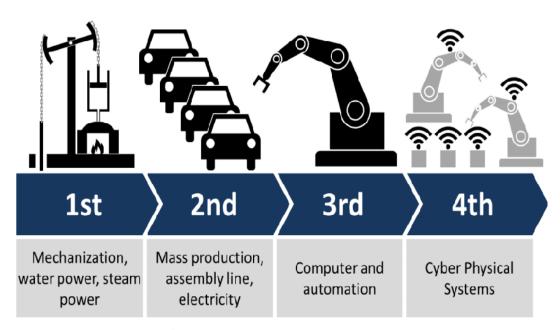


Figure 2.1: The industrial revolution

Source: (Stancioiu, 2017: 74)

2.1.2 Industrialization and economic growth

Kaldor was the one who submitted the research that proposed the fact most of the differences that exist between countries at the economic level are related to industrialization, "where rapid growth rates are directly related to the growth rates of industrial sectors, and this is one of the most important stages of the economic development of society" (Kaldor, 1966, 7).

As he suggested three laws based on these experimental predictabilities:

- 1. The growth of the domestic product is related to the growth of the industrial sector, as when the growth rate in the industrial sector increases, the speed of the growth rates of the domestic product increases, meaning that the relationship between them is direct.
- 2. The growth of the industrial sector determines the quality and efficiency for the industrialization, as this law of Kaldor is also called (Verdoon's Law). The argument is in the point that there are revenues granted to increase the scope of the industrial sector, where the growth of the sector leads to reducing costs in addition to the dynamic impact of the GDP growth and the process of technical progress.
- 3. The last law of Kaldor laws is considered the least spontaneous. This law states that there is a direct relationship with the growth rates of the non-industrial sectors with the growth of the industrial sector. It is based on the principle that there are contradictory record revenues for the non-industrial sectors, some of which will rise as long as there are revenues from abroad that come through production of the industrial sector.

Chenery, Robinson, and Syrquin (1986) they analyzed the relationship between industrialization and economic development based on Kaldor's research. They did this after collecting many data related to some industrialized countries and other semi-industrial countries, with the exception of cases that raise controversy such as poverty traps. Kaldor's hypothesis on economic growth was supported by them, where they claimed that they were able to obtain sufficient evidence to support Kaldor's research regarding economic development through industrialization, as they found that industrialization is generally necessary for the process of continuous growth in a practical and theoretical manner where the increase in industrialization

significantly affected the economic structure of a particular country (Chenery et al., 1986, 350).

Murphy, Vishny, and Shleifer also agreed on this perspective: "Industrialization was a major source of rapid economic growth and productivity improvement in most countries that experienced economic development in the last 200 years. Countries that have successfully industrialized and produced manufactures and took advantage from their industries they are the nations that grew, like 18th century Britain or Korea and Japan in the 20th-century" (Murphy et al, 1989, 1003).

This scheme may apply to some countries in the twentieth century under the framework of economic development experiences, where the industrialized countries are considered the fastest and most developed during the period between 1965-1990, as these countries were considered the most industrially developed in terms of performance, Singapore, Korea, Taiwan, Hong-Kong, China, Indonesia, Japan, Malaysia, Thailand, Brazil, and Yugoslavia. During the same period, it was found that the least developed countries are the non-industrial countries. Besides, most of the successful experiments regarding the economy found the effective role of industrialization. (Ortiz et al, 2009: 78).

Thus, industrialization matters. (Leontief, 1986) he wrote regarding developing countries the following: "Every country needs resources and technologies to achieve its goal of development, where the essence of the economic development process is trying to obtain an economic system similar to the economic systems that exist in developed countries worldwide" (Leontief, 1986, 164).

Hence industrialization is a key factor to economic growth, but in the meantime, there are a few successful economic take-offs after World War II like China, China adopted a development strategy that included careful insulation from the world economy, industrialization, and economic domination of the state. As the country was falling behind Western countries by far, nonetheless, it began reforming its closed and centrally planned economy in 1978. In the 1980s and 1990s GDP growth rates were the highest in the world, Since improvements and growth have accelerated remarkably as the growth reached 9.9 percent, and 10.3 percent respectively, from 6 percent in the 1970s (World Bank, 2004: 300).

Growth has been specifically high in China's industry, as the compound annual growth rates being 11.3 percent in the years between 1980 and 2002, as well as services growing fast (10.4 percent). The share of industry in GDP has increased from 35 percent in 1965 to 46 percent in 2004 (World Bank 2006: 266), whereas the share of agriculture has declined from 38 percent to 13 percent (Figure 2.2).

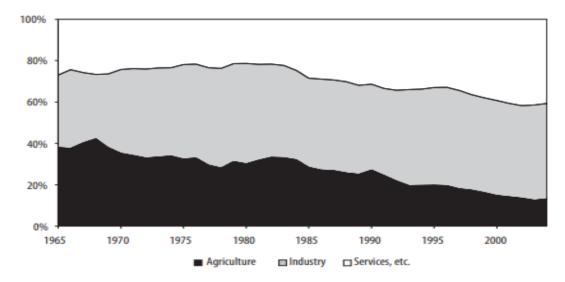


Figure 2.2: Sectoral shares of GDP in China, 1965-2004 **Source**: World Bank (2006)

Simultaneously, the ratio of exports of merchandises and services to GDP has increased by 31 percent in the period (1970-2004) according to (World Bank, 2006: 332). Despite the outstanding decline in agricultural value-added in GDP, but the decline in agriculture's employment share was much more unassertive. In 2002, approximately 44 percent of the labor force still worked in agriculture. China is still very much reliant on its agricultural sector, compared to the employment profiles of developed industrialized countries (Dutta, 2005: 1169).

This may raise the question that why the economically backward countries cannot develop and catch up with the developed countries? Here to answer this question, there is an accurate view of economic development, where work must be done from government to establish a new economic structure that depends on the capabilities of these countries to make full use of their own resources, so they can begin the stage of industrialization and set up the best plans to develop (Hirschman, 1958; Amsden, 1989; Landes, 1998). Organizational difficulties are the main problem that stands as an obstacle to the development of plans that can take these countries to the highest level (Hirschman, 1958; Murphy et al, 1989). Based on this, it can be asserted that

the hypothesis that indicates that the relationship between economic growth and industrialization is a non-linear relationship, in other words, there is no fixed pattern to achieve the industrial structure that makes the growth of any country guaranteed. Rather, each country must verify the capabilities of the available resources, facilities and technology before turning to industrialization to ensure economic growth (Ortiz et al, 2009: 78).

In this vision, each country is it has its own character to transform many features of its structure to be able to make a success in the world market the main characteristics of this economic transformation, according to, Chenery, Robinson, and Syrquin (1986) are the following changes in the final demands, intermediate demands and surly in international trade.

"The productive structures become more "roundabout" as countries start to industrialize, in the logic that a higher quantity of production is sold to other manufacturers rather than to final consumers., there is to parts to break down this phenomenon: the first part is to make a shift in product mix toward industrialization and other sectors that use more intermediate inputs; and the second part is to make technological changes inside a sector that lead to a greater use of intermediate inputs" (Chenery et al, 1986, 57).

It is certain that nothing is guaranteed during industrialization according to the vision of economic growth and development. Industrialization may achieve remarkable growth depending on the economic structure that the state has sufficiently advanced, which allows the state to open up to global markets or the state becomes an exporter of goods and products, which is an essential thing to achieve benefits from industrialization and certainly contributes to the growth process, but the matter may be complicated as information must be used extensively in economic activities as they require intensive use of IT, transportations, biotechnology, scientific research. (Rodrik, 2013: 78).

2.1.3 Industrialization and economic development

There are four groups that classify the world's economies based on the GNI according to the World Bank (Figure 2.3), the four groups are as follows:

- a. Advanced economies (developed countries).
- b. In transition economies (upper-middle).

- c. Less developed economies (developing countries).
- d. Low-income economies (least developed countries).

Small Island states and landlocked developing countries are considered sub-groups of developing countries (Rosling, 2018: 353).

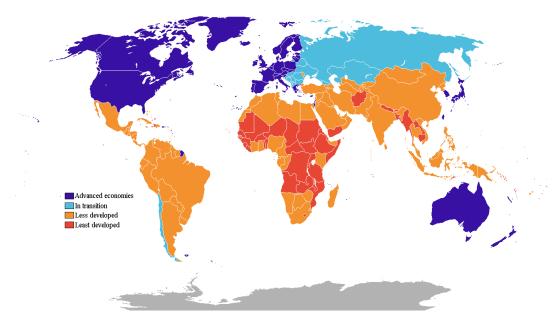


Figure 2.3: World map (updated in 2019) showing advanced, in transition, less and least developed countries.

Source: data obtained from the CIA World Factbook

Industrialization of course is an essential process for economic improvement and development and that is applied for devleoped and developing nations. As the confirmable record appears, Where, through industrialization, developed countries fought poverty and triumphed over their economic problems instead of relying on agriculture or their national wealth (Stiglitz et al, 2006: 232). At this time, many countries are labeled as ''developing'' countries, which means that they are on the right track to reach a higher economic level and standard of living for their societies. For that goal, these countries adopt policies to support privatization to become economically liberal, and in most cases, the trend to industrialization is considered a basis in the process of economic development; the following are the most significant effects of Industrialization.

i. Increase the average GDP

Countries can invest their almost non-existent resources such as natural gas, gasoline and forests through industrialization, as this contributes to increasing the local resources of the country. Therefore, industrialization plays a major role in increasing the GDP (Saif, 2011: 8).

ii. Better Standards for Living

Industrialization provides many jobs, not to mention their value to society. Therefore, when the country is industrialized, the efficiency will be higher, and this means an increase in per capita income, which means, in the end, a more comfortable life for the individual.

iii. Economic Stability

Most nations that depend on the export of raw material unaccompanied usually will not accomplish good rates for economic growth except in some rich countries. Industrialization offers a more effective way to provide economic stability. Because instability movements hostile effects on growth through numerous channels. Tragedies and disasters lead to the destruction of the net worth of banks or firms so it reduces the preparedness to accept risks, counting the firm's willingness and ability to invest as well as banks' ability and willingness to lend (Stiglitz et al, 2006: 235).

iv. Balance of Payments

The result of foreign trade in the country with a change in the efficiency of manufacturing in it, so the balance of payments is threatened by imports, especially when sudden imports appear, which may expose many local industries to the risk of bankruptc, the same can apply to the food insurance process (Altenburg, 2013: 56). The export of manufactured goods increases according to the efficiency of industrialization, which limits foreign imports, especially in the import of raw materials, and thus helps manufacturing to maintain foreign exchange, thus pushing the balance of payments.

v. Encouraged the Progress in Other Sectors

The development in a particular industrial field leads to the development and expansion of other related industries, where the industry inspires other sectors to redirect, where the success of the manufacture of a particular product stimulates others, for example, the manufacture of a watch will inspire the manufacture of small batteries and so on (Marrone, 2017: 302).

vi. Provide more job Opportunities

Industrialization offers many occupations for individuals in various industrial fields. Industrial interventions aim to expand employment opportunities by supporting companies, factories, and their employees to benefit from their efforts to increase production and expand the capabilities necessary to participate in the dynamic sector of the economy. (Rodrik, 2019: 2).

vii. Greater Specialization of Labour

Industrialization encourages specialized labor. For example, the state requires investors to use their local labor and to transfer technology, credits, certain subsidies, and organization investments that can be specifically targeted to attract developmental industries (Chang, 2008: 19). This partition of labor will contribute to increasing the peripheral cost of labor. That means, expert labor will be more gainful. Therefore, the income of the worker when you compare it with the worker in the agricultural sector will be remarkably higher.

viii. An increase in the productivity of the agricultural sector

Industrialization will contribute to providing the needs of the agricultural sector in terms of machinery and heavy equipment that help in the work of the agricultural sector, in addition to keeping pace with and providing modern technologies. In one way or another, the development of the industry pushes the development of agriculture (Ortiz et al 2016: 86).

ix. Control of Economic Activity

When it comes to control, industrial activity is easy compared to other activities in other sectors, where controlling productivity facilitates the process of expanding or reducing the product and its cost (Ortiz et al 2016: 62).

x. Technological Progress

Technological progress is a key factor when it comes to industrialization, as the latter provides greater possibilities for training and development, and technological progress contributes to increasing the volume of production in addition to improving the quality of the product in general (Saif, 2011: 8).

xi. Decrease in the Growth Rate of Population

In many least developed countries, usually, these countries depend on basic resources to achieve economic growth like energy, raw materials, and population growth (Aiginger, 2003: 7). Where industrialization leads indirectly to the presence of smaller families in society, where most of the workers in the agricultural sector turn to work in manufacturing, whose sectors are often in large cities, and according to several social studies, city residents depend on the joining of family measures, so their families are usually small in individuals compared to the rural population And areas that depend on agriculture

xii. Amplified Investments and Savings

The governments of countries play a direct role by organizing private sector entrepreneurs to make investments that benefit the state in general by increasing job opportunities, developing individuals and gaining experiences that promote development in the country, industrialization is the main key to bringing these investments in addition to enhancing the ability to save and that These savings lead to the expansion of industry and stimulate the economic growth of the country (Rodrik, 2000: 497).

xiii. Facility for Defence

An industrialized country has the ability to equip themselves with arms and ammunition that are necessary for its own self-defense. As the nations that rest on on importing or supplying arms from abroad suffers in wars and suffers material losses in addition to human losses. Pakistan and Iraq two wars with India and the united states respectively should open societies' eyes to the meaning of this issue, other the self-defense reasons, Mary Kaldor, has argued that the United States and Britain defense innovation systems are biased to trend innovation, constantly more exaggerated and isolated from civilian needs and markets (Kaldor 1981: 92). These innovation systems for defense do not, so, they present models that other countries would be wise to compete with.

xiv. Reduce the pressure from the land

Intuitively the expansion and establishment of industries lead to extreme pressure on the land due to the labor force in the agricultural sector.

xv. Development of Markets

Most countries are pursuing innovation growth, and for that, they must require a long-run strategic investment as well as public policies that target to create markets

and shape them well. The market for raw materials is expanding with the development of the industrialization within the country (Mazzucato, 2016: 140).

xvi. Increase in Government Revenue

Both external and internal markets benefit from industrialization as the supply of goods increases for them. For the state, the growing range of potential governance mechanisms implies new roles. The main role in the categorized mode was to line and impose rules, public agencies progressively act as initiators, coordinators, and facilitators (Altenburg, 2011: 19). The exports of products provide interchange, In addition, the customs duties and taxes imposed on products increase the state's revenues, as the tax revenues imposed on manufacturers benefit from their state value and are spent in a way that benefits the country in general from economic stability and the welfare of society.

2.1.4 Industrialization and Economic Convergence

The basis of the concept of economic convergence, or what is known as the catch-up effect, is based on the assumption that poor countries with weak economies grow faster than rich countries with strong economies (Korotayev et al, 2011: 25). This assumption is likely that all economies will converge in terms of per capita income, so it is possible that the growth rate of poor or developing countries will be faster than that of developed countries, because the returns of developing countries are not comparable to those of developed countries, in addition to that, developing countries can benefit from the productions of the developed countries, therefore, this accelerates their growth process, as they do not start from scratch, but rather restore the production methods that exist in the developed countries. But on the other hand, the term convergence has two meanings in the economics literature. The first is sigma convergence and the second is beta convergence. The decline in income levels across the economies of developing and developed countries overtime is sigma convergence. The opposite of that when the economies of poor countries grow and develop faster than the rich countries. This convergence is called beta convergence. (Lucas, 1990: 92).

The economic literature related to the catch-up principle or the theory of economic convergence stresses that the different productivity growth rates between countries are inversely proportional to the level of productivity of these countries (Andersson,

2017: 9). Therefore, there are other opportunities to achieve economic growth for developing countries. The advantage of technological backwardness is one of these opportunities (Abramovitz, 1986: 385).

Rodrik (2011) he explained that world-wide picture is in fact different with regard to convergence, as many evidences indicated the existence of divergence between global economies and not convergence, in the period before the millennium at least, where productivity levels of poor countries are significantly far from developed countries, in other words, they did not have a catch-up effect. Therefore, the theory of convergence when looking at the economies of the world did not occur except with East Asian countries, as shown in the figure 2.4

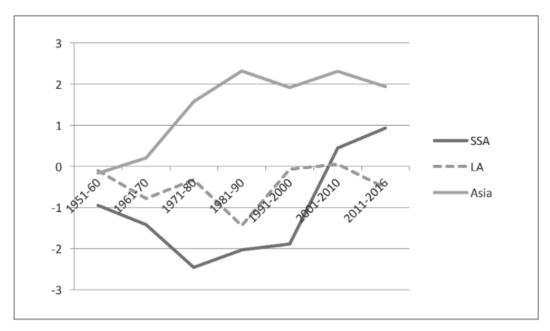


Figure 2.4: Annual per capita growth compared to global annual per capita growth (global growth rate =0%)

Source: TED (2016)

Notes: 0 on the y-axis is the global average per capita growth. SSA: Sub-Saharan Africa, LA: Latin America

Social capabilities might be a more dynamic and perhaps more useful approach, which was first suggested by Ohkawa and Rosovsky in (1973) and expanded by (Abramovitz, 1986: 385) when he proposed to take advantage of backwardness be determined by the "social capability" that is accessible in the catching-up countries. It may seem doubtful, but social capacity as a concept has come to refer to the promotion of innovation and investment as mentioned by Rhode and Tonilo (2006). The term might include several components that start from the quality of institutions, educational levels, the state capacity, and of course social unity. Abramowitz

mentioned that managerial and technical skills are fundamental components of social capability as well as markets and institutions that have the ability to bring together the capital, the fact that steady and operative governments leads to extensive faith and decency in their population. Social capabilities are a factor that helps answer the question that states why some countries have succeeded in advancing with developed economies, unlike other developing countries that have not succeeded in economic growth? The answer to this question is due to the understanding of the principle of social capabilities, where their scale varies in different countries, so it is difficult to find an explicit answer because the many indicators in addition to the variables that make the matter complicated (Andersson, 2017: 10). For example, in developing countries, demographic processes take place faster, so investment in labor and available technologies is an essential factor for the industrial economy,but in the short term, it is less important, so the social capabilities of developing countries contain many differences in terms of creativity or the arrangement of their economic interests (Ravallion, 2003: 93).

Where they collected data for 74 developing countries with different indicators between the years 1957 to 1963. They analyzed the factors to reduce and isolate the indicators, where they suggested three groups of countries according to their production capacity. The classification included advanced countries with high production, medium production countries and low production countries. Since then, the number of empirical studies on social capabilities has increased, although the attempts to understand them or define their concept were very rare. (Milanovic, 2016: 493).

There is another approach called "the conditional beta-convergence" suggested by many economists. This type of convergence occurs when countries are able to achieve beta convergence, but there are variables that are conditioned by this convergence, such as the rate of population growth and the rate of investment as both being detained constant. Other approaches can be reached like "unconditional beta-convergence" or "absolute beta-convergence" take place when the rate of an economy growth falloffs as it reaches the steady-state, the Great Divergence peaked a few years before the First World War and sustained until 1970, then, after twenty years of uncertain oscillations, in the 1980s the Great Convergence took its place that happened when the majority of what's referred to as the (Third World countries)

extended their economic process rates considerably more than the (first World countries). therefore the Great Divergence continuation could be regarded as the modern convergence (Goldstone, 2002: 22).

Regardless of all the discussion on economic convergence the divergent pattern according to (Madisson, 1994: 18) analysis over 21 countries, the ratio of the highest to the lowest regarding GDP per capita, which was inclined from 3 to 17 between the period 1820-1989. (Pritchett, 1997: 11) estimations that from 1870 until 1990 the percentage of GDP income among the rich and the poor countries was huge this gap is additionally ascertained for more modern stages (Hall, Jones 1997: 177) found that the quantitative relation of GDP per employee of the richest twenty percent of nations thereto of the poorest one-fifth of states javascript; from 26 to 29 between 1960 and 1988 (Easterly, Levine 2001: 220) stated that the divergence of per capita financial gain has enhanced from 1960 to 1992. Their approximations in Table 2.1 show the growth rate between the higher income countries and middle income countries and the low income countries.

Table 2.1: Rich countries grow faster

Rich Countries Grow Faster			
Countries classified by income p	er person Awrage growth of income per personm		
in 1960	1960 - 1992		
Richest fifth	2,2 %		
Second richest fifth	2,6 %		
Middle fifth	1,80 %		
Second poo]prest fifth	1,2 %		
Poorest fifth	1,4 %		

Source: Easterly and Levine (2001:220)

Therefore, the three groups of rich economies, moderate economies, and poor economies are developing. Perry et al (2016) have confirmed this feature showed as a recent World Bank research report that the unimodal (having a single mode a statistical distribution) has become a trimodal (having three statistical distributions) of per capita real income across countries in 1960 has become trimodal in 1999, it shows well that there has been convergence since 1960 inside these groups but there is divergence amongst them. Accordingly, it is obvious to determine that the gap has been spreading between rich economies and the rest over a long period.

As a result of the fact that growth and convergence are not guaranteed to achieve for all countries that are considered poor, According to Abramovitz (1970) Social

Capabilities is required and that includes the absorption of new technology and entice the capital and of course the participation in the comprehensive markets these fundamentals are essential for the economy to benefit from convergence growth before it occurs. Learning by doing along with improving the quality of the educational system has led to the growth of technological capacity, which has enabled some countries to carry out innovative imitations to counteract the high costs and increase competition from the second tier of the newly industrializing economics NIEs, such as Singapore, which underwent a similar process that produced products, a mature foreigner at a lower cost from foreign investments. With the improvement of the skill base in Singapore, many multinational companies (MNCs) have followed the Singapore strategy with significant local R&D and moved the labor-intensive factories to the second-tier NIEs (Kim, 2002: 8).

The neoclassical growth theory plans three factors that are needed for the economy which they are resources and labor and technology. Hence the theory argues that technological change is key for economic growth as it cannot continue without technological advances, however, the temporary steadiness is different from longterm steadiness as the neoclassical growth theory explains, which does not require any of the three factors (Rodrik, 2013: 165). Technology is freely traded as the theory also assumes so it is available for the developing countries that are trying to achieve economic convergence, this an be prevented if the capital for these countries unavailable. This frequently deceits countries into a low efficiency cycle where capable technology can be very costly to be picked up. What separates the developed countries from the developing countries is the difference in production techniques, but by a small margin that is enough to let the developing countries catch up with them. The process of catching up continues as long as the developed countries have something that the developing countries lack. It will continue until this knowledge difference between the two types reaches the stage of consolidation and this thing may be unlikely or difficult to achieve (Pereira, 2008: 563).

Kaldor discovered in his classic research paper the existence of persistent growth gaps between countries, where he stated, "There are many differences that can be observed that relate to the rate of labor productivity in different societies in addition to the overall production rates "(Kaldor, 1961: 197). Thus, Kaldor presented six approaches of development that indicate the lack of guarantee of convergence

according to the structure of the global economy. Kaldor's opinion is compatible with the historical experiences that took place regarding the economic convergence. However, there are some economies that have managed to advance and developed, but the majority have not succeeded in doing so. with this scenario, considerate the original economic mechanisms a challenging tasks facing economic development analysts.

(Galor, 1996: 106) classified the economic convergence into three types:

- Absolute convergence: A decrease in GDP leads to a high growth rate, which means that poverty will disappear by itself.
- Conditional convergence: Structural characteristics of a country determine the income of each worker in the long run, where the convergence of wages occurs. That means that the structural characteristics determines the long-run level of GDP for each factor, not the primary national income.
- Convergence of aggregates: It is possible to notice that there are different groups of countries that have the same path of growth and progress, as there is a similarity between these groups in the growth rates, whether they are increasing or declining.

2.2 Industrial Strategy and Policy

Industrial strategy is a term that generally refers to the efforts or attempts made by the state and the competent authorities to implement a set of policies designed to improve the economic performance of the country. These policies focus on the manufacturing sector, but the industrial strategy can focus on many other sectors in the economy, which means that it is possible to It is more general, as it extends from services to the production of resources, and industrial strategies aim to correct imbalances in the economy and improve its performance and involve the assumption by the government of a prominent a role in facilitating or achieving economic change (Jenken, 2006: 16).

Industrial policy as defined by Aghion (2012) is "appropriately targeted" if it "targets a specific market failure", such as financial market deficiencies. Pack and Saggi (2006) stated that the industrial policy is simply a type of intervention that aims to change the arrangement for manufacturing headed for sectors that are likely develops

to achieve economic progression. A definition that is related to Crafts (2010) when he considered that the defining component of industrial policy is the goal of changing the distribution of resources across economic sectors. Warwick (2013) expands Pack and Saggi's explanation a bit as he stated "Industrial policy sort of government policy that tries to develop the industry environment or change the structure of economic activity toward sectorial or task technologies that probably will offers a much better scenarios for economic growth".

The above definitions emphasize the impact of industrial policies on the economic structure. Contrariwise, the labor agreement of the EU urges the competitiveness of industrial policies, as the industrial policies of the EU create the appropriate conditions to make the member states of the union capable of international competition when it comes to industrialization. But of course, in the end, companies are the ones responsible for their success or failure in the global market, and of course they are responsible in the event of bankruptcy, but the industrial policy supports these companies and supports their industries, but at the same time it can hinders them in some cases from gaining an international reputation. Economic ethics with regard to industrial policy is not limited to manufacturing, but affects the general economy and its structure in a positive way. (Mazzocato, 2015: 134).

In this context, Rodrik notes that the assimilation of technology and innovation in general determines the direction of economic development and progress in developing and developed countries, and this is determined by the industrial policy used to influence the country or region in which the industrial specialization takes place. (Rodrik, 2008: 2).

The industrial policy can be summarized as a specific plan aimed at enhancing industrial efficiency, expansion, creating greater job opportunities, and industrial renewal. Where industrial policy can be broad-based, for illustration, actions to increase competition (ie competition policy) or to promote regional development (regional policy), as well as some comprehensive measures that are specific objectives to improve the quality of industry and the use of modern technology for development, or it can be more focused, including selective interference in certain industries or to support some particular projects and companies.

2.2.1 The concept of strategy and policy

The difference between the terms strategy and policy, be in terms of concept, a strategy is a special plan set to achieve the objectives for an organization, but policy refers to a set of rules made by the organization for rational decision making, policies are subordinate to strategy. Strategy is like a game plan that is carefully chosen to achieve the organizational objectives, the Industrial Strategy purposes to boost productivity by backing businesses to create good employments and boost the producing power of individuals through investment in industries, skills, and infrastructure. It is a mixture of well-thought actions that lead the organization on the way to its preferred position or purpose. It is a united and combined plan made to achieve the basic objectives of originality like Effectiveness, full resource utilization, handling events and problems, coping with threats, taking advantage of opportunities (Bagal, 2016: 9).

Rhodes (2019) Mentioned that there are three aspects considered fundamentals for industrial strategy; the first aspect is a series of policies of the industrial strategy that influences all sectors of the economy (The Five Foundations):

- Ideas, this part is done by R&D, innovation.
- People, which means skills and education.
- Infrastructure, the likes of broadband, energy, transport.
- Business environment, such as support for specific sectors and SMEs.
- Places, regarding the Local Industrial Strategies.

The second aspect is a series of modified corporations with and government and individual sectors: The sector deals can embrace: Artificial Intelligence, Aerospace, Automotive, Creative industries, Construction, Nuclear, Life sciences Offshore wind, and Tourism.

The third aspect is another series but this time as series of challenges that are facing the economy. The assignment of solving these challenges will support the whole economy for strengthening and developing the country. What is considered as the (Grand Challenges) are: AI and the data revolution, Mobility, clean growth, Aging society

The success or failure of the organization is mainly related to how the various functions are integrated to provide high production for all participants. This

integration takes place in a complex environment and exceptional circumstances. The biggest role lies in formulating strategies and policies for any organization that tries to keep pace with development in the world with the increase in the number of occupations and global competitiveness, which will not be easy as it requires the assimilation and understanding of all variables in the modern world (Jacobs et al, 2017: 39).

The policy sometimes viewed as a set of ideologies and instructions which direct the conclusions of the organization. Policies are outlined by the management of the organization to serve as a standard for decision-making. It helps highlight the rules, values, and views of the organization. As well as, policies are designed to serve as a basis for controlling activities. This is done by taking opinions and general views that are based on previous experience and basic understanding. Policies help the management of the organization to decide what is best for it, in a precise situation. It should be applied consistently over a long period of time to dodge inconsistencies and overlaps (Bagal, 2016: 10).

Table 2.2: The main differences between Strategy and Policy:

The strategy is a plan that is chosen in order to achieve the goals that the organization aims to achieve according to specific studies based on the available capabilities.	Economic policy is general regulations and rules that represent a base for making executive decisions
Strategy is a plan of achievement	Policy is a standard of achievement.
The strategy is dynamic in nature and	Conversely, Policies cannot be modified
can be modified	
Strategies are focused to the activities of	Policies are focused on decision making
the organization	
the top management usually formulates	In contrast to Policy, which are
the type of strategy to be implemented,	exclusively made by the top
but not exclusively	management.
Strategies deal with exterior factors for	Policies are made for internal factors for
the organization	the organization

Source: Sanjeev Bagal (2016).

In summary, the difference between policy and strategy may seem somewhat complicated because policies fall under strategies, that is, they are considered a part of them, as they participate in achieving the goals of the organization and securing a place for it in the market, where both policy and strategy were put forward by the responsible administration according to certain controls and rules.

2.2.2 Types of Industrial Strategies

Historically, industrial strategies have actively intervened in many developed countries, such as the United States, Germany and Britain, and had an impact on their local economy. In the same way, some countries from Latin America have used industrial strategies, such as Argentine and Brazil in addition to the East Asian countries that have experienced rapid growth in their economies same as NICs countries. Where industrial strategies helped the progress of many countries at the level of technology, transportation and upgrading their industrialization in general (Chang, 2002: 46).

2.2.2.1 Import substitution industrialization (ISI) strategies

Import substitution industrialization (ISI) is one of the economic and marketable strategies that are based on the exchange of imports with local production, as it is based on the assumption that the state needs to reduce the volume of imports from abroad and therefore depends on local production to produce goods. The term mainly refers to the policies of development economics in the twentieth century: It is one of the branches of economics that deal with different economic characteristics for the development process in poor countries, The change is not limited to economic development and the shape of the general economic structure, but works to improve the quality of life of the population through the health, security and education sectors, where the government supports all non-profit local public channels. Many economists promoted the idea of ISI strategies such as Alexander Hamilton and Frederick List in the late eighteenth century (Chang, 2002: 49).

The fact that the infant industry is considered as one of the oldest influences used to explain the protection of industries from worldwide, Alexander Hamilton and Friedrich List were the first to frame this matter at the beginning of the 19th Century, the economists over the last two centuries has been generally accepted the case for infant industry protection (Melitz, 2005: 178). The infant industry argument is an economic foundation for trade protectionism, the principal of dispute is that promising industries often do not have the economies that their older participants from other countries have, hence it needs to be protected until these industries gain similar economies of scale (Chang, 2008: 15).

In a report on productivity by Alexander Hamilton in 1790, he found that the development of a country's industrial base is impossible to achieve without the principle of protectionism, since import duties are of great importance in maintaining the domestic emerging industries in order to be able to develop (Bairoch, 1995: 33). The first to speak publicly about this argument was the US Secretary of the Treasury Daniel Raymond, where Chang (2008) stated that the American economist developed a method for developing nascent industry in 1823 in his paper "Elements of Political Economy" and the research was expanded by Friedrich List in 1841 in his work called "The National System of Economics", List placed his idea during his stay in the US when he criticized Britain for encouraging free trade and urging other nations to do so, because Britain gained its economic reign through high tariffs and government subsidies (Chang, 2008: 16).

The main objective of implementing the ISI strategy is to secure and develop local industries, as it contains several necessary tactics to do so, in addition to benefiting from tariff and import quotas and supported government loans. Most countries are applying this strategy to develop all production channels. Latin countries and some Asian countries have implemented the ISI strategy for the purpose of obtaining self-sufficiency through industrialization and the establishment of a strong local market for these countries. Many evidence supports the success of the ISI strategy because they contributed mainly Providing protection for many industries that developed later and in different fields such as energy and agriculture (James and Dilmus, 1982: 673).

The exceptional circumstances experienced by the industry in particular and the economy, in general, provide all economic and non-economic justifications to provide protection and support for local production and national economy as it applies to the text of the emerging industry theory, which was proposed (Friedrich List) the german economist justifies the protection of the early German industry in front of the Italian rivalry during The Industrial Revolution, and how it to recover and then to be reduced and then canceled eventually when the fresh German industry reached the level to compete with foreign goods (Eugen, 2014: 135).

The ISI strategy's popularity increased after World War II, and more precisely at early 1950s, when the UNECLAC leader the Argentinean economist Raul Prebisch favoured greatly the idea of the ISI strategies same for the Brazilian economist Celso Furtado. Prebisch provide an explanation in one of the reports on how Latin America

moved from primary export-led growth to focused on internally urban-industrial development that Prebisch report has become a basis for the industrial and economic development of Latin countries and a practical guide to relying on industrialization instead of imports. Encouraged by Prebisch's (Renato, Aguilar, 1986: 227) mentioned that most of the Latin countries went through ISI forms in the succeeding years. For example, Argentina, Brazil and Mexico focused on expanding some non-durable consumer industries such as food, and then turned to the manufacture of durable goods such as appliances and autos, and their development increased by doing more advanced industries such as aircraft and electronics. But on the other hand, despite the successes of the ISI strategy, this led to high inflation and some economic difficulties, as many Latin countries wanted to obtain loans from the International Monetary Fund due to the aggravation of the crises in the 1970s, which were often foreign debts that led to reduced productivity due to these circumstances and forcing these countries to drop their protection and move towards free trade (Prebisch, 1986: 158).

Prebisch hypotheses on the infant industry argument the (Prebisch–Singer thesis) theoretically grounded the ISI policies. The related practices are the following:

- Develop an effective industrial strategy to support and organize the production of strategic substitutes.
- Provides protecting walls for the trade like tariffs.
- Overestimated currency that helps companies to import heavy assets such as machinery.
- The dissuasion of external direct investment.

To summarize the main idea about ISI can be labelled as an effort to decrease the dependency on imports in the national economy by relying on local production through local factories and companies, substituting imports does not mean canceling them completely. In fact, when a nation industrializes, it logically imports new materials that it needs to manufacture, and these materials often include petroleum, chemicals, and raw materials (James and Dilmus, 1982: 689).

2.2.2.2 Export oriented industrialization (EOI) strategies

The post-war period witnessed a noticeable increase in free trade for many countries and the trend towards the global market. Germany and Japan rejected many policies based on protecting the emerging industries from global markets. Instead of protecting their products, they exported their products and put them in the global markets, benefiting from the reconstruction aid from the US (Yamamura, 1976: 267). In the late 1970s, export-led growth strategies became more popular, especially after the success of both the German and Japanese economies, as developing countries benefited from the assistance provided by the International Monetary Fund and encouraged governments of developing countries to open up to foreign trade instead of relying on Imports as they adopted exports and entered the world market headed toward the international trade (Palley, 2012: 147).

South Korea, Taiwan, Hong Kong, and Singapore adopted EOI strategies In the 1970s and 1980s. In the 1980s and 1990s, it spread further by South East Asian countries such as Thailand, Malaysia, and Indonesia. Mexico adopted the same pattern in Latin America. China has demonstrated the paradigm In the 2000s (Hein, 2005: 94). The exchange rate that was reduced provided the competitive ability for exports, as the industrial discrimination of some countries in some industrial fields such as the automobile industry and the electronics industry helped the rest of the countries to realize that their countries need foreign technology if they seek development and competition. Considerable the huge success of the East Asian Tigers has been credited to their achievement of foreign technology and the operation of that technology compared to their contestants, the foreign direct investment (FDI) also supported these countries to gain the ability to acquire and develop technology (Scott, 2012:345).

The results expected by supporters of ISI were not achieved, as the main goal was to produce products locally instead of relying on importing them. Therefore, many incentives were provided for the purpose of this goal, such as exemption from customs duties to access raw materials at a low cost, in addition to import restriction measures to attract foreign producers in the host countries, but despite this, the set goals were not achieved, as unemployment rates increased, in addition to the deportation of profits and spoiling production, which led to the depreciation of the local currency. Free and exports as two basic factors for economic growth in the era of globalization, but in the end, the importance of promoting and expanding exports was harassed due to the different opinions regarding exports (Chang, 2002: 52).

Export oriented strategy (EOI) It is one of the economic strategies that aim to make developing countries have a place in the global market for a certain type of exports, as it enables them to obtain government aid granted to industries that help them grow and compete at the international level. Where, through the EOI strategies, countries aim to earn hard currency from their exports and thus use it to import assets (Goldstein et al, 2008: 22).

In addition, a calculated study shows that (EOI) strategy where the efficiency growth for a country with under-valued currency is linked where wage growth is repressed. For that country the efficiency development of exports is better than the relative income growth from the non-tradable assets. Therefore, the export prices decrease for the country with export-led growth and it became more modest in the global trade (Unal, 2016: 57)

According to McCombie (1994), there are two main reasons to highlight the importance of (EOI):

- The First is that (EOI) improves the nation's foreign-currency savings given that if the materials for the exports exist, as well as surpass their debts.
- The second is the more arguable reason which is (EOI) generating more exports, in other words, increasing production capacity in an upward manner.

There are two types of exports used in this framework:

- Industrial goods.
- Raw materials.

Industrial products represent the largest proportion of exports adopted in the EOI strategies, despite the great competition that these industries face from other countries, particularly developed countries, which usually have more capital in addition to higher individual skills and technological excellence. Therefore, governments should evaluate the general situation of the country before applying this strategy to achieve success. As each country intending to implement this type of strategy needs to find a product that it can be export to find its place in the global market, in other words, it can compete through it, in addition to calculating the cost of the raw materials it needs to manufacture this product. However, there are many risks that this strategy may contain, as if there is a change in the terms of trade, the

product becomes not approved internationally, so it may cost these countries to import more raw materials for reprocessing, and therefore they will face difficulties to achieve profits (Goldstein et al, 2008: 24).

EOI is considered partially responsible for the Asian financial crisis in 1997 to the economy for the countries that used EOI industrialization strategies as it is increased market sensitivity due to external factors. The same scenario was occurred in 2007 and 2008 during the financial crisis and following the global depression. Similarly, restricted tragedies can cause international absences of the products that countries specialize in.

Other blames embrace that EOI strategies success is limited, as it depends on the state of the economy, whether it directs a decrease in the terms of exchange or not, as the prices of exports rise at a gentler rate than their imports when their prices fall (Krugman, 1994: 280). This can be true as many economies try to achieve activity to their primary produces as they have a long term approach of decreasing prices as mentioned in Prebisch-Singer's thesis. Primary produces dependency count on lack of excessive specialty as primary produces prices are incredibly unstable, leading to an excessively big variation in prices when assumed a modification in for them (Sarkar, 1986: 355).

There are many opposing opinions regarding the EIO strategy as being inevitable solutions to the economic problems of a country, as most opinions are based on that the economic trend should be applied to all countries in the same way, for example, if a particular country follows the EIO strategy and is beneficial from it then it must benefit the other country that deals with the country that uses this strategy, but logically this is almost impossible because the priorities of countries differ among themselves, in addition to the fact that it is impossible for all countries to be exporting countries Mazzucato (2013).

2.2.3 Types of industrial policies

Economists have always believed that the developing world is full of economic failures, especially market failures and that the inspiring way that enables poor countries to escape from the trap of economic failure is through strong government interferences, then after that time economists started to believe that government interferences were by far the bigger evil, and the best thing that the government can

do is to abandon any pretense of directing and steering the economy (Popov, 2014: 116). The reality was not very kind to any set of prospects. Planning, Import substitution, and state possession were not successful, but where they got entrenched and fossilized over time, enormous failures and crises were the results. Economic liberalization and opening up benefited financial interests, skilled labor, and export activities, but more often, they caused economic growth in labor and total factor productivity ratio, which fell far short under the bad old policies of the past (Rodrik, 2004: 17).

The nature of industrial policies is that they complement opponents would say "distort or misrepresent" market forces: they reinforce or counteract the allocated effects that the existing markets would otherwise produce. Estimating technology and other externalities well-thought-out as the conventional approach to industrial policy, and then targeting policy involvements on these market let-downs (Rodrik, 2004: 18). Industrial policies are not essentially aimed at recommending industrialization. The era holds any policies choice of technology and moving the sectorial composition. Therefore, in this logic industrial policy should also be part of business governance, monetary policy, anti-trust and competition policy, and bankruptcy frameworks, as well as spending and tax policy. An industrial policy success is not judged by the accomplishment or failure of any single project, but rather has to be estimated methodically that means based on how the performance of the overall economy is affected, of course, if there are steady and repeated failures, that points to a flaw in institutional design, which needs to be corrected (Mazzucato, et al, 2015: 120). Types of industrial policies Neoliberal, Selective, and Green industrial policies, will be discussed in the next section.

2.2.3.1 Neoliberal industrial policies

Neoliberalism: it is a policy model and an ideology that worries free-market competition value. Although there is discussion on the features of neoliberal ideas and their practices most frequently related with laissez-faire economics. Neoliberalism is often categorized as the resources to achieve human progress in constant economic growth, when its assurance in free markets as the most-efficient provision of resources, as it emphasizes minimal state involvement in social affairs and economic as well as its obligation to the freedom of trade and capital (Smith,

2019: 399). Neoliberalism is different from modern liberalism, even though the terms may seem similar. Both have their conceptual backgrounds from the 19th-century classical liberalism, which supported laissez-faire economics and the liberty (freedom) of individuals against the extreme power of government. The economist Adam Smith is often associated with liberalism, who argued in his book The Wealth of Nations (1776) that "markets are governed by an invisible hand and thus should be subject to minimal government interference".

The following characteristics are often associated with neoliberalism:

- The management extracts from all parts of social life.
- The destruction of the prosperity state and cooperative accountability.
- Self-responsibility of the individuals their issues as well as the ability of the market to control itself without any interference.
- Productivity, development, and competition are existing as the main goal of human actions.
- Ultraliberal and the old ideas are offered as modern and enlightened thoughts.
- Cash and Finance markets are standardized under the domination of other few nations.
- A sort of new socialized Darwinism states the message that the strong and extraordinary is the only one to survive in society and the market.
- Neoliberal ideas suggested that the economy is independent of society, and the market is the best capital for organizing production and supply proficiently and that globalization in fact requires minimizing state spending, specifically on social security.
- These developments are something expected to be self-evident and without substitutions.
- The neoliberal government creates the legal agenda for flexible wages and working times.
- The increase in the collective bargaining systems is outdated by systems at a sectorial, district, or company level.
- The government tries to simplify capital investment and technological growth by supporting R&D programs, funds, and institutional provision.
- Allowances gradually have been cut and the age of retirement is lifted, as well as private pension funds are stimulated.

- Universities are considered as originalities and collaboration between universities and establishments is encouraged.
- Public services and initiatives are privatized and commercialized.
- Welfare is progressively removed from the private to the corporate level.
- Multinational corporations introduce flexible ways of producing possessions, and they are well organized as internationally distributed organizations that are political as well as economic influencers.

One of the most essential structures of neoliberalism is the support for the policies that allow free trade just like the clearance of North American free trade which neoliberalism is often associated with (Rodrik, 2017: 4). The discussion adopted by neoliberal supporters is that free trade helps to reduce poverty rates and enhance the economic growth for the country as a result of reducing prices for products and providing economic freedom for the consumer in general. In addition, voluntary trade between two parties is argued by neoliberals that it should not be banned by governments, thus to the fact that protecting products does not benefit consumers, as they are forced to pay high amounts for local products, which leads to resorting to fewer foreign goods as it cost less and may be more efficient, which is what harms local industries and benefits foreign industries (Rodrik, 2017: 5).

Many of the criticisms pursued neoliberal policies because the belief in the market by neoliberalism is exaggerated and different from what it might be in reality, in addition to that it enables markets to change their ideologies under the principle of economic and political freedom. Economist Krugman (2007) has argued that the "laissez-faire absolutism" was endorsed by neoliberals "funded to an intelligent climate which the faith in markets and contempt for the government often outplays the evidence". Other critics for the neoliberal policies is their prioritizes as some indicators in the economy like GDP growth and inflation is more important than various social factors that might be difficult to measure such as labor rights and the level of education. On the other hand, according to Giroux (2017), he stated that neoliberalism finds it difficult to analyze industrial development, and the reason for that lies mostly in the treatment of technology. Developing countries are thought not to assume significant technological activity since they do not modernize at the frontier. The neoclassical model takes responsibility as there are no additional risks

or costs or even other restrictions for using technologies. So, there will be no policy problems: by theory, there can be no significant market or established failure.

2.2.3.2 Selective industrial policies

A country's living standards can be determinant by productivity growth and the ability to compete in the global market. Since the level of productivity and its growth potential differ based on the activities as the ability for a country to catch up with the progressive countries is basically reliant on what it produces and trades in the global market. Economic development involves structural transformation naturally activities from low productivity to high productivity, such as from agriculture and basic industrial accomplishments to more modern industry (Irfan, 2007: 102). The current climate for industrial policy is quite aggressive. The "rules of the game" set by Bretton Woods foundations and the WTO plus major donors are established against most procedures of government intervention to promote the industry. Hence In the future, governments will not have any of the implements of policy that has been used through the past to promote industrial development. However, throughout history industry and supporting institutions played an important role in industrialization. Most industrialized countries used protection policies and other selective methods to encourage industry and to develop the needed institutions to support the industrial and technological movement. Protection benefits have been debated for a long (Reinert, 1995: 44) and (Vernon, 1989: 23). This mistreatment may continue in the future to the impairment of the analysis of industrial policy.

Selective industrial policies may be unanimously undesirable and economically harmful, while there were turbulent opinions about the neoliberal stance in the early 1990s that denied any role for government other than providing basic goods and security, the prevailing economy restricts the role of governments very severely. According to the terminology developed by the World Bank in 1993, the role of governments is considered "friendly to the market" to improve markets for deficient factors. As there is no legitimate government role in "selectivity" about the distribution of resources based on the productive activities of the market (Lall, 2000: 27). Nevertheless, economic theory justifies selectivity, as market failures affect some activities more than others, as restoring balance calls for more intervention in specific activities. Enhancing industries and technologies expresses this situation

where once we loosen some simplistic assumptions about how information, including industrial technology, is created and how it is exchanged, used, and absorbed. From a practical point of view, the experience of the most successful developing countries today shows that the East Asian countries or the Asian Tiger countries (Korea, Singapore, Hong Kong, Malaysia) are a good example that selective industrial policies can succeed economically and politically. (Lall, 2000: 30).

China's practice for example with the industrial growth is remarkable and that is for many reasons due to the massive usage of selective industrial policies. The selection of strategic industries or the pillar industries is based on the Five-Year Plan which is introduced by the selective industrial development policies. But what remains unclear is how such industries are identified among the others (Barbieri et al, 2019: 124) in the Chinese economy the methodology allows ranking in the different industries according to their strategic importance. The authors employ a vagueness analysis methodology to verify the sturdiness of the ranking. The results point to a list of strategic sectors for China when comparing the ranking of the strategic sectors to the list of strategic main concerns is described in the twelfth Five-Year Plan, that when it became clear to find that, the ranking accords with the list of strategic sectors of the Chinese government (Barbieri et al, 2019: 126).

2.2.3.3 Green industrial policies (GIP)

The definition of industrial policies is not very different from green policies, only that green policies have a basic environmental goal that they seek to achieve, more accurately GIP does not affect the industrial sectors nor the production rate directly but they aim to gain environmental benefits for the country (Hallegatte et al, 2013: 6). The main features for the green industrial policies are the following:

- It is not possible to achieve rapid green growth without industrial policies concerned with the environment, even if this interest is at the expense of adjusting prices for products to achieve environmental goals.
- It is necessary to develop green industrial policies or what is known as the 'sunrise' policies, because they contribute to supporting new technical sectors that reduce production costs.
- Green industrial or the 'sunset' policies, along with safety nets, may well be required to make carbon pricing be more ethically or socially acceptable.

Many associations called for green growth operations, with the increase in industrial production capabilities and the rapid growth of the economy at the expense of the environment, according to the (World Bank, 2013: 94). But the biggest question remains, how can this green growth be achieved? Certainly, this growth will not be a coincidence, and that the economic basis in the past 100 years or more has cost the environment harm to achieve these economic benefits, and that market mechanisms do not care about the environmental aspect at the expense of their own benefits from manufacturing, as they are not interested in how the product was created as much as how is the quality of this product. What made environmental goods and products largely fail in global markets, in addition to the failure of governments to determine taxes related to pollution, in addition to several external factors (Hallegatte et al, 2012: 179).

Stern (2006) Stated that one of the great challenges is climate change, which is considered the biggest market failure in human history, but the attempts to reduce the damage were agreed upon by the international community. The most prominent attempts are to maintain the temperature below 2 Celsius above the levels of what is known as the pre-industrial era. This commitment urges the elimination of carbon from the global economy by the year 2100, thus transforming all economic systems.

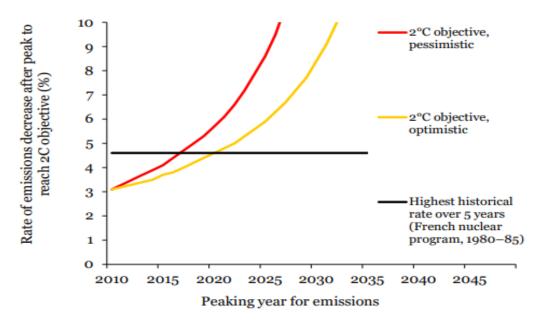


Figure 2.5: Rate of production decrease that is necessary after the global peak in emissions to keep man-made temperature increase below 2C

Source: (Guivarch and Hallegatte, 2013).

Figure 2.3 shows that it is possible to identify the speed that global emissions of gases that contribute to the formation of global warming should reach, in addition to the time when these emissions may reach their peak. In a viewpoint the figure shows the most rapid decrease in emissions that was recorded over a five year period in a single country, to be exact in the 1980s the French shift to nuclear electricity, Even if the emissions peak soon, the worldwide emission decreases will need to continue at a similar pace or faster compared to what was achieved in France. Government arrangements are also needed instantly to make this growth maintainable. An obvious step for the policies is to price externalities, which can be done specifically by removing the destroyed subsidies such as fossil fuel and the magnificent carbon charges.

Accordingly, There is a similarity between GIP and industrial policies despite the different agendas of both of them regarding the desired goals and the difficulties they face. Where GIP faces environmental problems mainly because it works to eliminate the doubt that hovering about the possibility of profiting the idea of green investment, in addition to that, industries are transforming the provision of plans that guarantee environmental safety from pollution and industrial waste, so industrial organizations take GIP seriously to avoid problems that may costs a lot (Karp, Stevenson 2012: 20).

GIP offers a low carbon economy and opportunities for an energy transition that serves the environment. The absence of public support can be a huge challenge for the GIP but on the other hand, GIP makes assistances that charms publics for their sustainability. As GIP creates a "green spiral" which is a method of reaction from industrial interests with GIP, as well as it generates strategic function management. GIP can also guard employees in developing and diminishing businesses, which rises the governmental support for other GIP policies (Hallegatte et al, 2013: 6). Sustainability and carbon pricing with energy transitions and the decreases in greenhouse gas productions have higher odds to success when political provision rises. Nevertheless, there are many risks wait for GIP as the main risk may include poor government choices on which industries to support, political capture of economic policy, and wasted resources. Poor policy design long with unproductive actions to deal with the climate change affects the policy objectives and exit strategies and coordination failure (Rodrik, 2014: 470). GIP is not an instant solution,

hence, many doubters argue that GIP establishes is kind of ineffective regarding the climate change and trade disputes as well or any other risk due to the fact that GIP created a new strand of trade and environmental battles within the WTO. For illustration, policies with local content requirements have influenced several trade arguments (Wu et al, 2015: 302).

The risks that are facing the GIP can be managed by taken several Strategic steps to maintain them. Some of them include private and public sectors as well as communication and accountability, as the policy has clear objectives and evaluation techniques and of course exit strategies. Different types of green industrial policies are used in many governments in different countries, states, provinces, and cities. Different policy instruments will leads to several outcomes. Examples include sunrise and sunset policies, subsidies, R&D and local content requirements, tax credits, feed-in tariffs, consumer mandates, export restrictions, green public obtaining rules, and renewable standards (Rodrik, 2014: 472).

2.2.4 Industrial policy tools

There are several tools available for governments that enable them to implement industrial policies, these tools are called industrial policy tools. (Weiss, 2015: 71) suggested a way to classify these tools and categorize them, that by taking into account the market of products, capital, and labor, in addition to technology, where they were classified into five categories. Industrial policy tools are characterized by the fact that they work on pricing, as they are often considered market-based, in other words, the goods provided by companies will not be able to provide them alone, this also applies to services. It should be noted that many industrial policy tools may be considered expensive, and this means that governments must study their economic resources before implementing them. That is, there must be a good financial space in the state to have the ability to collect taxes. Therefore, on this basis, Weiss's (2015) classification was distinguished because it depends on the income levels of different countries and accordingly determines the type of industrial policy tool.

Table 2.3 shows what industrial policy tools are accessible for the poor countries in the market, the policy tools are aiming for the profitability to increase from industrialization activities. Export subsidies and import tariffs have always been among the most important tools that have been used in Latin America and East Asia.

The modern global trading guidelines today discourage the usage of these policy tools, they are not banned or forbidden but they are kind of restricted. Therefore, there is an alternative tool, such as tax incentives and duty drawbacks, that can be used. Public procurement is among the tools that do not directly affect prices, but at the same time, they are less controversial tools as well as they are costless, such as services to moderate information irregularities, linkage programs, and organization of fairs, also other services that enable domestic and foreign investments (Prebisch, 1950: 22). Interest rate subsidies are considered as industrial policy tools that are being absorbed in the market the same applies to credits, on the other hand, banks which is a public goods tool that is very important for the NIEs (newly industrialized economies) and their strategies especially with industrialization. In the land market, EPZs (export processing zones) and SEZs (special economic zones) are considered public goods tools in developing economies where lies their importance through foreign investment attraction (Altenburg, 2011: 4). Through the several substructures can be provided for the foreign companies from the governments and offer them support for the possible challenges and difficulties that these corporations may face when they move to settle and work in their country. In the technology market financial resources, and the limited skill levels that are available in the poor economies industrial policy tools would target the foreign knowledge absorption by supporting extension programs and technology transfers, which both are public goods tools.

Table 2.3: Industrial policies tools in the poor economies

Industrial policies tools in the poor economies				
Policy area	Tools			
	Market-based	Public goods		
Products	tariffs, investment, subsidies,	Procurement, export market,		
	credits, drawbacks, tax	programs, marketing, shops,		
		investment agencies		
Labour	Wages, training	Institutes, councils, skills		
Capital	Directed credits, interest	Loans, Banks		
	subsidies rates			
Land	Subsidized rental	EPZs, SEZs, factories,		
		governmental change		
Technology		Technological transfer support		
		and extension programs		

Source: Taxonomy of industrial policy (Weiss, 2015: 9)

Table 2.4 adapts the previous classification of industrial policy tools by Weiss but for the moderate economies. It is obvious to identify which industrial policy tools these countries can use when comparing it with Table 2.3 as there are more expensive tools available for these countries to enhance industrialization and endure development. There are two fields where these tools can be found: technology and capital markets. The development of a certain country directly develops the capital markets Thus, governments are encouraged to help projects that may be expensive, but with huge promises and a bright outlook for the economic growth of the country. Similarly, as industries gather knowledge and abilities as the state develops at the administrative and technical level, At that time, governments provide support and many incentives to support development and growth. As for technology, there are two market-based policy tools scientific fields grants and R&D subsidies. Other tools include support for research groups and public or private institutes, but these tools do not affect the market directly as other tools do. As an example, governments in East Asian countries have financially supported public and private research centers to create a strong information network and to increase innovation for their local industry.

Table 2.4: Industrial policies tools in the moderate economies

Industrial policies tools in the moderate economies			
Policy area	Tools		
	Market-based	Public goods	
Products	tariffs, drawbacks,	Procurement, market,	
	investment tax, credits	information, programmes	
Labour	Wage, training, grants	Institutes, skills, councils	
Capital	Interest rate subsidies	Financial regulation, bank	
_	and loan guarantees	_	
Land	Subsidized rental	EPZs/SEZs	
Technology	R&D subsidies and	Public-private research	
	grants	consortia, public research	
		institutes, technology	
		transfer support	

Source: (Weiss, 2015)

2.3 World Trade Organization (WTO)

Formed in 1995, the WTO is an international institution that manages the global trade rules among nations. Replacing the well-known GATT that arose in 1948 after the 2nd World War. The WTO is based on an agreement signed by the majority of the world's trading nations. The WTO helps exporters and importers to protect and

manage their industries as well as manufacturers of goods and services. There are 164 member countries in the WTO as of 2021 (Sutton, 2020: 4).

The WTO is essentially an alternative argument or intervention entity that upholds the international rules of trade among nations. There is a platform that has been provided by the WTO that allows the negotiations for member governments to resolve their trade issues with other members. The WTO's main impetus is to provide more lines of communication between the members for trade. For example, the WTO has increased trade among member nations and lowered trade barriers. On the other hand, there are some trade barriers maintained when it makes sense to do so in the global circumstance. So, the WTO attempts to provide negotiation that can be beneficial for the global economy. Once a negotiation is complete and an agreement is reached, the WTO offers then to read that agreement in the event of a future disagreement. A settlement process is included in all of the WTO agreements, where the organization legally conducts neutral conflict resolution. According to WTO (2018), the organization has 164 countries representative so it is considered as a huge economic organization located in Geneva, Switzerland, in fact it is the largest in the world with a budget around 220 million USD annually as it is a key for over 96% of world-wide trades. The ministerial conference of the organization is the highest decision-making body in it, as it consists of all member states to confirm the agreements concluded between them, in addition to dealing with contracts at the council, where there are more than 600 secretarial employees under the Director General, in addition to four assistants to provide administrative and professional services. (Green, 2020: 7).

The WTO has reduced trade barriers and boosted trade as many studies showed that in addition to its clear impact on trade agreements, a 2017 analysis of (Tomz et al, 2007: 97) found the majority of commercial agreements refer to the organization's openness and clarity of its objectives. Dear critics, they agree that the organization has mitigated the benefits of free trade, provided that it is divided equally among the members. The UN for development through its ten goals, referred to the agreements of the WTO to reduce discrimination and reduce the growing gap between rich and poor countries, indicating that the rise of the foreign influence and the decline of domestic industries has a negative impact on the global economy (Joseph, 2011: 112).

2.3.1 A brief history of the WTO

WTO was legitimately established on the 1st of January 1995 at The Marrakesh agreement that was held in Morocco (The Marrakesh Agreement), it was signed by 123 countries on 15 April 1994 to replace the GATT which started in 1948. Hence the GATT is no longer in control it has been out of date by GATT 1994 which sets out the WTO main rules that stand specifically on trades (VanGrasstek, 2013: 321).

The WTO operates in a specific framework for negotiation to organize trade operations between countries to conclude final agreements where it requires members to accept the organization's agreements and rules, these rules have been signed and ratified by the parliaments and the representatives of the governments of the member states of their countries (Malanczuk, 1999: 305). Most of the problems the WTO had to deal with are old trade negotiations from 1986 at the Uruguay round which means from the original GATT as it known as GATT 1947, delivered the basic rules from 1948 of the multilateral trading system until 1995 when WTO was formed.

GATT was established in 1947 out of the ruins of World War Two, the same as the International Monetary Fund what is known now as the World Bank. It was the result of unprecedented international cooperation by the international community, which was massively damaged during the war period, which led to an international community looking for a completely new beginning, in addition to a new economic system. Although GATT was indicating the beginning of a new era of international cooperation, it had to overcome the aborted efforts to establish an international trade organization, Besides that due to the cold war and many national and regional conflicts, GATT suffers from constant pressures, all before turning into the World Trade Organization that exists. Today. After more than a decade, it is time for the World Trade Organization to inherit the GATT agreements (VanGrasstek, 2013: 322).

Since GATT was the only multilateral organization until the establishment of the WTO in 1995, GATT since 1946 led the global trades. Despite many attempts in the 1950s and 1960s by some organizations to take leadership from the GATT to take some control over the global trades, GATT did not stop working for approximately five decades as a semi-existing mutual agreement temporarily (Fergusson, 2007: 4).

Under GATT there were seven negotiations rounds, the early rounds of negotiations were mainly focused on plummeting tariffs. furthermore, in the mid-1960s a segment on development was introduced by GATT which was an agreement for anti-dumping at the Kennedy Round. After that, attempts began to challenge trade operations that do not take the form of tariffs, the first real challenges began in the Tokyo Round during the 1970s when it was agreed to accept a series of agreements on tariffs, which in many cases were deduced from the GATT rules. But some cases broke these agreements because many GATT member countries rejected these rules they were familiarly named "codes" in the Uruguay Round many codes were corrected as they revolved into global promises which were accepted by most of the WTO members, except four codes persisted, those were on supervision judgment the likes of bovine meat, dairy products, and civil aircraft eventually the WTO members reached an agreement to dismiss the dairy and bovine meat in 1997, leaving only two codes.

The 8th GATT round was launched in Uruguay, Punta del Este, 1986, which was the biggest negotiating instruction on trade that was eternally agreed that round which is known as the Uruguay round was the final round under the GATT. The discussions of this round were mainly aimed at adding several new parts to expand the trading system, the most prominent of which was trade in intellectual property, in other words, patents, and also the discussions were to improve some sectors that suffer from lack of support such as the agricultural and textile sector. The official founding of the WTO was "The Final Act" at the round, and it was signed on April 1994, during the governmental meeting in Morocco more specifically at Marrakesh. Therefore, GATT still exists within the framework of the WTO, where it has been updated as a result of the Uruguay Round, where there is a difference between the original GATT ie GATT 1948, and the GATT that ended with the existence of the WTO in 1994, that is, as the original agreement still exists and is the basis for the WTO (Gallagher 2004: 17). There were six main agreements in that round: The Agreement of Establishing the WTO

- 1. Trade Related Investment Measures (TRIMS)
- 2. General Agreement Trade in Services (GATS)
- 3. Trade Intellectual Property Rights (TRIPS)
- 4. Dispute settlement (DSU)

5. Reviews of the governments' trade strategies (TPRM)

The Uruguay Round has been successful for both developed and developing countries, as it is obvious to realize that when comparing the tariffs before and after the Uruguay Round.

2.3.2 Globalization and WTO

Globalization refers to the closer incorporation of countries and people around the world. It can be considered as the product of various factors such as lower transportation, trade barriers reduction, and the costs of communication, that and, activities of the capital, technology, knowledge and culture. These variations involve improvement but there are multiple dimensions to reach globalization, and there are various arguments and objections all over the globe regarding this matter. Supporters the increase in consumer choices and the accessibility are a result of globalization which allows nations to use their assets seamlessly, this ponits to new technologies as well as generates new productions and surly sanctions fast economic growth. In contrast, many critics continue as these critics suggest that vulnerable economies have been exposed to financial shocks and economic difficulties as a result of globalization, which leads to environmental poverty and unemployment plus descending wages, and stressed the ability of poor countries to adapt (Effland et al, 2008: 2).

The relationship between globalization and the WTO: is that the globalization and growing of the international corporations, or in other words businesses that cross their borders, are not new, but the relative new in the matter is the depth and spread that occurred and will occur during the 21st century from the activities of these corporations an their rapid movement, international corporations are defined as those that have multiple events in different countries to take advantage of the comparative advantage of those countries, and therefore the globalized economy is one in which goods, services, people, skills and ideas move freely across national borders, and there is no doubt that this is an ideal situation that many countries have not reached, and accordingly, countries that has membership of WTO seeks, at least in theory, to reach that ideal situation despite the many difficulties encountered in the application due to the desire of countries to achieve the highest value for a specific mutual trade situation. There is no doubt that the degree of competitiveness varies from one

country to another. This means the weak mistreatment of the factors of production is a factor influencing the production process and globalization. How many forms of interaction between countries are often represented by multinational companies and organizations that defend the rights of those who represent them, and thus the link is strong between corporations that have a homeland or take it as a base, and usually, it is the homeland in which it grew up and spread that company (Effland et al, 2008: 3).

The acceleration of the interaction of technology has led to globalization processes and to an increase in the pace of work to a degree that can be considered revolutionary. There are two types of technology: the Internet and over-the-air communications such as mobile and the subsequent performance update for those tools that have changed and will change most performance methods, which requires that many companies that aspire to Continue to adopt global strategies instead of being limited to marketing goods and services in the country from which it started, taking into account all the elements of competitive advantage and others such as the economies of scale, location, return on investment, market segmentation and the laws of the host country, which if ignored, may refer to the courts of the World Trade Organization and its mechanisms (Siddiqui, 2018: 11).

After a break Comparative advantage in international trade made a comeback. The Ricardian model was commonly taught to students but it was very rare to see it applied in research, comparative advantage role to explain the trade flows is the center of examination. Comparative advantage theory is considered one of the most applauded theories in economics. David Ricardo made the formulation in the 19th century and it become 'something of an article of faith in the present economics (MacDonald, 1985: 277). Ricardo displayed that what was important when the protection was removed is the comparative advantage of each country in production. Thus, comparative advantage theory holds even if one country can produce all merchandises more cheaply than the other nations, as both nations can still trade under conditions where each of the benefits. Under this theory, what matters is relative efficiency (Krist, 2011: 4).

Developing countries may have a reasonable advantage in the production of primary supplies; as "free trade" can be beneficial for both developing and advanced economies, because advanced economies depend on developing countries to use many of their necessities for their daily life such as coffee, sugar, cocoa, and seafood

prices might increase gradually, hence their living conditions and consumption will be affected (Siddiqui, 2018: 14).

There are many reasons for the countries to join the WTO, but fundamentally the main reason is increase trade and, in particular the exports. The demonstration is one of the key economic contributions as it has been extremely beneficial for the countries from trade mutually. In the simplest form, if a country produces wheat and another country produces coffee, both of them have the ability to improve civilians' welfare by exchanging wheat for coffee. Through the price system, which establishes the values for multiple commodities exchanges, the process can be extended to an infinite variety of goods. As simple as it looks but yet it is very powerful concept, globalization has encouraged many countries to negotiate for trades. Trade negotiations basically involve mutual enterprises that exchange tariff cuts or other factors of equivalent value that enable this mutually beneficial exchange of goods (Stiglitz, 2006: 53).

2.3.3 Deglobalization and WTO

Deglobalization is the opposite perspective of globalization and is the process of weakening interdependence and the incorporation between certain corporations around the world, normally nation-states (Kim et al, 2019: 83). To see opportunities and avoids the risks from the protection from this economic vision is when the globalization concept has raised, this vision then came back to society but with some political concerns, which resulted in deglobalization, so in other words, political globalization is what generates deglobalization, which has been exposed in world society.

Globalization is connected strongly with international economic and international corporate. Globalization indicates the importance of standard measures like free trade, international investment, and international agreement. International organizations, such as the WTO, IMF, and UNCTAD were important for world trade and the economy. Conversely, disapprovals and criticism appeared against globalization, due to the unfairness and differences among the trading nations and became a serious matter for these nations (Hillebrand, 2010: 185). That has brought regionalism and resulted in a sort of regional collaboration, furthermore, some regional integration agreements, the likes of the ASEAN and the EU as well as

CPTPP, all reflect a deviancy from multinationals and globalization (Kim, 2019: 90). This response to globalization creates what is opposite which is deglobalization, which can result in globalization. Deglobalization and Globalization and have had competition throughout history that can be described as a cyclic competition. James (2017) shows that from 1840 to 1929 the first global economy occurred. Before the great depression and the First World War which produced the first deglobalization from 1929 to 1979. During that time, the Second World War happened to add more suffering to the world, after that the western nations collaborated to remove the trade barriers that's when many countries became members of the WTO. Hence followed 1979 the second globalization arrived and continued until 2008 when the global financial crisis hits. Nations worried about the dividend income and the inequality, this doubt of global companies and the financial systems leads to deglobalization. Granting international trade had developed the economy, but the SMEs and several influential individuals assumed that they were paid below par. This caught the considerations of the politicians as well as the public and the crisis generated a new pattern of deglobalization (O'Rourk, 2009: 35).

Developing economies weren't growing at all, as evidenced by subsidies and tariffs. As the world is in turmoil mutually politically and economically, thus by examining unorganized markets can improve government policies that are aimed to correct the economic progress. This imitates the negative aspects of globalization. Since then, deglobalization witnessed several clarifications (Stiglitz, 2006: 62). The end of WTO could be the most related turning point towards deglobalization, especially as far as trade is disturbed. This would bring descending pressure to grow globally.

2.3.4 Effects of the WTO membership on industrialization: countries experiences

After many decades after the end of the second world war, most of the nations that were freestanding from the global industrialization witnessed a noticeable industrial expansion, benefiting from the old GATT laws, as shown in table 2.5. On the other hand, some countries face the challenge of building and developing their industrial sectors in light of the new trade system. The new system is more open and liberal than the old one that has been in operation since 1944, that is, since the Bretton Woods Agreement until 1994 when the WTO was established. Because of high

tariffs the task was difficult as the tariffs have convoyed industrialization historically: since the end of eighteenth century and the beginning of the nineteenth century, the first industrial revolution appeared in the United Kingdom, then followed by the industrial revolution in the North Atlantic at the end of the nineteenth century and what is known as the late industrialization that happened after World War II. Consequently, tariffs fluctuated in a downward direction during the first industrial revolution, but rose in the second and continued to rise during the post-war years as well (Toye, 2003: 93).

There are special provisions and rules for developing countries in all the agreements of the WTO, which contain guaranteeing longer periods for the implementation of these agreements for the countries concerned in order to increase their trade opportunities and to continue their support for building the infrastructure necessary for the work of the organization. In other words, developing countries are treated in special treatment, including discharge from certain provisions.

Table 2.5: The Percentage of GDP growth rates in the latecomer industrized countries, from 1960 until 2000.

Country	1960-1970	1970-1980	1980-1990	1990-2000	1960-2000
Argentina	5.4	0.9	-1.4	16.5	5.3
Brazil	8.0	9.0	0.15	13.1	7.5
Chile	9.4	1.8	2.9	16.8	7.7
China	n.a	8.4	9.6	13.5	10.5
India	3.1	4.0	7.4	15.9	8.3
Indonesia	6.4	14.2	7.4	22.6	12.6
Korea	17.7	16.0	12.0	26.4	18.0
Malaysia	10.9	11.8	9.5	30.8	15.7
Mexico	9.7	7.2	2.2	18.9	9.5
Egypt	4.8	9.7	8.3	10.3	8.2
Thailand	9.1	10.1	9.6	28.3	14.2

Source: UNIDO, 1997 and World Bank.

There are two types of import competition that the WTO protects its members, one of which is the competition from total imports that destabilize the balance of payments. The second type is what threatens individual local industries, causing what is considered an unfair trade practice (Toye, 2003: 95). WTO has put official restrictions on the duration of the guarantees, which are for eight years, which was not present at the GATT. Many measures are addressed in the WTO that enables its members to protect and promote their industry and suppliers, in addition to promoting exports and technology transfer. Industries still can be protected by tariffs

to develop domestic industries as well as other industrial policy tools which are used to promote industries (Bora, 2000: 14).

In the following table for comparison, Table 2.6 presents the result of the value added to the GDP from industrialization for the same countries in table 2.5 but the last two decades, according to the World Bank.

Table 2.6: Industrialization, value added (% of GDP) from 2000-2020

Country	2000-2005	2005-2010	2010-2015	2015-2020	2000-2020
Argentina	16.4	12.2	14.9	13.1	14.1
Brazil	13.1	9.8	10.7	10.3	10.9
Chile	16.8	10.5	11.1	10.3	12.1
China	31.0	24.2	30.6	27.3	27.5
India	15.9	13.6	15.5	14.2	14.8
Indonesia	22.6	20.2	21.2	19.9	20.9
Korea	26.4	25.2	27.4	26.0	26.2
Malaysia	30.8	20.8	22.8	21.7	24.0
Mexico	18.9	16.4	16.0	17.2	17.1
Egypt	17.9	15.4	16.3	16.2	16.4
Thailand	28.3	27.2	27.8	26.3	27.4

Source: Databank World Development Indicators (2021)

VERS (voluntary export restraints) were the main protection under GATT. The North Atlantic economies had been used VERS widely same thing with the U.S and Canada as they depend on it to protect their industrial strategies. There are other countries like South Korea used VER to develop their own industries as prohibit automobiles and electronics imports from Japan as the latter is considered a serious opponent in the global market. This arrangement started in 1980 until 1999 that period was enough to allow Korea to build their own automobiles and develop their electronics. The VER was banned by WTO because they were bigoted, which means, their outcome differs from one country to another. The main disadvantage of eliminating VER was that they had a beneficial goal, and if that goal is provided by the WTO, then countries that were using VER to achieve that goal will find another way on their own, and these approaches will most likely not be effective or applied well (Deardorff, 1994: 57).

Where, as expected, the countries raised tariffs, although the tariffs decreased after the Uruguay Round, they were raised to compensate for the use of VER to ensure the protection of their products and industry. Whereas, the developing countries tied their tariffs too high levels as a starting point for joining the WTO as shown in (Table 2.6). Where in the event of a risk from importing that could affect the economy, these countries can raise their tariffs to high levels and keep them for at least eight years. In other words, raising tariffs has become an approved thing in emergencies for countries that have free economies. An example of this is when Mexico faced the new free trade in 1995 when it faced intense competition. The country increased its tariffs from the average rates of about 20% or less to no less than 35% On leather and apparel products.

Table 2.7: Tariffs before and after liberalization

	Trade- weighted tariff averages		
	Pre- Uruguay Round	Post Uruguay Round	
Argentina	38.2	30.9	
Brazil	40.7	27.0	
Chi[e	34.9	24.9	
India	71.4	32.4	
Indonesia	20.4	36.9	
Korea, Re public of	18.0	8.3	
Malaysia	10.0	10.1	
Mexico	46.1	33 .7	
Thailand	37.3	28.0	
Turkey	25.1	22.3	
European Union	5.7	3.6	
Japan	3.9	1.7	
United States.	5.4	3.5	

Source: GATT secretariat (1994), Hoda (1994).

NTM refers to (non-tariff measures) which is restrict the trade like trademarks which are considered as NTM. But the achievements in the area NTM were limited in the Uruguay round compared to what was expected, in addition, Mexico accession with NAFTA is a practice of unconventional trade, in other words, it violates traditional trade principles (Amsden, 1994: 113). Free trade members unlike customs union, they can protect themselves, where they do not need external tariffs between them

and other countries. Since the launch of the WTO, more than a hundred regional trade agreements have taken place, but only one of all these agreements was approved, as it was concerning the Slovakia and Czech, other agreements were not prevented or attended for example NAFTA agreements, but the organization did not take any action regarding them (Toulan and Guillen, 1997: 522).

3. INDUSTRIALIZATION IN IRAQ AND THE ISSUE OF THE WTO ACCESSION

It is noticeable in Iraq that the industrial sector is in decline compared to other developed countries, and the financing of this sector depends on the oil resource, which was controlled by the foreign sector, and on the economic structure of the state.

However, Iraq since 1973, it became the owner of most of the producing oil fields in the country, and the oil resource constituted 93% of the value of Iraq's exports during the years 1966-1968, and the percentage increased to 98% in 1977, which made Iraq's exports a single commodity (Nazar, 2011: 387). With this imbalance, the state began planning to develop other sectors such as agriculture and industrial, in order for a kind of balance to occur in the structure of the national economy, and this was assisted by the oil revenues, which increased from 55.5 million dollars in 1970 to 24.8 billion dollars in 1980.And to 31.7 billion in 2005 through the export of 1.6 million barrels per day at a price of 55 per barrel (Rabab, 2017: 14). The increase in revenues from oil has tended towards the development of reconstruction projects in the country, especially the industry.

According to Al-Toma (2017) The industrial system in Iraq is characterized by a number of characteristics that were left behind by decades of mismanagement, wars, and excessive addiction to oil, in financing the budget and meeting the country's needs for foreign goods and services, and the most prominent of these characteristics are:

- Despite the increase in the size of the industrial units belonging to the private sector (about 17,752 establishments), they represent 98.3% compared to 1.5% owned by the state, and 0.2% with joint ownership. However, the production of public sector companies in Iraq constitutes approximately 90% of the total industrial production in the country (Mohanad, 2017: 619)
- On the technological level, 56% of public companies factories are classified

as high-products and medium-technology producers, compared to 28% with low-tech components, and 16% dependent on raw materials. However, the reality of the industrial sector reveals the old machinery and equipment, the weakness of keeping pace with, and the use of technological developments, and modern systems in control and operation (Salman, 2015: 128).

- The contribution of the industrial sector to the GDP is estimated at about 2%, in addition to the decrease in the added value, to reach negative values in some public sector companies. The volume of public companies that have been suspended from operating is estimated at about 30% until 2011 (AlToma, 2017: 17).
- Low productivity rates and increased unemployment rates, as nearly 70% of public sector companies operate at about 30-50% of their absorptive capacity.
 As well as the low levels of quality and quality resulting from poor adherence to production standard specifications (Salman, 2015: 128).
- The weak contribution of the industrial sector, as a generator of job opportunities, and the employment of manpower in Iraq, if the total labour force involved in this sector (public, mixed, private) is estimated at about 500,000 workers. In addition to the reliance of about 40% of public companies on government aid to pay their employees' salaries, as they are losing companies (Jamila, 2014: 2).

It is clear that there are many problems that occur in the industrial sector in Iraq, perhaps the most noticeable of which is the lack of production and export and the lack of job opportunities, despite the fact that the country is considered an economically stable country, joining the WTO may be a factor that influences some of these problems and is a catalyst for the state to focus more on the industrial sector and to make it a sector that could be essential in the country's economy besides the export of oil.

3.1. From Past to Present Industrial Strategies and Policies in Iraq

The Industrial development strategies, the sovereignty of the Reconstruction Council confirmed in the 1950s the establishment of industries that depend on the primary raw materials available in the country and the reduction of imported raw materials,

and the development strategy became aimed at creating an industry that would have the ability to export its products to facilitate the industrialization process, as the national development lines for the period 1970-1980 confirmed the expansion of industries, export and the adoption of the principle of focus and integration in projects. And that the industrial development strategy emphasized several policies as Rabab (2017) stated, most notably as follows:

- 1. The first policy suggested to implementing a program to electrify the country that electrification is an essential component of progress, and it is noticeable that the electrical energy has deteriorated in 2005 to less than its capacity in 2003.
- 2. The second policy it was established by the engineering, mining and petrochemical industries as it constitutes the stage of qualitative development in the way of establishing gravitational industries.
- 3. The third policy was the trend towards developing oil extractive industries through direct national investment.
- 4. The fourth policy aims to expanding and developing light and medium industries to meet local needs.
- 5. The fifth policy was During the Iran-Iraq war; this policy emerged, representing the trend towards establishing war industries to meet the local need for those industries.

The previous policies became clear through the confirmation of industrial development after 1970, as follows (Al-Mashhadani, 2014: 134):

- 1. Increase allocations for the industrial sector in the overall development plan.
- 2. Establishing industries that have the ability to export, such as those confirmed by the industrial development strategy.
- 3. Encouraging regional development by developing underdeveloped regions by settling industrial projects in a number of governorates, such as establishing the industrial complex in Diyala, cotton fabric in Kut, and car tires in Diwaniyah (Sahib, 2004: 63).
- 4. Establishing industrial poles that have the ability to advance industrial development regionally and at the level of Iraq through the formation of three industrial poles in the country: Baghdad, Mosul and Basra.

Support and attribution policies, since the launch of the industrial strategy in Iraq in July 2013, the government has been seeking to revive the industrial sector to be a pillar for economic diversification programs, disengaging from the oil resource, and ridding the national economy of the oil monopoly that has characterized the economy for decades. However, the collapse of oil prices, the absence of political and security stability, and the government's failure to manage the economic file caused the loss of opportunities to activate and reform this sector, to be an engine for growth, a driver for generating jobs, and another window for the flow of foreign currency into the country. Despite the multiplicity of challenges and obstacles that hinder the wheel of industrial development and launch in Iraq, the adoption of a number of policies may be appropriate to restore life to the Iraqi industry, especially with the financial pressures imposed on the government to activate alternative government resources for oil (Al-Toma, 2017: 8). Among the most prominent of these policies:

- 1. Supporting the national industry should be according to a new strategy that accommodates all the internal and external challenges that hinder the launch of the industrial sector in the country, and in this regard it is necessary to form joint working committees that include experts and representatives from the public and private sectors (Al-Toma, 2017: 8).
- 2. Accelerating the enactment of laws and legislations that support the revival of the industrial sector, including the amendment of the Mineral Investment Law (No. 91 of 1988), the amendment of the Industrial Investment Law (No. 20 of 1998), the amendment of the Small Income-Generating Projects Support Act No. 10 of 2012, the Industrial Cities Law and the Renewable Energy Law, and directing the Ministry of Finance and the relevant authorities to activate the provisions contained in the Customs Tariff Law No. (22) of 2010 and to amend the fees in a way that contributes to raising the competitiveness of the Iraqi product and reducing the dumping of Iraqi markets with foreign products that inhibit the opportunities for the rise of the industrial sector in the country (Naji, 2018: 104).
- 3. Overcoming the procedures that hinder the flow of the necessary raw materials as inputs to the industrial sector through customs entry facilities and exemption from taxes and other means, and work to create an appropriate infrastructure for doing business (Al-Toma, 2017: 10).

- 4. To oblige ministries, public sector companies and other governmental institutions to contract with the Ministry of Industry to provide the necessary supplies and commodities, with the need to raise the levels of product quality and be subject to high quality standards. (Khalil et al, 2013: 43).
- 5. Instructing the companies of the Ministry of Industry and Minerals to seek to reduce production costs in public sector factories to support the price of the local product in conjunction with obliging these companies to apply standard specifications in production and marketing and to follow up on their modernization (Khalil et al, 2013: 43).
- 6. Seeking foreign expertise and attracting international companies to develop the industrial base through participation and management contracts and the introduction of high technology for all types of companies and governmental institutions producing in the country, as well as training and qualifying the human force involved in this sector. (AL-Basri, 2010, 8).
- 7. The Ministry of Industry and Minerals, in coordination with the National Commission for Investment and the relevant research centres, to draw up a national strategy to encourage investment in the productive sectors in a way that promotes the optimal use of local resources and increases national production (Khalil et al, 2013: 44).
- 8. The Iraqi Media Network and the various official media adopt a continuous national initiative to launch a professional promotional advertising campaign in support of the national product and in coordination with production institutions in the public, mixed and private sectors to increase consumers' appetite for national products (AL-Basri, 2010, 8).

3.2 Industrialization Experiences in Iraq

Industrialization in Iraq is one of the traditional that was and still is associated with the petroleum industry. Oil refining, fertilizers and chemical industries are the main industries in the country. Industries in the Republic of Iraq are divided into two main types, as follows:

a. Extractive industries: It refers to any industries that depend on the extraction of oil and natural gas, in addition to minerals such as: the mineral sulphur

found in the Qayyarah and Mashreq regions, as well as phosphates extracted from western Anbar from the Akashat region (Mansur, 2019: 3).

Manufacturing industries: can be divided into the following:

- 1. Foodstuffs: Including the dairy industry, where there is a factory for the production of various types of milk and its derivatives in the Abu Ghraib area on the western side of Baghdad, as well as other factories in several areas such as Nineveh, and a factory in Basra, Jazira and Babylon, but the problem is that the production of these Factories only suffice 15% of the state's needs, as well as food and edible oils. The State Company for Petroleum Industries implements this industry, and there are 4 factories, three of which are in Baghdad and one in Al-Amara, where these factories produce edible oils of different types made from sunflower seeds, but the production level is weak compared to the oils imported from Turkey and Iran (Mansur, 2019: 4).
- 2. Leather and textile industries. Among these industries, we can mention: cotton weaving, leather, rug, silk weaving, woolen weaving, garments, yarn, carpets, and others.
- 3. Building materials industries: Including the cement industry, this is the strongest and oldest existing industry in Iraq that began in the early 1950s. There are several cement factories spread across Anbar, Nineveh, Muthanna, Karbala, Sulaymaniyah, Badush, and Basra, in addition to bricks and other building materials as reported in by (Ministry of industry and minerals, 2018: 66).
- 4. Chemical industries: including petrochemicals, such as the liquefied gas industry and the refining industry, as well as the chemical fertilizer industry, this is a medium-sized industry. There are only two factories in Iraq for these industries, and there is also the cleaning materials industry, the paper industry, the glass industry, the pharmaceutical industry, and batteries (Ministry of industry and minerals, 2018: 67).

Thus it is noticeable that the characteristics of the industrialization in Iraq as follow:

- 1. Most of them are consumer industries.
- 2. The number of large enterprises that include 30 workers or more is small.
- 3. It includes only a limited number of workers compared to the agricultural

activity.

- 4. The lack of clarity of the relationship between the public and private sectors.
- 5. It is concentrated in a limited number of governorates, the most important of which are Baghdad, Basra and Mosul.

The problems facing the industry in Iraq can be shortened as:

- 1. Dependence in obtaining technologies on the external market.
- 2. The need for imported raw materials such as metallic minerals.
- 3. Weak coordination between Iraq and the Arab and neighbouring countries in the field of industries that need wide markets.
- 4. Weak interconnectedness between the industrial sector and the economy and service sectors, especially agricultural sector.

3.2.1 The Industrial sector in Iraq between the period (2003-2020)

In 2005 and 2006 a survey of manufacturing companies was conducted And extractive (other than oil) to determine the costs required for rehabilitation, which were estimated at that time as Equivalent to 2250 billion dinars, but the sums collected are within the investments budget for the years 2006 and 2007 were in the range of 14 and 42 billion dinars Consecutive, and it does not correspond to the actual need, resulting in the inability to rise and effect the reality of the public sector during these two years as for the year 2008 it was monitored an amount of 668 billion dinars from the investment budget, which had an impact on making Many contracts that help in the qualification of companies and the introduction of some production lines necessary for the progression of the Iraqi industry (Kobba, 2013: 21).

Generally the industrial sector activity, including oil, and as a result of successive wars and blockades and the security conditions, changeability in the percentage of its contribution to the formation of the gross domestic product In current prices, where the ratio was 4.66% in 1979, it then decreased to 34% in 1988, then increased by 2.69% in 1990, and then increased to 2.76% in 2001, and then back down to 6.60% in 2004 it reached 3.58% in 2008, and upon following the development of the industrial activity's contribution to The GDP in 2008 compared to 2004, we notice an increase in its contribution with a growth rate of 6.178% at current prices, and by only 6.16% at prices fixed for the base year in 1988 (Al-Obaidi, 2012: 37). As for the

fixed capital formation of the industrial activity at current prices, it has been increased from 718.2017 billion dinars in 2004 to 134.15670 billion dinars In 2007, a growth rate of 676%, and the public sector acquired a share of it 6.99% of the total fixed capital formation for industrial activity for the year 2007, and accordingly It seems clear that the government sector will continue to dominate industrial activity in Iraq after In 2003, despite the emphasis on switching to a market economy and giving a major role For the private sector.

Thus more than 60% of the private sector establishments are suspended from work while companies of the mixed industrial sector which they are 19 neglected companies, they represent a large sector and can buy bonds and stocks that have been totally crushed during the last three decades.

Table 3.1: Iraq's economy according to 2004 statistics

Value	Indicator		
Iraqi Dinar	Currency		
89.9 Billion USD	Annual average national income		
60th	Rank between countries in terms of national income		
3500 USD	Annual average per capita income		
25.4%	Inflation rate		
6.7 Million	Labour force		
25-30%	Unemployment ratio		
10.1 Billion USD	Export value annually		
United states of America 54.7% Canada 9.8% Italy 8.8% Taiwan 4.2% Jordan 4.2%	Imported countries from Iraq		
125 Million USD	Residual debt		
32.6 Giga watts/ hour	Electricity production		
33.7 Giga watts/ hour	Electricity consumption		
2.25 Million barrel per day	Oil production		
383000 Barrel per day	Oil consumption		
Oil 83.9% Raw materials other than oil 8% Animal and food products 5%	Export		

Source: The inductors are calculated from the data of the ministry of planning and the central statistical organization

Table 3.2: Production and the domestic product of industrial activity (Oil, Gas, Electricity, the manufacturing and extractive industries)/ Billion Iraqi dinar

Year	Production	GDP at current prices	Growth rate compared to 2004	GDP for the base year 1988	Growth rate compared to 2004	Workers compensation	Surplus operations and depreciations
2004	35936966.4	32235265.2		21227.7		844546.3	31315837.1
2005	48565655.3	44088536.2	36.8	19843.1	-6.5	919428.1	42983450.4
2006	61163230.4	55283502.8	71.5	21003.2	-1.1	1105085.8	53689192.2
2007		61856655	91.8	21905	3.2		
2008			178.6	24749.1	16.6		

Source: The inductors are calculated from the data of the ministry of planning and the central statistical organization

Table 3.3: Total fixed capital formation by economic activities at current prices for the years 2004-2007/ Million Iraqi dinar

Economic	2004	Relative	2005	Relative	2006	Relative	2007	Relative
activities		importance%		importance %		importance %		importance %
Crude oil	448719	22.3	238192	53.9	2639510	26.4	6000469	38.3
Transformative industries	200063	9.9	86666	2.0	3220347	32.1	330590	2.1
Electricity and water	1368935	67.8	1950983	44.1	4163628	41.5	9339082	59.6
Total	2017718	100.0	4419575	100.0	10023485	100.0	15670142	100.0

Source: The inductors are calculated from the data of the ministry of planning and the central statistical organization

3.2.2 Current situation of the industrial development in Iraq

The Iraqi economy has been exposed to many crises and many causes that are difficult to limit to one factor. Rather, there are various factors. These crises cannot be faced despite the enormous potential the economy possesses that has not been invested or properly employed, as it is noticed that the one-sided economy depends mainly on the oil sector and natural gas to a lesser degree ,and reliance on oil that finances public revenues in the absence of strategic planning. The loss of that leads to the economy being under the mercy of circumstantial changes, which in turn leads to the elimination of the positives of the previous stages (Zeni, 2009: 12).

There is no doubt that Iraq was subjected to in terms of siege and then a devastating war had inflicted severe harm on the industrial sector, and the stage of invasion and the years that followed it exacerbated the crisis and was fully equipped with its policies and procedures, and contributed directly to the deterioration of non-oil industrial production, to decline to less than 3% of GDP before The year 2011, when the Iraqi economy entered after 2003 in a state of economic chaos, and many establishments that formed the basic infrastructure for the national economy, such as: iron, cement, petrochemicals, fertilizers, sulphur, phosphates and other industries became completely out of service in terms of productivity and instead of investing part of the returns the huge oil in the rehabilitation and operation of these main productive institutions and other national productive channels. The commissioners in the administration of the helm of government tended to expand the field of import as an alternative to the national economic development, as Iraq's imports rose from about 8 billion dollars in 2004 to about 24 billion dollars in 2007 among imports is cement is a striking example of the negative trend of economic policies and the lack of optimal use of resources The material and human energies with the accumulated capabilities and experiences, as Iraq imported five million tons of cement in 2007, while the state owns 14 cement factories, with a total production capacity of 17 million tons and these factories need partial sums in relation to the size of the state's consumption expenditure in order to rehabilitate and operate (AL-Anbaki, 2018: 45).

Table 3.4: The GDP of the industrial sector and the percentage of its contribution to the local production Total / Million Iraqi dinar 2008-2020

Years	local production Total	GDP activity Manufacturing industries	Contribution rate%
2008	52358.6	2156.2	4.1
2009	53335.1	2447.4	4.4
2010	50344.9	2175.7	4.3
2011	36990.4	1702.8	4.6
2012	41607.8	966.6	2.3
2013	43438.8	956.0	2.2
2014	57851.4	1303.8	2.2
2015	48510.6	1122.4	2.3
2016	51716.6	1167.3	2.2
2017	54720.8	1587.5	2.9
2018	57925.9	1687.5	2.9
2019	55620.4	1465.3	2.4
2020	50402.6	1144.2	2.1

Source: Yasmin sadoon solbey; Small and medium industrial establishments/Industrial Statistics Directorate 2020.

Through the previous table, we notice the low contribution of manufacturing industries to the gross domestic product, as it reached its highest contribution in the year 2008, at a rate of 4.6%, and that contribution decreased to ranges between 2.2% -2.9% after 2008, as the Iraqi industrial machinery retreated significantly in various areas of production and distribution. Export and even import is the same as the rest of the agricultural, commercial and tourism industries. In addition to the looting and sabotage that was accompanied during this period by civil war and terrorist events that negatively affected the components of the Iraqi industry and the infrastructure needed for production. We can summarize the reasons for the deterioration of the Iraqi industrial sector for several causes, the most important of which are the external causes and the internal causes;

• External causes: related to external interference, including the American occupation, which greatly affected the destruction of the infrastructure of the Iraqi economy in general and the industrial sector in particular, as many industrial facilities, research centres and production requirements were

destroyed, most of which were looted and sabotaged, and many national businessmen and investors were exposed to industry led to assassinations, deportations, threats and exclusion, in addition to the policies pursued by some of the countries neighbouring Iraq that took advantage of the bad conditions that the country is going through to attack Iraqi wealth, especially oil and to a lesser extent, water and gas. Make Iraq become a consumer country of their product on almost everything (AL-Shawi, 2012: 9).

- Internal reasons: Most are related to entering a category that do not have competence and experience in the industrial economic decision-making centres, as this category lacks ambitious long-term strategic policies on scientific grounds to reactivate the industrial sector in its various joints and develop the Iraqi national industry, in addition to several reasons, the most important of which are:
- a. Development of the devices and equipment used in the industry as well as the lack of spare parts through, which can be qualified to keep pace with production.
- b. The deterioration of the security and economic situation in some areas of the country and the spread of the so-called war zones. This factor has hindered many of the reconstruction of many industrial facilities in these areas, as well as not supporting them with the necessary financial resources (Ministry of planning, 2014: 59).
- c. Not to benefit from international expertise and experiences in the field of industry by sending delegations and missions and holding specialized courses to raise the level of experience and skill of labours.
- d. The subordination of the industry in Iraq to severe external competition, especially in the field of prices, as the cost of manufacturing any material inside Iraq may cost many times the price of the imported material itself, due to the spread of inflation and the low purchasing power of the Iraqi currency (AL-Shawi, 2012: 11).

3.3 Iraq and World Trade Organization

Iraq suffers, as is the case with all the least developed countries and many developing countries, from the dilemma of weak economic competitiveness due to a set of economic, administrative and technical variable, whether related to those that stem from within the Iraqi economy or related to the nature of the general economy. This was the weakness in all the basic sectors of the economy, such as the trade and investment sector Industry, services, agriculture ... etc., and this was reflected in a clear imbalance in the trade balance and effected the structure of exports and imports negatively; the Iraqi economy has become the result of a combination of factors that made it unable to access regional and international markets except within a framework of the energy market which is represented by oil, and at the same time it became an open market for the good and the bad of the foreign product, thus it weakens the chances of establishing a competitive Iraqi industry within the Iraqi market at least (Alwan, 2017: 20). It is in the midst of this situation the intellectual opinions and practical steps that the competent official and non-official authorities in Iraq urges the importance of Iraq's accession to the World Trade Organization as a means of integration into the global economy (after the lack of enthusiasm to integrate into the Arab economy for many reasons) And access to international markets and benefit from the global potential in this area, but the option of joining the World Trade Organization as a sponsor and regulator for new relations between states and groups and private projects which appears to be the most likely, at least so far, within the framework of the official institution it needs many conditions and requirements as a prelude to success, and this joining will have negative effects and its positive effects on the Iraqi economy in light of the reality of indicators that characterize the Iraqi economy Currently, but before that, it is better to take note of the relevant data and the major variables on the World Trade Organization, by raising the most important points.

3.3.1 History of the relationship between Iraq and WTO

After more than a decade of forming the negotiating delegation, it seems that the concerned ministry has become convinced of the need to prepare a file that includes enacting a series of laws, hence not all the attempts were successive from the Iraqi governments since the end of the nineties until now, to enter the field of the World

Trade Organization, have achieved their goals despite the formation of governmental committees to follow up on this matter, and many meetings were held with international parties to facilitate this task (AL-Torfi, 2020: 18).

In line with the requirements of the immediate stage within the gradual transformation that Iraq is witnessing in its economic policy and the transition from a centralized economy directed to a market economy, it was decided to join the WTO-On February 11, 2004, Iraq submitted an application to join as an observer in the World Trade Organization and obtained the approval of the General Council to accept it (Yahia, 2017: 14). Since 2003Iraq turned to economic openness and sought to develop work policies to enter global markets after it was completely isolated from them, as after the economic blockade in the nineties of the last century, in addition to the political problems and wars that befell the country, where Iraq was isolated from the world and this led to a significant decline in terms of the development is due to the lack of knowledge and lack of access to modern technologies that retroactively affected the industrial sector in Iraq mainly, as Iraq lost competitiveness in the last three decades (Khalil, 2017: 33).

It is clear that the serious intention of governments on paper is far from the conditions for joining that organization on the ground, and lacks a real will capable of enacting a series of laws that guarantee the smooth entry of this organization. Perhaps the justification of those successive governments, not to legislate laws related to consumer, competition, and protection of national products and others, is that their security, economic and political priorities were completely different from these trends, which mainly serve the Iraqi economy and make it more productive and employable for many unemployed. And after more than a decade since Iraq formed a negotiating delegation to enter the world organization, it seems that the Ministry of Trade has become convinced of the need to prepare a clear file for accession, including the enactment of a series of laws that serve the Iraqi consumer of various orientations, the positive results of which can be seen years after its enactment (AL-Torfi, 2020: 20).

The ministry stated in a statement that it had prepared a plan to join the World Trade Organization, represented in the restructuring of the National Committee on accession, as well as the sub-committees emanating from it, to complete the enrolment files, as well as to expedite the enactment of laws, in addition to preparing

draft laws related to the organization's agreements, such as "the Law National product protection, consumer protection law, competition and monopoly prevention law, customs tariff law, and other laws." the ministry seemed optimistic about the expected positive repercussions of joining in the long run, which would ensure that there would be a strong and integrated Iraqi economy capable of competing with the economies of the member states of the Organization in general, and the economies of neighbouring countries in particular (Medhat, 2010: 14).

Despite the Ministry's confirmation of the completion of a preliminary draft of the accession plan, there are still restrictions and obstacles that may hinder this rush towards the World Trade Organization during the next stage (Khalil, 2017: 34).

3.3.2 Terms, principles and applications of joining the WTO

The WTO includes 137 member states, and this number is expected to increase in the coming years, as 32 countries are currently negotiating to join the organization, and there are 20 countries that have not applied for membership in the organization. The international organization stipulates several conditions for countries wishing to join it, and there are some procedures that must be followed to join the organization. The following are an account of the most important institutions and procedures (WTO, 2019: 118).

1. Offer tariff concessions

The World Trade Organization requires the country wishing to join it to submit a schedule of concessions that contains customs tariffs that constitute obligations that can only be lifted in principle in special cases.

2. Make commitments in services

The state shall provide a schedule of the obligations that it will follow in the services sector, including a list of barriers and conditions that obstruct service sectors and professional activities, and a timetable for their removal.

3. Commitment to WTO agreements

The country wishing to join the WTO undertakes to sign an accession protocol that includes agreeing to implement and abide by all WTO agreements (except for the government tenders agreement and the civil aircraft agreement, which are both optional agreements), that is, it must agree to the Uruguay Round agreements. That

is, there is no way for the country to choose between agreements, unlike what was prevalent in the early days, especially after the Tokyo round, when most developing countries did not sign their results, which were represented by special agreements according to the WTO.

On the other hand there are several principles on which the WTO operates and they are:

- a. Transparency principle; This means the obligation not to place customs restrictions such as the quantitative quota system to restrict imports within certain limits, in other words, not to place customs restrictions to protect the product and to distinguish between it and the product that is being imported.
- b. The member state, which grants any advantage or preferential treatment to any other party, must grant the advantage and the same treatment, without restriction or condition, to all other member states, except in the case of regional arrangements such as customs unions and free zones.
- c. Alternative inhibition procedures, as in the event of a unexpected and huge flood of imports of certain merchandises, which may damages the domestic product, or threaten to do so. These procedures must be applied without insight, and an obligation to cancel them should the emergency circumstances cease to exist.
- d. Quantitative restriction of trade in case of crises, where restrictions are placed on the country in emergency situations, but these restrictions are not permanent, as these restrictions are removed gradually with the disappearance of the reasons.
- e. The market is not dumped with goods; That is, the obligation not to export products at prices that are abnormally lower than their domestic prices and production costs; this could cause serious harm to local producers in importing countries.
- f. Refrain from subsidizing exports, such as granting subsidies to national exports; In what causes damage to another contracting party.
- g. Preferential treatment for developing countries, or the so-called empowerment rule, whereby developing countries may take additional

protection measures to achieve flexibility in adjusting their customs tariffs and obtain commercial benefits from developed countries - according to specific arrangements - including exemption from applying the most favoured nation clause.

h. Trade negotiations; That is, the obligation to settle disputes between member states through consultation and negotiation within the scope of the organization; With the aim of reaching a just and effective settlement.

There is no doubt that joining the World Trade Organization and applying its principles with all transparency and accuracy; Contributes in the long term to price stability and the development of domestic production; As a result of adopting a policy of stabilizing customs duties and gradually eliminating them, which will also help combat counterfeiting, preserve intellectual property rights and increase production efficiency due to the escalation of international competition. This would lead to the recovery of some productive sectors of developing countries, and the ease of penetration of their exports to global markets, and then an increase in the volume of international exchanges (Khalil, 2017: 36).

There are two methods in the application and admission procedures a country is admitted into the organization's membership by adopting one or both of the following methods:

The first method: The concerned state receives letters from a committee designated to consider applications for new membership, which is mostly made up of major industrialized countries, in addition to the most important countries with commercial relations with the country wishing to acquire membership in the organization. The requests include a list of goods and services that will see a reduction in their tariffs.

The second method: the country wishing to become a member submits by itself a list of reductions in customs tariffs that would be the basis for negotiation.

Sometimes the two methods work together, and the country concerned submits a list of tariff reductions and at the same time receives a list of the reductions required from the committee formed to consider membership.

3.3.3 Supportive and non-supportive views regarding Iraq's accession to the world trade organization

• Firstly the non-supportive view.

The situation against joining is based on the fact that membership will not bring much benefit to Iraq in the future perspective, because Iraq has only one export-oriented commodity, which is oil, and there are no obstacles in the way of its entry into the markets of the member countries of the World Trade Organization. This on the one hand and on the other hand, it is despite ensure that WTO laws are concerned with trade and do not require the adoption of institutions and policies oriented market, political pressure and threats to slow down membership procedures may compel countries seeking access membership is required to open up to markets and introduce institutional changes that go beyond the open policy of market requirements (Nadhim and Sinan, 2018: 17).

Also, opening Iraqi markets to foreign competition will lead to pressures on industries Iraq is not already competitive, and these pressures may lead to the removal of these threatened sectors from the market equation. In addition, the social policies adopted by developing countries such as Iraq, including subsidies for certain sectors, supported basic materials, such as energy, will come under pressure from the World Trade Organization, and thus will face poorer sectors of the population exacerbate political and economic conditions. In addition to the uncertainty about the benefits of joining, opponents put another obstacle: requirements Join the World Trade Organization, which is a very complicated matter, due to the ramifications of the membership agreement (Khalil, 2017: 39).

This issue includes a set of procedures related to creating the appropriate conditions for an investment environment based on the market economy and granting the private sector a role on an equal footing with the public sector. Plus a bundle of Legal, tax and fee reforms, as well as fulfilling some policy development measures for customs protection, that is, restrictions on imports should be removed, and this issue requires a review Comprehensive Iraqi Customs Law No. 23 of 1984 amended. The membership agreement requires a bill Preventive measures and anti-dumping. Moreover, Iraq must adhere to economic policies the comprehensive reform to enable the Iraqi economy to allow free movement of capital and foreign investment.

Export subsidies should also be lifted, and efforts should be made to implement an agricultural policy that addresses all related issues with agricultural support. Other requirements include liberalizing the service sector to open it up to the outside world, where it insists WTO to implement the principle of non-discrimination in this sector. With regard to intellectual property rights, the the ability of the Iraqi government to enforce protection of intellectual property rights and implement relevant laws is very weak. It also lacks procedural measures regarding the customs administration's handling of goods suspected of violating rights property at the border. Then, the provisions of intellectual property laws in Iraq lack implementation, for example from It is assumed that you find pirated copies in public stores. Iraqi intellectual property laws do not grant the right to the authorities competent in the confiscation of materials proven to violate property rights, on a private initiative. In addition, regulation the records in the ministries and agencies related to the protection of intellectual property still adopt primitive means and do not meet them by international standards. Finally, intellectual property laws in Iraq are dispersed between more than one law and are subject to more supervision on the one hand, there is an urgent need to collect the elements of intellectual property rights in a single law that is easy to refer to. Joining according to the economic and legal perception above is a long and difficult process, and it will not come without sacrifice. One of the factors of concern revolves around the future of Iraq and whether it will be able to implement its membership obligations (Nadhim ,Sinan, 2018: 18).

• Secondly the supportive view.

The question arises here: Why does Iraq agree to the harsh terms of joining the World Trade Organization?

The answer lies in the existence of clear and useful justifications for membership, and Iraq can take advantage of the advantages that WTO membership brings, especially since WTO membership will deepen integration to Iraq in the Global Economy. In other words, it avoids the isolation of Iraq in its diverse relations with states Moreover, the WTO is helping 11 joining others in an increasingly interconnected world. It aims to enhance the diversification of the country's economy and reduce its dependence on oil exports, which currently account for about 9% Of Iraq's foreign exchange earnings. Also, Iraqi consumers are likely to benefit as a

result to reduce trade barriers through a wider choice of products and lower prices (Nadhim and Sinan, 2018: 19).

In addition, there are a number of other justifications presented by the trend favouring joining Iraq to the Trade Organization, and mainly, Iraq needs to catch up with the rest of the world in terms of upgrading trade laws And the economic performance of national institutions. Moreover, membership can make positive contributions first, the Iraqi economy is one based on oil revenues, and developing any alternatives will require adoption on the ability of economic institutions to open up and compete, and thus there will be pressure to develop the economy Iraq will not be able to achieve the necessary political and institutional changes without pressure to implement commitments second, if Iraq remains a member outside the organization on the one hand, and competition inside the Iraqi market on the other hand (Hala, 2009: 5).

The World Trade Organization, through adopting an alternative, will not be able to achieve sustainable development and diversification import and protection. In other words, export-oriented products need open markets, and they cannot help Iraq to create sufficient non-WTO markets for this purpose. However, some accessions are permitted exceptions and sectors through the provision of social aid in the form of cash transfers according to laws WTO, and legalization of commodity aid will remain in effect until economic and social conditions improve that allows for suitable alternatives. Finally, Iraq's status as a developing country can be used to gain waivers and deferment implements stringent measures for a period of time agreed upon during accession negotiations (Alwan, 2017: 23).

The ultimate goal of accession is long-term (albeit cumbersome) reforms on the side the commercial legality imposed by joining the WTO for the purpose of opening the Iraqi market in front of the competition. These obligations include areas such as trade in goods and services, knowledgeable and property. This, in turn, is in line with the direction of the Iraqi constitution of 2005, which tries to address the problems of several decades. From the central government's strict policy, it should be recognized here that the negative impacts of joining cannot be minimized that would, but the positive message is that the effects will be effective in the short term, but they are beneficial to Iraq on the issue in other words, it is unrealistic to expect these benefits to be realized immediately. And more Therefore, Iraq needs gradual reforms, not

immediate trade liberalization, to advance the economy closed, dominated by stateowned monopolies and subsidies towards an open, modern and competitive economy on global trade.

To these ends, joining, in turn, will lead to a comprehensive review of Iraqi commercial laws and regulations other related matters with the aim of change or development in line with the rules of the World Trade Organization Therefore, there is a need for the Iraqi government, to be completed with the aim of removing unnecessary restrictions to domestic and international trade. To recognize the need to provide a legal environment that is supportive of the market economy. In addition, the government must understand the need for a stable legal infrastructure, including impartial law enforcement, to support the rule of law, and thus strengthening the rule of law provides a means to enhance stability. Therefore, Iraq needs to provide a package of Legal reforms aimed at improving the rule of law and developing commercial law topics such as intellectual property and customs tariffs, it should also not be neglected to upgrade the judicial institution in order to be able to absorb the situation new legal and judicial (Nadhim and Sinan, 2018: 40).

It should be understood that membership of the World Trade Organization will not be a magic solution to the problems of Iraq, and likewise membership is not an end in itself, but Iraq needs to address its problems and develop its means to benefit from Standards and requirements for the work of the World Trade Organization. Nevertheless, embrace the path of reform and join an organization global trade can be a useful tool for greater prosperity and reconstruction because it encourages policies progressive local reform. That is, Iraq should start with reform plans to advance its laws and implement governance In the work of institutions so that it can reach international standards, which, if achieved and applied effectively It will bring economic prosperity to the country.

3.3.4 Possible advantages and disadvantages of WTO accession for Iraq

As mentioned previously, in the case of Iraq accession there will be many advantages and disadvantages.

The possible advantages:

1. One of the most prominent positive effects expected from joining the WTO it is to change the direction of the national economy and move towards free

trade and globalization, so the rate of production of goods will increase and their quality will increase too, this will benefit the consumer as well as the producer. Where consumers will benefit from lower prices due to lower customs duties or even possible to cancel them, while producers will benefit from the increase in production volume, which leads them to innovate and develop to compete (AL-Qurayshi, 2006: 7).

- The agreement with WTO includes provisions specifying differential and preferential treatment for developing countries that qualifies it to obtain many benefits and opportunities to become national exports and inspire the domestic production.
- 3. The development and expansion of production will provide more job opportunities and thus will reduce unemployment rates, which will have a positive impact on the state's activity and the economy (Sabah, 2012: 24).
- 4. The organization helps to protect local products from commercial practices that harm the economy, such as dumping operations, as the organization is issuing legislation to combat this type of activity.
- 5. Opening up to globalization will encourage foreign investment in the country, and this will provide opportunities for technological advancement for local industries, in addition to gaining experience for individuals that are working inside the country.

On the other hand the accession will be challenging and have many possible disadvantages:

- 1. It should be remembered that all the advantages mentioned are possibilities and not inevitable, as they depend on the general situation of the country and the ability to adapt to achieve the benefits of joining.
- 2. Openness to globalization and the abolition of customs duties and other forms of protection will be in the interest of developed countries that have a strong economy and high production capacity, and surely this will not be in the interest of weak and backward developing countries with very limited production and export capabilities. This may expose weak economies or developing countries to unfair competition, which may cause great harm to industries, local products and the economy in general (Sabah, 2012: 25).

- 3. The governments of rich countries press for liberalization without making any distinctions between the economies of developing countries. Such liberalism aims to open the global markets without making an equal chances and forces the developing countries to pursue privatization without any regard for special circumstances (Al-Toma, 2017: 9).
- 4. Developing countries are hit hard by the subsidies that rich countries give to their farmers. The United States, for example, spends 5.3 billion dollars in subsidies to about 25,000 cotton farmers, and like this has made it possible for cheap cotton to sink in international markets and to cut the world price of cotton in half since the 1990s, which caused great difficulties for about 5 million farmers. Cotton in South Africa and elsewhere. These American cotton subsidies represent about three times the total of the American aid directed to Africa. (Martin, 2006: 84).
- 5. The trade restrictions imposed by the organization force the developing countries to give up their independence in many aspects of economic development. As no real opportunities were provided for the industrial development of these countries or for the development of effective industrial policies, because the WTO attends to ban any form of subsidy provision and the use of countermeasures that depend on the performance of exports and those that depend on domestic raw materials.
- 6. Some features of TRIPS like the issues of licensing, copyright and title to ownership complicate the process of obtaining new technologies for developing countries that lack this development.
- 7. Although the organization is based on the principle of compatibility, but the economic power of the countries is unequal, in addition to the technical complexity of the developing countries, and the many differences between the developing countries increase the differences, as these matters lead to a great inconsistency between the developing countries, which leads to the marginalization of these countries (AL-Qurayshi, 2006: 8).
- 8. The severity of the negative impacts on the industry resulting from joining is affected by a number of factors, the most important of which is the amount of the comprehensiveness of the application of the trade liberalization program,

as well as the period of time during which the trade liberalization measures are applied. The more limited and gradual the program is, the more negative the negative impact will be, and vice versa. The negative impact also depends on the level of competitiveness of the products, where the negative impact is inversely proportional to the level of competitiveness. Finally, the more the relative importance of the industry is greater in the economic activity the more the joining process has a big and important impact (Abd-Alghafoor, 2004: 90).

3.4 SWOT Analysis for Analysing the Iraqi Accession

SWAT analysis represents the strengths, weaknesses, opportunities and potential threats. It is a general analysis on the basis of which companies and institutions are based to assess the current situation, as it enables the organization to understand the four basic points mentioned above and work on the inclusions (Griffin, 2007, 88). The four components that make up the analysis are divided into two types of internal and external factors, where the strengths and weaknesses represent the internal factors of the organization, and the opportunities and threats represent the external features that the organization is likely to face (Gurel, 2017: 955). Where strengths and opportunities are of great benefit to reach the desired goals of the organization, on the contrary, weaknesses and threats are the obstacle that may stand in the face of these goals. On the basis of analysis, organizations know how to choose strategies and policies that enable them to achieve their goals and look to the negative aspects based on the results of the analysis and tries to overcome the obstacles that they have as weaknesses or possibly facing as threats. Therefore conducting a SWOT analysis is of utmost important for the Iraqi accession it will specify what can be prevented and what factors to stimulate.

	Strengths	Weaknesses
Internal	Internal capabilities which may help the company to reach its objectives	Internal limitations that may interfere wth the company's ability to achieve its objectives
	Opportunities	Threats
External	External factors that the company may exploit to its advantages	Current and emerging external factors that may challenge the company's performance
	Positive	Negative

Figure 3.1: SWOT analysis structure

Source: (Kotler & Armstrong 2012, 53-54)

Regarding Iraq's accession to the WTO, the SWOT analyses was conducted for the study as the strengths, weaknesses, opportunities and threats that Iraq might face in the event of accession were identified.

3.4.1 Strengths

- **S1, Integration into the global economy:** Since exchange of goods and services between various countries will cover the local needs on one hand and transfer the surplus abroad on the other hand.
- **S2**, **Economic liberation**: achieving liberalization of the economy from restrictions and market mechanism.
- **S3, Encouraging foreign direct investments FDI:** many benefits can be accrued like increasing employment and economic growth, development of backward areas, provision of finance and technology and increase in exports.
- **S4, Expand the IMF's economic reform policies:** Represented by establishing the necessary institutions to achieve and maintain macroeconomic stability and rise the efficient functioning of the market economy as well as making a change in determining the performance and defining the role of the state economy by reducing its role as a produce and distributor.

- **S5, Protectionism:** Iraq's accession will mean openness to import and export, so it will increase the production capacity of industrialization and avoids importing cheap goods and merchandise that can be produced locally.
- **S6, Support the underdeveloped sectors:** many sectors in Iraq do not receive appropriate financial support like the agricultural sector, due to the reliance on imports.

3.4.2 Weaknesses

- W1, Expansion in dumping operation: Tokyo round defined dumping as it is the act by which products of one of the two countries entered into trade of the other country at less than the internal selling price (cost) of a particular product in exporting country.
- **W2, Government institutions closure:** As a result of cancellation of protection programs and the support granted by the Iraqi government to some local projects such as; support directed to a specific good, service, sector or project from exemptions of taxes, credit or export insurance and other governmental support.
- **W3, The escalation of competition:** Due to the production activity the competition will escalate which leads to the collapse of many state institutions, and thus increases privatization programs.
- **W4, Unequal economic power:** Despite the decisions of the organization are based on the principle of consensus, the inequality of economic power among the different countries plus differences among the developing countries, therefore the poorest will have weak bargaining power, in addition to the complexity of negotiations and the weak ability of many developing countries due to the economic inequality that may lead to marginalization for those developing countries.

3.4.3 Opportunities

- **O1, Provide job opportunities:** the WTO accession will increase activity in most industrial sectors, and since the accession opens the doors to FDI hence many job opportunities will be provided that reduce unemployment rate.
- **O2, Establishment of small and medium industrial enterprises**: especially in the field of goods and services that are distinguished with great value-added generation,

high efficiency, quality and information, and avoiding extravagance In the large projects adopted by the public sector.

- O3, Development of technology: Encouraging the investment comes with several benefits, the most prominent of which is the development of the working staff, especially those who rely on modern technology, where training take place in addition to dealing with modern equipment which leads to the development of the work sector in general.
- **O4, Free economy:** The opportunity to achieve a free economy through the accession pushes the production of goods at low prices and with high specifications in a way that benefits both the consumers and producers, thus the national is pushed towards a free economy and global competition.

3.4.4 Threats

- **T1, Unstable security situation:** Iraq may achieve accession, but the current situation of the country is considered unstable in terms of security, so the country may witness high financial losses as a result of the unstable security situation which could cause the suspension and cancellation of many projects and investments.
- **T2, Poor strategic planning:** Iraqi government has made many mistakes especially when it comes to planning, in the event of accession; Iraq will be under several regulations and restrictions from the WTO hence poor planning may lead to potential losses and weak production that affect the national economy and lead it to downfall.
- **T3, Cash inflation:** The high level of financial inflation and the rise in prices represent a problem and an obstacle to the exportation of the local products (if they exist).

4. CONCLUSIONS AND RECOMMENDATIONS

The industrial sector in Iraq has been exposed to many problems, whether through external factors such as the many wars that the country has gone through, which witnessed the destruction of most of the state's facilities and the destruction of the country's infrastructure, and the internal factors such as; poor planning and failure to choose strategies and policies that benefits the country economic situation and the absence of government support for most of the facilities including the industrial sector and the total dependence on imports and the lack of sufficient exports from the industrial sector, which made Iraq completely dependent on the export of oil.

The structural imbalances that affected the main joints of the industrial sector in Iraq are among the most important reasons that encouraged the country to carry out economic operations one of those operation is the accession to the WTO, but these operations are still in their early stages. At the time when the industrialization process is the basis for launching the development process of any country and has an effective role in addressing the structural imbalance, the role of industrialization in Iraq was not at the ambitious level according to the standards of the development of added value and its contribution to the GDP for the country. The industrialization in Iraq faced many obstacles and challenges that prevented its progress, however, there are encouraging factors to find advanced manufacturing industries in the future. The indicators and contributions of the manufacturing industry to the development of the Iraqi economy were not at the required level in all the years in the period (2003-2020), thus Iraq is considered one of the least developed countries in the world, and the industrial sector is still underdeveloped and does not constitute any importance in the Iraqi economy. The investment climate in Iraq did not contribute to stimulating and attracting foreign investments, due to the weak security stability and the lack of economic infrastructure that encourages investors to direct their investments for the industrial projects hence the accession may encourage this matter, as accession to the WTO may encourage the development of industrial facilities and impose regulation on industrial establishments, in addition to training and technological development and other positive points that may make the industrial sector more active to enhance export, whether abroad or locally.

However, accession does not necessarily mean economic and industrial development in an instant, as it is necessary to plan and work at all levels to obtain the benefits that may be accompanied by accession, as the WTO contains regulations and restrictions that cannot be violated, and the industrial situation in Iraq in particular requires a lot of work And support from the state, therefore, the industrial strategies and policies the country will use must be determined to achieve development for the industrial sector, where in the event of accession, losses must be reduced to a minimum and maximize the benefits to achieve economic development for the country

There is no doubt that the process of evaluating the opportunities available to the Iraqi economy and resulting from joining the WTO is a complex issue and involves many expectations about the future, In addition to the assumptions inhabiting a large part of the structural elements of those expectations due to the relevant data that interacts with the subject that is still in the process of being crystallized. And based on the reality of the regressive Iraqi economy, which we were exposed to previously through its main indicators it is better to focus as we discuss the issue of Iraq's accession to the WTO on the opportunities that can be realized for this collapsed economy in light of its new global economic situation. While not ignoring the negatives that may affect the economy as a result of joining, it may seem to some that the available opportunities should be expressed as net gains at least in sectors of the economy as for the losses they are expressed by the failure to achieve competition in the main sectors sufficient access to international markets, but this opinion is not always correct, especially in the case of Iraq. It is not economically objective if the Iraqi economy is supposed to be described as successful in his new economic relationship with the WTO, and he suffers from a structural economic imbalance, the goal is to achieve economic profits in the main economic sectors and to achieve competitive advantages while the country is outside the organization and has enough economic tools to achieve this. AS well as reduces the losses that can be attached to any economy similar to the Iraqi economy that may result from its implementation of the agreements The WTO in light of a global economic situation that no longer implicitly allows any country to move away from this regard, it is

possible to correct the most important opportunities, the effects and results of the agreements of the organization itself, which is considered a success expected and available to the Iraqi economy in event of the accession to the WTO. It is exempted from many of the requirements contained in the agreements of the organization is to protect industries And the use of quantitative and non-quantitative restrictions when there is a major disturbance in the balance of payments or when they are exposed to major structural crises and imbalances and allow them to support local industry and agriculture.

Iraq can take advantage of the regulations from the organization in their agreement. These regulations ensure the developing countries better opportunities to protect their commercial rights and prevention from the dumping policies by other countries as well as the improvements that exit to resolve trade disputes as the organization provides opportunities for members to resolve their trade disputes with other countries in a fair manner. Although these regulations may be misused in favour of developed countries but they are considered as opportunities for the developing countries members who can resort to them. In this regard if Iraq remains outside the WTO will make it vulnerable to economic abuse without international protection. Thus, Iraq can benefit from the rule on which the WTO agreements are based, which states that every member has the same rights regardless of its size and economic capacity as long as it has obligations within the organization.

REFERENCES

- **Abd-Alghafoor, H.** (2004). The Economics of Industrialization Production, *Iraqi* Books and Documents House. p 90
- **Abramovitz, M.** (1970). Reinterpreting Economic Growth: Parables and Realities, *The American Economic Review. Vol 63.* NO 2: p 428.
- **Abramovitz, M.** (1986). Catching up, forging ahead and falling behind. *Journal of Economic History. Vol* 2. NO 46: p 385.
- **Aiginger, K.** (2003). The Relative Importance of Labour Market Reforms to Economic Growth, *WIFO Working Paper*. NO 208: p 7.
- **AL-Anbaki**, **A**. (2018). The Three Gabs: Lost Economic Development Syndrome. p 45.
- **AL-Basri, K.** (2010). The current economic challenges and the strategy of the next stage, *Iraqi al-Saleh Economic Institute* p 8.
- **Al-Mashhadani, A, A.** (2014). The role of monetary policy in achieving monetary stability in the Iraqi economy. *Iraqi journal of economic Science*, v 10: p 134.
- **Al-Obaidi, H.M.** (2012). The Effects of the WTO agreements on the industrial sector, *Baghdad Journal of Economic*. p 37.
- **AL-Qurayshi, M**, (2010). The Effects of Iraq's Accession to the World Trade Organization on the Iraqi Industry and the National Economy, *AL-Mansour Journal*. Vol 1. NO 14. p 12
- **AL-Qurayshi, M.** (2006). protection and industrial growth in Iraq, theoretical study, *Arab Foundation for Studies and Publishing, Vol 1.* pp 8, 9.
- **AL-Shawi, A.** (2012). The statee's role in supporting the industrial sector I Iraq "Field Study", *Journal of administration & Economics. Vol 89.* pp 9, 11...
- **AL-Tai, H.A.** (2011). Privatization and the Relationship with Foreign Direct Investment in the Iraqi Economy, *Economic Seminar Series*. p 119.
- **Altenburg, T.** (2011). Industrial policy in developing countries: Overview and lessons from seven country cases, *Discussion Paper*. NO: 4: pp 4, 56.
- **Al-Toma, H.H.** (2017). The Industrial sector in Iraq and the Opportunities for Advancement, *Al Furat Centre for Development and Strategic Studies*. pp 8, 17.
- **AL-Torfi, M.** (2020). Iraq preparation plan to join the world trade organization, *Arab Economic Journal*. *Vol* 2. p 18.
- **Alwan, A.S.** (2017). Iraq Facing the Requirements to join the World Trade Organization, *Journal of Political Science*. NO 38: pp 20, 23.

- **Amsden, A.** (1994). The Rise of the Rest: Challenges to the West from Late-Industrializing Economies. p 113.
- **Andersson, M. and Palacio, A**. (2017). Catch up growth and social capability in developing countries: A conceptual and measurement proposal. pp 9, 10.
- **Bagal, S.** (2016). The Differences Between Strategies and Policies, *Journal of International Economics*. Vol 4. pp 9,10.
- Bairoch, P. (1995). Economic and World History: Myths and Paradoxes. p 33.
- **Barbieri, E., Pollie, C., Di Tommaso, M.R. and Lauretta, R.** (2019). Chinese Industrialization, planning and policies: local growth and global equilibrium. pp 124, 126.
- **Barnes, P.** (1993). Industrial Competitiveness and the Environment: The need for EU policy Integration, Journal of European Environment. Vol 3. NO 6: p 114.
- **Bhala, R.** (1999). "The Myth About Stars Decisis and International Trade Low (Part One of a Trilogy)", *American University International Law Review. Vol* 14, NO 4: p 4.
- **Bickerstaff, K. and Walker, G. (2003).** The place of matter: matter out of place-public understanding of air pollution, *Sage Journals. Vol 1.* p 92.
- **Bieler, A.** (2014). Book Review:vCapitalist Globalization: Consequences, Resistance and Alternatives.p 35.
- **Bora, B.** (2000). Industrial policy and the WTO. *Policy issues in international trade and commodities.* v6. p 14.
- **Bruland, K.** (2004). History of Modern Britain: Industrialization and Technological Change. pp 117, 147.
- **Busch**, **P.** (2016). "Tacit Knowledge in Organizational Learning". p 21.
- **Chand, S.N.** (2006). Dictionary of economics. New Delhi. *Atlantic Publishers & Distributors*. p 268.
- **Chandler Jr, A.** (1990). Scale and Scope: The Dynamics of Industrial Capitalism, *Harvard University Press, Cambridge, MA*.: p 406.
- **Chang, H.** (2008). Bad Samaritans: The Myth of Free Trade and the Secret History of Capitalism. pp 15, 19.
- **Chang, Ha-Joon** (2002). Kicking Away the Ladder: Development Strategy in Historical Perspective. pp 46,52.
- **Chenery, H., Robinson, S. and Syrquin, M.** (1986) Industrialization and Growth: *A Comparative Study.* pp 57, 350.
- Crafts, N. (2010). The Sources of Growth in a Technologically Progressive EconomyGGDC Research Memorandum, Groningen Growth and Development Centre. p 17
- **Croome, J.** (2000). The Present Outlook for Trade Negotiations in the World Trade Organization. p 30.

- **De Valence, G.** (2012). Defining an Indusry: What is the Size and Scope of the Australian Building and Construction Industry, *Construction Economic Journal*. Vol 1. NO 1: p 53.
- **Deardorff, A.** (1994). Third-Country Effects of a Discriminatory Tariff, *The World Economy Journal. Vol 7.* NO 1: p 57.
- **DiCaprio, A. and Gallagher, P.** (2006). "The WTO and the Shrinking of Development Space: How Big is the Bite?" *Journal of World Investment and Trade, Vol* 7. NO 5: p 787.
- **Dutta, M.** (2005). China's industrial revalution: Challenges for a macroeconomic agenda, *Journal of Asian Economics*. *Vol 15*: p 1169.
- **Easterly, W., Levine, R.** (2001). It's Not Fctor Accumulation: Stylized Facts and Growth Models, *World Bank Economic Review. Vol 15.* NO 2: p 220.
- **Effland, A., Roberts, D. and Normile, M.** (2008). "World Trade Organization and Globalization Help Facilitate Growth in Agricultural Trade" *Amber the Economics of Food, Farming, Natural Resources, and Ruarl America*. p 2, 5.
- **Eugen, W.** (2014). Friedrich List (1789-1845): A Visionary Economise with Social Responsibility. p 135.
- **Fagerberg, J., Feldman, M. P. and Srholer, M.** (2014). Technological dynamics and social capability: US states and European nations. *Journal of Economic Geography. Vol* 2. NO 14: p 313.
- **Fergusson, I.F.** (2007). "The World Trade Organizatrion: Background and Issues", *Congressional Reasearch Service*. p 4.
- **Freeman, C. and Louca, F.** (2001). As Time Goes: From the Industrial Revolution to the Information Revolution. pp 264, 266.
- **Fuchs, Erica RH.** (2014). ''Global manufacturing and the future of technology''. *Science 345.6196.* pp 519, 520.
- Gallagher, P. (2004). The First Ten Years of the WTC. p 17.
- **Galor, O.** (1996). "Convergence? Inferences from theoretical models", *Economic Journal*. Vol 43. p 106.
- **Giroux, H.** (2017). Authoritarianism, Class Warfare and the Advance of Neoliberal Austerity Policies. *Knowledge Cultures Journal*. NO 1: p 3.
- **Goldstein, Joshua, S. and Jon, C**. (2008). International Relations. 8th ed. New York. *Pearson Longman*. pp 22, 24.
- Goldstone, J. (2002)." Efflorescence and Economic Growth in World History". p 22.
- Gorecky, D., Schmitt, M., Loskyll, M. and zuhlke, D. (2014). Human-Machine-Interaction in the industry 4.0 Era, 12th IEEE International Conference on Industrial infomatic. p 289.
- **Griffin, M.** (2007). A new model of work role performance: Positive Behaviour in Uncertain and Interdependent context, *The Academy of Management Journal*. *Vol* 50. No 2: p 88.

- **Guivarch, C. and Hallegatte, S.** (2013). 2C or Not 2C? Global Environmental Change. p 179.
 - **Gurel, E.** (2017).SWOT analysis: a theoretical review. *The Journal of International Social Research*, v 10: p 955.
 - **Hala, S.** (2009). The Worl Trade Organization: Arapic Participation, Requirements and Possiblities, *Madah Journal*. NO 75. p 5.
- Hall, R.E. and Jones, C.J. (1997). Levels of Economic Activity across Countries, *American Economic Review Papers and Proceedings. Vol* 87. NO 2: p 177.
- Hallegatte, S., Heal, G., Fay, M. and Treguer, D. (2012). From Growth to Green Growth: A Framework National Bureau of Economic Research, *Working Paper 17841*. p. 179.
- **Hallegattel, S., Fay, M. and Vogt-Schilb, A.** (2013). Green Industrial Policies: When and How. p 6.
- **Hein, E. and Truger, A.** (2005). a different view of Germany's Stagnation: p 94.
- **Hillebrand, E.E.** (2010). Deglobalization scenarios: who wins? Who loses?, *Global economy Journal vol* 10, NO.2: p 185.
- **Irfan, H.** (2007). Rethinking Industrial Policy, *UNCTAD discussion Paper, United Nations Confrence on Tradeand Devekopment.* NO 183: p 102.
- **Jacobs, M., Hatfield, I., King, L., Raikes, L. and Stirling, A.** (2017). Industrial Strategy: Steering Structural Change in the UK Economy. p 39.
- **James, H.** (2017). "Deglobalization as a Global Challenge", *CIGI Paper* NO 135. pp 8, 9.
- **James, H. and Dilmus, D.** (1982). "Structuralism, and Dependency in latin America", *Journal of Economic Issues. Vol 3.* NO 16: pp 673,689.
- **Jamila, J.** (2014). Balance of payments in the pursuit of WTO accession. *Al bahith Journal*, v 11: p 2.
- **Jenken, M.** (2006). Industrial Strategy, *The Canaidian Encyclopaedia*: p 16.
- **Joseph, S.** (2011). Blame it on the World Trade Organization?: a human right critique. p 112.
- **Kaldor, Mary.** (1981). The Baroque Arsenal, The Life and Death of An Aircraft: A Network Technical Change In Shaping Technology/Building Society. p 92.
- **Kaldor, N.** (1961). Capital Accumulation and Economic Growth: The Theory of Capital. p 197.
- **Kaldor, N.** (1966). Marginal Productivity and the Macro-Economic Theories of Distribution. p 7.
- **Karp, L. and Stevenson, M.** (2012). Green Industrial Policy: Trade and Theory. p 20.
- **Khalil, I. and Shamaá, A.J.** (2017). The role of the international Monetary Fund in managing the Iraqi dept, *Social science Journal*, pp 33, 39.

- **Khalil, I., Fareed, A. and Shaimaá, A.J.** (2013) The Reality of Environment and Energy Statistics in Iraq, *The Central Bureau of Statistics*. pp 43, 44.
- **Kim, H and Li, P and Lee, Y.R.** (2019). Observation of deglobalization against globalization and impacts on global business. pp 83, 90.
- **Kim, L. (2002).** Technology Transfer and Intellectual Property Rights: Lessons from Korea's Experince. p 8.
- **Kobba, S.I.** (2013). Industrial Bardaux in the Modern Iraq, *Civilized Dialogue*. NO 4082: p 21.
- **Korotayev, A., Zinkina, J., Bogevolnov, J. and Malkov, A.** (2011). Global Unconditional Convergence among Larger Economies after 1998?, *Journal of Globalization Studies. Vol* 2. NO 2: p 25.
- **Kotler, P. and Armstrong, G.** (2012). Principles of Marketing, *Pearson Educator* 14th Edition. pp 53, 54.
- **Kragh,S.** (2007). The Role of Agriculture in Economic Development: The lessons of History. *Copenhgen Business School Press DK*. p 73.
- **Krist**, W. (2011). Trade Agreements and Economic Theory. p 4.
- **Krugman, P. (1994).** Peddling Prosperity: Economic Sense and Nonsense in an Age of diminished Expectations, W. W. Norton & Company. p 280.
- Krugman, P. (2007). The Conscience of a Liberal, New York Norton. p 297.
- **Lall, S.** (2000). Selective Industrial and Trade Policies in Developing Countries: Theoretical and Empirial Issues, *Working paper*. NO 48. p 27, 30.
- **Leontief, W.** (1986). The Structure of Development. In W. Leontief, Input-Output Economics, p 164.
- **Liao, Y., Deschamps, F., Loures, E. and Ramos, L.F.** (2017). Past, Present and future of industry 4.0- a systematic literature review and reaserch orposal, *International Journal of Production Research*. *Vol* 55 :p 3609.
- **Lucas, R.** (1990). "Why doesn't Caoital Flow From Rich to Poor Countries?", *American Economic Review, Vol 80.* p 92.
- **MacDonald, R.** (1985). Strategic Alternatives in Emerging Industries. p 277.
- **Madisson, A.** (1994). Explaining the economic performance of nations 1820-1989, Convergence and of Productivity: Cross-National Studies and Historical Evidence. p 18.
- **Malanczuk, P.** (1999). "International Organizations and Space Law: World Trade Organization", *Encyclopaedia Britannica*. NO 442: p 305.
- **Mansur, M.** (2019). Industrialization in Iraq: A theoretical Research, *Journal of Arab Economics*. Vol 2: pp 3, 4.
- **Marwan, A.** (2017). Analysis of economic growth indicators in the Iraqi economy environment for the period 2004-2017. p 14.
- **Mazzucato, M.** (2015). The Innovative State Governments Should Make Markets, Not Just Fix Them. p 134.
- **Mazzucato, M.** (2016). From market fixing to market-creating: a new framework for innovation policy. p 140.

- **Mazzucato, M., Cimoli, M., Dosi, G.** (2015). Which Industrial Policy Does Europe Need?, *Intereconomics*. NO 50. p 120.
- **McCombie, J.S.L. and Thirlwall, A.P.** (1994). Economic Growwth and the Balance-of-Payments Constraint, *New York St. Martin's*.
- **Melitz, M. J.** (2005). When and how should infant industries be protected?, *Journal of International Economics*. *Vol* 2, NO 66: p 178.
- **Milanovic, B.** (2016). Global Inequality: A New approach for the age of globalization, *Panoeconomicus*. Vol 4. NO 64: p 493.
- Mohanad, R.Y (2017). Economic Strategies in the Middle-East. p 619.
- **Mohanty, R.P.** (2001). TQM in the Service Sector, *Jaico Publishing House*. p 33.
- **Murphy, K., Shleifer, A. and Vishny, W.** (1989). Industrialization and the Big Push. p 1003.
- **Nadhim, G. and Sinan, A.** (2018). The Challenges to Iraq's accession to the World trade organization: An Analytical legal study. pp 17, 40.
- **Naji, S.** (2018). Reality and forests of the industrial sector in Iraq, *Center for Basra and Gulf Studies*. p 104.
- **Nazar, S.A.** (2011) Iraq accession to the WTO: between legal commitment and economic challenges. p 387.
- **O'Rourk, K.H.** (2009). Government policies and the collapse in trade during the great depression. *Consequences and Prospects*. p 35.
- Ortiz, C.H., Castro, J.A. and Badillo, E.R. (2009). Industrialization And Growth: Threshold Effects Of Technological Integration. pp 62, 86.
- **Pack, H. and Saggi, K.** (2006). The case for industrial policy: a critical survey, *Policy Research Working Paper Series 3839, The World Bank.* p 266.
- **Palley, T.** (2012). From Financial Crisis to Stagnation: *The Destruction of Shared Prosperity and the Role of Economics (Cambridge University Press, New York).* p 147.
- **Pereira, L. C.** (2008). Globalization, nation-state and catching up, *Brazilian Journal of Political Economy. Vol* 28, NO 4: p 563.
- Perry, G., Arias, O., Maloney, W. M., Lopez, J. H. and Serven, L. (2016). Poverty Reduction and Growth: Virtuous and Vicious Circles, Washington: World Bank Latin American and Caribbean Studies.
- **Popov,V.** (2014). Mixed Fortunes: An Economic History of China, Russia and the West. p 116.
- **Prebisch, R.** (1959). Commercial Policy in the Underdeveloped economies, *The American Economic Review. Vol 49.* NO 2: p 22.
- **Prebisch, R.** (1986). La Crises del desarrollo argentine. De la frustracion al crecimiento vigoroso. p 158.
- **Pritchett, L. (1997).** Divergence, Big Time, *Journal of Economic Prespective. Vol 3*. NO 11: p 11.
- **Quiggin, J.** (2014). "National accounting and the digital economy", *Economic Analysis and Policy*. Vol 44 NO 2: pp 136, 141.

- **Rabab, I.** (2017). Industrialization in Iraq: A Future View of the Industrial Situation in the country, *Journal of Babylon*. NO 8. P 14.
- **Ravallion, M and Chen, S.** (2003). Measuring pro-poor growth, *Economics letters*. *Vol 1*, NO 78: p 93.
- **Reinert, S.** (1995). Competitiveness and its predecessors a 500 Year cross-national perspective. p 44.
- **Rhode, P. W. and Toniolo, G.** (2006). The Global Economy in the 1990s: A long-run prespective, *Cambridge University press*.
- **Rodrik, D.** (2000). Saving Transitions, *The World Bank Review, Vol 14.* NO 3: p 497.
- Rodrik, D. (2004). Industrial Policy for the Twenty-First Century. p 17,18.
- **Rodrik, D.** (2008). Normalizing Industrial Policy, Commission on Growth and Development, *Working Paper* NO 3. p 2.
- **Rodrik, D.** (2011). The globalization paradox: democracy and future of the world economy. *Oxford: W. W. Notton & Company*.
- **Rodrik, D.** (2013). Unconditional Convergence in Manufacturing, *The Quarterly Journal of Economics*. pp 78, 165.
- **Rodrik, D.** (2014). Green Industrial Policy, *Oxford Review of Economic Policy*. *Vol* 30. NO 3: p 470, 472.
- **Rodrik, D.** (2017). Straight Talk on Trade: Ideas for a Sane World Economy. pp 4, 5.
- Rodrik, D. and Sabel, C. (2019). Building a Good Job Economy. p 2.
- **Rosling, H.** (2018). The gap Instinct Factfulness: Ten Reasons We're Wrong about the World- and Why Things Are Better than You Think. p 353.
- Sabah, K. (2002). Industrial planning in Iraq. Bait al-hekma Jornal, Vol 1.pp 23, 25.
- **Sabah, K.** (2013). Industrialization in the History of Mesopotamia. pp 51, 80.
- **Sahar, Q.** (2011). The mechanisms that must be available for Iraq's transition from a planned economy to a market economy. p 8.
- **Sahib, S** (2004). The Role of local Industries in economic stability, *Al-Nahar Journal*. *Vol* 2. p 63.
- **Sahib,R** (2016). Privatization and the possibilities for application in Iraq. *Journal of Economic Siences*, University of Kufa, v 23: p 26.
- **Salman, H**. (2015). The World Trade Organization and Iraq: justification for accession and the expected economic effects: p 128.
- **Santos, A.** (2012). Carving out policy Autonomy for Developing countries in the World trade organization: The experience of Brazil and Maxico. p 567.
- **Sarkar, P.** (1986). EconPapers: The Singer-Prebisch Hypothesis: A Statistical Evaluation, *Cambridge Journal of Economics*. Vol 10, NO 4: p 355.
- **Scott, R. E.** (2012). The China Toll: Growing U.S. trade deficit with china cost more than 2.7 million jobs, *economy policy journal*. *Vol* 5: p 345.

- **Siddiqui,K.** (2018). David Ricardo's Comparative Advantage and Developing Countries: Myth and Reality, *International Critical Thought*, Vol 8, NO 3: pp 1, 14.
- **Simandan, D.** (2020). Industrialization: Definitions and Measurement, *Working Paper*. NO 4: p 255.
- **Smith, N.R.** (2019). Community self-organisation in contemporary China: Efficiency, Equity and affect in the process of institutional transformation, *International Planning Review. Vol 3.* NO 41: p 399.
- Stancioiu, A. (2017). The Fourth Industrial Revolution, Industry 4.0. p 74.
- **Stern, N.,** (2006). Stern Review report on economics of climate change, *Tour*, *A.D.L.*, *Glachant*, *M.*, 2013. How do solar photovoltaic feed-in tariffs interact with solar panel and silicon prices? An empirical Study.
- **Stiglitz, J., Ocampo, J. A., Spiegel, S., Davis, R. and Nayyar, D.** (2006). Stability with Growth: Macroeconomics, Liberalization and Development. pp 232, 235.
- Stiglitz, J.E. (2006). Making Globalization work, New york: W. W. pp 53, 65
- **Sutton, T.** (2020). WTO Reform Must Start at the Top, *Journal of American Rescue*. p 4.
- **Tomz, M., Judith, L. Goldstein and Rivers, D.** (2007). "Do We Really Know That the WTO Increases Trade? Comment", *American Economic Review*. NO 5: p 97.
- **Toulan, O.N. and Guillen, M.F.** (1997). New Organizational Forms of the Internationalization in Latin America: The Experince of Argentina Firms. p 522.
- **Toye, J.** (2003). Trade and Development: Directions for the 21st Century. pp 93, 95.
- **Unal, E. (2016).** An institutional approach and input-output analysis for explaining the transformation of the Turkish economy, *Journal of Economic Structures*, *Vol* 7. NO 3: p 57.
- **VanGrasstek C.** (2013). The History and Future of the World Trade Organization. pp 321, 322.
- **Vernon, R.G.** (1989). Endocrine control of metabolic adaptation during lactation. p 23.
- **Wafa, J. A** (1999). Evaluation the Developmental role of monetary policies in Iraq using Kaldor's Square. p 165.
- Weiss, T.G. (2015). The United Nations: before, during and after 1945. p 71
- **World Bank**, (2013). Risk and Opportunity: Managing Risk for Development, 2014 World Development Report. *The World Bank*. p 94.
- World Bank. (2004). World Development Inductors of 2004. p 300.
- World Bank. (2006). World Development Inductors. Online Database.
- **World Trade Organzation** (2009). Trade Report: Trade policy Commitments and Contingency Measures. p 73.

- **Wu, M. and Salzman, J.** (2015). The Next Generation of Trade and Environment Conflicts: The Rise of Green Industrial Policy, p 302.
- **Yahia, G.** (2017). The statues of manufacturing industry in iraq and its improvement strategy: future vision. pp 4, 14
- **Yamamura, K.** (1976). A Retrospect and Prospect on Post-war, *Japanese Economy*. *Vol* 3: p 267.
- **Zeni, M.A.** (2009). The Iraqi economy, Past, Present and Future Options, *Almalak for Arts Literature*. p 12.

RESUME

Name Surname: Karrar Ghazee Mohsin AL-Shammari

Place and Date of Birth: 1/1/1994 Baghdad, IRAQ

EDUCATION:

- Bachelor: 2016, AL-Mustansiriyah University, College of Science, Math department.
- IESE Business school (Online), 2015, Principles of Financial Accounting.

PROFESSIONAL EXPERIENCE AND REWARDS:

- 2016- 2018: Junior Accountant in the United Iraqi Medical Society (UIMS) Baghdad, Iraq.
- 2018-2019 : Accountant at the Norwegian Refugee (NRC) Baghdad, Iraq.
- 2020-untill now: Human Resource Manager (HR) at Solitaire food industries Baghdad, Iraq.