

# Expansion of Higher Education, Labor Market and The Economic Value of Education in Iraq: An Empirical Analysis

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## Abstract

The expansion of education has a disproportionate impact on many aspects of cultural, economic, and social life. There are arguments about whether the monetary value of education will change as acceptance expands at different academic levels. Education will become a tool for sustainable economic development. This research studies how educational expansion affects the intensity of the relationship between education, graduate skills, and labor market needs, using secondary data on education spending, unemployment, and population growth for several Arab countries for 2010-2018. The results indicate that with the expansion of higher education, the impact of years of education on labor market outcomes remains constant, but the effect of its topical calculation on changes in these outcomes. Likewise, as higher education advances, the impact of higher education graduation on labor market outcomes remains constant, but the effect of its relative calculation changes. The results are consistent with the topical theory of education, which assumes that it is not the actual level of education that matters but rather the level of education.

**Keywords:** Higher education, Skills gap, Labor market, the value of education, education expansion

## 1. Introduction

Higher education in developed countries has been characterized by a steady increase in school enrollment rates. In many developing countries, including Iraq, access to higher education is increasing faster than the population for various reasons. The first conclusion stems from the increase in secondary school enrollment, which coincides with the rise in higher education demand among each region's population. The second is that as employment opportunities change due to globalization, experienced workers gain value. Finally, these countries' governments recognize the crucial role of higher education in their countries' future growth. Although higher education cannot guarantee sustainable economic development, it is essential for continued success. This paper's central question is, "Is the labor market in Iraq able to accommodate graduates of higher education institutions based on looking at the opportunity to work as one of the basic needs for sustainable human development?"

There is a close relationship in achieving an acceleration of sustainable human development indicators because of the harmonious interaction

between higher education institutions' outputs and the global labor market requirements. Higher education in

Iraq contributes to interacting with the global labor market's demands and creating more jobs to meet the numbers of graduates entering the market. Therefore, the paper aims to explore the following:

- Have higher education institutions contributed to job creation, or is it the labor market that controls this?
- To highlight the extent to which higher education in Iraq contributes to interaction with the labor market to achieve human development.
- Analysis of the labor market's reality in Iraq and the Iraqi economy's ability to create and create jobs.

## 2. Literature review

### 2.1. Labor Market and Human Resource Investment

In the traditional sense, the labor market has the same as other markets regarding the essential components that mean supply, demand, and price. Some define the labor market as an institution with rules to control optional transactions through the price mechanism. In terms of this market's economic functions, it is concerned with the regulatory process to develop a tool to coordinate both the production and consumption of goods and services under optional transactions. But the

main problem facing all economies remains the4. mechanism of distributing limited resources between increasing and multiple uses (Baharin, Syah Aji, Yussof, & Mohd Saukani, 2020). Fisher is the first to incorporate the concept of human capital into the idea of capital, based on the premise that it generates continuous income over a specified period. Thus, it is5. comparable to material capital, whereas Karl Marx regarded human capital as the most valuable form of capital. However, Alfred Marshall emphasizes the critical nature of education and its promise as a national investment firm. The economy must prioritize education and work with the state to increase education spending (A. H. Almagtome, Al-Yasiri, Ali, Kadhim, & Bekheet, 2020).

In contrast, economist Theodore Schultz stressed the need to emphasize human resource development by paying attention to the education and training process, spending on education. In light of the essence of this investment and pre-defined areas, scientifically, to avoid resource loss due to irrational usage. It can be done through the coordination of a plan for education outputs to fit the requirements. In the labor market, this trend must be in line with societies' transformation from traditional manufacturing to cognitive, which refers to jobs and works achieved remotely. Due to the tremendous development achieved in ICT, it needs a human resource with high education and skills and continuous training not to acquire skills that keep pace with the rapid growth of the knowledge labor market (Mohammed, Bhatti, Jariko, & Zehri, 2013).

One of the most prominent reasons why economists have counted investment in education productively for capital and to highlight their essential role in economic development is as follows:

Contributes to increasing the income of individuals by obtaining jobs that require special education and skills.

1. It leads to an increase in productivity, which is a critical pillar in economic development.
2. Increases the knowledge, science, and skills of individuals in society and thus benefits them economically.
3. Contributes to improving individuals' ability to adapt to fluctuations resulting from different working conditions resulting from the restructuring of the industry.

Some studies have revealed the significant role of human capital in technological development, which has contributed about 90 percent of economic growth, which exceeds the rest of the production factors combined. That's what Solo found between 1900 and 1960.

Frederick Harrison noted that the formation of top competencies in societies is the golden key to economic growth.

It is also important to emphasize that education is a human right to assert its humanity in education, learning, and knowledge. It allows it to learn the secrets of many physical and life aspects. Therefore, it is not limited to material benefits but contributes significantly to reducing the phenomenon of human poverty through the distribution of wealth and income and the achievement of justice and equality in society. Education is, therefore, one of the most prominent and influential tools used to reduce the phenomenon of human poverty and inequity and lays the foundation for sustainable economic growth.

The formation of human cognitive capital requires several factors, primarily the time devoted to the teaching and learning process and the extent to which educational programs and curricula are achieved in achieving the qualifications expected to be gained by students, which are related to the quality of education. Education can become more relevant to the labor market's needs, especially in the modern rather than traditional private sector when the curriculum is demand-oriented for the industry, consistent with the nature of the sector's business, and providing continuing education if it is unable. There is no doubt that the limited material potential available to achieve investment in human capital to develop individuals' capabilities and skills contributes to a low level of education and learning and decreased agility, capacity, and productive efficiency. The spread of illiteracy in its various forms, the deterioration of the health level of the population and the inability of an element to move or move geographically or professionally, as well as the impact of the system of negative values and traditions prevailing in society, also contribute to discouraging innovators (entrepreneurship) from achieving leadership and risk (Brach, 2017). Education for industrial organizations is an effective means of increasing production capacity, and accordingly,

resource allocation is essentially a form of capital formation (Cao, Kang, Cao, & Sajid, 2020). When calculating the cost of social opportunity for student time, the social benefits of education are measured using individual income data defined by age and educational level. Thus, the disparity or disparity in the incomes of individuals within the same age category. But at varying academic levels due to schooling during the study's period is demonstrated by measuring potential estimates (projections) of disparities obtained during the individuals' life expectancy. From this time flow of education's cost and benefits, the current net value (or internal rate of return) can be calculated for investment in education. This outcome enables us to compare investment in education with other forms of investment alternatives from the community's perspective (A. Almagtome, Shaker, Al-Fatlawi, & Bekheet, 2019).

The estimate of return on investment in human capital is usually used to allocate resources at the economic level to various levels of the education system, which affect the supply of the labor force in the labor market (Sun, Ak, Serener, & Xiong, 2020). When a person invests in his own education, he assumes opening up prospects and areas of work and achieving an increase in the choice opportunities available to him, and in doing so frees himself and increases his economic well-being, the interests of man by investing in himself have reached such an extent that economists have begun to look at the individual with experience, scientific knowledge and high skills as a capitalist, based on the increased demand for his services by increasing his experience and skills, and economically the primary function of education is the dissemination and increase of knowledge, so education Incarnate production is associated with the learner, so the measured benefit of education cannot be counted as the only benefit, but education brings society many dynamic and indirect benefits that may be immeasurable and important to those that are represented by its contribution to the advancement and urbanization of society, by removing old (traditional) aspirations and creating a new outlook for life that is more civilized in harmony with the transitions achieved in (cognitive economics).

Accelerated technical inventions affect the workforce's characteristics, and as technology becomes increasingly complex (Ras, Wild, Stahl, & Baudet, 2017). The general level of employees' education must be sufficient to enable them to adapt to the necessary special skills. Rapid technological advancements sometimes result in the demise of such specialized skills. As a result, investing in human resources is at least as risky as investing in equipment, and it is not easy for the worker to retain his capital in the same manner as it was previously (Leopold, Ratcheva, & Zahidi, 2016). The 21st-century reliance on ICT and industrial intelligence has contributed to instability and security in traditional jobs (Neubert, Mainert, Kretzschmar, & Greiff, 2015). The rapid transformation of inventions into products by innovators in renewable and multi-quality and high-specification goods and services has made their production process. It requires high education, skills, and experience by the work element. It has led to the human resources that have completed yesterday's work unable to meet today's work, as it is fundamentally different from yesterday's work. It made it unable to follow tomorrow's work if it does not subject itself to training, development, and continuous rehabilitation under the requirements of the labor market. The tremendous advancement in the field of artificial intelligence, which encompassed a variety of fields, such as games and programs, identifying patterns, shapes, and sounds, establishing the validity of complex theories and the psychology of information processing, and providing natural interfaces.

Additionally, instruction and self-learning techniques aided in accomplishing tasks that are difficult or hazardous for men to perform. Therefore, high-income jobs will be geared towards education and high skills. International companies will be willing to pay high wages to these people because they have specialized skills to use technology to achieve added value and excellence in the market. In contrast, the demand for middle-class and skilled people will decline (A. H. Almagtome et al., 2020).

Therefore, talking about a local labor market is a traditional conception that is not in line with the reality of the market in the 21st century, and there is a lot of objective evidence that confirms this, perhaps the most prominent of which is the aspirations and desires of students in universities in acquiring more science,

## 2.2. Skills Gap and Future of Jobs

knowledge and high skills, which must conform to the opportunities provided by globalization, and this trend is more credible and realistic, so Iraqi universities have sought to adopt modern scientific curricula and in different Its scientific disciplines (medical, engineering, social and human) through the process of twinning with the international universities sober and using modern methods in the field of education and learning to earn graduates science, knowledge and skills to meet their desires and to keep pace with their aspirations to compete with their peers graduates of sober universities in obtaining jobs that are available in the global labor market thanks to the wide use of ICT in all economic sectors. Higher education data suggest a disconnect between the outputs of higher education entities and the labor market requirements (Velasco, 2014). The first two aspects of the gap are dumping in the labor market for disciplines that do not meet market needs, and the third is graduates' failure to possess the bare minimum skills required for specialization in their field of study. Additionally, the absence of broad-based skills, such as analytical and imaginative thinking abilities, is partially attributable to a lack of confidence in the curriculum's ability to grow the student's personality as much as it is in conservation, indoctrination, and conventional exams. The expansion of the public sector and, therefore, the absorption of more graduates based on their degrees without looking at the efficiency level have lost young people incentives to acquire more science, knowledge, and skills (Lee, Miozzo, & Laredo, 2010). Besides, the private sector's weakness in the field of manufacturing and entrepreneurship and therefore not absorbing more graduates. However, the development of criteria that can be adopted as a reference that can be applied in education for all countries is complicated. It is because of the different economic and social structure and the availability of financial capacities, which reflect their needs from other disciplines to prepare them and prepare them in higher education stages (Trow, 2007). so, it is clear that there are no global standards that can be adopted and circulated to all countries. There are no ideal ratios for the distribution of students in higher education between technical education and university education in primary studies (Kbelah, Amusawi, & Almagtome, 2019).

About job offer requirements, the private sector gives a worker who does not have the required skills a lower wage than a highly skilled worker (Krzywdzinski, 2017). the production process does not stop in the absence of such gifts. But its outcome is an inferior product or service that is not of quality and has a lower price in the market. Therefore, the private sector has two options in the absence of such skills. The first is to look for high-skilled people, pay higher wages and bear high costs, or resort to rehabilitating their workers and incurring training costs. Here, governments can influence the labor market in both the public and private sectors through employment, employment, and wage policies. The expansion of attracting more public sector workforces has been a significant distortion in the labor market due to its workers' incentives and privileges (Ali, Almagtome, & Hameedi, 2019). It has made job seekers receive modest education and thus refrain from working in the private sector. It is evident in the Iraqi economy as job seekers seek employment in the public sector due to the privileges available for various reasons, including legal and legislative. Sometimes wages may not be available to those available in the private sector. Therefore, adopting a traditional development model is based on the private sector's public sector dominance and competition through monopoly, alliances, and concessions provided to workers. It reduced the potential of the private sector and made it uncompetitive. The human development model contributed only limitedly to the development of productivity and economic growth to account for human capital in the public sector and in unproductive jobs that contributed to the spread of disguised unemployment. Besides, it achieves a financial advantage for companies and individuals associated with the ruling elite (Acker, 2006).

From the above, the adoption of macroeconomic policies for all economic sectors aims to create more productive jobs that require more skills and make them an incentive to push job seekers to invest in their human capital to fit the jobs available in those sectors. Instead of being the leading institutions of higher education where invention and creativity occur and contribute to the creation of more jobs and job creation. the labor market is the primary reason for individuals to invest in developing their abilities and skills; in other words, it is the investment in human



capital achieved in higher education institutions that leads the labor market (Marginson, 2019).

### 3. Methodology

This paper aims to explore the role of education strategy in developing countries in enhancing Iraq's economic growth using quantitative analysis. This research studies how educational expansion affects the intensity of the relationship between education, graduate skills, and labor market needs, using secondary data on education spending, unemployment, and population growth for several Arab countries for 2010-2018.

### 4. Results and Analysis

#### 4.1. Analysis of Education Expansion

Planned expansions in the education sector economically must be linked to specific economic objectives. Therefore, there is a problem in measuring the monetary value of education and the return rate on investment in education compared to other investments' financial returns. Here we ask whether spending on education is a consumer or investment spend?

Spending on education from an individual's point of view is an investment if they desire to obtain it is linked to its impact on the expected income and can be considered consumer if accompanied by a desire to get it for knowledge only. As for society, it is an investment in some cases and consumption in others (Amusawi, Almagtome, & Shaker, 2019)

. When some spending on education is counted as an investment, the economic return rate on this investment must be calculated. It must be compared with the rates of returns on other investments. The costs borne by the entire community are analyzed and compared to the programs' primary and sub-macro benefits, a process known as cost-benefit analysis. The problem facing developing countries, including Iraq, is expanding their educational programs, the large budgets and expenditures needed to implement them. The problem takes two aspects: the first is to determine the total budget allocated to education, which involves directing a limited amount of economic resources, and the second is how to distribute these resources to the various educational stages of different types and given the length of recovery in this sector, so a

comprehensive academic plan is needed to take into account the following:

- What types of education should be given priority over others?
- To what extent should attention be focused, i.e., identifying its appropriate programs.
- What speed is needed to implement these programs?

Thus, it is important to distinguish between two primary forms of education from an economic standpoint when designing an educational plan. The first is appropriate, necessary, and inevitable for all society members, including (primary or compulsory education). The second is a higher-quality education that is more specialized. The degree of specialization increases in scope as we progress toward the educational pyramid's top, such as (specialized study missions). This education does not have to be universally or even somewhat received. Otherwise, the proper planning of the required numbers has resulted in an imbalance leading to economic resources loss. It must be considered the need to diversify educational needs and that this progress needs all kinds of education at all stages (Al-Wattar, Almagtome, & AL-Shafeay, 2019)

This method depends on studying predictions of the workforce's needs in the future and in various economic sectors and determining its requirements of various types of education, which contributes to the development of an education plan and linking it to the needs of the future labor market. Statistical data show progress in education spending rates from the GDP of some Arab countries during the period (2006-2009), which in Tunisia accounts for about 6.9 percent. Saudi Arabia and Morocco followed with 5.6 percent. It continues to the UAE to make up 1.2 percent. In 2019, Oman, Jordan, Qatar, and Bahrain spent about 6.9%, 3.6%, 2.9%, 2.3%, respectively. However, the low spending rates of GDP of some Arab countries may not indicate a deterioration in spending according to this indicator as much as it is related to the size of the small population and the large volume of GDP. For example, Qatar data indicate that the rate of spending on education is about (2.5 percent). However, per capita spending on education is high because of its GDP and low population, as is the case with other Arab countries such as Tunisia, Morocco, and Yemen. Still, spending on education from GDP remains an

essential and reliable indicator of international institutions' reports to measure the development of education. It is supposed to rise steadily to obtain better results in the field of educational services for individuals.

#### 4.2. Analysis of Population growth and the labor market in Iraq

Talking about the labor market in Iraq requires full knowledge of the size and type of the country's population. In light of this, the proportions of the working-age population are known within the different age groups, their scientific qualification, the skills they possess, the level of development of education, and the extent to which it meets the requirements of the labor market. So, all of this will be studied in the following paragraphs

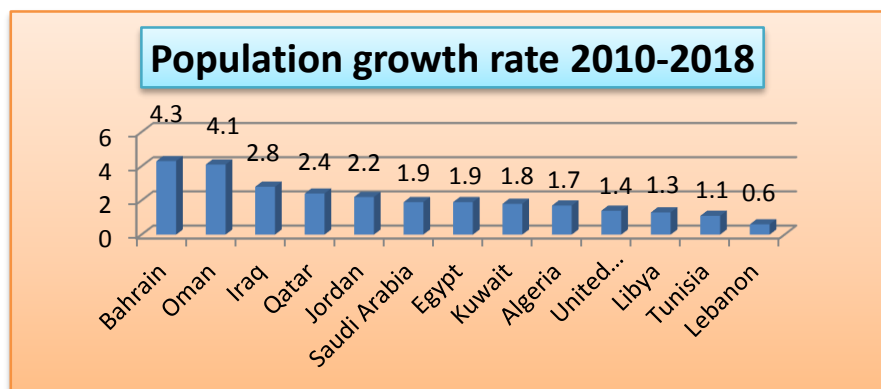


Figure 1. Population Growth rate 2010-2018

Figure 1 shows the population growth of some Arab countries for 2015-2020 and indicates a high population growth rate, with Bahrain at the forefront with a growth rate of (4.3%) Oman followed with 4.1 percent. Then Iraq (2.8%), Qatar, and Sudan follow with 2.4 percent. In the last place, Lebanon has a growth rate of about 0.6 percent. As evidenced by the graph, the data indicate that population growth was negative in Japan by 0.2 percent. Germany shifted from negative growth for 2010-2015 to positive (0.2 percent) during that period. For the duration (2015-2020). The increase in Germany could be due to increased international migration. According to the data, Iraq's dependency rate has risen to about 77.2 percent. Between 2015 and 2020, this places a significant burden on the working-age population in the UAE (17.7 percent), Singapore (38.7 percent), and the United States (52.3 percent). They account for 66.5 percent of the total in Japan. The world's countries will face a variety of consequences in the coming decades due to demographic changes, with the South benefiting from the demographic dividend associated with the proportion of the working-age population. In contrast, developed industrialized countries face high dependency ratios as the population ages and

fertility rates decline. The decline in the birth rate is a natural result of increased educational attainment, which has increased the workforce's productivity in developed industrialized countries. At the same time, these challenges require governments to create additional jobs and prohibit the employment of young people and adults alike. The population growth rate in developing countries, including Arab nations, is significantly higher than in developed industrialized countries at the start of the industrialization process. This issue requires double efforts to slow this growth and increase the population's income and well-being. The Arab countries' population growth crisis, which is followed by an increase in the burden of dependence, is waging a negative vendetta against the mechanism of economic development, which is harmed by a decline in agricultural production and a deterioration in their prices as a result of primitive means of production. Population growth requires more food, and some of these countries are in financial difficulty, restricting their ability to import additional food commodities.

Additionally, the effects of climate change have led to a significant shortage of these commodities, resulting in decreasing food security and widespread poverty.

According to Ministry of Planning data for 2018, Iraq's population pyramid refers to the young composition of the Iraqi population, which is very similar to neighboring Arab countries' demographics, as a result of the high fertility rate in comparison to the low fertility rate achieved in developed countries. Additionally, it demonstrates clearly through the population pyramid that Iraq's age dependency ratio is approximately 77.1 percent. It reflects the magnitude of the burden placed on working-age individuals in supporting individuals outside the working age. The proportion of the population under 15 years of age is approximately 40.5 percent, and the number of people in the working-age is about 21,523,759 million. Iraqi families average 6.4 people, 7.4 in rural areas, and 6.0 in urban areas. 42% of the population is of working age. Women account for approximately 16% of the people at 7.9 million. The age group (35-44) is the most involved in the labor market, with 57% of women working. The proportion of those with a diploma (68%) is higher than those without a certificate (8%).

#### 4.3. Analysis of unemployment rate in Iraq

Suppose the standard definition of unemployment is adopted, including everyone who can work and has not worked for even one hour in a week, by (7%) Among men and (13%) Among women. If the standard definition of unemployment expands, the unemployment rate rises to 11 percent. The unemployment rate for women rises to 21 percent. The unemployment rate for men rises to 9 percent. (27%) Female and (17%) Male and class (25-34) reached (7%) The unemployment rate for those with scientific qualifications are low, the unemployment rate among men with a diploma is 6 percent. Vs. (14%) Among females (14%), The number of unemployed was 7.3 million (9%). They work as underemployment (people who work less than 35 hours a week and want to change their current job), and women make up 15 percent of the total. Of the total workers, the educational level also constitutes a decrease in underemployment with a high education level. Unemployment is responsible for (9 percent ) The highest percentage of employees with a diploma is (16%), followed by (16%) among workers with a primary or secondary school diploma and (16%) among workers with a high school diploma (20 percent

). For jobs without a scientific degree, the proportion of employees classified as underemployed is 45 percent for women and 18 percent. Although the unemployment rate was 15.3 percent in 2008 (according to the Central Bureau of Statistics' Jobs and Unemployment Survey), the rate dropped to 8% in 2011, according to the same body's results. According to statistical estimates, Iraq currently has the highest unemployment rate in the Arab world, at about 50%.

#### 4.4. Analysis of Unemployment and the level of education

Unemployment is inversely proportional to the high educational level of individuals. According to the Social and Economic Survey of the Iraqi Family in 2007, the unemployed were among those with a preparatory degree and below 57.9% of the total unemployed. Bachelor's degree (13.9%) The structure of demand for these disciplines and the inappropriateness of higher education outputs for the labor market needs.

The information also indicates that the public sector absorbs about 40 percent of the total. Of the total workers and the private sector (59%) Wan (80 percent) Of the workers with a diploma qualification, the highest work in the public sector and most females work in defense activities. Other services, construction and construction, and the provinces of Kirkuk, Diyala, Najaf, and Basra occupy the highest relative in government employment, where this percentage reaches about (70%) Among the total users. The services sector in the developed industrialized countries attracts the holders of higher educational levels of holders of primary university degrees. Still, in developing countries, including Iraq, the labor market attracts lower education levels. It seems to be consistent with the reality of Iraq's market, especially in the public sector and specifically in the public services sector. The public sector employs about one-third of the economically active workforce, and more than half of the women are financially busy. However, only 4% of young people are used because of the nature of the law prohibiting public sector employment for those under the age of 18, which means that individuals aged 10-17 are excluded from working there.

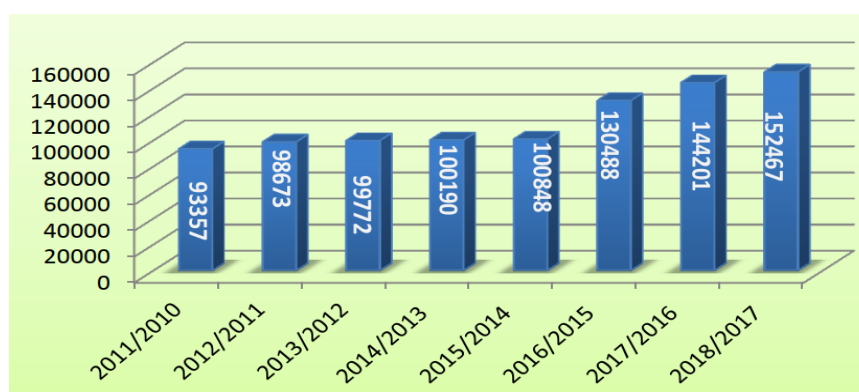


Figure 2. Graduates of public and private universities in Iraq 2010-2018

In the field of education in Iraq, the data indicate that enrolment rates vary significantly for the period (2002-2011) for various stages of study, with primary school enrolment rates of about 105 percent. In secondary school, this figure was about 53 percent. Higher education accounted for 16.4 percent of the country's total, which is different from un data from 15.5 percent. Therefore, about 47 percent of that age group entered the labor market after primary school. The rest continued in secondary school, with about 16.4 percent of students enrolled in colleges and colleges. It means that 83.4% of the 18-24-year-old in the labor market make up a scientifically qualified workforce that is only primary and secondary, reflecting the image of most of the force in the Iraqi labor market. Therefore, the enrollment rate of students in higher education institutions in Iraq is low compared to Arab or neighboring countries and developed industrialized countries. In Norway, enrolment rates in the three primary, secondary and postsecondary levels are about (99%, 110%, 73.8%) respectively for the same period, Kuwait (106%, 101%, 21.9%) In Lebanon (105%, 81%54%). Education in Arab countries, including Iraq, is also constrained by various factors, most notably a severe shortage of faculty members, with the average number of students per faculty reaching around 25 in 2005. although the global average is 16, we would need approximately 154,000 additional faculty members if we followed the international standard. It demonstrates that Arab countries lack the human capital necessary to promote development burdens.

It is a phenomenon that needs to be urgently studied: rates for higher education recipients in (primary and upper) countries need to be increased to levels that make them able to reduce the knowledge gap with

developed industrialized countries, which is shown in chart 3. Followed by Finland (94%) The United States of America (94%). At the end of the list comes Switzerland with 54 percent. France precedes it by 58percent. The importance of education and enrolment ratios is highlighted as one of the most prominent components of human capital and a critical factor in workers' productivity.

It seems through low enrolment rates in Iraq that occupations that have absorbed the workforce do not require skills, science, and knowledge. Therefore this gives the impression that a market in Iraq is still traditional based on simple work. Despite its low level of education, it still does not get a job opportunity commensurate with its scientific and skilled qualifications, which makes it work in marginal works that do not require a high level of science. It indicates the Ministry of Planning's lack of planning for the qualifications and skills needed by the labor market in Iraq and the lack of a future vision for the development of economic sectors to suit the transformations in the world. While chart (5) showed an increase in the number of graduates from public, civil and technical universities during 2010-2018, the percentage of graduates increased to about 63. 3%for the 2017-2018 academic year compared to the 2010-2011 academic year.

#### 4.5. Analysis of technical education Contribution to economic development

There is no global agreement on ideal ratios for the distribution of higher education students between technical and university education applied to all countries. It depends on the nature of societies' economic and political growth and their financial



ability and requirements from different technical disciplines.

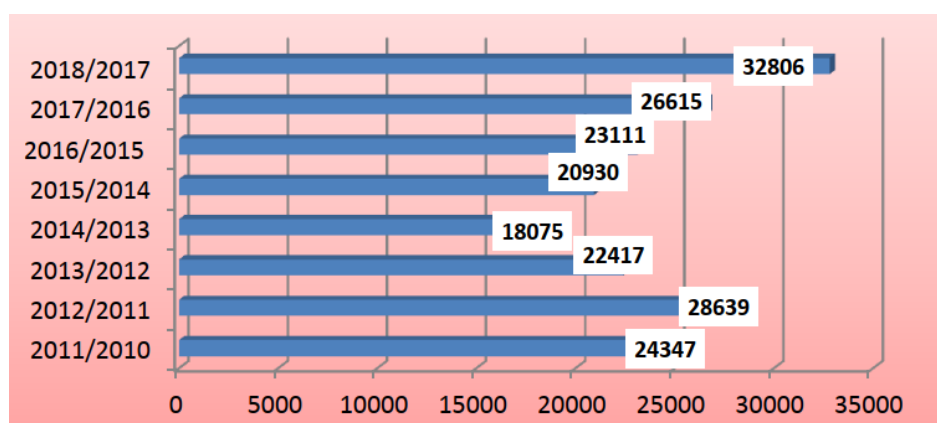


Figure 3. Graduates of Technical universities in Iraq 2010-2018

Figure 3 indicates an increase in the number of graduates from technical universities, with the number of graduates in the 2010-2011 academic year rising to (32,806) for the 2017-2018 academic year, increasing about 34.74 percent. In 2017-2018, however, graduates from technical universities to total graduates from Iraqi universities were about 21.5 percent. The percentage of graduates from academic disciplines (scientific, humanitarian, and social) was about 78.5 percent. The proportion of graduates from technical universities is low. It contradicts global economic development trends, as most developed industrialized countries attach great importance to technical education so that those enrolled in academic studies do not exceed (30 percent). In Iraq for the 2017-2018 academic year, this figure is about 78.5 percent. Thus, the significance of technical education and its critical position in achieving economic growth in countries that experienced dramatic shifts in development indicators during the twentieth century. South Korea, Southeast Asian nations, and China are prominent examples of this transition phase.

In contrast, most Arab countries have shifted in the opposite direction in the field of technical education over the last six decades. Setting specific standards requires accurate knowledge of the labor market's needs, which have been transformed by the significant development of information technology from local to global, specifically in the field of knowledge industries due to their widespread use of ICT, which usually requires legalization of university qualifications. Knowledge industries flourish in the knowledge society, including the Information Society, and each of these societies has distinct characteristics.

The information group is the most advanced since its members widely use informatics to develop and value-added processes. These high rates of enrollment in higher education indicate that advanced industrial economies are undergoing cognitive changes, which lead to a mental commodity across all economic sectors. They demonstrate the critical role of education in acquiring information, knowledge, and skills at the postsecondary level and emphasize its crucial role in the societies' ongoing development and accelerated economic growth. The use of ICT needs to be acquired, produced, shared, and analyzed and easy took the cognitive path.

## 5. Conclusions and Discussion

This article indicates that the labor market requires a highly skilled and specialized workforce geared towards ICT and artificial intelligence. Global companies will be willing to pay them high wages to achieve added value. The labor market demands are evolving so that changes resulting from the development of technology lead to the emergence of new businesses that lead to the obsolescence of some personal skills. There is a gap between the outputs of higher education institutions in Iraq and the labor market requirements, as the hole in the first two aspects is the presence of flooding of the labor market with disciplines that are not commensurate with its requirements. The other is graduates' inability to have the lowest skills necessary and the lack of comprehensive skills, including critical and creative thinking skills. Most of the jobs created and available in the local labor market are the main reason for

investing by individuals to develop their abilities and skills.

The age dependency rate in Iraq has reached about 77.1% and indicates the significant burden placed on working-age individuals supporting individuals outside working age. The findings suggest that the Iraqi Ministry of Planning lacks a strategy and vision for its future. Iraqi universities prioritize and emphasize economic sectors and labor market requirements through academic and technical-scientific disciplines to meet the demands of the financial development process. The proportion of spending on education in GDP is about 3.9 percent, so it is low compared to neighboring countries and the world. The economic development process requires an increase in the number of graduates from technical universities to the total number of graduates from Iraqi universities in 2017-2018, which is still below global levels and has reached about 21.5 percent. The percentage of graduates from academic disciplines (scientific, humanitarian, and social) was about 78.5 percent. Low enrolment rates in higher education (preliminary studies) in Iraq, accounting for about 16 percent of the total. Compared to enrolment rates in most Arab and developed industrialized countries, South Korea has reached nearly 98 percent. In the United States of America, about 94 percent of 1,000 people are women. Postgraduate enrolment rates are at least (10%). At least 2-3 percent of them are women. With the Ph.D., this is contrary to the stated goals of achieving sustainable human development. Most of our educational institutions do not interact with the global labor market requirements in science, knowledge, and skills that our educational institutions are supposed to provide to students, and most students' inability to access the labor market remotely. Various sites can provide, including Upwork and different scientific, social and humanitarian disciplines. Some universities resort to modernizing their science curricula and scientific fields by the curricula adopted by sober international universities, which requires a review of the admissions process to contribute to the formation of the qualitative human capital needed by the economic development process. In general, most of our university still meets the requirements of the traditional labor market and the concept of the university producing is to turn into the production and sale of goods, not productive, innovative and

developed for scientific, research and intellectual aspects to form theories, inventions, and innovations. It contributes to the creation of new jobs adopted by the labor market. However, information indicates that they are still marketing traditional educational outputs unable to communicate with the global labor market. Most students still turn to higher education (primary studies) to get a future job in the public sector. When this is not achieved, most students tend to work in jobs that do not require a medium or high level of education, knowledge, and skills, causing a waste of resources. On the other hand, it is essential to Emphasizing the importance of our scientific institutions recognizing that the current labor market is a global market regardless of whether it is (national or external) and that graduates of our educational institutions must have the science, knowledge, and skills of their peers who are graduates of international universities sober to compete for opportunities in this market.

The development of an administrative formation in both universities, colleges, and institutes works to follow up on the new sciences, knowledge, and skills in teaching and to learn to keep pace with the development of sober international universities on an ongoing basis. It becomes imperative to develop a computer curriculum that incorporates numerous technological, humanitarian, and social disciplines and guarantees them a fundamental subject taught at all levels and fields. Otherwise, students would not learn additional science and skills necessary to compete for jobs in the global market.

Emphasizing the importance of expanding technical education and encouraging students to join technical institutes and colleges contributes to giving individuals the science, knowledge, skills, and high qualification needed by the economic development process. It is critical to establish well-defined plans for higher education that account for Iraq's population development. The expansion of universities horizontally and vertically to accommodate growing student populations and increase the proportion of students enrolled in postsecondary studies is consistent with Iraq's trends toward sustainable human development. There is also a need to establish scientific strategies based on a vision to meet the potential labor market requirements from the different disciplines required by the country, taking into account

countries' practical experiences that have progressed significantly in the economic development process. We think it is essential to Expand student enrollment in higher education in studies (primary and higher) in line with international rates. It allows sober international universities to open branches in Iraq and provide them with the necessary facilities because they have significant financial, material, and human resources. The article concludes that coordination between the Ministry of Planning and the Ministry of Higher Education is necessary to demonstrate the Iraqi economy's current and future state through the lens of various scientific disciplines. It develops a scientific solution to scientific disciplines that reduce labor market demand, prohibits the expansion of these parts in public and private universities, and promotes labor market-required programs. That failure to achieve this contributes to the depletion and waste of financial and human resources continuously. We invite members from the public and private sectors to attend meetings of university boards, schools, or research departments and express their views and findings according to their specialization or career as staff in the field of employment of graduates.

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