

Fiscal policy trends and their repercussions on human capital in Iraq after 2003

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Abstract : The research aims to monitor and analyze financial policy trends in Iraq after 2003 To diagnose Its implications for indicators of waste in human capital. The problem of the research is summarized by the exacerbation phenomenon of erosion in human capital in Iraq after 2003 as a result of the financial policy trends represented by the continued acquisition of military expenditures on a share of up to a quarter of the general budget allocations at the expense of other sectors such as health and education, in addition to the focus of this policy on investment in the oil sector and the neglect of other sectors. The main production and production elements affecting the production process . The research assumes that the rentier orientation of economic policies has led to neglect of the main production sectors and weak investment in human capital, which has led to high rates of poverty and unemployment and a decline in health and educational indicators, which has led to a widening and deepening of the erosion in human capital in Iraq.

The results of the research indicate that the rise in poverty and unemployment rates, and the decline in levels of health and educational indicators after 2003, was accompanied by a continued rise in the volume of military spending. The study recommended the need to create sufficient financial space to cover the needs of human capital in Iraq and raise the efficiency of spending on the health and education sectors.

INTRODUCTION: Today, Iraq is facing a crisis that is eroding its human capital, after it was classified in the 1970s and 1980s as one of the first countries to invest in the health and education sectors in the Middle East and North Africa region. According to the World Bank's Human Capital Index (HCI) , Iraq's position in the index is (143) out of 174 countries with a score of (0.41), which is a lagging position compared to the rest of the Arab countries and countries of the region, especially the Arab Gulf countries. This low rating should serve as a wake-up call to economic policy makers, who still insist on focusing on giving the main role to oil wealth. This rentier orientation has led policy makers to neglect the main production sectors and other productive assets, especially human capital. After this trend contributed to weak investment in the social service sectors, especially the educational and health sectors - despite their use of slogans of employment and reducing poverty and unemployment as the main focus of their electoral propaganda - this trend contributed to deepening the human and educational gap, which was reflected in the weakness of the alignment of educational outcomes and their lack of compatibility with the needs of the market. In this study, we will analyze the dimensions of the phenomenon of erosion in human capital in Iraq.

The research aims to monitor the role of fiscal policy in deepening the phenomenon of erosion in human capital indicators in Iraq after 2003 to identify the sources of waste in human capital.

The first axis: The theoretical and conceptual framework

In this topic, we will discuss the most important theoretical ideas and perceptions that emphasize the importance of investing in human capital and the danger of the phenomenon of eroding human capital.

First - Human Capital:

This concept expresses the amount of accumulated knowledge, skill, and experience at a specific moment in time , which represents the economic value of the worker's experience and skills. Which includes assets such as education, training, intelligence, ability to innovate, skills, health and other things that employers value such as loyalty and punctuality. As such, it is an intangible asset or quality that is not (and cannot be) included on a company's balance sheet. Human capital is viewed as increasing productivity and therefore profitability. The more a company invests in

its employees, the higher its chances of productivity and success become . (WILL , 2023). This indicator measures the state's ability to nurture, develop and deploy talent and skills to achieve economic growth . (Al-Arabi, 2007, 72). Kendrick believes that this concept includes both intangible and intangible intellectual capital, which accumulates in investment in education and research with the aim of increasing the efficiency of human resources in the future, which is **supposed** to lead to positive impacts and professional advancement by increasing the value of human resources. The individual in the eyes of the organization's management (Hasani and Hariri, 2010:3)

Second- Investing in human capital:

This concept expresses the amount of spending on training The assets that make up the human head, such as knowledge, skill, and experience .The ability to innovate and the extent of the ability to convert it into productive energy contributes to raising the facility's efficiency and developing its production as a result of the individual being the most competitive element of production, for enterprises at the present time. Investment in human capital includes education, training, and the promotion of health and nutrition (Awad, 2015, 60). .

Many business organizations have given great importance to investing in human capital To attract the best human talents and capabilities by creating a learning environment from the point of view of these facilities Human capital has become a real asset that is more important than physical capital (Najm, 2008: 299).

Schultz finds That's this type of investment It leads to improving the quality of production It contributes to increasing the national product. By raising the level of workers' productivity, skills, and ability to produce highly complex goods that other unskilled workforce cannot produce.

Third - Erosion of human capital:

Erosion of human capital is defined as the extent of deterioration and diminishment in human capital over time due to the deterioration of the level of individuals' knowledge, skills and abilities below the level required to keep pace with productive and technological developments, which leads to generating less productivity and added value in the workplace . The extent of the erosion in human capital in an organization, or in a country, reflects the extent of the decline in the rates of exploitation of human capital due to various economic, social and political factors . (Tugce , 2011) .and business sectors face increasing challenges to improve their human capital and modify it to comply with shifts in labor demand patterns, to fill the required skills gap, and to keep pace with shifts in technology and their repercussions on the level of productivity.The effects left by the erosion of human capital : the most prominent of which is (Johnson , 2004)

1. The impact on the deterioration of production and productivity and the decline in national income and individual income .

2-The impact on increasing job opportunities among individuals

3 The impact on declining opportunities Professional mobility is the work component : as a result of the deterioration of education or training and the absence of structural changes in the nature of work and the structure of the workforce itself, including qualitative changes in the work force and changes in the job structure. Structural changes in the nature of work appear through the efforts exerted by the educated individual. The higher his level of education, the greater his chances of joining jobs that require mental thinking .

Fourth - Human Capital Index (HCI)

It is an international measure that highlights how the results of current health and education indicators affect the productivity of the next generation of the workforce. This indicator emphasizes the importance of investing in human capital . This indicator was launched in 2018 The World Bank and it was updated in 2017 2020, and its value ranges between (0 and 1) , and it means (1) reaching the maximum potential. These two reports highlighted the importance of benefiting from this indicator in designing effective policies and interventions that are better , as ambitious political measures supported by evidence can In the areas of health, education and social protection to pave the way for today's children to exceed the achievements of human capital and quality Life for the generations that came before them (World Bank , 2021a)

The second axis: Iraq's ranking in the Human Capital Index 2020

Singapore ranks first in the index, followed by Hong Kong, South Korea, and Canada, which are the top five in the index, while Niger, Chad, Mali, and Liberia are at the bottom of the index, which includes (174) countries.

According to the index, (33) countries out of (48) in the Europe and Central Asia region included in the 2020 index are located in the first third of the world. These results basically correspond to countries with relatively high income in the region. Rich countries can invest in basic education and care. health more than poor countries.

However, there are also significant differences within the region. A child born in Poland, with an ideal education and ideal health, is expected to reach 75% of his productivity in adulthood, while a child born in Tajikistan will be able to achieve 50% of his productivity in adulthood.) Only, **says Anna Purdy** , World Bank Vice President for Asia: "European and Central Asian countries have prioritized investment in health care and education, which are key drivers of economic growth and development. The challenges posed by Covid-19 require a stronger policy response,

including This increases the use of technology to improve the delivery of services and social security programs to ensure that people have access to education and quality health care.

Iraq's position in the index is (143) out of 174 countries with a score of (0.41), which is a lagging position compared to the Arab Gulf countries.

The reason for this is that Iraq has not used its large oil reserves to develop human capital, which is essential for achieving sustainable economic growth.

The index stated that the UAE ranked (44) globally, first in the Arab world, and third in the Middle East and North Africa, among the best countries for investing in human capital. The Kingdom of Bahrain ranked second in the Arab world, ranked (46) globally, and fourth in the Middle East. And North Africa, Oman also ranked (64) globally, the Kingdom of Saudi Arabia ranked (84) and Kuwait ranked (88) globally.

The Human Capital Report (issued by the World Bank on addressing the human capital crisis in Iraq) reflects Iraq's modest gains in health sector outcomes considered in the index, as well as other major outcomes.

However, the weakness of the human capital index is mainly due to the meager educational outcomes. According to current school enrollment rates, it is expected that an Iraqi child will be able to complete only (9.6) years of school education, compared to (11.3) years in the Middle East and North Africa region. Africa. (world bank, 2021b)

Table (1) Ranking of countries in the Human Capital Index 2020

Category	Class	Ranking	Countries
The first	0.88-80	1-8	It starts with Singapore and ends with Sweden
the second	0.79-0.70	9-36	It begins with Ireland and ends with the United States
Third	0.69-0.60	37-73	It starts with Greece and ends with Kyrgyzstan
Fourth	0.59-0.50	74-114	It starts with Ecuador and ends with Guinea
Fifth	0.49-0.40	115-150	It begins with Egypt and ends with Zambia, including Iraq
Six	0.39-0.29	151-173	It starts with Madagascar and ends with Niger

Source by researchers based on

World Bank Group : (2021a) Addressing the Human Capital Crisis: A Public Expenditure Review for Human Development Sectors in Iraq (English). Washington, DC:.

<http://documents.worldbank.org/curated/en/568141622306648034/Iraq-HD-PER-Final>.

The third axis: Analysis of indicators of human capital erosion in Iraq

Poverty, unemployment, the gender gap, and the amount of spending on education and health are among the most important indicators for measuring the state of human capital, and the limits of investment or waste to which a group of young people in Iraq is exposed. This can be demonstrated through the following aspects:

First - high poverty rates

It is considered Poverty Sunday the reasons Main that I contributed in The deterioration of human capital in Iraq because it is reflected in the weak interest in educational, cultural and health aspects. The increase also contributed In numbers the poor, In increasing intensity Social polarization And high level Social exclusion as a result of deprivation Individuals or Communities In its entirety from Opportunities And from rights and resources, Like housing And work And care health, And from Share Complete in life Economic Social and political . And for To class Young, Lead Exclusion with it to Wait Years To start His life So he goes Long periods from The unemployment, and he what Represent Waste For a head the money Human , whether with regards to The individual or with regards to Country that spend Billions on education Low the level, no He meets Needs market the job Of skills required in Organized the job innovative, Due to Low level Graduates . building on him, Become education Mechanism for manufacturing Poverty And classification Class in the society, And he contributes in Sustainability waste head the money The human . The situations Unfair And it gets lower Rights Social And economic and political, As well as on absence Ability on that He is The individual is a member active in the society .

The phenomenon of poverty has begun to worsen in Iraq Since the 1980s, as a result of crises, wars, and economic sanctions. The truth is that the roots of poverty in Iraq are not similar to its roots in any other country, as the reason for its rootedness is not the weakness of the state's material capabilities and resources, but rather the continuous wars and the ruling regimes' control over the state's resources and not distributing them fairly and not adhering to plans and strategies to address poverty, as the analyzes indicated. It has been common since 2007 that the majority of Iraq's population is distributed close to the poverty line, which increases the fragility of their situations and makes them vulnerable to the effects of economic shocks. The data in Table (2) indicates a decrease in the poverty rate according to the national poverty line from 22.4% in 2007 to 16%. In 2013 and 2014, the poverty rate increased until it reached 22.5%. This is due to terrorist organizations' control over large areas of Iraqi territory. Then it decreased again in 2018 until it reached 20.5%. The number of poor people did not decrease, but rather increased from 6.648 million people in 2007 to 7.370 million in 2018. The poverty rate according to the national poverty line worsened to 31.7% in 2019, when the number of poor people became 12.680 million people. This is due to the high population growth rate and fertility rate, especially among the poor. (Ministry of Planning, Central Bureau of Statistics), and it should be noted that the problem of poverty has worsened during the complex (health-economic-political) crisis in 2020, which negatively affected the standard of living of Iraqi families, especially families whose members work in the private sector, leading to the repercussions of the pandemic (Corona) led to an increase in poverty rates throughout the country from 26.7% in 2020 to 29.6% in 2021, and thus the number of poor people became 12.271 million people, according to estimates by the Ministry of Planning, while alternative estimates of poverty conditions in 2021 indicate that poverty will continue to exceed the rate of 31. The number of poor people will rise to 12.8 million people (Ministry of Planning, 2021, p. 29).

Al-Awwal, 2021, p. 29).

As for the reality of poverty in the governorates, from Table (2), we notice that it was distributed unevenly, as Al-Muthanna Governorate recorded the highest percentages (49) in 2009, followed by Babil Governorate with a percentage of (41%), while the lowest percentages appeared in the governorates of the Kurdistan region. The reality ranges between (9%) and (3%).

According to official estimates from 2009 until now, the poorest and most deprived governorates were the southern governorates, as poverty rates there reached 34.6% in 2009 and decreased slightly to 31.6% in 2018 (Ministry of Planning, previous source, p. 35 and according to the poverty survey For the year 2018, it was found that Al-Muthanna Governorate occupies first place, as the poverty rate there reached 52%, while the poverty rates were distributed among the other governorates as follows: Dohuk 8.5, Sulaymaniyah 4.5, Erbil 6.7, Nineveh 37.7%, Kirkuk , 7.6%, Diyala 22.5% , Anbar 17, Salah al-Din 18, Baghdad 10, Babylon 11, Karbala 12%, Wasit 19%, Najaf 12.5, Diwaniyah 48, Dhi Qar 44, Maysan 45%, Basra 16%. (Ministry of Planning, Directorate of Living Conditions, 2018. We conclude from the above that the poorest geographical areas in Iraq are Al-Muthanna Dhi Qar, Al-Qadisiyah, Babil and Maysan, and they are the same governorates where unemployment or underemployment is widespread.

Table (2) Poverty indicators in Iraq for the years 2007-2021

Indicators	year	poverty line	Poverty rate %	The number of poor people
		(Thousand dinars)		
The shock of terrorism and loss of security	2007	76,896	22.4	6.648
Before ISIS attack	2014	105,500	16	5.76
ISIS shock	2014	105,500	22.5	8.101
Corona shock	2018	110,880	20.5	7.37
general social transfers scenario	2020	111,000	31.7	12.68

After exchange rate change	2020	111,000	26.7	11.17
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Source: Ministry of Planning, Central Statistical Organization, Statistical Report on Sustainable Development Goals, Section Human development statistics, 2020.

Secondly :- The multidimensional poverty: Multidimensional poverty refers to deprivation of health and educational services as well. Regarding municipal services, the gaps between the expenditure poverty and multidimensional poverty indicators according to the 2019 Human Development Report data indicate that an increase in consumption is not always accompanied by an improvement in human development indicators. We find that 10.4% of families are poor according to both measures, and 24.9% of families are poor according to the multidimensional poverty measure, but they are not poor according to the consumer spending measure, and 63% of families suffer from deprivation in two or three areas that make up the multidimensional poverty index, While 11% of families suffer from four or more areas. These data enhance thinking about the outcomes of the strategy, which focuses on five dimensions that can contribute to addressing the causes of poverty, whether related to spending and income or related to deprivation and access to services and assets. In contrast, the governorates of the Kurdistan region have lower levels of multidimensional poverty, while the southern governorates suffer from a poverty rate. Higher on both metrics. Although consumption poverty reaches about 20% throughout the country, multidimensional poverty has risen to 35% (Ministry of Planning, 2018, p. 2). Based on the latest statistical data, multidimensional poverty indicators can shed more light on the groups that are most Exposure to neglect by social strata, as shown in the following table (United Nations Development Programme, 2019, p. 320).

Third- Unemployment and gap Type Social in Iraq

Unemployment constitutes one of the manifestations of waste in the use of human resources, and it is costly in various forms to the individual, the family, and society. It is the annihilation of productive capacity that cannot be stored, and the reduction or elimination of the income necessary to sustain life, especially with the lack of unemployment compensation (which is incomplete and not continuous in many cases, leading to falling into poverty). Or deepen it. Unemployment also reduces income tax revenues, and unemployment creates suffering for the individual and his family, reduces self-esteem, and sometimes leads to deviance, crime, and terrorism, in addition to other health problems (the health of the individual and society). The economic estimate of the national income lost as a result of unemployment may be less. The unemployment rate itself is usually concentrated among low-income people , and Amartya Sen, in his book “Development is the Son of Freedom,” believes that unemployment is a form of deprivation of ability. Not only in that it means a loss of income only (which may be compensated for with unemployment compensation programs), but in that Its impact on individuals includes deprivation, psychological damage, loss of motivation to work, skill and self-confidence, an increase in pathological illnesses (and even an increase in the death rate), the corruption of family relationships and social life, the cruelty of social exclusion, the exacerbation of racial tensions, and discrimination between the sexes.

Unemployment rates relative to the labor force in Iraq reached (8.4%) as an average for the period (2004-2021) 4, and the unemployment rate among males reached (8%). It appears that unemployment rates among females are more severe than unemployment rates among males during the same period, as they reached (12%) among females, and in general, all unemployment rates are at very critical and worrying levels and indicate that there is a deficiency in the investment aspect and thus the local production level in Iraq. Weakness in the role of the private sector

The data in Table (3): The high unemployment rate for females compared to males also indicates the existence of a gender gap in the labor force participation rate, which is due to gap Type Social discrimination leads to gender-based discrimination, which makes women in particular more vulnerable to the repercussions of poverty, inability to access and control resources, weak professional and cognitive empowerment, including widespread illiteracy, weak education at its various levels, high unemployment rates, and lack of Enjoying reproductive rights, such as safe motherhood and family planning, in addition to the weakness of the personal and societal role and effectiveness .

Table (3) Unemployment rate in Iraq for the period (2004-2020) (%)

year	Females	Males	Total
2004	8.5	9.9	9.7
2005	8.14	9.6	9.4
2006	7.8	9.3	9.1
2007	7.4	8.9	8.7
2008	8	8.2	8.2

2009	9.8	8.7	8.8
2010	10.7	8.2	8.6
2011	11.5	7.7	8.2
2012	12.5	7.2	7.9
2013	12.6	7.3	8
2014	12.3	7.2	7.9
2015	12.5	7.3	8.1
2016	12.6	7.2	8.1
2017	12.2	7.2	8
2018	12.3	7.2	7.9
2019	12.4	7.1	7.9
Average	10.7	8	8.4

Source: Prepared by researchers based on data from the Iraqi Ministry of Planning, Statistical Collection for the Years (2003-2021), Baghdad.

Schedule (4) rates Share Young in Powers The worker in some the countries Arabic

Country	Type	
	Male	Females
Algeria	29.3	19.5
Egypt	17.8	17.6
Iraq	35.6	13.9
Jordan	40.3	17.5
Lebanon	25.2	31.8
Libya	51.4	35.8

Source: World Bank (2020) , Estimates Shared To redo Building And the ages in

Fourth : The high rate of educational loss in Iraq

The rate of educational loss or academic waste (dropout and failure) expresses the level of functional efficiency of the educational system. In recent years, Iraq has witnessed a noticeable increase in the rate of educational loss (dropout and failure) resulting from decades of conflict and the absence of investments in weakening the educational system and severely hindering children's access to education. Quality education. The continuous deterioration of the political and social conditions and the decline in the quality of education, as well as the ineffectiveness of modern mechanisms and methods to reduce it, have led to the exacerbation and expansion of this phenomenon in the country. A report issued by UNICEF in 2021 revealed the presence of 3.2 million Iraqi children of age Studying outside of school.

Nineveh Governorate witnessed the highest percentage of educational loss in the primary and secondary stages, as the dropout rate in the primary stage reached 14.25 and the failure rate was 15.80 , while in the secondary stage the dropout rate reached 9.07 and the failure rate was 10.45 percent, followed by Basra Governorate, which had a dropout rate in the primary stage. 9.35 and the failure rate was 11.16 . In the secondary stage, the dropout rate was 9.47 and the failure rate was 7.59 percent, followed by Baghdad - Rusafa II, where the dropout rate in the primary stage was 8.20 and the failure rate was 9.19. As for the secondary stage, the dropout rate was 9.37 and the failure rate was 9.38 percent.

Then comes Babil Governorate, where the dropout rate in the primary stage reached 8.55 and the failure rate was 3.41 . As for the secondary stage, the dropout rate reached 6.49 and the failure rate was 8.92 percent. Then come the rest of the governorates according to their index in Table3.

There are several reasons for missing school, the most important of which are:

The severe shortage of school buildings, double and triple school hours, and overcrowding of students in the classroom

The deterioration of the economic situation of many Iraqi families and their inability to bear the burden of their children's educational expenses contributed to school dropouts, causing students at an early age to turn to the labor market to help their families.

The instability of the security and political situation in Iraq and the control of ISIS over large areas of the northern and western governorates led to the cessation of studies there for nearly 3 years.

The Ministry's approach to developing the school curriculum 5 years ago and the difficulty it included was not appropriate to the situation in Iraq, especially since the country suffers from a large number of official holidays that disrupt the educational process, which ultimately leads to an intensification of the study material to avoid government accountability when the teaching staff is not completed. to the prescribed curricula, which led to students dropping out of schools.

The development and instability of educational curricula in recent years was not in line with the requirements that the Ministry of Education had to implement, the most important of which was developing educational personnel and qualifying them for the new curricula.

Regarding child labor, "The applicable labor law prohibits the work of children under the age of 18, but the reality is otherwise, with hundreds of thousands of children participating in the labor market in industrial and commercial areas without any legal deterrent."

The economic situation is the first factor in school dropout, especially since statistics confirm that nearly 12 million Iraqis are within the poverty line, and this has led to thousands of children leaving school in the last two years.

The inability of families to bear the burden of education and provide stationery and means of transportation has contributed to the swelling numbers of school dropouts.

Weak motivation or an unattractive school environment, partly due to weak family interest and weak financial capabilities, repeated failure, and the curricula and teaching methods that do not meet students' inclinations and hobbies. The high rates of poverty and the resulting weak families' interest in education and encouraging children to leave school and work to support the head of the family. This explains the spread of child labor, begging, and the high rates of crime, deviance, and drugs. The causes of dropout are also due to the weakness of the educational system in primary schools and its inability to achieve educational goals, and as a result of wars and lack of security, which led to forced migration, an increase in the proportion of orphaned children and the loss of parental care.

According to UNESCO, UNICEF and the World Bank, the highest dropout rates are among females at about 12% compared to 6% of males. This explains the low parity rate at the secondary and middle levels.

The deteriorating economic and security situation in Iraq coincided with the Corona pandemic, causing the country to face two double crises that forced many students to leave school. Looking at the figure below, we see an increasing number of students leaving education, especially in the 2020-2021 academic year, in which the Corona virus had a major impact .

The percentage of females dropping out or dropping out of school is higher than that of males, reaching (11.4) for females compared to (5.4) for males, meaning more than double the percentage. According to UNESCO, large-scale school closures could result in devastating risks, especially for vulnerable groups, especially girls, who are two and a half times more likely to be out of school than males.

Women and girls in Iraqi society bear many burdens that are beyond their capacity. Circumstances and circumstances force them to do many household tasks, which is reflected in the path of their educational and professional development. She explains: "In light of many people losing their jobs and businesses as a result of the closure and ban, many families forced their daughters to marry to alleviate the financial burdens, especially since many of them were not able to continue studying remotely due to the lack of appropriate conditions for them compared to males, and many of them did not have a choice." Either marry at an early age or stay at home and endure a lot of pressure and deprivation."

According to many reports issued by UNICEF, dropping out of school makes it difficult for many to make up for lost time during the pandemic period, which will increase the gap in education, skills, and knowledge they have compared to those who preceded them in those educational stages, and the matter is exacerbated with students who suffer from problems in... Comprehension and understanding, which exposes them to falling far behind their peers to the point that they eventually drop out of school .

However, there is a spatial variation in the relative distribution of dropouts in the governorates of Iraq, as Nineveh Governorate had the highest dropout rate of (14.18), followed in relative importance by Babylon Governorate with a percentage of (10.43), then Basra Governorate with a percentage of (8.31). The reasons for this increase in dropout rates are attributed to weak economic security and the deterioration of the political situation in Iraq in general and in

those governorates in particular. The increase in school dropout rates is also linked to increasing poverty and deteriorating living conditions, with the poverty rate reaching (31.7%) at the end of 2022 compared to (22%) at the end of 2019, it worsened the educational conditions and in turn contributed to the dropout of many students. This can also be seen in the decline in the number of students graduating from high school for the 2020-2021 academic year compared to previous years, which shows the extent to which the studies of many students have been affected by the Corona pandemic. The number of high school graduates in Iraq has decreased after the Corona pandemic. As we pointed out when dealing with the issue of poverty, increasing poverty would increase the value of the multidimensional poverty index, which shows the extent of the fragility of Iraqi society. In light of the values and percentages of those indicators shown in the figure below, we can identify the extent of the fragility of the Iraqi economy and the conditions of poverty in it. In the year 2022, and in light of the Corona pandemic, most of the indicators in this guide, which took an increasing trend, were academic achievement, disposal of waste, provision of drinking water, and enrollment in education, showing through this the reciprocal relationship between poverty and education, which has become rooted in Iraqi society. Education in Iraq before The Corona pandemic and its aftermath.

The fourth axis - financial policy trends in Iraq after 2003

Among the most important financial policy trends in Iraq after 2003, which contributed to the exacerbation of erosion and deterioration in human capital indicators in Iraq, are the following:

1- The financial system in Iraq is almost completely dependent on oil, and its laxity Efforts to develop and improve the government's non-oil financial revenue system. As a result of the weak interest of fiscal policy in building a stable financial system in which the tax system has an important role, as despite the fact that the tax system in Iraq is one of the oldest tax systems in our region, the urgent requirements of modernizing and activating it after 2003 were ignored. This failure In diversifying financial resources, Iraq was forced to resort to the International Monetary Fund to borrow from it as a result of the financial distress to which the Iraqi economy was exposed.

2- Fiscal policy took an expansionary curve that relied on an increase in public expenditures that coincided with the rise in oil prices, which was known as the "third oil boom," which achieved financial savings that in turn led to an increase in output growth rates (in the oil sector), and not as a result of an increase in public spending. In the non-oil sector or for tax incentives provided to companies and the business sector.

3- This expansion in spending resulted in a deepening of... There was a consumer and operational trend at the expense of investment and production trends, and this trend resulted in an inflation in the numbers of public sector employees, both civilian and military, until the end of 2015 reached approximately 7 and a half million employees and retirees, and the level of salaries was improved in cash (by raising cash wages). And in reality (by raising the real exchange rate of the Iraqi dinar at the beginning of 2007 and maintaining it).

3- Adopting a financial policy that is favorable to the poor and aims to redistribute income, by reducing the poverty rate. This policy took two channels. The first is the ration card, which includes all Iraqi citizens regardless of their income level, and the second channel is cash support through the social welfare network. Which helps the needy and vulnerable groups. When we return to international standards, we find that 6% of the Iraqi population enjoys a stable and decent standard of living, while 94% of the population suffers in one way or another from an imbalance in the standard of living, which constitutes a predicament that may last for a long time. Because the proposed treatments also represent a problem that is difficult to overcome in the foreseeable future.

4- Adopting a financial policy that favors security and defense, which was reflected in the arrangement of spending priorities and in the structure of the arrangement of general budget items by allocating the largest share to security and defense. This trend made military expenditures take up a share of up to a quarter of the general budget allocations at the expense of other sectors such as health and education. The percentage of spending on education (represented by the Ministries of Education and Higher Education together) did not reach 10% at best.

5- During periods of declining revenues that extended from 2014- 2020. We resorted to borrowing from ... The International Monetary Fund, as a result of the financial distress to which the Iraqi economy was exposed, estimated this gap at 50 billion dollars. Between the years 2016-2019. Economic literature has known to call what the Iraqi economy was exposed to at the end of 2014 a "double shock," as a result of the two health and economic pandemics at the beginning of 2019. Thus, the Iraqi economy, in an exceptional case, less than the world's economies, has been exposed to two double shocks. Within five years, this constitutes an exceptional burden on the Iraqi economy.

6 - Another failure of the fiscal policy is the weak allocation and implementation rates for the investment budget in productive sectors and sectors related to human capital development. Investment level In These are the sectors In a way He shouted With her great needs. It might happen Evaluation To the bank and to me For damages and needs In Iraq, the total reconstruction and recovery needs are In Education sector, After Ten conflicts from 2014-2017, it is estimated With 5.4 trillion dinars (4.6 billion US dollars). What ? What? It relates In the health sector, He lost The International Development Agency estimated that more From 50 percent Of the health institutions that Done Evaluate it In The year 2018 may Damaged, 30 percent lost From her. And you may have seen it The cost of rebuilding This is

the most harmful thing In Iraqi dinars , 2.7 trillion (\$ 2.3 billion) .Spending also suffers On health and education From Bad Implementation General budget allocations . There is K Shortage Ongoing In Implementing the investment budget , Where He is heading Most capital spending Like Oil fields and the oil sector . The latest available data reveals For the year 2019, the rate is no Implementation of linked investments With oil She reached 129 percent , In When She reached Percentage of sectors Non - oil : 30 percent . And this It raises concerns Regarding n Providing services , and expanding Infrastructure gaps , and the Reconstruction programmes .And no Put For example This is so Results A burden On long - term and sustainable growth Just , But it is It also increases From Human Capital Vulnerability Scores 2019 .

As a result , the education and health sectors suffer from a chronic shortages In Implementation of the investment budget , at a rate of 17% and 4% In 2019 , respectively , Compared to What B approves Out of 100 percent Implementation rate For the energy sector .

7- One of the problems of the health sector is the weakness of data on private spending and private investment spending in this sector, as well as the weakness of transparency in its government procurement system at the three levels, primary, secondary and specialized. This has had a negative impact on the situation of the health sector in general in Iraq and the trend Many Iraqis seek treatment in neighboring countries, even though the levels of public and private spending, both absolute and relative, are not higher than in Iraq.

Naturally, these trends are reflected in indicators of sectors related to investment in human capital, including the education and health sectors

First - spending on education

Education is considered one of the important indicators that reflect to us the level of human capital and is considered one of the important components of human development. If we want to know the level of interest in education, we must know the amount of money allocated to this sector from the amount of public spending in the federal budget. Through the data in Table (6), we notice the presence of variation and instability in the relative importance of allocations. The average relative importance of spending on spending on the education sector reached (8.5 %) of total public spending in Iraq for the period (2003-2021). This percentage is considered low if It was compared to the recommendations of UNESCO of the United Nations, which stipulated that the percentage of spending on health spending should range between (17-20%), and financing education from public expenditures is affected by many factors, including the fluctuations that occur in the prices of crude oil that were mentioned. Above, the conditions of security and political stability and the accumulation of problems witnessed by education with the destruction to which large numbers of school buildings were exposed as a result of wars and international sanctions, (UNESCO,2021)

Naturally, this low percentage of allocations, most of which are devoted to recurring operational spending to pay wages, salaries, and maintenance expenses, is reflected in the weak investment allocations and the weak ability to provide educational supplies for the educational process. In this regard, a report by the World Bank revealed the joint estimates for rebuilding. And Reconstruction in Iraq, which was issued on 10/10/2003 , stated that the cost of renovating school buildings in Iraq was estimated at approximately (4.8) billion dollars in the short and medium term , without accounting for operating and maintenance expenses. Then , as the years passed, this problem worsened as a result of dealing with it with an eye devoid of Realism and seriousness. In the year 2009, a report by the Iraqi Ministry of Education revealed that there were (6690) schools in need of restoration, of which (3469) schools needed partial restoration and (2721) schools needed complete restoration. As for the unusable schools, there were approximately (1879) schools. The report indicated that there is an actual need for (16,000) school.. (UNESCO,2021)

and therefore the successive Iraqi government did not allocate during the years of research the necessary expenditures to develop this sector, which led to Iraq obtaining last ranks for a group of selected countries, whether developing or developed, in the percentage of spending on Education to total public expenditure. (International bank,2010)

As for secondary education, the number of schools increased from (4269) schools in 2003/2004 . To (8612) schools in 2020/2021 , and despite this increase, the Ministry of Education reports indicated a deficit of (2415) schools (Ministry of Planning, 2022)

. As for higher education, the number of universities increased from (26) universities for the year 2003/2004 to (38) universities for the year 2020/2021, with a growth rate of (46%), as this increase in the number of Iraqi universities is due to its expansion in increasing the number of colleges from (189) government colleges and (10) private colleges in 2003 to about (369) government colleges and (160) private colleges in benefits from the services of the education sector, meaning that 40% of the population, representing 16 million Iraqis, are without educational services. (Ministry of Planning, 2020)

Second: Spending on the health sector

When talking about the size of the financial amounts allocated to the health sector, we note that the average relative importance of spending on health spending reached (5.2 %) of the total public spending in Iraq for the period (2003-2021). This percentage is considered low when compared to the recommendations of the World Health Organization,

which amount to about (25%) Most of this percentage goes to spending on operational spending on salaries and wages, while investment projects received only a small amount . (Iraqi Ministry of Health,2022)

Naturally, these low percentages of allocations are reflected in the maternal mortality rate and life expectancy at birth The maternal mortality rate reached (54) deaths per 100,000 live births in 2004, then began to decline until it reached (50) deaths in 2021. These rates are considered high and large, for several reasons, including the lack of government hospitals, as well as the lack of their staff, and the absence of health awareness. Among mothers and the widespread phenomenon of illiteracy among them, especially in the countryside. (World Health Organization,2021)

As for the other indicator, which shows the average life expectancy at birth, and by returning to Table (3), we note that this indicator was increasing during the period of the study, as it reached about (57) years in 2004, then it began to increase until it reached about (70) in 2021.

This It shows that there is an improvement in the level of health services in some years of study, which led to an increase in this indicator. Although life expectancy at birth has begun to recover to the level it was in 2000, which was 70 years, the Iraqi citizen has not benefited equally from these modest gains, as the analysis shows that mortality rates for newborns, infants, and under-fives have improved significantly in urban areas. And the richest, but the conflict conditions in the western and northern regions caused large waves of displacement and influx of refugees and negatively affected the average life expectancy of both adults and children. Which led to large discrepancies between Governorates.

Table (5) Maternal mortality rate per 100,000 live births And Life expectancy at birth for the period 2003-2021

years	mortality rate	Life expectancy at birth (years)	Infant mortality rate per 1,000 live births
	Mothers per 100,000 live births		
2004	54	57	43
2005	52	59	44
2006	52	59	5 4
2007	52	61	32
2008	52	68	25
2009	52	71	24
2010	51	72	22
2011	51	69	20
2012	51	69	18
2013	50	71	17
2014	50	69	18
2015	50	65	19
2016	50	69	24
2017	50	70	23
2018	51	72	23
2019	50	72	22
2020	50	69	21
2021	50	70	21

Source: Iraqi Ministry of Finance, Budget Department, Annual Reports of the Ministry of Health (2003-2021).

Regarding the infant mortality rate index (first year of life per 1,000 live births), we note that the infant mortality rate reached about (43) deaths per 1,000 live births in 2004 and then to (54) cases per 1,000 live births in 2006, except After that, the death rate began to decline until it reached (21) cases per 1,000 live births in 2021 .

While the under-five mortality rate has declined over the past two decades, it is still twice the average for upper-middle-income countries, and much higher than its counterparts in the Middle East and North Africa region. Although life expectancy at birth has begun to recover to the level it was in 2000, which was 70 years, the Iraqi citizen has not benefited equally from these modest gains, as the analysis shows that mortality rates for newborns, infants, and under-fives have improved significantly in urban areas. And the richest, but the conflict conditions in the western and northern regions caused large waves of displacement and influx of refugees and negatively affected the average life expectancy of both adults and children. Which led to large discrepancies between Governorates. Health services cover 33% of Iraq's population of about 39 million people in 2019, meaning that 67% represent 26 million Iraqis who live without health care.

Third : The reality of military spending in Iraq:

One of the most important challenges facing the Iraqi economy that affects the process of building human capital in Iraq is the increase in the volume of military spending as a result of the continuing conditions of security and political instability as a result of the increasing intensity of conflicts and deductions between the various political and sectarian movements and forces. All of these factors have contributed to exacerbating the current situation and strengthening the roots of Terrorism, as well as hateful policies based on ethnic and sectarian identity Ruling regimes often give priority to spending on armaments at the expense of public expenditures related to health, education, and protection networks designated for the most vulnerable groups. Hence, military spending in Iraq remains higher than the global average and higher than most Arab countries and the countries of the Middle East and North Africa, which reflects spending Insufficient, ineffective and unequal across the social sectors. The table shows that this percentage increased from (2%) of the total public spending in the year (2004), to reach (12.4%) of the total public spending in the year (2015), and decreased to reach (10.9%) in the year (2017). And (8%) in the year (2020).

Table (7) The relative importance of military spending, education, and health spending from public spending in Iraq for the period (2003-2021) %

year	military	education	health
2004	1.83	5.4	5.5
2005	3.55	5.1	5.6
2006	3.77	6.9	4.2
2007	4.86	8.2	4.6
2008	4.14	9.3	4.6
2009	4.92	9.4	4.8
2010	5.47	10.9	5.5
2011	5.31	8.3	5.8
2012	4.43	8.1	3.9
2013	6.87	10.4	4.1
2014	6.73	9.1	3.7
2015	12.45	9.7	4.6
2016	8.37	14	5.5
2017	10.97	12.3	5.3
2018	8.85	9.1	5.4
2019	7.77	6.1	4.8
2020	7.34	5.3	7.5

2021	6.34	5.6	8.3
Average	6.3	8.5	5.2

Source: Prepared by researchers based on data from the Iraqi Ministry of Planning, Central Bureau of Statistics and Information Technology, Statistical Collection for the Years (2003-2021), Baghdad.

Conclusions :

1. Iraq's position in the index is (143) out of 174 countries, with a score of (0.41), which is a lagging position compared to the rest of the Arab countries. Especially Arab Gulf countries. The reason for this is that Iraq did not **use its large oil reserves to develop human capital**, which is necessary to achieve sustainable economic growth.
2. Transformation Poverty in Iraq to poverty structural After taking the population percentage under Line Poverty Between 25-30% The poverty rate according to the national poverty line has worsened to 31.7% due to the impact of the complex crisis (health - economic - political) in 2020, which negatively affected the standard of living of Iraqi families, especially families whose members work in the private sector, and the repercussions of the (Corona) pandemic led to an increase in the rates of living. Poverty across the country increased from 26.7% in 2020 to 29.6% in 2021, thus bringing the number of poor people to 12.271 million people.
3. Fiscal policy priorities are characterized by a bias towards military spending at the expense of health and education spending. Iraq ranked last in health and educational indicators, while it ranked first in military spending compared to the rest of the countries of the Middle East and North Africa, which led to an exacerbation of the phenomenon of capital erosion.
4. Unemployment rates in Iraq reached (8.4%) as an average for the period (2004-2021) 4, and the unemployment rate among males reached (8%) and among females (12%), and in general, all unemployment rates are at critical and very worrying levels and indicate There is a deficiency in the investment aspect and therefore the local production level in Iraq and a weakness in the role of the private sector
5. The high unemployment rate for females compared to males indicates the existence of a gender gap in the labor force participation rate, which indicates the intensification of gender-based discrimination, which makes women in particular more vulnerable to the repercussions of poverty, inability to access and control resources, and weak empowerment. Professional and cognitive .

Recommendations:

Standing up to the phenomenon of worsening erosion of human capital in Iraq requires adopting a financial policy that takes into account the following factors

- 1 - The need to create sufficient financial space to cover the needs of human capital in Iraq . The government must diversify its sources of revenues away from oil to local sources, as well as improving efficiency and setting spending priorities. Significant non-oil revenues can be generated by improving the tax system , and by Implementing other non-oil taxes, such as value added tax.
- 2- Raising the efficiency of spending on the education sector requires :
 - A - Increasing the share of education in the government budget by enhancing investment spending and spending that is not related to salaries.
 - B - Achieving equity in spending on the education sector.
 - C - Commitment to directing additional financial resources to improve education gains for children from poor families and areas in the regions and groups most in need by adopting new policies to allocate resources in terms of infrastructure and teachers that would achieve equity at the regional level. And schools
 - D- Support the comprehensive reform program for public financial management to benefit the education sector (for example, moving towards developing a performance-based budget, clarifying government financial relations, etc.).
 - E- The need to work to keep pace with developed countries in terms of curricula and modern technological methods to improve the status of education, which is reflected in the upgrading of the level of skills and abilities of individuals.
- 3- Improving the efficiency of spending on the health sector requires improving access to services , enhancing equity , improving efficiency , ensuring preparedness for epidemics , improving the quality of the workforce in the health sector, and conducting a functional review of the salary scale and human resources. Evaluating and rationalizing governance Health human resources and capacity building for effective clinical treatment.
- 4- In order to build a successful development process, it is necessary to look at the human being as an important capital, and work to develop it in various educational and health fields by prioritizing government spending allocations to the education and health sector.
- 5-The need to benefit from global expertise in the field of human capital development, especially from the partnership with the World Bank
- 6- The need to pay attention to non-oil production sectors to reduce poverty and unemployment rates

Reference

1. Ali Hussein Muhammad, Nidal Shaker Judeh (The impact of military spending on the development path in Iraq for the period (1990-2016))
2. Ashraf El-Arabi (2007), Human Capital in Egypt, Concept and Measurement , Arab Economic Research Journal, Arab Society for Economic Research, Cairo, Summer, Issue 39.
3. Becker, G.S. Human Capital. Chicago: University of Chicago Press Combs, J. G., & Skill, M. S, 1993
4. H.G.Johnson, (2004) Towards ageneralized capital accumulation approach to economic development, economics of education.
5. International Bank for Reconstruction and Development (2021) The Human Capital Index 2020 Update: Human Capital in the Time of COVID-19, <https://documents1.worldbank.org/curated/en/45690160011156873/pdf/The-Human-Capital-Index-2020-Update-Human-Capital-in-the-Time-of-COVID-19.pdf>
6. International Labor Organization - Generation 2050 Working Paper Transfer A gift Iraq Demographic to window Economical for opportunities, Baghdad, 2022
7. Iraqi Journal of Economic Sciences, 2020, Volume 18, Issue 65, Pages 28-59
8. Iraqi Ministry of Health, Department of Planning and Resource Development, statistical reports for the years (2003-2021).
9. Iraqi Ministry of Health, Department of Planning and Resource Development, statistical reports for the years (2003-2021).
10. Mardin Mahsoun Faraj, Saman Ali Arif, "The impact of military expenditures on some macroeconomic variables in Iraq during the period (2004-2021)" Journal of Business Economics for Applied Research, 2023, Volume 4, Issue 4, Pages 111-126
11. Ministry of Planning, Central Bureau of Statistics and Information Technology, Statistical Collection for the Years (2003-2021), Baghdad.
12. Ministry of Planning, Central Bureau of Statistics, Secondary Education in Iraq for the academic year 2010-2021, Directorate of Social and Educational Statistics.
13. Ministry of Planning, Central Bureau of Statistics, Secondary Education in Iraq for the academic year 2010-2021, Directorate of Social and Educational Statistics
14. Ministry of Planning, Central Bureau of Statistics, Statistical Collection, 2020, p. 3.
15. Ministry of Planning, Central Bureau of Statistics, Statistical Collection, 2020, p. 3.
16. Ministry planning, Analysis of poverty trends in Iraq-2021
17. Ministry planning, the device Central For statistics, to divide Statistics Environment, indicators the environment and development Sustainable Self priority in Iraq, October The first 2018
18. Muhammad Thabet Al-Karawi, Investing in Human Capital and the Requirements of Transformation towards the Digitization of the Knowledge Economy, Al-Ghari Journal of Economic and Administrative Sciences, 2022, Special Volume, Conference Issue, Pages 835-860
19. Nagham Hamid Abdel Khader,. Khaled Rokan Awad, Rabab Nazem Khozam, " Analysis of the relationship between investment in human capital and economic growth in Iraq for the period (2004-2020)" Journal of Applied Business Economics, 2023, Volume 5, Issue 3, Pages 425-448
20. program Nations United development, a report Development Humanity, 2010 ,
21. program Nations United UNDP "Statistical Report on Sustainable Development Goals - Human Development Statistics Section 2021
22. Source: Ministry of Planning, Central Statistical Organization, Statistical Report on Sustainable Development Goals, Section Human development statistics, 2020.
23. Suhaila Abdel-Zahra Al-Jahmi, Amira Khalaf Lafta Shaheen, Amer Sami, "The phenomenon of demographic gift and the waste of human capital in Iraq, an analytical study of development challenges," Al-Kunoz Al-Ilmiyyah Magazine, 2023, Volume 7, Issue 1, pages 176-187
24. Theodore W. Schultz: Human Capital: Policy Issues and Research Opportunities <http://www.nber.org/chapters/c4126>
25. Tugce YerlitasIlona, BuciunieneIlona Buciuniene, Antecedents of Human Capital Erosion, Academy of Management Proceedings 2022 <https://journals.aom.org/doi/abs/10.5465/AMBPP.2022.12835abstract>
26. UNESCO, "Education for People and Planet," Global Education Monitoring Report, 2021.
27. UNESCO, "Education for People and Planet", Global Education Monitoring Report, United Nations Educational, Scientific and Cultural Organization, 2021.
28. United Nations Development Program (UNDP), Human Development Report, 2005: International Cooperation
29. Will Kenton(2023) , Human Capital Definition , <https://www.investopedia.com/terms/h/humancapital.asp>
30. World Bank (2020) , Estimates Shared To redo Building And the ages in Iraq
31. World Bank Group : (2021) Addressing the Human Capital Crisis: A Public Expenditure Review for Human Development Sectors in Iraq (English). Washington, DC.: <http://documents.worldbank.org/curated/en/568141622306648034/Iraq-HD-PER-Final> . World Health Organization, "Coronavirus disease dynamic dashboard," 2021.