Economic Development in Iraq: A Comparative analysis

Dr. Ahmed Ibraihi Ali

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Comparing Iraq's economic development to other nations with similar or different resource endowments provide valuable insights into how resource management affects development paths. The main argument of this paper is that economic development through industrialization is a strategy for diversification, shifting the Iraqi economy from a narrow base to a wider range of economic activities.

This paper critically re- examines the opportunities for economic development in Iraq, situating them within the context of global economic trends, the worldwide growth slowdown, and the challenges faced by middle – income countries- a category that includes Iraq. A central focus is the problem of the nation's pronounced dependence on oil revenue.

The analysis specifically addresses the limitations of Iraq's production capabilities, and structural imbalances. Key issues highlighted include insufficient capital formation, its efficiency, and allocation as the main factors responsible for the persistent underdevelopment of the non- oil economy. A low labor force participation rate, and high unemployment are investigated along with the elasticities of employment in relation to productivity growth and population growth using international data.

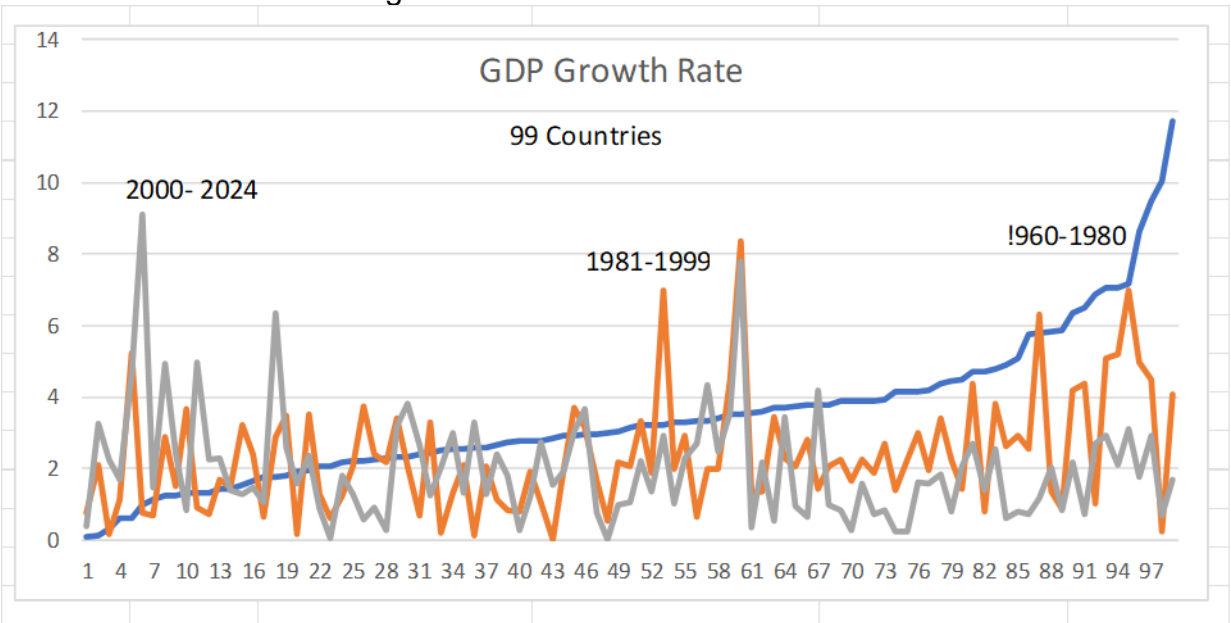
Furthermore, the paper provides a thorough analysis of the real effective exchange rate and inflation, analyzing their combined impact on sustainable economic growth.

The Trend of Growth Slowdowns

The period of 1960 – 1980 did experience relatively high global GDP growth. The period generally saw robust global growth in advanced economies, many low - and middle-income countries also experienced significant growth in this era. The era between 1960 and 1980, often called the “Golden Age” for some developed economies, was characterized by high growth rates, partly due to post- war recovery, high rates of capital formation, and a stable international system. The growth rates, since 1980, subsequently slowed for most regions outside of east Asia.
In the two decades (1980- 2000), there was a sharp and widespread slowdown in economic growth for most countries and this has generally continued, with some exceptions. In recent decades, while the overall global GDP volume has increased, the growth rate itself has generally been lower than the 1960- 1980 peak.

advanced economies have also faced challenges with the catch- up process, though experiences vary by country. Japan’s economic trajectory presents a case for an advanced economy’s catching -up. Japan experienced a significant economic boom referred to as the “Japanese economic miracle,” which peaked during the 1960s and continued into the early 1970s. during this period, the nation’s real GDP growth rates frequently exceeded 10 % annually. Post – 1990s , following the collapse of its asset price bubble in the late 1980s, Japan entered a prolonged period of economic stagnation and deflation.

GDP growth rates: 99 countries 1960- 2024



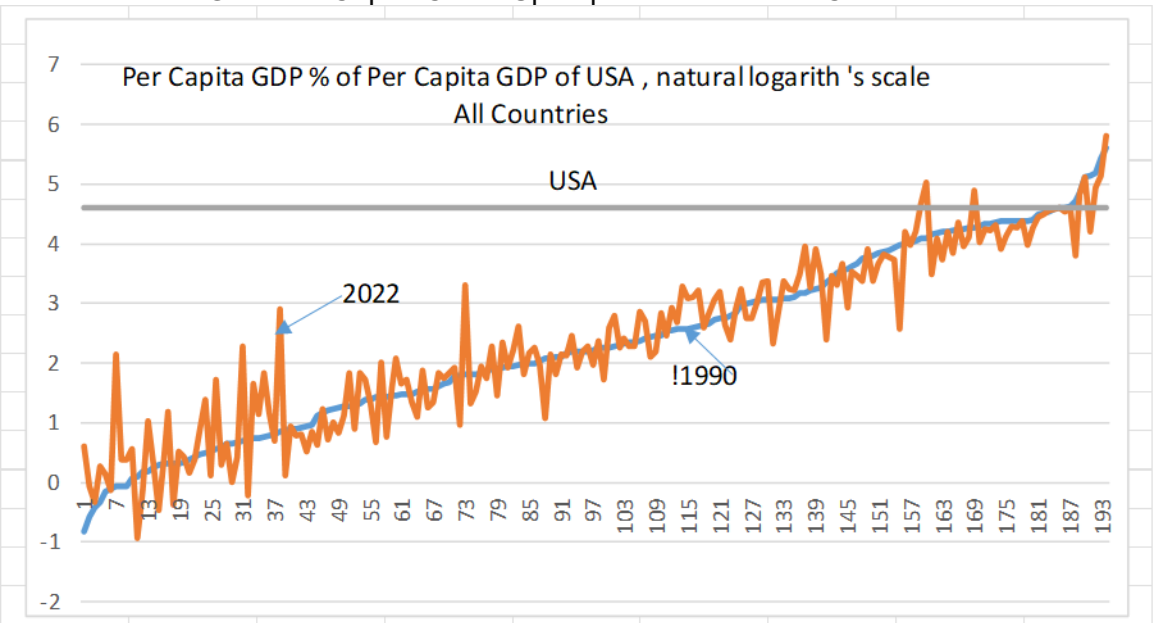
Source of Data: World Bank open Data.

Numerous academic analyses and reports support the argument that the influence of neoliberal policies and the Washington consensus contributed to slowing economic growth and increased instability in many regions, while east Asian countries achieved rapid growth by often following a different, more developmental state model. The Washington Consensus, a set of free – market policy prescriptions advocated by the IMF, World Bank, and U.S. treasury in the late 1980s and 1990s, promoted measures such as privatization, deregulation, trade liberalization, and fiscal austerity.

For many developing countries, the implementation of these policies was associated with negative results. The neoliberal policies were linked to “lost decades” of development and economic instability.

The rapid growth experienced by many East Asian economies, is often attributed to different strategies and effective policies. This successful experience demonstrates that the state plays a crucial, balanced role in fostering sustainable development.

GDP Per Capita Catch-Up Experiences Across Countries



Source of data: World bank Open Data.

The Middle – income Trap

Economic development as a catch -up process is a description of how developing economies tend to grow faster than developed ones, gradually narrowing the per capita income gap. Developing economies with less capital can see significant output increases with each new unit of capital and the ability to adopt existing technologies from more developed nations, this is the advantage of backwardness. In developed countries, the existing stock of capital is already high, as a result adding more capital yields proportionally smaller increases in output compared to countries where capital is scarce, this is the principle of diminishing marginal returns on capital.

Developed economies are already operating at the technological frontier, because they are the ones defining and creating new technology, they cannot import or imitate existing, more advanced methods from another country; no such technology exists yet. Their growth relies instead on innovation: investing heavily in research and development (R&D), education, and infrastructure to push the technological frontier outwards.

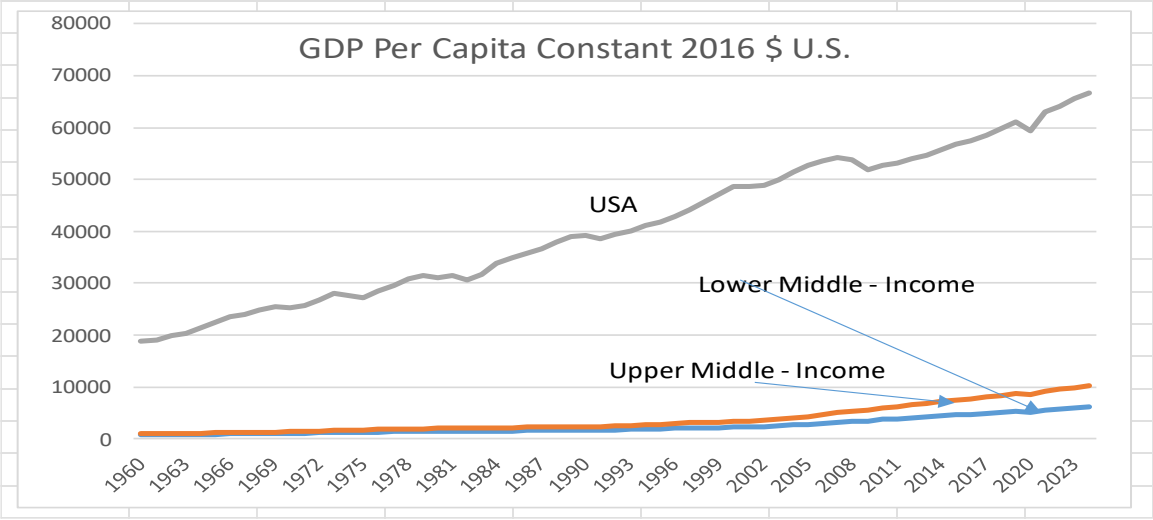
The middle - income trap can be precisely defined in terms of unsuccessful catch-up: it describes a situation where a country's economic growth stagnates after reaching a certain income threshold, failing to catch- up to the high- income economies it initially aimed to emulate. The nation successfully transitions from low-income to middle income status by leveraging advantages like low – cost labor, abundant resources, and

technology adoption, this initial phase of catch- up is typically driven by factor accumulation and imitation.

The trap occurs when these initial growth drivers lose efficiency so that the country can no longer compete with lower – wage nations on cost, nor can it effectively compete with advanced economies on innovation and quality. The fundamental unsuccessful catch - up is the failure to transition from a growth model based on imitation and input accumulation to one driven by innovation, productivity improvements, and human capital development. The income gap between the middle- income country and high - income countries stops narrowing and the nation gets stuck in a persistent middle – income band, hence the term “trap”.

Most middle – income economies are not catching -up with the income levels in advanced economies. Among those economies, the United States is still considered the world’s economic leader; people living in countries with incomes higher than those of Americans add up to fewer than 25 million. The graph below demonstrates that Since 1960 the mean income per capita of middle- income countries has never risen above one- tenth that of the United States.

GDP Per Capita Catch-Up Experiences of Middle – income economies



Source of Data: World Bank Open Data.

The middle – income trap affects 108 countries, which the world bank currently classifies as middle – income economies with GNI per Capita between $ U.S. 1136 and $ U.S. 13935 for the fiscal year 2026. These 108 countries account for a significant portion of global economic activity, the world's population, and those living in extreme poverty, making the trap a critical global development issue. The World Bank's 2024 World Development Report outlines a strategy for countries to avoid this trap by focusing on investment, technology adoption, and innovation. The successful transitions to high-income economies, as exemplified by the four Asian tigers, necessitate a fundamental shift from input – driven growth to growth driven by productivity and innovation.
While these economies did maintain a high rate of capital formation compared to the world average and other developing economies, the core argument of the report is that capital and labor alone eventually hit diminishing returns. They moved from simply accumulating physical capital to adopting new technologies and fostering indigenous innovation. Created a workforce capable of utilizing advanced technologies, and encouraged R&D. The governments implemented policies that promoted exports, ensured macroeconomic stability, and creating an environment where high capital formation could be efficiently allocated to productive sectors rather than being wasted.

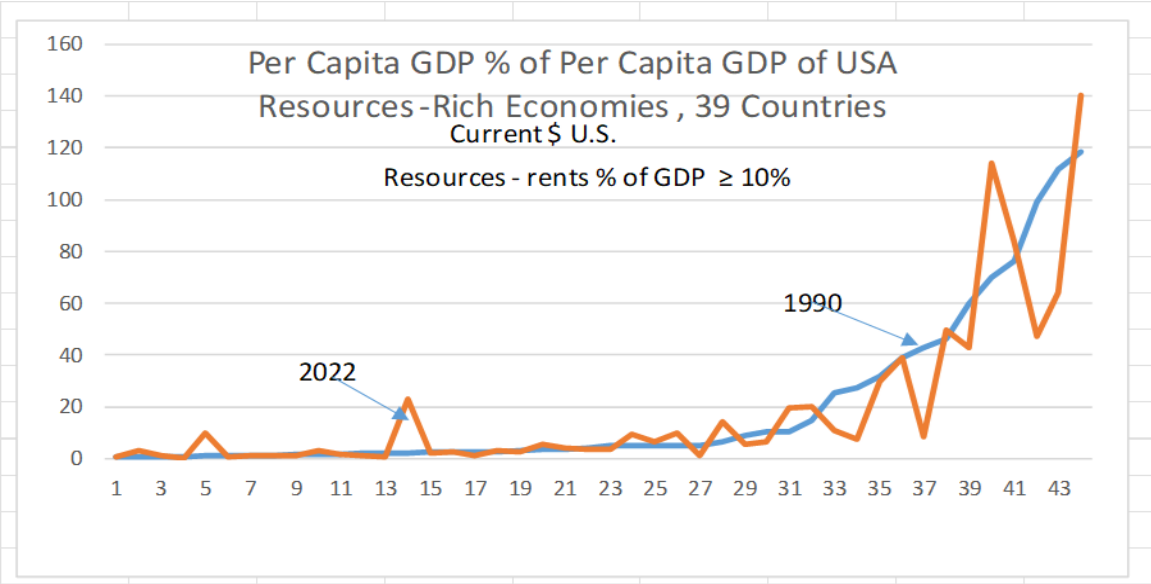
Growth and Structure of Non- Oil sectors in Iraq

Many studies and empirical analyses confirm the presence of the resource curse in numerous oil – exporting economies, this phenomenon describes how countries with abundant natural resources often experience slower economic growth, less economic diversification, and weaker institutions compared to resource – poor nations. The Dutch disease is a prominent explanation for the resource curse, where a natural resource boom leads to national currency appreciation, making non – oil exports less competitive in the international market. This often results in the contraction of the manufacturing sector, which is typically a key driver of long – term, diversification, innovation and productivity growth. While exchange rate appreciation is a significant mechanism in the resource curse, other factors may be equally or more important, as the analysis will show later.

The influx of rents can reduce government accountability to citizens as there is less need to rely on local economic activities. This often fosters rent – seeking behavior among elites, corruption, and the development of weak institutions, which can hinder economic development.

An economic and political dynamic commonly associated with rentier states, particularly those reliant on natural resources like oil. In such systems, the leadership often has little incentive to pursue industrialization or diversified economic development because substantial revenue from resource extraction can directly finance public spending necessary to maintain political stability and support among the population, often through subsidies, and public sector jobs. This dynamic can lead to economic stagnation as non-resource sectors of the economy may remain underdeveloped, and the economy becomes highly vulnerable to fluctuations in global commodity prices.

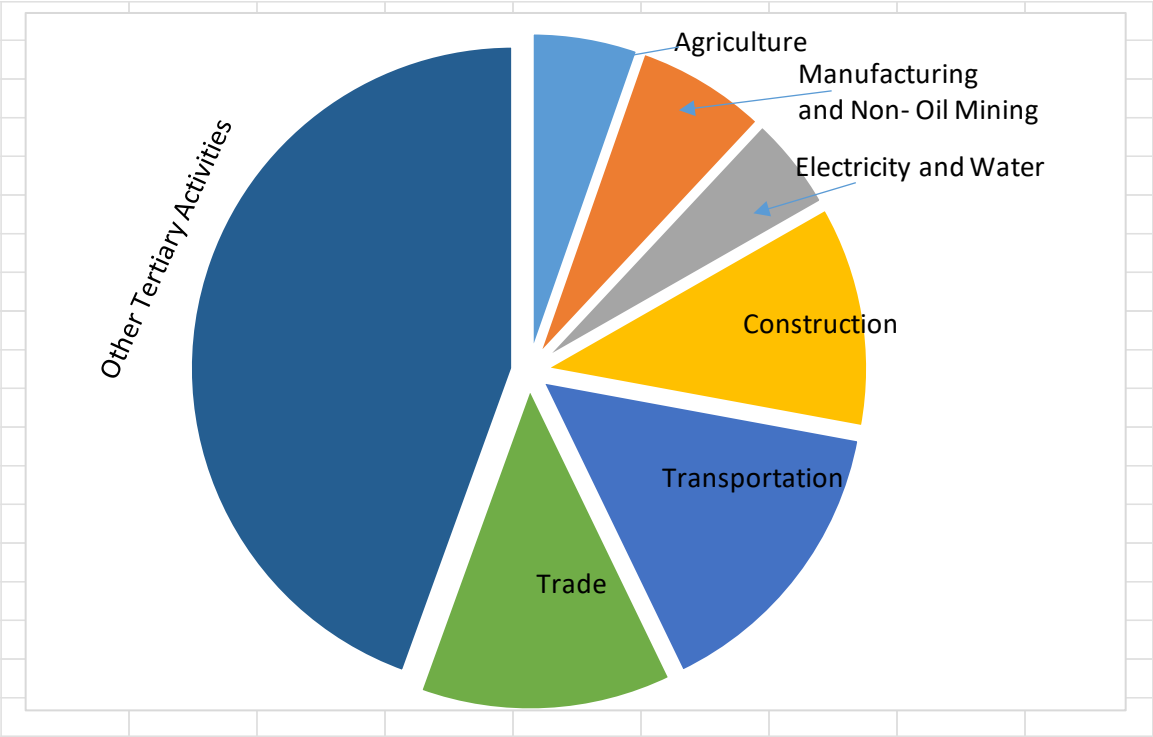
Insignificant Catch -Up of Resource – Rich economies



Source of Data: world bank Open Data.

Such myopic economic development also leads to economies being tied to the price of commodities, which are set in international markets that individual countries often don't have much control over. Commodities are notoriously volatile because they are tied to economic cycles, and downturns can severely affect countries that are dependent on natural resources. A resource curse doesn't have to be permanent, but overcoming it requires a developmental state and transformational economic leaders.

Structure of Non- Oil Economy in Iraq, 2024



Source of Data: Central Statistical Organization, Iraq.

In 2024, the share of the tertiary sector in non-oil GDP was 70%, and its share of total employment is 64 %, demonstrates a premature transition to services, escaping the stage of industrialization. While in China the share of services in GDP was 24.6 % in 1978 risen to 54.5 % in 2020 represents a typical path of structural changes.

There is no doubt that the characteristics of an oil-dependent economy are insufficient to explain the clear decline in productive activity as it reached in 2025 in Iraq, nor are they sufficient to explain the low level of the economically active population, as well as the high rate of open unemployment by all measures, in addition to widespread disguised unemployment. This is related to the strategy of national economic management adopted after 2003. The new-liberal economic model implemented in Iraq after 2003 has been characterized by limited use of oil revenue for industrialization, largely due to an emphasis on free-market principles, trade liberalism, and foreign advisors' doctrinal positions against the public sector and economic nationalism.

Iraq, after 2003, has seen attempts to adopt a more liberalized, market-oriented approach often associated with Western-advised reforms, the doctrine is responsible for wasting oil revenue instead of focusing on the main task of industrialization, a task which necessarily entails a leading role for the public sector. Neoliberal international institutions and foreign entities influenced the Iraqi bureaucracy against the true interests of the Iraqi people , preventing them from using `industrialization` in their formal discourse to avoid the public sector, which is not needed by the IMF, World Bank, and the U.S. Treasury.

. The result is a system characterized by inefficiency and a focus on non-productive sectors. The lack of a coherent and committed national development strategy has resulted in missed opportunities, with government initiatives often failing to yield tangible results. While, Successful East Asian countries (e.g., South Korea) used a strong "developmental state" approach. This involved an active government role in guiding the private sector towards specific industrial goals, including targeted investments in organization, technology transfer, and international communication networks, often through a leading, dedicated economic planning body. This model often included performance-based incentives and close coordination between the public and private sectors.

International institutions and Iraqi governments are not prepared to retreat from their unsuccessful strategy. The IMF, for instance, now recommends the government invest in infrastructure for trade and transportation for diversification, and notably not including industrialization financed by oil revenue. Iraq's industrialization has not been hindered by a lack of oil revenue, but rather by a political ideology. A rapid shift to free- market economy without clear political commitment to industrialization and true agricultural development, led to a decline in local tradable production.

The traditional oil vs. non-oil economy dichotomy is a misleading approach to understanding Iraq’s structural economic imbalance. Based on the clear facts that everyone has seen the current structure leads to a non-oil economy heavily dependent on oil- financed imports, and jobless income growth. Oil revenues are primarily used to finance a high volume of imports to meet domestic demand fueled by government expenditure.

The non -oil economy in Iraq consists of three sectors: government services, non-tradable goods and services, and tradable goods. The government services sector is a major employer. The non- tradable sector generally encompasses activities whose output cannot easily imported or exported. The specific categories of non -oil non tradeable

activities can vary between different economic models, but typically includes services like construction, electricity and water utilities, retail and wholesale trade, transportation and communication services, and other tertiary non- governmental activities, these industries primarily serve the domestic market.

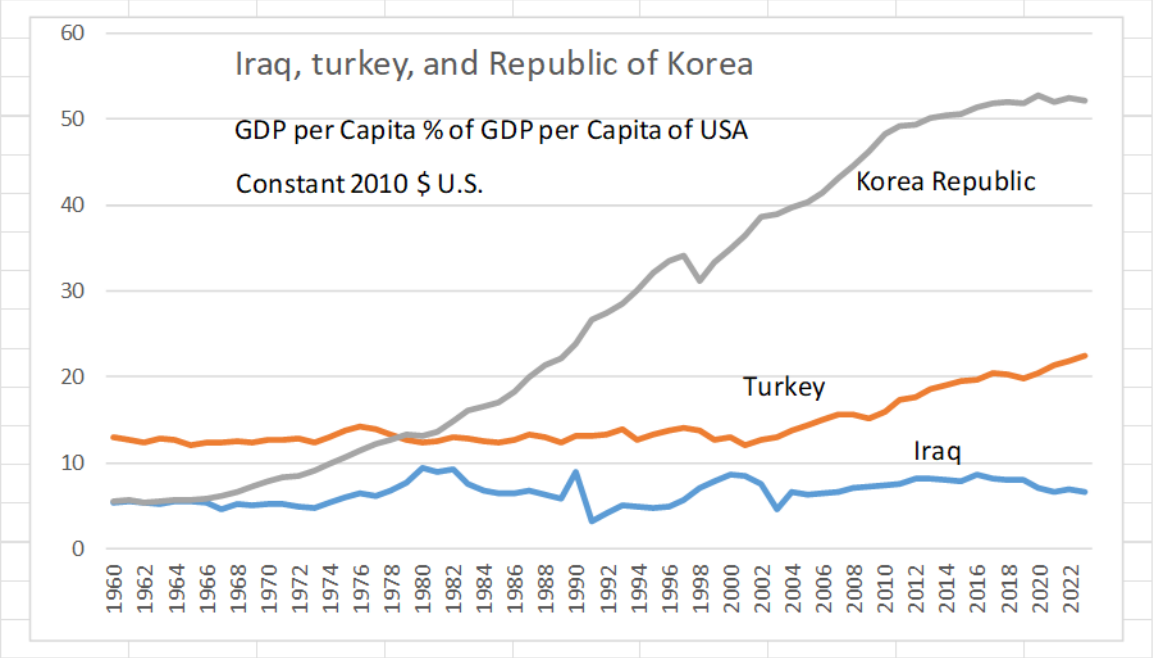
The tradable sector, including non- oil extractive industries, agriculture, and manufacturing, is widely considered the engine for economic transformation through diversification. This is primarily because these industries produce goods and services that can be traded internationally, generating foreign exchange and driving productivity gains through global competition. Manufacturing is often the cornerstone of the tradable sector, processing raw materials into intermediate and finished goods, these industries benefit from exposure to international competition, which spurs innovation and efficiency.

Growth in the tradable sector creates demand for inputs and services from local non-tradable sectors, leading to job creation and expansion throughout the economy. Diversification into a variety of non- oil tradable sectors reduces an economy' s vulnerability to price fluctuations in single commodities like oil.

Accelerated growth of non- oil tradable goods and services facilitates a deep transformation by introducing new sources of national income, enhancing economic resilience to oil price volatility, and creating sustainable employment opportunities. The non- oil sectors often have employment multipliers than the capital-intensive oil industry. Investing in non- oil tradable sectors can lead to broad – based job growth and better distribution of wealth throughout the population.

Iraq's income gap persists despite oil wealth due to diversion of resources from productive investment. Oil wealth has often been channeled into consumption expenditure, this has contributed to a reliance on imports, as the country lacks sufficient commodity production capabilities.

Catch -up Comparison and the Flattering Iraqi Path



Source of Data: world Bank Open Data

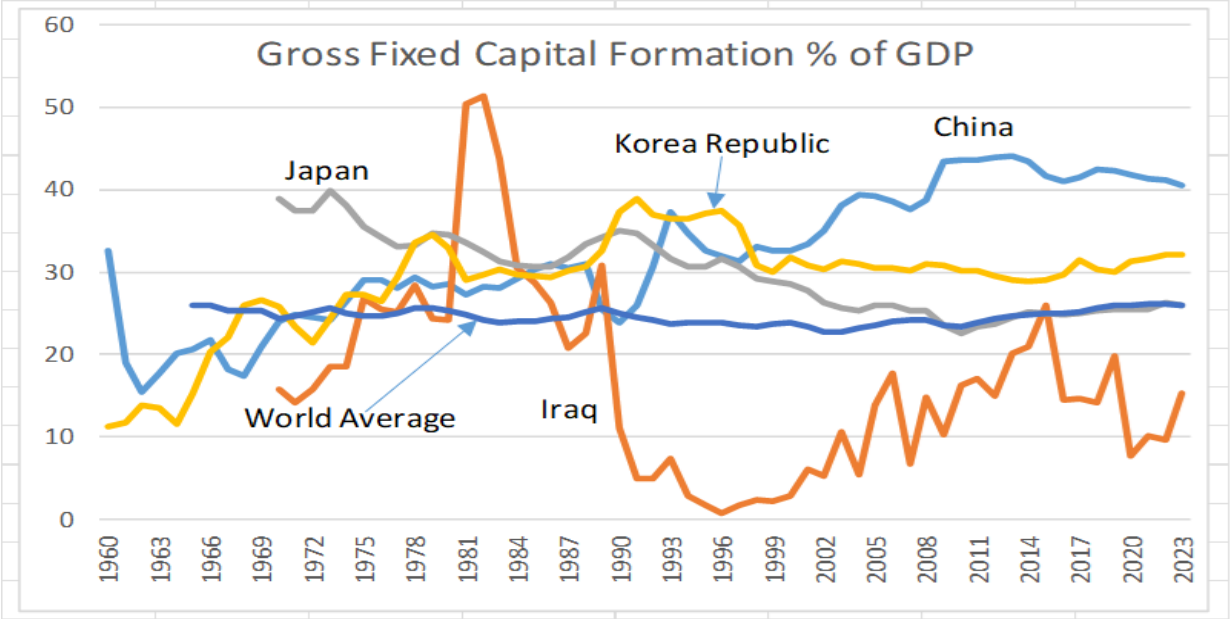
The graph above demonstrates the low level of capital formation compared to the world average and selected countries. Also, the share of agriculture and manufacturing in Iraq's capital formation is insignificant, which contributes to the economy's structural imbalance. The oil sector dominates both Iraq's GDP and its capital formation as demonstrated by the graph below.

The presence of international oil companies doesn't contribute to capital formation and that their costs are a deferred payment by the central budget. The capital and operating expenses paid through the budget indicate the necessity of implementing a transparent cost – control system and verification process.

Capital accumulation in Iraq have slowed to an average lower than depreciation. IMF - projected fixed capital formation rate of 11.6 % of GDP for the next five years in Iraq might barely cover depreciation, leading to near – zero or negative net investment. This situation means that the country is primarily replacing existing worn- out capital rather than adding significantly new capital stock, which constrains future economic growth. Iraq's non -oil economic growth is constrained by limited investment. The projected fixed capital formation is low considering the needs of oil sector. The need for higher and more efficient investment should be a key consideration for Iraqi authorities and political leadership.

Gross Fixed capital formation in Iraq

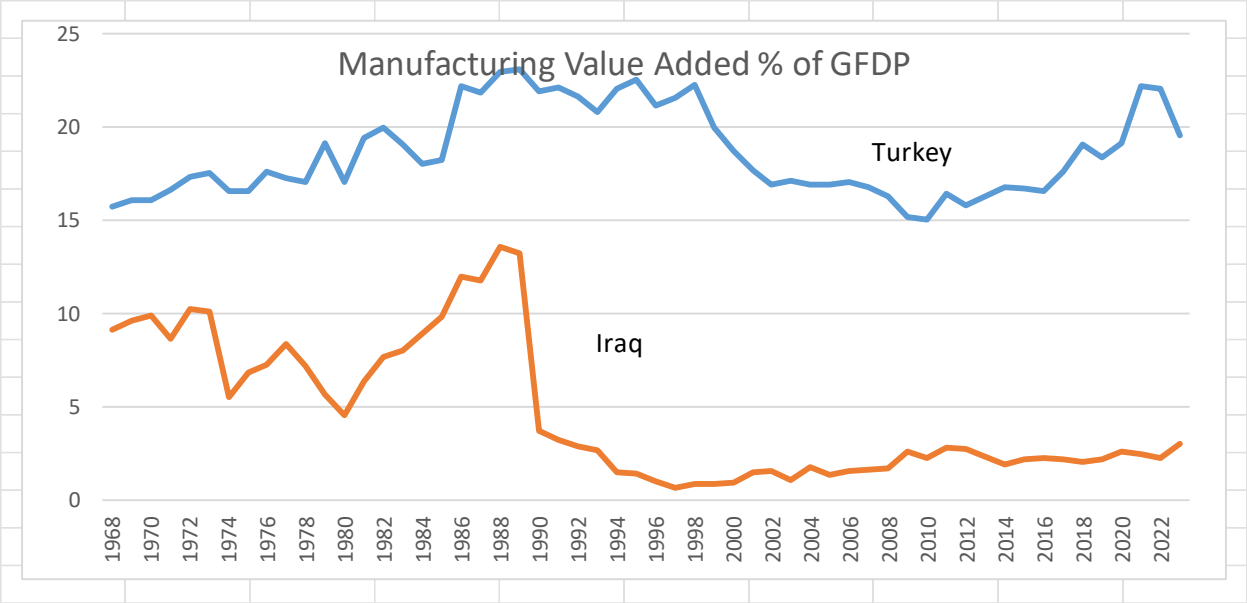
Compared with world average and selected countries



Source of Data: Worl Bank Open Data

In developing countries, labor productivity in the services sector is significantly lower than in manufacturing. Therefore, a rapid shift to services deprives developing economies of a major opportunity for productivity growth which is the source of economic growth. Historically, economic development followed a structural transformation path from agriculture to industry, and finally to a service- oriented economy at high – income level. When a developing economy allocates more labor to services at a low or middle – income level, it is generally referred as “premature deindustrialization’. This phenomenon is considered problematic because it bypasses a full- fledged industrialization phase that has historically been crucial for sustained economic growth and development. Premature deindustrialization occurs when the share of manufacturing in a country’s employment and output begins to decline at a much lower level of per capita income and at a lower peak levels compared to the early industrialized nation.

Deindustrialization of Iraq



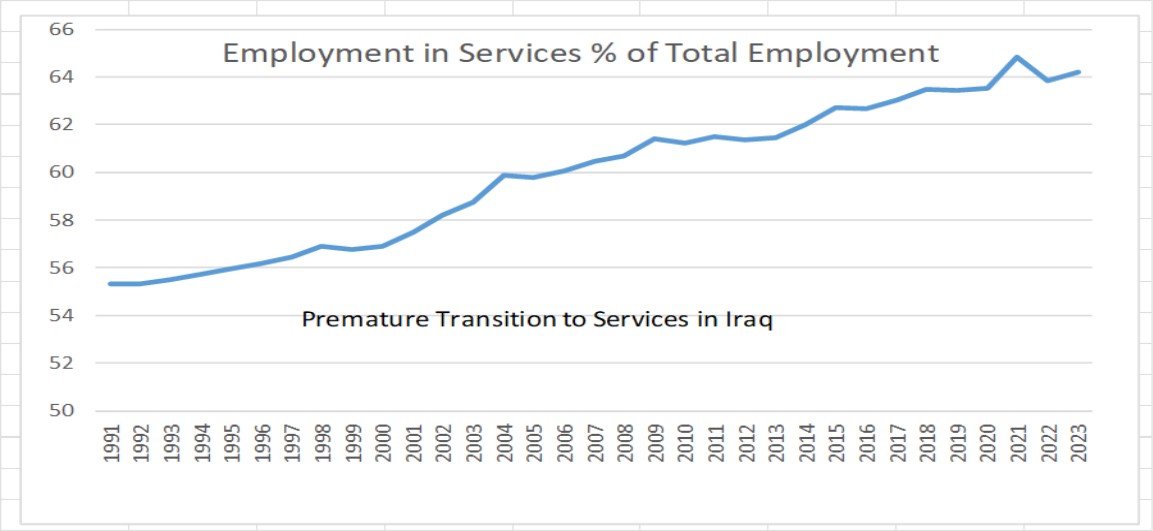
Source of Data: World Bank Open Data.

The growth episodes approach is a framework in economics that views national economic development not as a smooth, long-term process, but as a series of discrete, abrupt shifts between periods of high growth (accelerations) and low or negative growth (decelerations or collapses). This approach contrasts with traditional models that focus on steady-state or long-run average growth rates. A research work conducted by (Bartak, Jakub, et al) investigated the relationship between growth and volatility on a sample of 182 countries over the period 1951- 2017, used the growth episodes approach to find the link between growth and volatility. They found evidence of negative relationship between volatility and growth, as well as that physical and human capital correspond to episodes of stable growth, which emphasizes a strong positive correlation between output growth and the acquisition of both human capital and physical capital.

It is noteworthy that empirical analysis confirms a positive relationship between openness to trade and economic growth and a negative one between openness and growth stability. High income volatility growth negatively impact long -term growth by hindering public and private capital formation, and creating “stop- and – go” cycles of investment. Growth volatility leading to delays or cancellations of crucial investments. Additionally, volatile returns compound to a lower average growth over time, as losses have a greater impact than gains in a volatile environment. Also, Multiple studies have found a significant negative relationship between economic volatility and growth, particularly in oil-dependent developing countries like Iraq.

Adopting countercyclical management of public finance for Iraq to overcome its oil dependent economy's inherent volatility is needed, but it may not be achievable. Reliance on counter- cyclical fiscal management is proving difficult to implement and potentially too late for Iraq's immediate fiscal challenges. The pressing need is for long- posted economic transformation to address structural imbalances. Diverting public spending towards capital formation in key sectors is necessary to build physical foundation for a diversified economy.

Premature transition to services in Iraq



Source of data: world Bank Open Data.

Real effective Exchange Rate and Inflation

Dutch disease refers to an economic phenomenon where a country's currency becomes overvalued, harming its other exports sectors. It is an example of resource curse, in which a country's economy underperforms despite having substantial natural resources, the situation often arises as a result of huge oil revenues. A strong national currency hurting exports of non- oil industries by making their goods more expensive abroad, while simultaneously making imports cheaper for domestic consumers, which can disadvantage local production. When a country has a significantly valuable natural resource, it can be tempting for its leaders to go enthusiastically into developing that commodity at the expense of other industries.

The exchange rate appreciation is the difference between domestic and foreign inflation, which is fundamentally related to the purchasing power parity (PPP) hypothesis. This concept is crucial for understanding the Real Effective exchange Rate, and is particularly relevant in Iraq due to its fixed exchange rate system. An appreciation (rising index value) of the real effective exchange rate is an indicator of a deterioration of international price competitiveness. Therefore, it is better for Iraq to have a lower inflation rate than the international rate. The optimal inflation rate in Iraq cannot be independent of exchange rate stability in real terms because of the strong, bidirectional link between them, particularly in an oil dependent t economy. For the purpose of maintaining low inflation, the aggregate demand induced by government expenditure should be managed to align with the economy's potential output.

While the conventional economic theory posits a negative relationship between real effective exchange rate and the growth of GDP and exports, various factors can lead to reversal effects or modify this relationship. For this paper, the effects of the real effective exchange rate on the growth of GDP and exports were analyzed, and the correlation coefficients are as follows:

Correlation coefficients, No. of countries is 83, for the period 1979- 2024

	GDP Growth Rate	Exports Growth Rates
Real Effective Exchange Rate	-0.0788	-0.03121
Lagged Real Effective Exchange Rate	-0.08166	-0.01351

Source of Data: World Bank Open Data.

The very low correlation coefficients suggest a negligible linear relationship between REER and the growth of GDP and exports in overall sample. In essence, while the direct effect on price competitiveness is negative, complex indirect and macroeconomic factors often interact to produce outcomes that deviate from the standard model, as explained below.

If a country's exports rely heavily on imported intermediate goods, a stronger REER makes these imports cheaper, potentially boosting export competitiveness and GDP growth. Also, an appreciation often results from an improvement in the terms of trade, this can increase national income and purchasing power, offsetting the negative effects of REER on competitiveness. Robust foreign investment stimulates GDP growth, and central banks might manage the appreciation to control inflation. Economies that are

diversified, technologically advanced, and less reliant on price competitiveness are better positioned to withstand or even benefit from stronger currency.

While the exact “optimal’ rate varies by country and study, a consensus has formed that there is a critical threshold beyond which inflation severely harms growth. In developing economies, research indicates a non- linear relationship between inflation and growth, where the effect on growth is generally not significantly negative. In this paper, a simple cross – country analysis of the relation between inflation and GDP growth.
Over the period 1960- 2023 the relationship between the inflation rates and the GDP growth rates is analyzed.
The analysis covers all countries for which data on inflation rates and GDP growth rates are available for the period 1960 – 2024. The results as follows: The correlation coefficient for the overall sample (152 countries) is (-0.184) indicates a negative relationship between inflation and GDP growth.
The correlation for the developing economies, low and middle– income (103 countries) is (-0.159). For the developing economies (67 countries) with inflation rates of 8% or less, the correlation is (-0.041).

The correlation for the countries with inflation rates of 4% or less is (-0.286), and for the developing countries of the sample is (-0.058). For the low and middle- income economies (74 countries) with inflation rates of 8% or less over the period 1995- 2024, the correlation is 0.019.
Many studies employing quadratic regression models supposing that inflation has different effects at various level. Using the same sample of countries regression equations estimated, the results as follows:
GDP Growth = A+ B Ln(Inflation) + C (Ln Inflation)^2
Overall countries:
GDP Growth= 5.778 -0.433 Ln (Inflation)+ 0.0407 (Ln Inflation -square)

Overall Countries

predictor	Coefficients	S-E	T -stat	P- Value
A	5. 778	0.4532	12.749	0.00
Inflation	-0.433	0.1895	-2.399	0.0177
Inflation - Square	0.04069	0.0179	2.273	0.0244

R- square = 0.09; R- Square adjusted = 0. 07; F(2, 148) =7.06, P= 0.013.

Developing countries:

GDP Growth= 5.664 – 0.4643Ln (inflation) +0.04356(Ln Inflation- Square)

Developing Countries

predictor	Coefficients	S-E	T -stat	P- Value
A	5. 864	0.5446	10.767	0.00
Inflation	-0.4643	0.2144	-2.1655	0.0327
Inflation - Square	0.04356	0.02099	2.075	0.0405

R- square = 0.08; R- Square adjusted = 0. 07; F(2, 99)=4.53, P= 0.013.

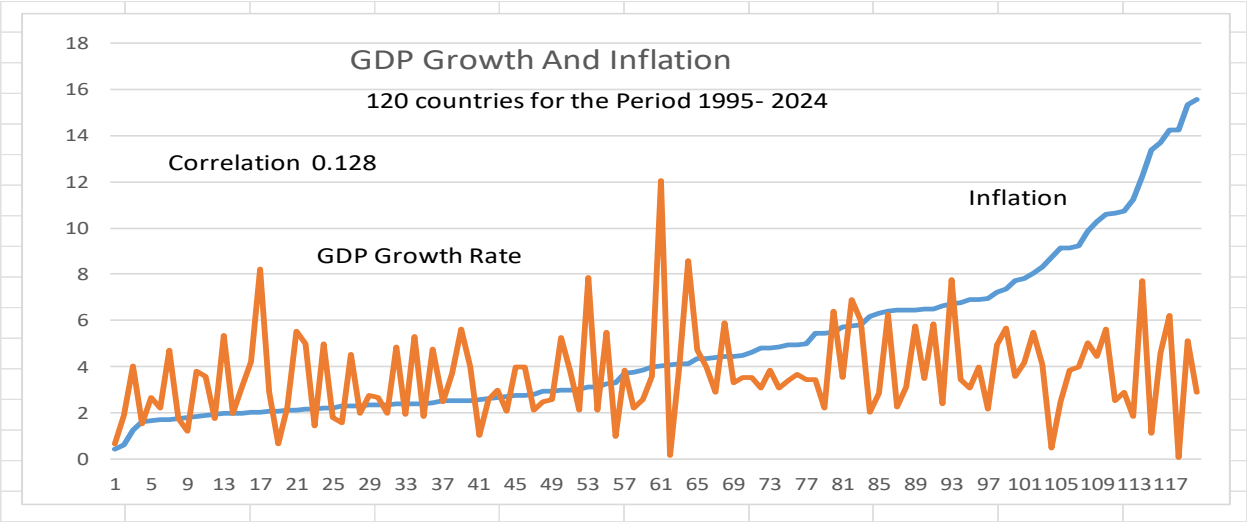
The regression equation for the developing countries of inflation rates 8% or less, indicated that there was a very weak collective non- significant effect between the (Ln inflation), (ln inflation – squared) and the GDP growth, R- squared = 0, and R- Squared adjusted= -0.01.

The above correlations and regressions were calculated between the average rate of inflation and the average rate of GDP growth for the whole period, i.e. the number of observations is the number of countries. Also, the correlation between annual GDP growth rates and the annual inflation rates is calculated, for overall countries, which is (-0.114), this finding aligns with the results of the analysis mentioned above.

On country level there is a positive correlation (0.238) between inflation rate and GDP growth in Korea republic, while in India is (-0.045). Determining the true impact requires more sophisticated economic modeling and analysis to isolate which variable is influencing the other, or both being influenced by a third factor.

The relationship between inflation and GDP growth is complex, and it is generally considered unsound policy to rely on high inflation as a driver of economic growth. While a low, stable rate of inflation can be beneficial, high or unpredictable inflation becomes detrimental to long- term economic expansion.

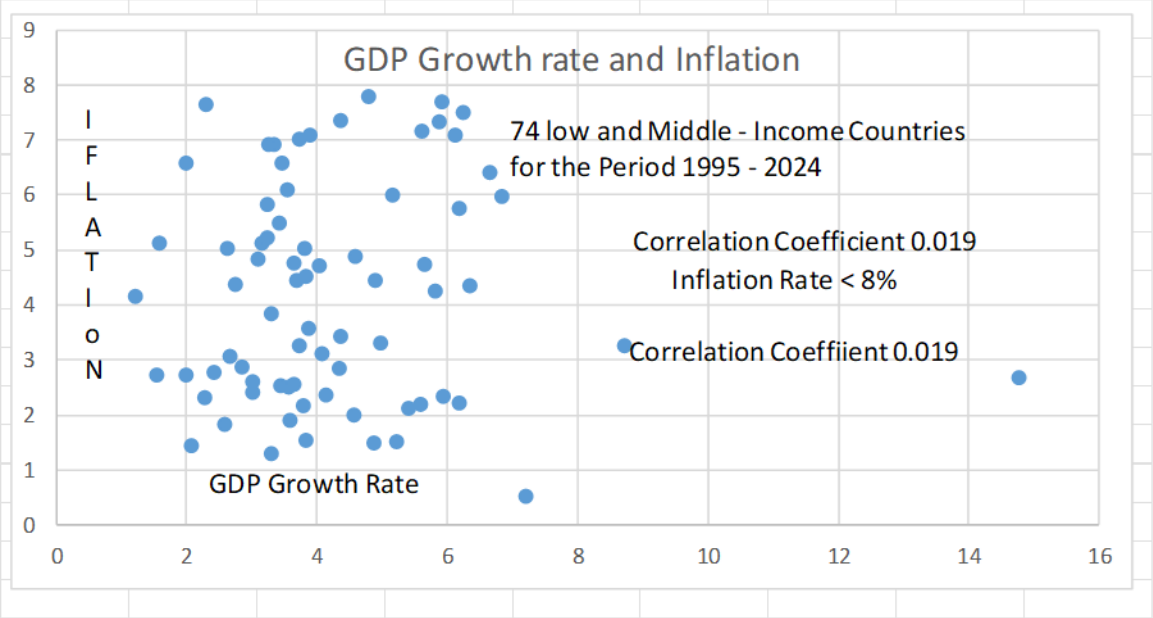
GDP Growth and Inflation: A Cross – Country Analysis



Source of Data: World Bank Open Data.

In macroeconomic theory and empirical evidence, causality is generally considered to run from GDP per capita Growth to inflation, especially when an economy grows rapidly. This is often described as demand pull inflation. As an economy grows and approaches full employment, demand for goods and services typically increases. If demand outpaces the available supply, producers can raise prices, leading to inflation. A tight labor market during high growth can also lead to higher wages, which businesses may pass on to consumers as higher prices. The reverse causality is more complex and debated. A small stable amount of inflation is often considered beneficial and is associated with normal economic growth. High or volatile inflation has a negative impact on economic growth in the long run.

GDP Growth and Inflation: Middle- income Countries



Source of Data: World Bank Open Data.

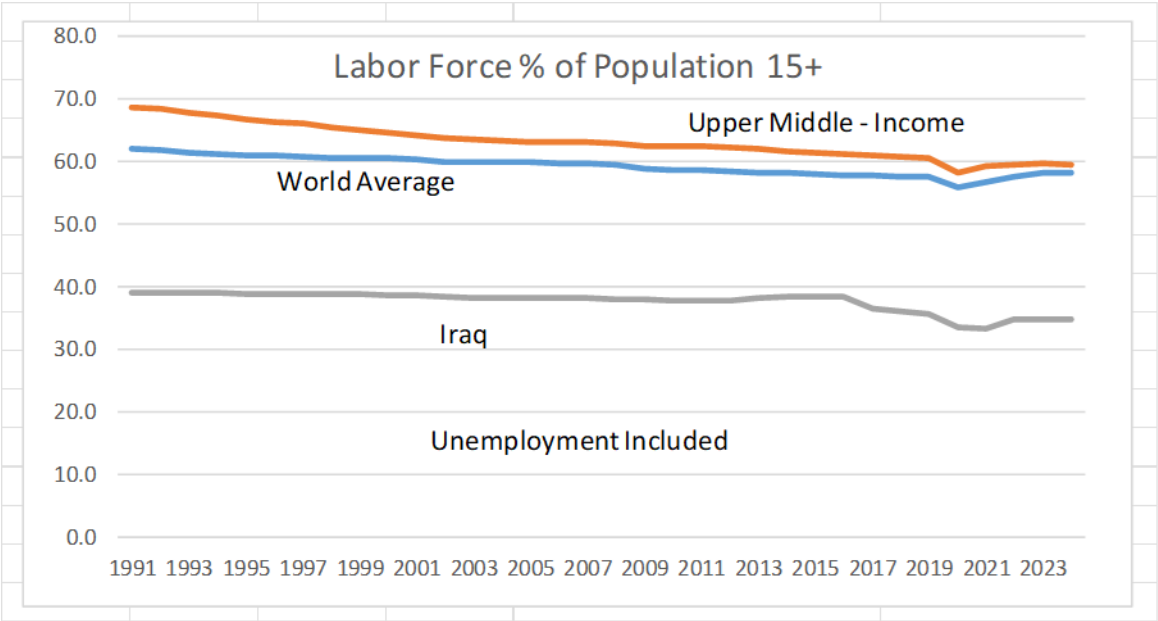
Unemployment, Employment, and Productivity: A comparative Analysis

In the short run, the actual level of output (GDP) and, consequently, the level of employment, is primarily driven by the aggregate demand of gods and services in the economy. The potential output represents the maximum sustainable of what an economy can produce when it is operating at full capacity, utilizing all available resources (labor, capital, technology) efficiently without generating inflationary pressure. If aggregate demand is insufficient, actual output falls below potential level, leading to unemployment. The economy cannot sustainably produce beyond its potential level.

If demand pushes the economy to operate above capacity in the short term, this leads to inflation rather than significant increases in employment. Demand constraints dictate employment levels below full employment in many developed countries. Supply – side constraint in Iraq prevents employment growth from reaching its full potential, due to insufficient productive capacities in many sectors. In Iraq, structural imbalances, as non-oil economy dominated by services, lead to high unemployment, particularly among youth and women, and limit the economy's ability to absorb the growing working- age population.

Economic growth leads to a growing demand for labor, a relationship quantified by employment elasticity, which measures the percentage change in employment for every one percent change in GDP.

Labor Force Participation in Iraq



Source of Data: World Bank Open Data.

The elasticities vary significantly from country to country, and over time, due to differences in economic structure, technological advancement, and labor market policies and labor market characteristics and policies. Developed countries tend to have higher employment elasticities than developing countries. Agriculture generally has very low, or even negative, employment elasticities, as growth in this sector is often driven by productivity improvements that reduce the need for manual labor, encouraging a shift to other sectors. Manufacturing and services often exhibit higher elasticities during industrialization and post- industrial development phases.

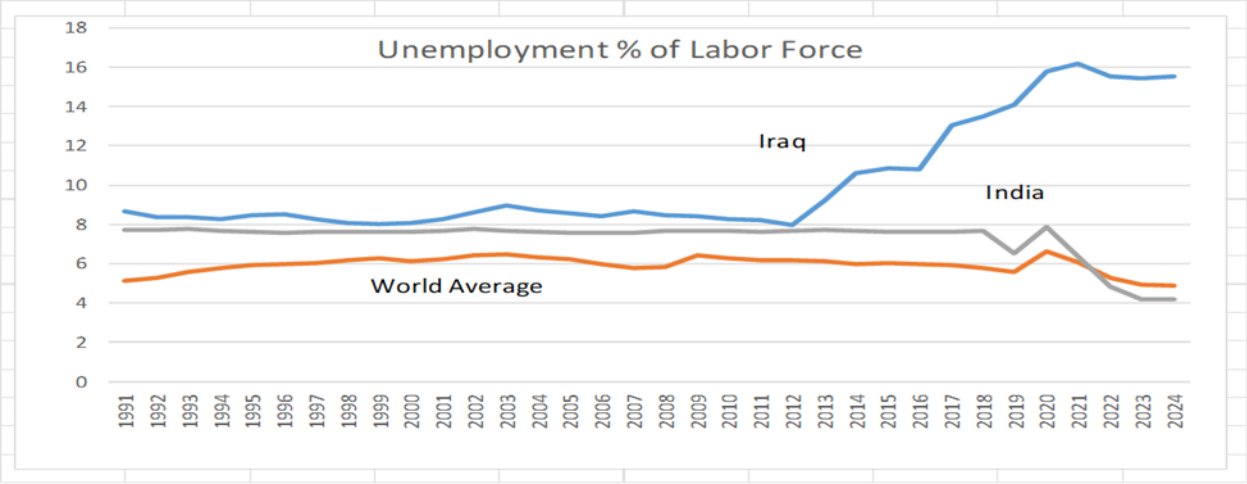
The adoption of capital- intensive technologies can increase productivity and GDP without proportionally increasing the demand for labor, leading to lower employment elasticity. In developing economies labor productivity improvements might have welfare implications through increases in labor income driven by reductions in informal employment and small-scale traditional activities.

The effect of economic growth on job creation has been a prominent topic in macroeconomics. It is particularly important in Iraq When we observe unemployment reaching dangerous level, it is as if income generation have become detached from employment.

As the oil sector is capital intensive and generate limited employment. To sustain full employment in Iraq, the rate of non -oil GDP growth must at least equal the sum of the labor force growth rate and the labor productivity growth rate. This is a fundamental concept in macroeconomics related to the potential or long- term sustainable growth of an economy. Employment in agriculture is generally decreasing globally as a share of total employment, and labor is typically absorbed by the industry and services sectors as economies develop. This phenomenon is a key part of the structural transformation of an economy. Iraq's service sector is disproportionately large and that industry should therefore become the main employment sector in Iraq.

The Iraqi economy struggles with low labor force participation, the rate around 38% in 2024, driven primarily by the, organizational and technological, underdevelopment of non-oil activities, exceptionally low participation of women, skill mismatch, and culture. Also, high unemployment estimated at 15.52 % in 2024, service - dominated employment, and significant disguised unemployment, particularly in government sector.

High unemployment in Iraq



Source of Data: world bank Open Data.

The ability of a contemporary economy to absorb its labor force at a normal participation rate is not an inherent guarantee but is heavily influenced by a mix of structural, cyclical, and policy – related factors. This means that proactively discovering and implementing strategies to maintain labor absorption is, economically and socially, necessary. This study utilizes a cross – country panel of data for the period 1991- 2023 for the growth of

GDP, productivity, and employment for 127 countries, and the relevant indicators for selected countries and global pattern.

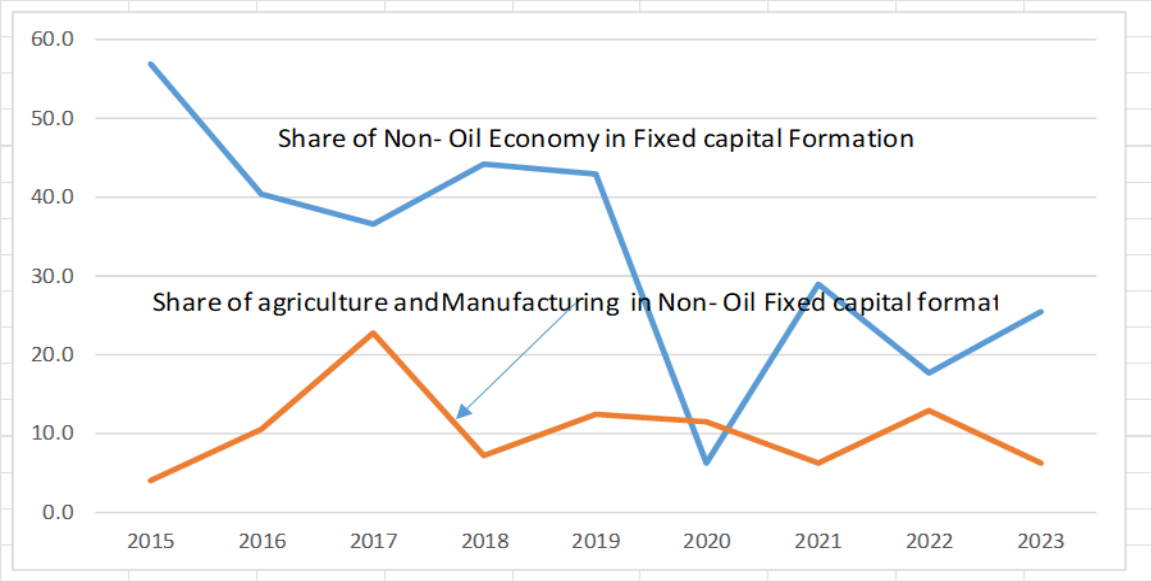
One of the main conclusions that employment growth and productivity growth must be jointly pursued in order to maximize the potential for realizing economic development objectives including high participation rate and full employment. The Iraqi economy, with its high population growth and abundant labor, requires high GDP growth to raise the participation rate and achieve full employment. However, current economic realities in Iraq present significant challenges to achieving this goal, as GDP growth has often been driven by the oil sector, which is not labor- intensive.

Our analysis clarifies the negative correlation between employment elasticity and productivity growth. The strong negative correlation (-0.529) indicates that elasticity across the countries studied, periods of high productivity growth tended to coincide with lower employment. This often reflects capital – intensive growth or technological advancements displace certain types of labor, which is common observation in development economics where structural shifts occur.

The analysis highlights the positive correlation between employment elasticity and population growth. This strong positive correlation (0.641), indicates that countries experiencing higher population growth also tended to have higher employment elasticity. The analysis summarizes how the factor intensities compliant with long – run condition of full employment. Economies with growing populations are managing to generate jobs at a rate that is keeping pace with the new supply of labor, even if those jobs are in sectors with lower productivity growth compared to more capital – intensive industries.
The full employment policy in Iraq should consider the critical structural issue, that the mismatch between wage levels and low productivity in certain industries, coupled with the influx of cheaper foreign goods, is a major impediment to achieving full employment and diversifying the economy. The decline and disappearance of many traditional industries, such as wood products, textiles, and clothing, were significantly driven by a lack of protection, making them vulnerable to competition from mass – produced, cheaper imported goods.

Appendix

Share of non-oil economy in Fixed capital formation: Iraq 2015- 2023



Source of data: Central Statistical organization , Iraq

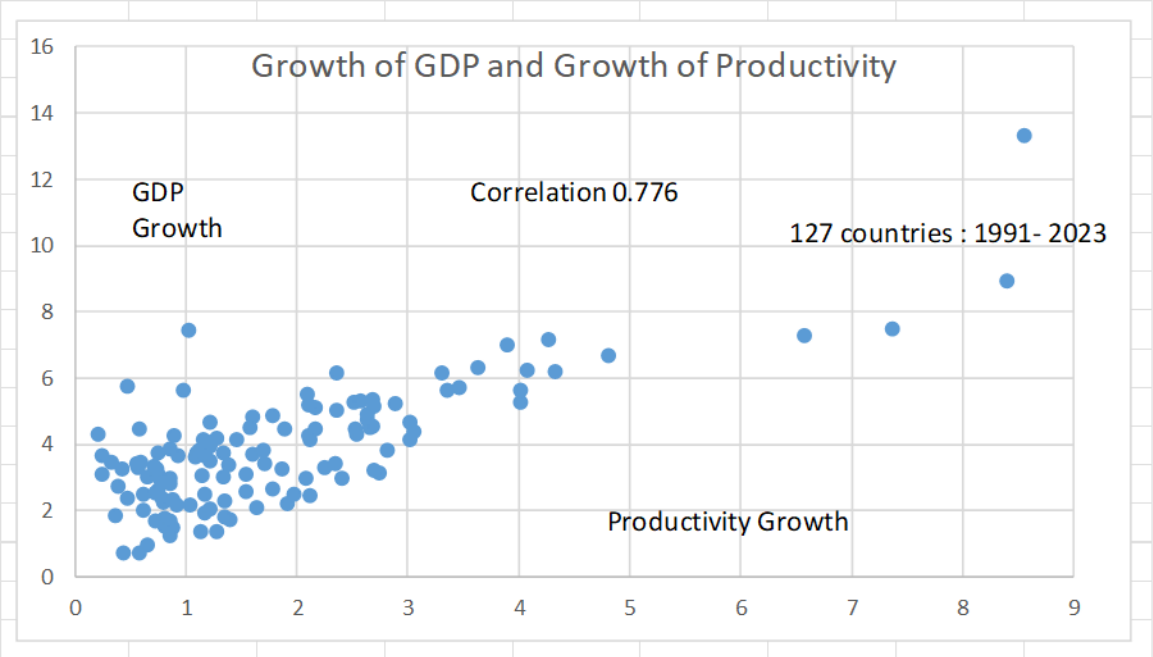
Labor predictivity annual Growth Rate 1991- 2023

	GDP Growth	Productivity Growth	Employment Growth	Employment Elasticity	GDP PC % of Productivity
China	8.94	8.40	0.53	0.06	52.35
Guyana	7.49	7.37	0.12	0.02	30.99
Myanmar	7.28	6.57	0.71	0.10	40.42
Ethiopia	7.17	4.26	2.91	0.41	39.70
Viet Nam	6.69	4.81	1.88	0.28	55.67
Lao PDR	6.32	3.63	2.70	0.43	45.27
India	6.24	4.07	2.17	0.35	39.25
Uganda	6.16	2.36	3.80	0.62	44.05
Mozambique	6.15	3.31	2.85	0.46	42.10
Kuwait	5.75	0.47	5.28	0.92	59.01
Bangladesh	5.71	3.47	2.24	0.39	42.26
Ireland	5.64	3.36	2.28	0.40	50.48
Bhutan	5.62	4.02	1.60	0.28	49.45
Cambodia	5.51	2.09	3.41	0.62	55.78
Rwanda	5.35	2.68	2.66	0.50	34.75
Panama	5.32	2.58	2.74	0.52	45.49
Singapore	5.27	2.52	2.76	0.52	59.09
Burkina Faso	5.26	4.02	1.24	0.24	25.84

	GDP Growth	Productivity Growth	Employment Growth	Employment Elasticity	GDP PC % of Productivity
Ghana	5.22	2.89	2.33	0.45	39.23
Malaysia	5.10	2.17	2.93	0.57	49.05
Turkmenistan	4.90	2.63	2.27	0.46	31.25
Turkiye	4.68	3.01	1.66	0.36	37.76
Uzbekistan	4.55	2.68	1.88	0.41	37.01
Indonesia	4.50	2.66	1.83	0.41	48.61
Korea, Rep.	4.40	3.05	1.35	0.31	55.69
Saudi Arabia	3.38	-1.79	5.17	1.53	46.52
United States	2.58	1.54	1.04	0.40	49.30
Mexico	2.06	-0.12	2.18	1.06	45.08
Japan	0.74	0.58	0.16	0.22	54.13
Low income	3.09	0.25	2.84	0.92	36.79
Lower middle income	5.25	2.95	2.30	0.44	39.09
Middle income	5.01	3.48	1.52	0.30	43.24
Upper middle income	4.91	3.96	0.95	0.19	47.56
High income	2.10	1.29	0.81	0.39	49.23
World	3.27	1.85	1.41	0.43	42.96

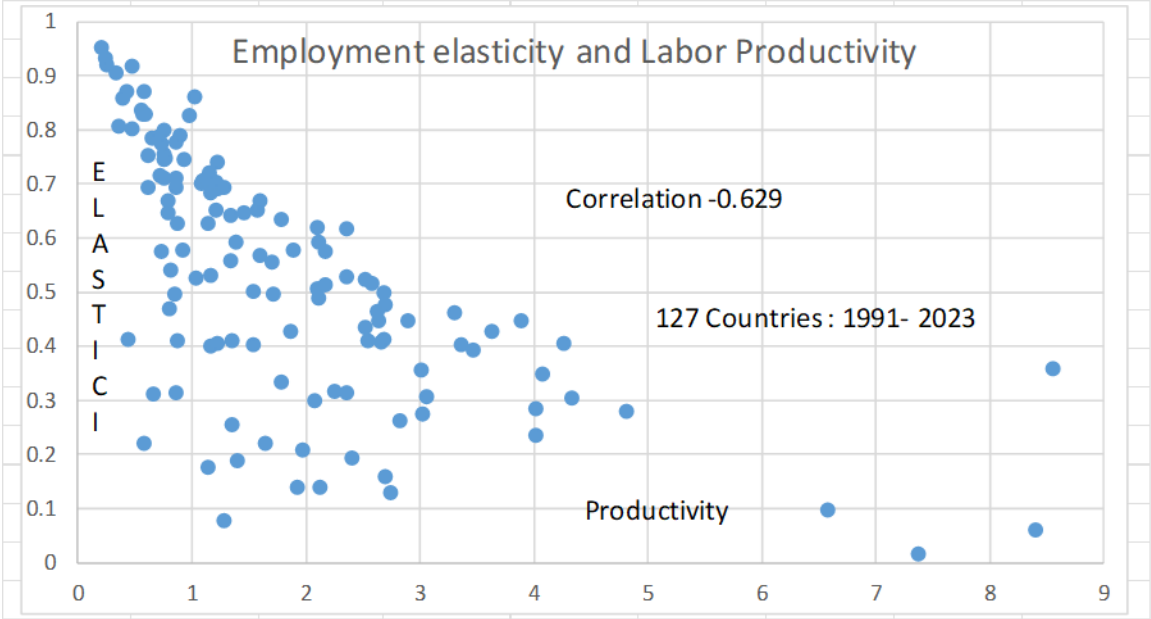
Source of Data: world Bank Open Data , GDP PPP Per Person Employed.

GDP Growth and Productivity Growth



Source of Data: World Bank Open data

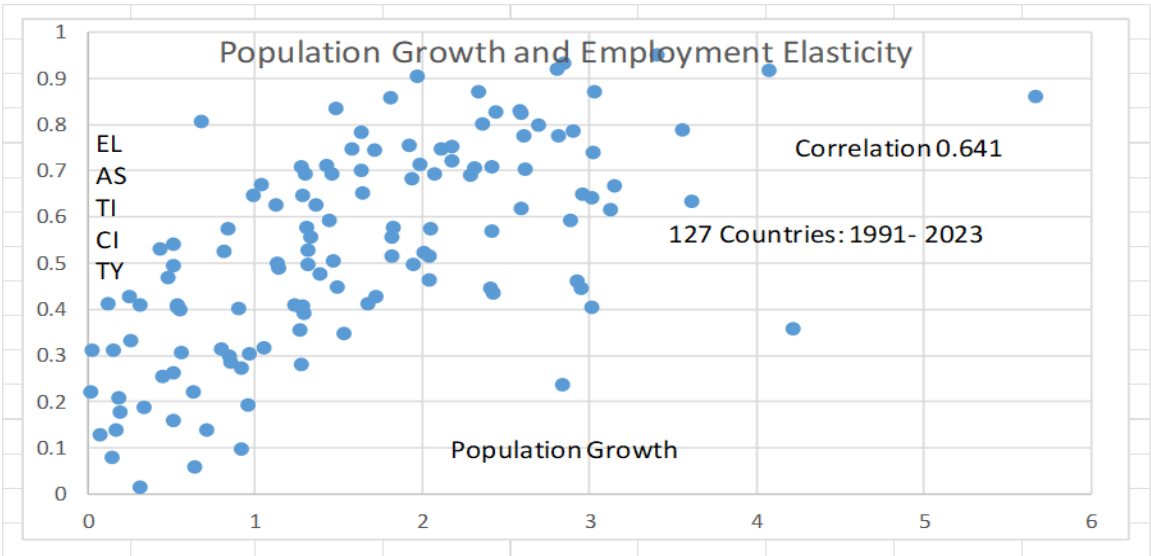
Employment elasticity and Labor Productivity Growth: Cross – Country analysis



Source of Data: World Bank Open Data.

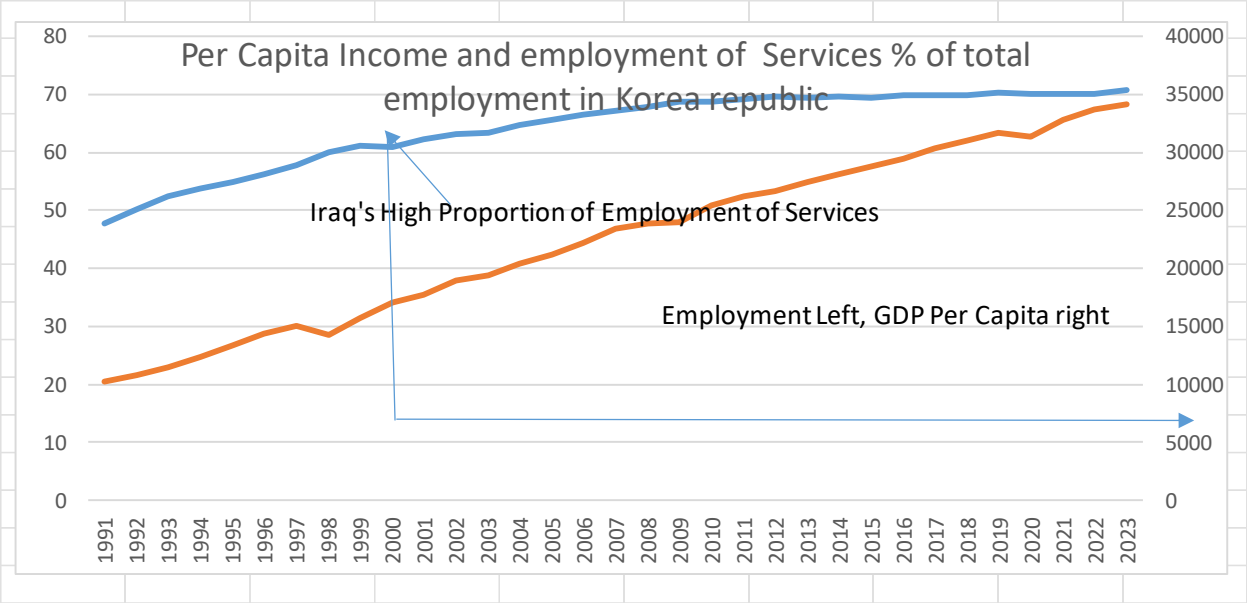
The horizontal axis represents labor productivity growth.

Population Growth and Labor Productivity: cross – country Analysis

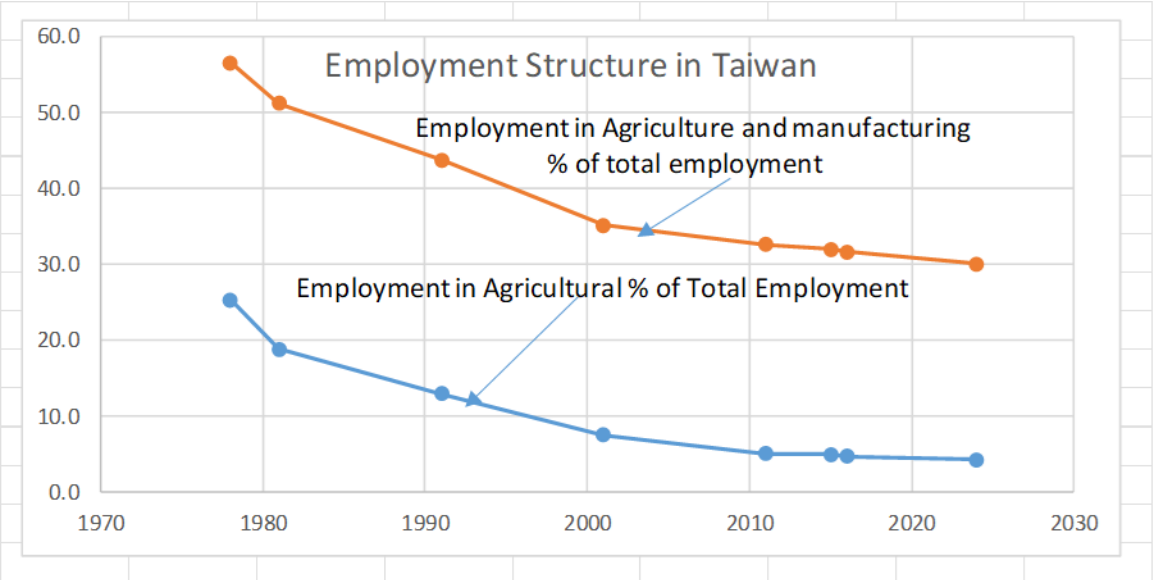


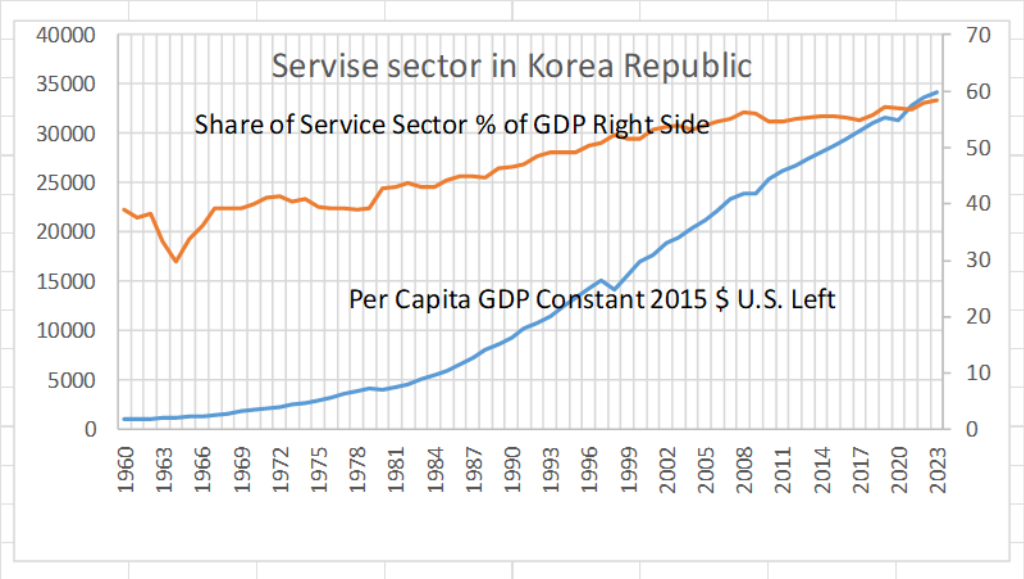
Source of Data: World Bank Open Data;

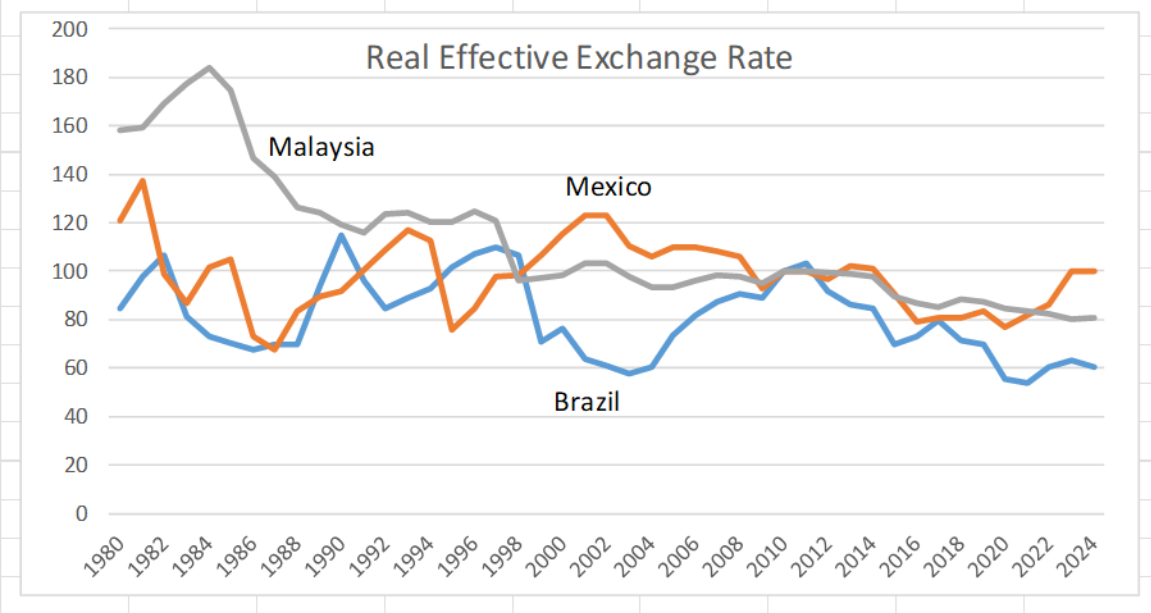
Employment in services % of Total Employment in Iraq

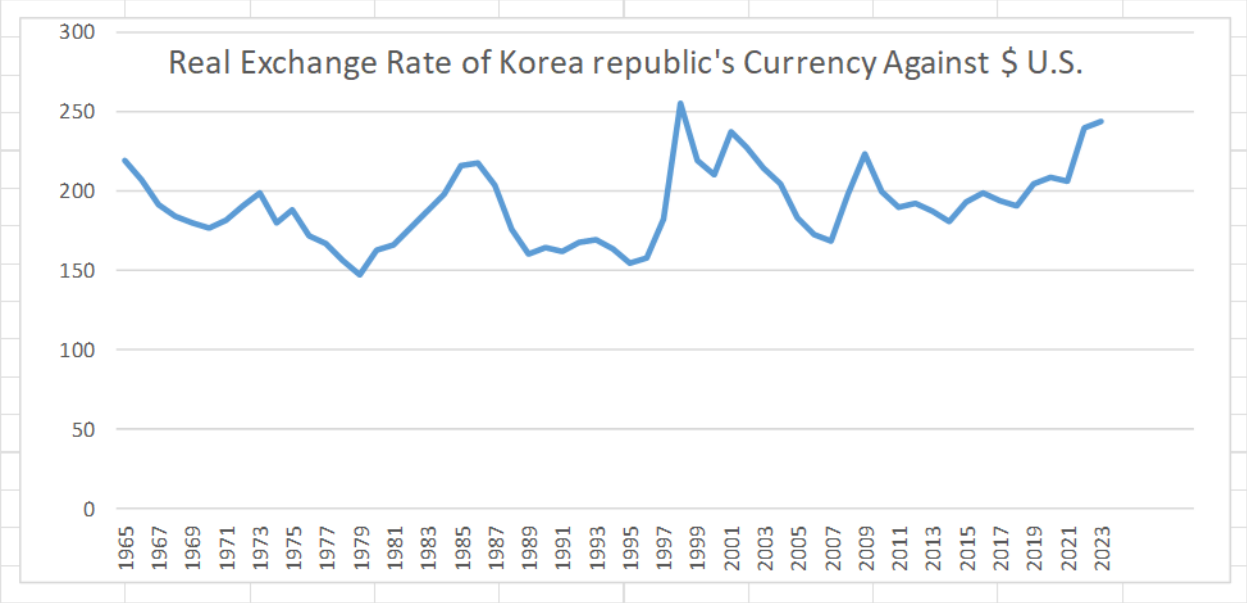


Source of Data: world Bank Open Data.




Servise sector in Korea Republic
Share of Service Sector % of GDP Right Side
Per Capita GDP Constant 2015 $ U.S. Left
40000
35000
30000
25000
20000
15000
10000
5000
0
70
60
50
40
30
20
10
0
1960
1963
1966
1969
1972
1975
1978
1981
1984
1987
1990
1993
1996
1999
2002
2005
2008
2011
2014
2017
2020
2023


Real Effective Exchange Rate
Malaysia
Mexico
Brazil
200
180
160
140
120
100
80
60
40
20
0
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
2018
2020
2022
2024


Real Exchange Rate of Korea republic's Currency Against $ U.S.
300
250
200
150
100
50
0
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
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1993
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1997
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2001
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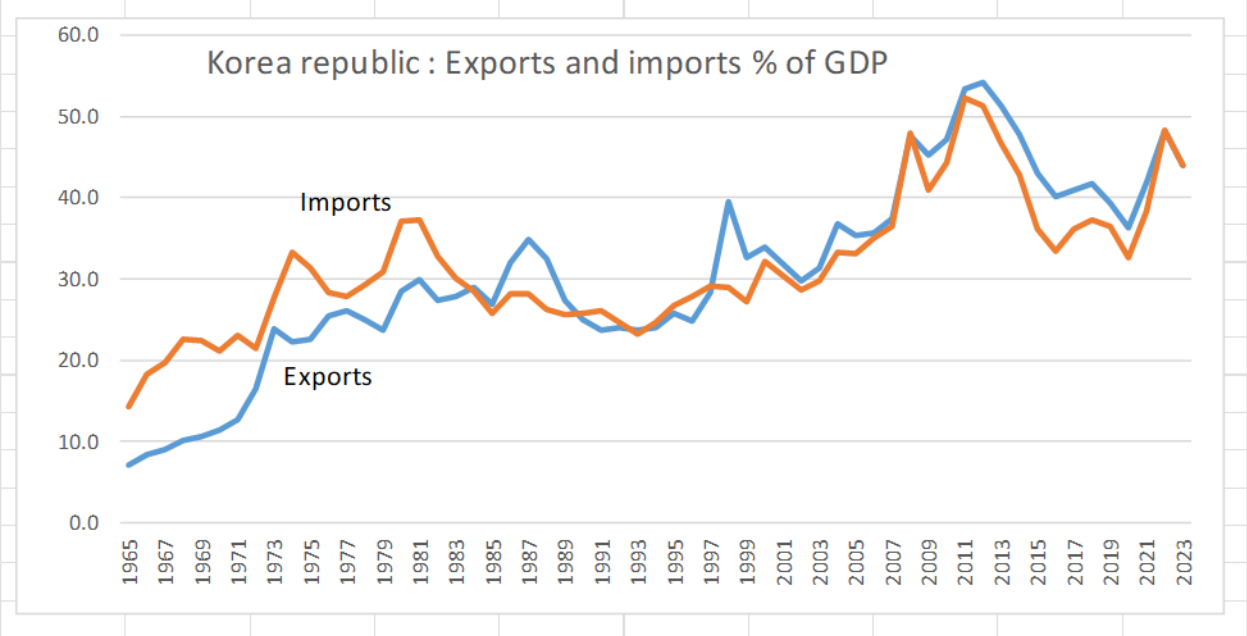
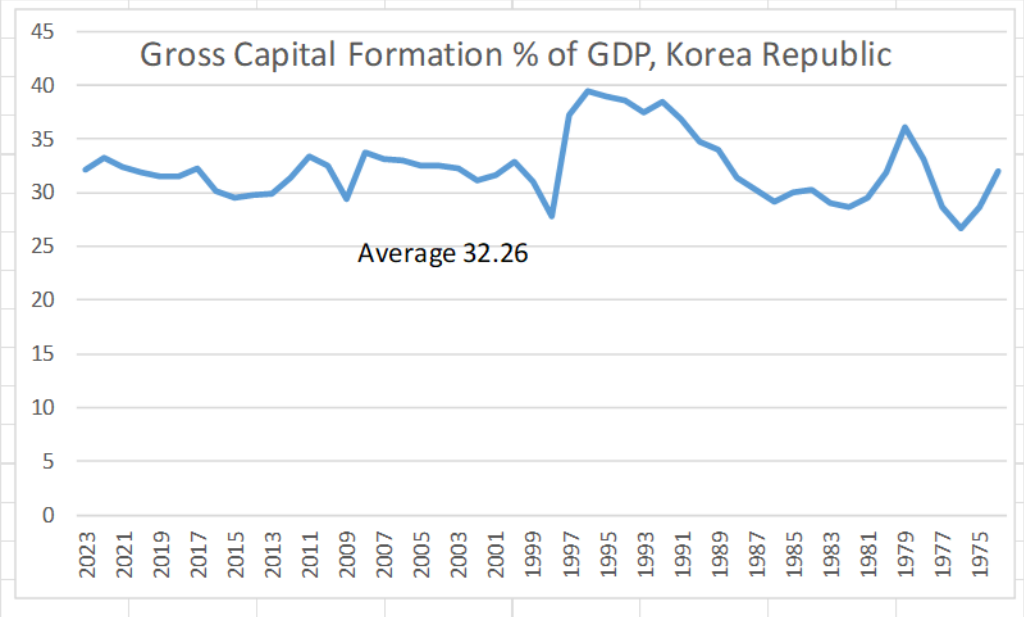
2007
2009
2011
2013
2015
2017
2019
2021
2023


Korea republic : Exports and imports % of GDP
Imports
Exports
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011
2013
2015
2017
2019
2021
2023


Gross Capital Formation % of GDP, Korea Republic
Average 32.26
45
40
35
30
25
20
15
10
5
0
2023
2021
2019
2017
2015
2013
2011
2009
2007
2005
2003
2001
1999
1997
1995
1993
1991
1989
1987
1985
1983
1981
1979
1977
1975

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