https://doi.org/10.54809/jkss.vi2.224

Measuring and Analyzing Selected Determinants of Public Debt in Iraq (2019 2004)

L. Sazan Tahir Saeed

Department of Economics, College of Adminisrtation and Economy, University of Sulaimaniyah

sazan.saeed@univsul.edu.iq

Asst. Prof. Dr. Nyaz Najmalddin Noori

Department of Economics, College of Adminisrtation and Economy, University of Sulaimaniyah

Visiting Researcher at Uppsala University, Department of Economic History

niaz.nury@gmail.com

Abstract

This study examines the measuring and analyzing selected determinants of public debt in Iraq from 2004 to 2019. It first reviews the major events that led to deterioration of the state's capacity in preventing risky borrowings before the fall of the Ba'ath regime. It then turns to the period under study, and applies the Fully Modified OLS (FMOLS) cointegration framework based on data from the central bank of Iraq. The main results show that public debt has been caused by a mixture of factors including a small share of non-oil revenue, increasing operational expenditure at the expense of investment expenditure by the government, and the ISIS attack. It also touches on the link between sectarianism and public debt, and explores the burden of debt services on accumulating public debt. It concludes that there is always a risk of increasing budget deficit; thus, a proper plan for managing public debt is vital to prevent a debt default.

Keywords: determinants of public debt; oil revenue; non-oil revenue; Iraq; FMOLS approach.

Recieved: 21/12/2022
Accepted: 29/1/2023

E-ISSN: 2790525-X
P-ISSN: 27905268

1- Introduction

Public debt is an instrument used to cover budget deficits. It is understood as a set of state obligations to third parties. It can be external, when it is sold to the foreign market, or internal when the debt is issued on the domestic market, regardless of the currency and the creditors' nationality (Lopes da Veiga,2016). Borrowing is also a way to avoid relying on printing money to finance the government's budget deficit (Ahuja, 2010). No less importantly, borrowings might arise as a result of the inability to generate enough domestic savings to carry out productive activities (Ezeabasili et al., 2011).

The slogan for borrowing by the states is mostly to enhance their investment and economic growth so that living standard of their citizens would be increasing (Eke and Akujuobi, 2021). No doubt, loans might not be a threat in themselves if allocated properly by authorities. It is also inevitable during a recession time. Certainly, it is to the benefit of the current generation as it often smooths taxes. Meanwhile, allocating the loan to expand state capacity, whether in the military or managing human and natural resources, paves the way to prevent future generations from bearing the burden. Instead, it might be flourishing their lives (Mankiw, 2016).

Apart from recession, social security programs, supporting small businesses, and college student tuition fees, as in the US, might make states reluctant to prevent large amounts of borrowing (Driessen, 2019). But it is a matter of much controversy with regard to satisfactory levels of debt (Lopes da Veiga, 2016). Some scholars do not support levels of debt beyond 90 percent of GDP.

Iraq has been in a debt trap for decades. While enjoying a huge amount of natural and human resources, the state has not been able to avoid risky borrowings. One reason for this is that the country cannot be met by current revenues from its considerable hydrocarbon resources alone, and thus; it needs to resort to debt to augment funding for this reconstruction. For example, over three million houses are needed to compensate for the houses destroyed during the war or built unlawfully since then (Zawya, 2021).

Besides paying its employees' salaries regularly, in which firing them is almost unacceptable as public jobs are seen as granted, the government is obligated to spend on infrastructure (such as schools, energy, health, etc), internal security (police, paramilitary, etc.), let military expenditures alone, especially when one million people are annually adding to the current pool of population to reach almost 40 million people in recent years. These expenditures are supposed to be paid through taxes and non-tax revenues. Otherwise, it should be filled out with borrowing. Some scholars see the level of public debt in the Middle East, including Iraq, in the last decade or so as weakness of, even a burden on, the state (Murray, 2008), and there are several reasons for accumulating further. With the current trend, the government has no sufficient capacity to pay back the borrowed money. After all, as in the Kurdish saying, "borrowing can get old but never expires".

Here lies the problem that this study explores: different sources of increasing borrowing are not consistent with one source of paying back the loans, which is the oil bonanza. Accordingly, one shall ask: What are the reasons for returning to the same path of the debt crisis as seen during the 1980s and 1990s? In other words, what are the major determinants of public debt during 2005-2019 in Iraq?

Hence, this study address two major questions pertinent to the measuring and analyzing selected determinants of public debt in Iraq, which are the following:

1- How did contribute the oil revenue to determine the public debt in Iraq from 2004 to 2019?

2- How did contribute the non-oil revenue to determine of public debt in Iraq from 2004 to 2019?

3- What were the participation of the exchange rate alongside the low investment expenditure versus high operational expenditure in the heightening the public debt during (2004-2019)?

Based on these two questions, the following hypotheses have been empirically tested:

Ha1: Oil revenue, the investment expenditure, and the exchange rates have negatively determined the public debt in Iraq.

Ha2: Non-oil revenue and the operational expenditure have positively determined the public debt in Iraq.

The main objective of this study is to narrate the story of borrowing in the last decade and a half from a different perspective alongside investigating the determinants of public debt in Iraq. To achieve this objective, the present paper applies the Fully Modified OLS (FMOLS) cointegration framework based on time series data from the central bank of Iraq.

The importance of the study comes from the fact that understanding the causes will not only allows us to explore the tensions the country confronts due to high levels of public debt, but also allows us to show which factor can contribute more, and how to manage debt in the foreseeable future. As we shall see, the public debt crisis is new in comparison to the history of modern Iraq, but it does not start from the fall of Saddam's regime. This is also be paid attention, too.

The rest of the paper is structured into five sections. Section 2 includes relevant experimental research literature that has used different variables and models determining debt. Section 3 provides a historical view of the determinants of public debt in Iraq alongside measuring, presenting, and analyzing the data used on the Iraqi public debt. The methodology employed, the model specifications, the methods of data collection, the model (tests) and the discussion of results are provided in Section 4. Conclusions and policy implementations are presented in the last section.

2- Liter ature review

Several reasons for the state's debt are explored by scholars and economists, some are justified economically, and others are political.

At the first glance, the largest public debts are incurred to meet emergencies, such as due to earth quakes when creating new taxes or increased taxes is difficult (Fatás et. al., 2020). But the story has more elements than emergencies. In the last two decades or so, studies have looked at certain variables such as oil price shocks (Iyoha, 2000), high volumes of imports and their ratio to GDP and high ratio of debt service payments (Tiruneh, 2004), war (Elmendorf and Mankiw 1998), and the sub-prime mortgage crisis, a high level of consumption (Hameed,et.al. 2020), and investment bank failures (Xu and Moussawi, 2016).

Many low-income countries are facing a lack of saving-investment, so they need to borrow, either internally or externally (Kasidi and Said, 2013). Furthermore, Gohar et al. (2012) emphases on the fact that low income is a major cause of low savings and investment, motivates borrowing behavior to prevent the living standard from downturn, and supports economic growth (Ishan, 2006, 2014).

Tiruneh (2004) explains the high level of indebtedness by less developed countries (LDCs) during the 1980s to 1990s is a result of high capital flight, high ratio of debt service payments, high imports and its ratio to GDP, slow growth rate, and low levels of income per capita. Jordan's dependence on both external and internal loans is owing to several reasons, containing wars, the lack of natural resources, and the misuse of available ones (Alzoubi, et. al, 2020). Like other developing countries, Jordan suffers from structural imbalances due to the shortage of economic and financial sources, which brought about a continual and persistent deficit in the trade balance, leading to hiking public debt. In addition, the low rate of withholding tax, which ranges between 20-25 precents of earnings, a low percentage as compared to developed countries, contribute to heighten public debt (Al Khatib and Shamiyeh, 2016).

In Egypt, the rate of growth of the public debt was more than the growth rate of the overall economy over the period 1985-2006. Certainly, the economic reform and structural adjustment program (ERSAP), which was implemented in 1991 on, was one of the reasons behind the accumulation of public debt. After 2000, the high public spending on inefficient sectors, the increase in the costs of imported materials along with the high subsidies and the wages of employees led to the rapid growth of the public debt (El-Mahdy & Torayeh, 2009). Debt has eventually become one of the fears for political instability in recent times. Mohamed (2018) illustrates that the public debt will continue to increase in Egypt in the future, at least due to an increase in living standards, though with the recent economic reform that Egypt Launched in 2016, the government introduced new taxes such as the Value-added tax (VAT), and decreased energy subsidies, all with the aim of lowering the budget deficit.

In a group of 52 African economies, which data from 1950 to 2012 shown, the main reason for public debt is the failure of tax revenues to cover projected expenditures (Lopes da Veiga et.al., 2016), Shabbir (2013) illustrates that countries borrow for two broad categories; macroeconomic reasons to either finance higher consumption or higher investment and to circumvent hard budget constraint. Easy monetary and fiscal policies during 2008-2009 when the US state spent over $10 trillion, partially through borrowing, might have helped the US economy recover faster than otherwise would be the case (Xu and Moussawi, 2016).

More interestingly, according to the political business cycle theory, public expenditures increase during the election period. The government with the vote worry increases public investments, but prefers to finance these public expenditures with internal borrowing instead of a tax. In the short and medium term, governments that do not want to seem repellent to voters transfer the debt principal and interest payments to the next governments in the long term. In line with this, it is worth noting that there is a fear of change, that is who are the winners and the losers of structural reforms (Fernandez and Rodrik, 1991). One way to ensure support would be through spending or tax measures that make those benefits immediate, reducing the potential uncertainty about the long-term benefits (Fatás et. al, 2020). In some cases, this encourages the current cabinets to borrow rather than raise taxes. Thus, the authorities' interest, rather than the new generations' interest, can decide on the amount of borrowing now and in the future.

No doubt, war is always and everywhere a major reason for borrowing. The War of 1812, the Civil War, World War I, and World War II all produced obvious upswings in federal indebtedness in the USA (Elmendorf and Mankiw, 1998). But that does not prove that there is a negative relationship between peacetime and borrowing. The Great Depression and the 1980s are two peacetime intervals when this ratio increased significantly in the US. Between these sharp increases, the debt-output ratio has generally decreased fairly steadily.

Overall, crises, large infrastructure investments, tax smoothing, meeting emergencies, low-income levels, consumerism, and the political background of the country can be major causes of public debt. Iraq has common features as well as differences from the above examples. One of them can be the limitation of state capacity and the power of social actors, a point to be returned in section 3 and its subsequent sections.

3- Historical Review

The history of debt in Iraq is dated back to the second 50 years of modern Iraq. In this section, two periods, one from 1980s to 2003 and the other from 2004 onwards, will be focused on. This will help readers to understand different aspects of the gloomy story that surrounds public debt in Iraq.

3.1 The Public Debt Causes During 1980-2003

The 1980s began with Iraq recognized as being one of the highly promising countries in the Middle East and the Third World in terms of its economic development: a donor country, a creditor country, and owner of an estimated U.S. $36 billion in foreign assets. This was a reflection of economic growth years before Saddam Hussein became president. Unfortunately, it did not encourage the state to strengthen the economy. Rather, it was used for waging war. And, as it happens with most of the dictators, the ultimate aim of foreign reserves was for controlling society and hegemony over the region. Thus, a high level of national reserves can be rather a sign of a healthy economy and a successful political regime. By the same token, reaching over 80 billion US$ as foreign reserve currently (2022) by the central bank of Iraq might not guarantee to prevent a stable society or a debt default.

What could help Iraq to be debt-free country the years before 1980 was oil price, particularly in comparison to its population. Once it was declined, the path was changed. Iraq was not a diversified one in producing goods and services at the time, relying mainly on oil exports and revenues. This has coincided with limited access to different routes for exporting oil. In other words, the country was also less diversified in exporting its major good, oil, to the international market through various channels. Syria, which the Iraqi oil pipeline was passing through, took advantage and closed the pipeline in April 1982; thereby causing an immediate and further loss of export production of some 700 thousand barrels per day. This is one lesson for the present time for similar countries: If a country does not able to diversify its income sources, through diversifying exports for example, while relying on one source or a few products to export, it should at least be able to diversify its channels of exporting that particular product(s). However, the story of oil is only a chapter within the book of upheavals that occurred in modern Iraq; thus, the focus in oil-exporting countries should not be on oil only.

Pan-Arab nationalism provided any discourse to apply an expansionary fiscal policy. To show that Iraq under Saddam Hussein's rule can be nominated for becoming a leading country in the Arab world, the Ba'ath party needed to spend. This was not possible, taking the structural imbalances of the economy, without borrowing. But what had been built through oil revenue and borrowing has later been destroyed, and that tendency for destruction more than to build is the fear to return in Iraq and perhaps other parts of the Middle East.

Following an eight-year war with Iran, Iraq found itself in the trap of debt. The geopolitics of the country and its developmental model contributed to attracting sudden shocks and worsening the situation, particularly

when the Ba'ath regime was threatening the neighborhood countries. In a country surrounded by dictatorship regimes, each competing for hegemony over the other, it is natural that "the enemy" took advantage of the other's weaknesses. In this regard, Iraq benefited from its partners' capacities. More than 40 countries, including what is known as Paris Club, were waging war by lending to Iraq. Nearly 70 billion US$ was given by Paris Club countries alongside 19.271 billion US$ by the foreign private sector. However, this did not take too long.

When the $36 billion foreign assets began to evaporate through increased wartime spending, investing in power relations, making people silent and/or still believing that the state can protect them with providing a good standard of living, and the like, Iraq has requested a deferral of contractual dues. Most of these contractual dues were deferred for two years and made payable in four equal semi -annual installments.

An optimistic view in this respect was presented. The optimism was attributed to three primary factors as argued by Nassrawi: first, the debt service on $2.1 billion due in that year (1984) was clearly attainable; second, it was thought that the U.S. dollar would continue to hold its strong position against other major currencies, thereby reducing the real value of non-dollar debts in terms of oil revenues; and third, was the expected 0.5 million barrel per day increase in export capacity expected to be available by the end of September 1985, following the construction of the first stage IPSA-I pipeline which linked southern Iraqi oil fields with the East and West crude oil pipeline in Saudi Arabia at the Red Sea port of Yanbu. Such optimism, or more properly illusion, began to fade away when the value of the U.S. dollar started a downward trend during the first quarter of 1985 and more so when the decline was institutionalized by the G-5 Plaza Agreement in September of that year. Additionally, oil prices continued in a downward trend causing a serious deterioration in Iraq's terms of trade and further deepening its financial crises. Deterioration of the financial situation was continuing into 1986 due to the collapse of oil prices. Though Iraq's oil production increased by nearly 18 percent in 1986 over 1985 levels, oil export earnings decreased by 27.2 percent' (Jiyad, 2001). This was accompanied by increasing spending internally for the same purpose of war, particularly with the Kurds in what is currently known as the Kurdistan Region. In the end, Iraq built a massive debt load to finance an eight-year war and simultaneously maintain a generous socialist system. It subsequently incurred further debts in the form of reparations for the invasion of Kuwait in the early 1990s, which ushered in the largest and most draconian economic sanctions regime in history.

Iraq now faces a new millennium with astronomical war reparations payments, a mountain of debt and a once prosperous economy in ruins with no specific solutions. The Security Council issued Act of 986 in 1995 imposed 30 percent of oil revenue to be paid back as compensation for the countries and companies that encountered damages during the Kuwait invasion, though it was reduced to five percent in 2003. Aside from the compensations, structural adjustments (e.g., lifting government subsidies, or privatization) have been imposed upon Iraq.

3.2 Public debt since 2004

Back in 2004, the GDP was low and still recovering from the previous two decades' disasters: War, embargo, and a centralized model of allocating economic resources above all. Suddenly, Iraq has tried to follow the market economy model away from a centralized model. That means the role should this time be given to investors, the private sector. However, this move needed time; thus, the fiscal policy had no choice but to be expansionary, ending up with a huge budget deficit.

An expansionary fiscal policy is almost a ground for running out of money in order to keep the same standard of living. Like it or not, one day will come when the same authority needs to put pressure on the wallet of its people and use (tax) policies to transfer at least part of it to its own wallet. This exactly what occurred in Iraq.

Before elaborating this analysis further, it is important to show how big is the problem of public debt in Iraq. The table 1 shows that public debt has been fluctuating, and reached risky zones in some years if not all. Overall and as a percentage of GDP, the public debt largely increased from 2014 onwards, though a slight decrease in some years, such as in 2019, can be observed.

Using other measurements, as the figure 1 shows, debt was about 2,386 US$ per person in 2004 when population was 26.313 million, decreased to 761 US$ per person in 2013 when the population reached 33.157 million, before starting to increase in most of the subsequent years, and never declined below 1000 US$ per person. To be noted, since 2013, almost one million people annually have been added to the pool of population in Iraq: it was around 33 million in 2013, increased to more than 39 million in 2019. This is one source of enlarging the state's budget deficit in the nearest future. To be compared to GDP per capita, in 2004, debt per person reached over 67.9 percent of GDP per capita. It moved down into 2013 before starting to rise in 2014 despite the expansion of GDP during the period. In 2019, it could take nearly 30 percent of GDP per capita.

As the government is a big player, consisting of nearly 50 percent of GDP, it is more useful to look at the problem from a different angle. The public debt was about 234 percent of public revenue in 2004, and declined to 29.9 percent in 2013. However, it surpassed public revenue again in 2014. In the subsequent years, it did not move down 70 percent of public revenue.

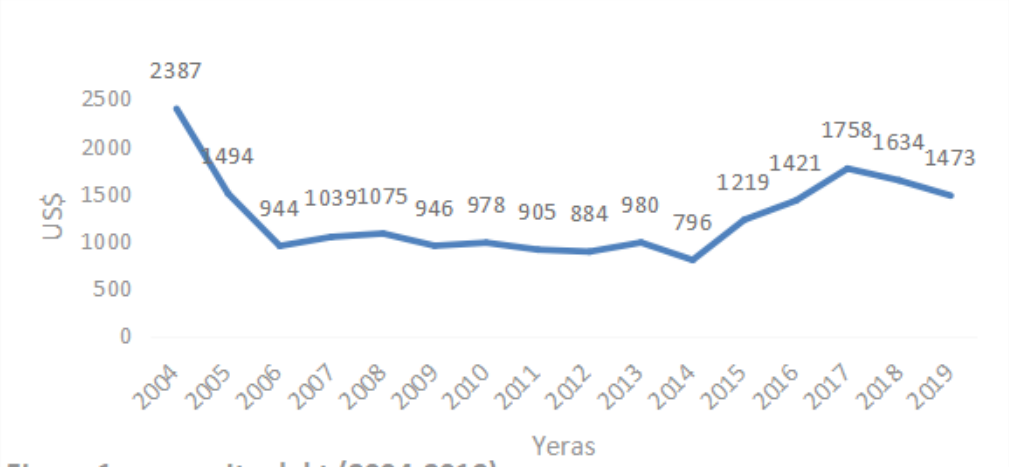

Figure 1: per capita debt (2004-2019)

Source: made by the researchers based on the data in table 1 (public debt divided by population)

The major cause of the upwards movement of debt was rehabilitating the economy as well as the infrastructure of the country, supported by a price hike of oil. In the beginning, increasing government expenditure was reflected in consumption (C) and investment (I), changing the behavior of consumers (households) and investors. The households, freed from the jail of more than 10 years of embargo when the standard of living severely shrunk, took the opportunity to compensate for that "lost decade" by building and furnishing houses, going to restaurants, traveling abroad, conducting cosmetic surgeries, and the like. In this process, a huge number of them are caught in the trap of debt. Then investment started to move but slowly as optimistic expectations were prevailed over the whole country following the fall of thr Ba'ath regime.

Both C and I have become a source of leaking capital through imports (M), mostly supported by one source of exports (X) which was, and still is, oil. Trade policies were in line with this leak: a high revaluation of the Iraqi dinar did not reach a level that can support importing capital goods. Instead, consumers have either spent their money abroad or imported goods and services. Eventually, due to internal conflict accompanied by instability in the international market of oil, the government (G) has been run out of money. As I and C were, and still are, remarkably linked to the public sector expenditures, the withdrawal of the latter caused the former to shrink, too.

For Iraq as a small player in the international market in terms of her share in the market, with its weak economic structure, it was not surprising that any negative demand shock, as seen in 2014 and subsequent years, to the international economy costs her a lot. Consequently, volumes of government revenues were squeezed.

(Table 1: Different Measurements of Public Debt in Iraq (2004-2019

years	Public debt in billions ($)	GDP** Constant $ Billion	Public debt to GDP %	Population in millions	GDP per** capita $	debt per person to GDP per {%} capita	Oil*** revenue $Billion	public debt to oil revenue (%)
2004	62.81	104.19	60.28	26.313	3,515.3	67.90	26.82	234.18
2005	40.21	114.77	35.03	26.922	3,493.3	42.75	31.71	126.79
2006	25.9	116.35	22.25	27.448	3,619.8	26.06	41.21	62.84
2007	29.01	125.93	23.03	27.911	3,626.9	28.65	63.16	45.92
2008	30.51	130.18	23.43	28.385	3,859.7	27.84	41.77	73.04
2009	27.400	138.52	17.42	28.973	3,909.2	24.19	57.11	47.97
2010	29.100	148.97	17.35	29.741	4,052.0	24.15	83.97	34.66
2011	27.800	169.73	16.36	30.725	4,218.3	21.45	95.46	29.12
2012	28.200	182.63	14.11	31.890	4,630.7	19.09	90.65	31.11
2013	32.500	183.91	13.73	33.157	4,793.5	20.45	84.49	38.47
2014	27.400	192.74	16.75	34.411	4,627.8	17.21	49.39	55.48
2015	43.36	213.94	20.26	35.572	4,688.3	25.99	37.91	114.38
2016	52.03	212.27	24.51	36.6106	5,183.4	27.41	55.32	94.05
2017	66.02	212.27	31.10	37.5527	4,961.4	35.43	81.27	81.23
2018	62.81	210.44	29.84	38.4336	4,975.3	32.84	78.46	80.05
2019	57.91	219.70	26.35	39.3097	5,154.2	28.58	82.01	70.61

:Sources

Al-yasiri, A.J. and Kadhem, Z. M. (2021). The Relationship Between Public Debt And Selected Eco- * nomic Indicators Of Iraqi Economy: An Analytical Study. *Turkish Journal of Computer and Mathematics .Education (TURCOMAT)*, *12*(7), Public debt data was taken from pp.2475-2476

World bank **

available on: https://databank.worldbank.org/source/world-development-indicators

Iraqi Central Bank ****

available on: https:// www.cbi.iq

However, promising to rebuild the country, at least to show that the invasion by both the US and the UK was fruitful and a new chapter of an optimistic book would be opened, combined with elections and internal conflicts between different social and political actors over power did not let public expenditure to be persistent with revenues and/or to be directed to productive sectors, such as agriculture, industry, or technology.

Internal conflict, among the center and its periphery, the Kurdistan Region, and within the center itself, supported by implicit and explicit interventions by neighborhood countries such as Iran and Turkey paved the way for terrorist organizations to grow and capture some parts of the country (e.g., Mosul). To meet the increasing needs of war against ISIS alongside other internal unrest, the government was forced to make dramatic cuts to its investment spending in the favor of military expenditure. The latter was 2.2 percent of GDP in 2005, increased to 5.4 percent of GDP in 2015, and never reached below 2.9 percent of GDP since then (The World Bank, Military Expenditure % of GDP-Iraq). Not surprisingly, the government resort to borrowing to fund its bloated current spending on security, wages, subsidies, and the welfare system.

No less important is the share of oil revenue versus non-oil revenue from total revenue alongside expending the revenue mostly on the operational expenditure over investment. The oil bonanza has partially participated in providing the government with its huge spendings; thus, blocking one source of borrowing further. It has also been used to strengthening the Iraqi dinar's value. But this has paved the way to import further at the expense of exporting other goods and services out of oil. Relying only on one source of revenue to provide the government with its huge expenditures should has encouraged officials to support investment through the private sector development. However, as the table below shows, the rate of investment expenditure out of the total expenditure was not surpassed 30 percent during the period under study. Thus, not only the private investment but also the public investment was too low to cope with the growing needs of spending. Also, a less diversified export structure has made the economy more venerable to the external shocks, such as those came from the decline of oil. Accordingly, the oil revenue has not reached a level that prevents the government to borrow from the domestic and international money markets.

(Table 2: Selected Determinants of Public Debt in Iraq (2004-2019							
Years	Oil reve-** nue $ Billion	Non-oil*** revenue Bil- $ lion	Share of non-oil of total revenue	E x - * * * c h a n g e r a t e In dinars) ($per US	Opera-** tional ex- penditure (million $)	invest-** ment expendi- ture $ Million	Share of investment of total ex- penditure
2004	26.82	1.362	5.72029	1453.417	86.989	9.01	9.39
2005	31.711	5.801	17.783	1472	46.983	9.85	17.33
2006	41.21	4.027	11.2681	1467.417	46.241	8.5	15.53
2007	63.162	7.189	14.8536	1254.567	39.484	9.73	19.77
2008	41.77	8.255	11.5589	1193.083	61.384	15.34	19.99
2009	57.11	2.849	6.38517	1170	56.988	14.24	19.99
2010	83.967	1.309	2.24071	1170	67.007	25.75	27.76
2011	95.463	1.203	1.41247	1170	76.312	22.33	22.64
2012	90.648	2.257	2.30966	1166.167	89.802	34.77	27.91
2013	84.487	2.467	2.64941	1166	91.621	46.98	33.89
2014	49.39	1.616	1.87682	1166	100.758	28.37	21.97
2015	37.907	1.726	3.37663	1167.333	58.080	20.8	26.37
2016	55.318	3.267	7.93462	1182	56.412	17.52	23.69
2017	81.271	5.319	8.77187	1184	64.834	18.08	21.81
2018	78.46	4.810	5.58776	1182	94.429	14.44	13.26
2019	82.01	3.393	4.14524	1183	108.394	24.357	18.35

:Source

,World bank, available on: https://databank.worldbank.org/source/world-development-indicators**

IMF, Available on: https://www.imf.org/en/Data

/and The Iraqi Statistical Center, available on: https://cosit.gov.iq/ar

Iraqi Central Bank, available on: https:// www.cbi.iq ***

Both sources of income, that is relying only on one source of revenue for the government, and its spending on operational expenditure rather than investment were contributed to narrowing the capacity of the state in confronting its huge expenditures, encouraged them to turn to borrow money while levying taxes on people or printing out money were more costly, at least socially and politically where people could go on strike against the government stronger than the ones seen during the last two decades. In the coming models presented in section 4, we will turn further to the data provided in the table above.

It should be noted that part of the debt was a foreign one. However, the external debt was declined after the year 2004 to reach $22.06 billion in 2006, and the reason for this is the lifting of restrictions and sanctions imposed on Iraq as well as the implementation of the Paris Club Agreement, according to which 80 percent of Iraq's debts were extinguished during that period. In addition, both oil exports and prices were facilitating

the downward trend of total debt. However, it started to increase between 2014 and 2015: from 15.67 billion to 16.72 billion US$ respectively (Tabaqchali, 2018). Recall, during this period, a respond to the ISIS attacks put more pressure on the public budget (Al-Mujama'I and Hamad, 2018). This forced the government to resort to internal debt in order to bridge the financial gap.

The total amount of public debt between 2010 and 2014 was reached 86 billion US$, including debt services. One reason for it was to finance infrastructure (e.g., power, bridges, ports) in Samawa province. During this period, Japan did lend about (102843) million Yen, with its interest rate 0.75 percent, for engineering services of Basra refineries, re-establish crude oil enterprises, and the like (Nur Shedhan Aday, 2016). It should be said that the share of internal debt was smaller than external debt in the years following the fall of Saddam Hussein. However, this trend has changed in favor of internal debt. For example, the share of internal debt out of total debt was slightly less than 12 percent against 88 percent for external debt in 2005. The latter has been reduced to 44 percent in 2019.

True, confronting an unexpected but brutal terrorist organization put obstacles in front of government plans, and made the options for controlling spending and directing it towards investment (I) less available in the subsequent years. This is combined with international player's interest in which each player would attempt to expand its share in the country, particularly the US and Iran if not to mention Turkey, causing further deviation from developmental goals, including the goal of managing the government's revenues. It should be said that the improvement in the security situation was assisting a slight recovery of public debt in 2019. Also, devaluation of Iraqi dinar, let increasing oil prices alone, in recent years has changed the equation in favor of the government but at the expense of households and investors as inflation rate was skyrocketed. Still, the threats of debt default can be a possibility.

It is worth noting that the economic policies are largely under the influence of social structure of the country. It is affected by corruption, sectarianism, and political instability. In this regard Haddad (2014) states:

"In many ways… sectarianism in pre-2003 Iraq was an issue of state-Shia relations rather than one of Sunni-Shia relations…. Whatever their personal preferences, Arab Iraqis today simply cannot ignore the sectarian prism due to its centrality to social and political life… Existential fear, the ongoing cycle of violence and revenge, the increasingly sectarian character of politics and security, and the weight of 11 years of violence and division have effectively forced Arab Iraqis to view themselves primarily as members of sect a or before practical reasons of self-interest and self-preservation if for no other".

Failure to provide sect actors with sufficient access to economic rents resulted in the rapid escalation of violence and the loss of large parts of territory threatening not just the generation of rents but also the very integrity of the state. The government was only able to reverse this situation by relying on external military support and the better inclusion of these groups in the political settlement by granting them access to public sector jobs (Hamilton, 2020). As pointed out by Hamilton (2020), both corruption and political instability were improving since 2003 into 2011, then started to decline. Thus, there is always a possibility for the democratic and economic improvements to get deteriorated in Iraq, and for public revenue and expenditure to be directed based on elite's interest rather than using it for the sake of development, though this is not within core objectives of this study.

The installments coupled with accumulating debt services are also putting pressure on the public budget.

$Table 3: Installments and Interest rates of external debt (2010-2014), in million US			
Years	**Installments**	**Interest rate**	**Total**
2010	5.79	355.36	361.15
2011	451.03	551.89	1,002.92
2012	1,221.4	636.9	1,857.55
2013	969.9	594.06	1,564.01
2014	1,530.5	586.9	2,092.46
Total	4,178.62	2,725.11	
.Source: Nur Shedhan Aday, 2016			

As shown in the table 3, over six billion US$, in which 451 million was mostly for Paris Club, has been paid back as both installments and debt services of external debt during 2010 and 2014. Adding the interest rate into the debt, it can be noted that the interest rate is another source of increasing costs of borrowing. Moreover, the internal debt was about 10.7 trillion IQD (9.14 billion USD) in 2010, increased to 20.2 trillion IQD in 2014. Out of it, slightly over one trillion IQD (nearly 850 million US$) was paid back as debt services of internal debt, in addition to 15.889 trillion IQD (nearly 12.750 billion US$) as installments, during the same period. These all are signaling tough days ahead in regard to public debt.

One shall not forget that achieving surplus in budget does not guarantee less borrowing in a particular year. For example, in 2014, the central government of Iraq could achieve 21.710 trillion IQD surplus. However, almost 40.4 trillion IQD as advance payments were for operational expenditure, and 7.7 trillion IQD on investment expenditure as advancement was gone. Therefore, the deficit was over 25 trillion IQD (Nur Shadhan Aday, ibid).

4. Methodology and Data Collection

In this section, an econometric model will be applied to elaborate the analysis. First, the model is presented. Second, the results and their analysis are shown.

4.1 Data collection

Data used in this study are semi- annual basis which cover the period of (2004-2019). Selected variables are public debt (PD) as a dependent variable while oil revenue (OR), non-oil revenue(N-OR), investment expenditure (IE), operational expenditure (OE), exchange rate (EXC), dummy variables (DI), which is ISIS and lag of public debt are independent (PD(-1)). Thus, the fundamental equation for this study can be shown as follows:

PD = f (OR, N-OR, IE, OE, EXC, D1 and PD(-1) ……..(1)

The variables in the formula can be transferred into the logarithmic form in order to capture measuring and analyzing selected determinants of public debts in Iraq as mentioned before:

LPD = B0+ B1 LOR + B2 LN-OR +B3 LIE+B4 LOE + B5 LEXC + B6 Dummy variable (ISIS)+ + B7 LPD (-1)+ Ut……(2)

Where at time t, LOR, LN-OR, LIE, LOE, L EXC, ISIS and LPD (-1) are the natural log of oil revenue, non-oil revenue, investment expenditure, operational expenditure, exchange rate, lag public debt and public debt respectively, Ut represents the error term, B0 is constant coefficient which is the intercept of the equation and B1, B2, B3, B4, B5, B6 and B7 are the coefficient of LOR, LN-OR, LIE, LOE, L EXC, ISIS and LPD(-1) represents the slope of the equation.

The Augmented Dickey–Fuller (ADF) and stationary are performed to unit root test (Dickey and Fuller, 1979) and the Johansen test is employed to estimate the possible long-run equilibrium relationship between these variables. At last, Granger causality test is used to analyze the direction of the causal relationship between the variables (Granger, 1988). Different tests have been applied to be sure about the validity of the model.

4.2 Stationary test

According to Dickey and Fuller (1979), the ADF test can be employed to check the stationary of the data, which will be followed in this study, too. The null hypothesis shows that there is a unit root (not stationary) against the alternative, which shows no unit root (stationary).

H0: there exists a unit root (not stationary)

H1: there is no unit root (stationary)

(Table 4: Result of Stationary test for variables (PD-OR, N_OR-G and R						
Augmented Dickey-Fuller (ADF) statistics test						
Variables	**Level, first difference and second difference**	**ADF t-statistic**	**Critical value with the constant**			
			%1	**%5**	**%10**	***.Prob**
PD	Level	-1.3254	-3.6793	-2.9677	-2.6229	0.6040
	1st Difference	-3.2971	-3.6793	-2.9677	-2.6229	0.0244
OR	Level	-1.7584	-3.6616	-2.960411	-2.619160	0.3932
	1st Difference	-5.4168	-3.6701	-2.9639	-2.6210	0.0001

N-OR	Level	-2.2768	-3.6616	-2.9604	-2.6191	0.1853
	1st Difference	-5.3010	-3.6701	-2.9639	-2.6210	0.0001
EXC	Level	-2.773374	-3.679322	-2.967767	-2.622989	0.0745
	1st Difference	-5.568656	-3.670170	-2.963972	-2.621007	0.0001
IE	Level	-1.7389	-3.6616	-2.9604	-2.6191	0.4026
	1st Difference	-5.3330	-3.6701	-2.9639	2.6210	0.0001
OE	Level	-1.4942	-3.6616	-2.9604	-2.6191	0.5232
	1st Difference	-5.3060	-3.670170	-2.963972	-2.621007	0.0001
Augmented Dickey-Fuller (ADF) statistics test						
Variables	**Level, first difference and second difference**	**ADF t-statistic**	**Critical value with the constant and Trend**			
			%1	**%5**	**%10**	***.Prob**
PD	Level	-2.1668	-4.3098	-3.5742	-3.2217	0.4892
	1st Difference	--6.2634	-4.2967	-3.5683	-3.218382	0.0001
OR	Level	-1.8032	-4.2845	-3.5628	-3.2152	0.6788
	1st Difference	-5.3660	-4.2967	-3.5683	-3.2183	0.0007

N-OR	Level	-2.3866	-4.2845	-3.5628	-3.215267	0.3788
	1st Difference	-5.2514	-4.2967	-3.5683	-3.2183	0.0010
EXC	Level	-1.329185	-4.284580	-3.562882	-3.215267	0.8614
	1st Difference	-5.940224	-4.296729	-3.568379	-3.218382	0.0002
IE	Level	-1.7210	-4.2845	-3.5628	-3.2152	0.7175
	1st Difference	-5.2673	-4.2967	-3.5683	-3.2183	0.0010
OE	Level	-2.5356	-4.2845	-3.5628	-3.2152	0.3101
	1st Difference	-5.5212	-4.2967	-3.5683	-3.2183	0.0005
Source: Made by authors based on EViews 9						

In table (4), all these variables (public debt, oil revenue, non-oil revenue, exchange rate investment expenditure and operational expenditure) are non-stationary at levels in ADF test which means that they do not have the ability to reject the null hypothesis of unit root (H0= Unit root exists) because in absolute value its (t) statistic is smaller than the critical DF value. Thus, taking the first difference for all variables has made it stationary at (1%, 5% and 10%) level of significant with intercept, intercept and trend.

4.3 Correlation

Correlation is a statistical measure that expresses the extent to which two variables are linearly related (meaning they change together at a constant rate). The link (or correlation) connecting the two variables is symbolized by the letter r and measured with a value ranging from (1) to +(1). (0) indicates no connection, while (1) implies the perfect or greatest connection. The letter r indicates the path of the connection. A negative r indicates that the variables are negatively linked. Frequently, perfect, powerful, good (moderate), or poor terms can be used to describe the quality of the connection among variables while writing a paper.

Table 5: Result of Correlation							
	LPD	**LOR**	**LN-OR**	**LIE**	**LOE**	**LEXC**	**ISIS**
LPD	1.000000	-0.164171	0.120740	-0.183029	0.297391	0.091735	0.549479
LOR	-0.164171	1.000000	-0.165426	0.826884	0.643815	-0.795818	0.141172
LN-OR	0.120740	-0.165426	1.000000	-0.439139	0.467251 -	0.185305	0.000708
LIE	-183029	0.826884	-0.439139	1.000000	0.632925	-0.753802	0.116865
LOE	0.297391	0.643815	0.467251 -	0.632925	1.000000	-0.400442	0.129921
LEXC	0.091735	-0.795818	0.185305	-0.753802	-0.400442	1.000000	-0.348210
ISIS	0.549479	0.141172	0.000708	0.116865	0.129921	-0.348210	1.000000

- LPD: log public debt, LOR indicates log oil revenue, LN-OR illustrates log non-oil revenue, LIE is log investment expenditure, LOE represents log operational expenditure and LEXC is log exchange rate and ISIS.
- Source: Made by authors based on EViews 9

Table 5 shows that LPD has a weak and negative correlation with LOR, and LIE. However, PD are weakly correlated with LN-OR, LOE while LEXC with positive sign. Furthermore, LPD and ISIS are moderately correlated with each other with positive sign.

4.4 Co-integration Analysis with FMOLS approach

Testing for cointegration intends to (i) determine a genuine long-run relationship between a set of time series data and (ii) estimate the long-run coefficient of the co-integrated series as suggested by economic theory. To investigate the presence of long –run relationship among these variables (PD, OR, N-OR, IE and OE).

H0: $\alpha 1 = \alpha 2 = \alpha 3 = \alpha 4 = \alpha 5 = 0$ (no Co-integration)

Ha: $\alpha 1 \neq \alpha 2 \neq \alpha 3 \neq \alpha 4 \neq \alpha 5 \neq 0$ (Co-integration)

If these variables are co-integrated, then a stable long-run or equilibrium linear relationship among them exists. The empirical co-integration test results are shown in Table 5.1 and 5.2.

(Table: 5.1 Unrestricted Cointegration Rank Test (Trace				
Hypothesized (No. of CE(s	**Eigenvalue**	**Trace Statistic**	**0.05 Critical Value**	****.Prob**
PD	0.868935	154.3441	95.75366	0.0000
OR	0.736606	93.38232	69.81889	0.0002
N-OR	0.551992	53.35915	47.85613	0.0139
IE	0.395744	27085,۲۹	29.79707	0.0574

OE	0.314942	14.15815	15.49471	0.0787
EXC	0.089431	2.810582	3.841466	0.0936

Source: Made by authors based on EViews 9

The above results show that Trace test indicates that there is 3 cointegrating eqn(s) at the 0.05 level of significant to reject the null hypothesis. Therefore, there is a long run co-integration relationship

(Table: 5.2 Unrestricted Cointegration Rank Test (Maximum Eigenvalue

Hypothesized (No. of CE(s	**Eigenvalue**	**Max-Eigen Statistic**	**0.05 Critical Value**	****.Prob**
PD	0.868935	60.96182	40.07757	0.0001
OR	0.736606	40.02317	33.87687	0.0082
N-OR	0.551992	24.08831	27.58434	0.1317
IE	0.395744	15.11270	21.13162	0.2811
OE	0.314942	11.34756	14.26460	0.1376
EXC	0.089431	2.810582	3.841466	0.0936

Source: Made by authors based on Eviews, 9

The above results show that Max-Eigen test indicates that there is 2 cointegrating eqn(s) at the 0.05 level of significant to reject the null hypothesis. Therefore, there is a long run co-integration relationship.

4.5 Granger causality test

Granger Causality tests should be run in order to find the direction of the causal relationship among variables. Findings are shown in the following table;

:Table 6: Pairwise Granger Causality Tests, Sample Lag 6 ,2019 2004

:Null Hypothesis	**Obs**	**F-Statistic**	**.Prob**
LOR does not Granger Cause LPD	27	4.45898	0.0098
LIE does not Granger Cause LPD	27	2.66882	0.0614

LOE does not Granger Cause LPD	27	2.37121	0.0862
LPD does not Granger Cause LEXC		3.34496	0.0294
ISIS does not Granger Cause LPD	27	4.92493	0.0064
LIE does not Granger Cause LN-OR	27	4.23334	0.0121
LOE does not Granger Cause LN-OR	27	3.65196	0.0215
LEXC does not Granger Cause LNO-R **LNO-R does not Granger Cause LEXC**	27	4.85453 3.25494	0.0068 0.0324
ISIS does not Granger Cause LOE	27	3.78252	0.0188
Source: Made by authors based on Eviews, 9			

According to Granger causality results in table 6, there is a causal relationship running among these variables with taking 7 lags. Therefore, there is a unidirectional relationship running from LOR to LPD, LIE to LPD, LOE to LPD, LPD to LEXC, ISIS to LPD, LIE to LN-OR , LOE to LN-OR, ISIS to LOE and bidirectional relationship is observed in LEXC to LN-OR and LN-OR to LEXC.

4.6 Using (FMOLS) Approach for Estimation Coefficients

Turning to the results of the Fully Modified Ordinary Least Square (FMOLS), which are reported in Table 7, the coefficient of oil revenue (LOR) indicates that a 1% increase in oil revenue have resulted a -0.3046% decrease of Iraqi public debt. This result is in line with the analysis provided in the previous sections. Moreover, there is a positive relationship between non-oil revenue (LN-OR) and public debt. The positive relation between them is mainly due to the fact that non-oil revenue has not reached a level that might leave its impacts on public debt as it consists less than 10% of the public revenue annually, the rest is from oil revenue. In other words, it shows a weak tax system and/or taxes have not contributed to reducing debt in during (2004-2019). Furthermore, the coefficient of investment expenditure (LIE) shows that a 1% increase in investment expendi-

ture would result a decrease of debt by -0.0576%. While investment plays a great role in shifting from debt to surplus, its percentage out of total public expenditure has been less than 30% during (2004-2019).

Table7: Estimates for Determinants of Public Debt in Iraq by applying FMOLS

Variable	Coefficient	Std. Error	t-Statistic	.Prob
LOR	-0.3046	0.0399	-7.6280	0.0000
LN-OR	0.0814	0.0126	6.4507	0.0000
LOE	0.4851	0.0532	9.1056	0.0000
LIE	-0.0576	0.0230	-2.5007	0.0203
EXC	-0.0008	8.69E-05	-9.8279	0.0000
ISIS	0.1892	0.0139	13.5531	0.0000
(LPD(-1	0.5669	0.0247	22.8660	0.0000

- denotes Significance at 1%, 5% and 10% respectively (***) ,(**) ,(*)
- Source: Made by authors based on Eviews, 9

In contrast, the coefficient of operational expenditure (LOE) shows a positive and significant relationship between operational expenditure and public debt: a 1% increase in operational expenditure, would result in increased public debt by 0.4851%. Reasonably, this is possible to occur. More than 6 million employees are on payroll, Iraq is among top corrupted countries in international indexes, and operational expenditure is part of the consumption which goes out of the country through importing goods and services, either by the public employees or for the government itself. One can argue that if Iraq is politically under the influence of Iran's politics, its markets are under the influence of Turkey. Thus, Turkish products (e.g., clothes, aluminum, flights, electrics) are in every corner of the Iraqi markets with a very high reputation by customers.

Furthermore, the coefficient of exchange rate (EXC) insists on the fact that a 1% increase in (EXC) would result in a -0.0008% decrease of debt. The negative sign is understandable: a revaluation of Iraqi Dinar led to increase spending, mostly on imported goods and services. Meanwhile, the Iraqi government's revenue is mostly in the US dollar, while it is spending is mostly in dinars. This have put more pressure on the government's wallet, led to a huge budget deficit during the period under study where the exchange rate was still not changed in favor of revaluation of US dollar. In other words, the trade policies did support heightening the public debt.

Finally, there is a positive relationship between (ISIS) and public debt, that is having ISIS as a threat caused the Iraqi government to direct its spending towards military expenditure, led to borrow more money internally or externally. Additionally, the coefficient of lag public debt is positive, too. It should also be noted that the p-value of the variables all are significant as they are lower than 5%. Overall, public debt is more under the influence of operational expenditure and oil revenue than the rest of the variables in the model.

4.7 Diagnostic Checking for Accurate Estimations

Diagnostic test is fundamental when testing the model to ensure that there are no regression problems, to test the accurate model are used to analyses, and to confirm the goodness of fit of the model. The langrage multiplier test for serial correlation, the variance inflation factor test for multicollinearity, the Jarque –Bera test for normality, and CUSUMQ have been applied. To ascertain the appropriateness of (FMOLS) model, the .diagnostic test were conducted, and the result are reported in table 8

Table 8: Diagnostic Checking for Selected Determinants of Public Debt		
Test statistic	**(Model1 (Internal debt, GDP**	**Decision**
*Serial correlation/LM test	Prob. R-squared =0.15> 0.05	good fit
Heteroscedasticity /ARCH test	Prob. R-squared =0.70> 0.05	good fit
Foundation form /ramsey test	Prob. F= 0.18> 0.05	good fit
Normality	٠,٠٥ < 46,٠=Prob.J.B	good fit
VIF	VIF<8> Centered	good fit
S.E. of regression	**R2**	**Adjusted R-squared**
0.13	0.87	0.84
Source: Made by authors based on EViews 9		

In table 8 the Breusch-Godfrey Serial Correlation LM test shows that the test does not reject the null hypothesis at the 5% level of significance, then we can accept the models and can be assured that the model has not faced serial correlation. It means that the model is statistically fit to be estimated. The ARCH tests suggest that the errors are homoscedastic and independent of the repressors. The model passes the normality tests. Therefore, the FMOLS model is correctly specified. Furthermore, table 8 also illustrates that in this model the value of S.E regression given its minimal value, is small. The R2 and adjusted R- squared indicate that the models are well fitted.

Also, for the stability test, the figure shows that the statistic plot of CUSUMSQ are within the critical range. Therefore, no evidence of any significant structural instability is observed. The model can be used for policy decision making. The stability tests are presented as follows:

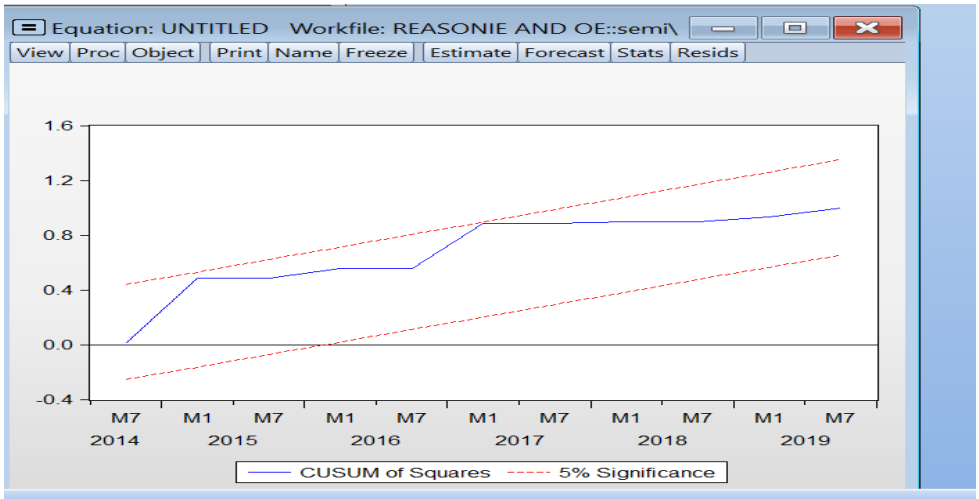

Figure 2: Cumulative sum of Recursive Residuals, Selected determinants of public debt in Iraq

5. Conclusion

Iraq has a huge endowment of natural resources, specifically oil; however, it suffers from an increase in the public debt, due to wars and the economic blockade which was imposed on Iraq in the 1980s and 1990s in addition to the political and economic instability following the fall of Saddam Hussein. It has been found that oil revenue, exchange rate, investment expenditure, operational expenditure, and ISIS significantly determine the public debt in Iraq. Within the group of variables, public debt is more under the influence of operational expenditure and oil revenue than the rest of the variables in the model.

It is also found that a weak tax system is one of the reasons for the public debt in Iraq. This combined with moving through winds of wars, not least the civil war, it is expected that will remain as a threat in the coming years, though the central bank's reserves can reach 90 billion US$.

It is clear that devaluation of Iraqi dinar has helped the government in covering its budget deficit. However, as tax system is weak, oil revenues are not stable, and internal conflict is deteriorating, let debt services alone, the possibility of collapsing the whole monetary system is still there. It would not surprise any experts in economy of Iraq if one of the social groups capture state and change the monetary policy again, for example. Accordingly, a debt default can be on the way.

Diversifying sources of exporting oil and fostering peace internally, which a major obstacle for shrinking investment, can certainly facilitate managing debt in Iraq. It is clear that the state does not have sufficient capacity and autonomy, that is to be freed from the social actors, to manage its debt. Therefore, into the foreseeable future, it is mostly at the hands of the international community and regional countries if they would cooperate to stabilize Iraq.

It should not be forgotten that this study limits itself to focus on some variables in its econometric analysis. No doubt, adding more variables, or testing for other variables, such as taxes or spending during elections, will broad the view of scholars and officials on the story of public debt in the history of Iraq.

پوختە

ئەم لێکۆڵینەوەیە هەڵدەستێت بە پێوانەکردن و شیکارکردنی هۆکارە دەستنیشانکراوەکانی قەرزی گشتیی لە عێراقدا لە ٢٠٠٤ بۆ ٢٠١٩. سەرەتا ئەو رووداوە سەرەکییانە دەخاتەڕوو کە بوونە هۆی لاوازکردنی توانای دەوڵەت لەوەی رێگربێت لە قەرزی مەترسیدار بەر لە کەوتنی رژێمی بەعس. دوای ئەوە سەرنج دەداتە سەر ماوەی لێکۆڵینەوەکە و میتۆدی چوارچێوە بچوکە ئاساییەکان (OLS) پشتبەستوو بە داتاکانی بانکی ناوەندیی، بەکاردەهێنێت. ئەنجامەکان ئەوە دەردەخەن کە قەرزی گشتیی بەرهەمی تێکەڵەیەکە لە هۆکار لەناویشیاندا بچوکی پشکی دەستکەوتی نانەوتیی و زیادبوونی خەرجیی بەگەڕخستن لەسەر حسابی خەرجیی وەبەرهێنانی حکومیی و هێرشەکانی داعش. هەروەها لێکۆڵینەوەکە باس لە وابەستەیی قەرزی گشتیی بە تایفەگەرییەوە دەکات، قورسایی خزمەتگوزارییەکانی قەرز لە کەڵەکەکردنی قەرزی گشتییشدا روون دەکاتەوە. دواتر بەو دەرئەنجامە گەیشتووە کە مەترسیی زیادبوونی کورتهێنانی بودجە بەردەوام لە ئارادایە. بۆیە، بوونی پلانێکی گونجاو بۆ بەڕێوەبردنی قەرزی گشتیی لە پێناوی خۆپاراستن لە دواکەوتنی دانەوەی قەرزەکان بە ئەرکێکی هەر ئێستای دەزانێت

ملخص

تبحث هذه الدراسة في قياس وتحليل محددات مختارة للدين العام في العراق من ٢٠٠٤ إلى ٢٠١٩. وتستعرض أولاً الأحداث الرئيسية التي أدت إلى تدهور قدرة الدولة على منع الاقتراضات المحفوفة بالمخاطر قبل سقوط نظام البعث. ثم ينتقل إلى الفترة قيد الدراسة، ويطبق إطار التكامل المشترك للمربعات الصغرى الاعتيادية (The Fully Modified OLS-FMOLS) استنادًا إلى بيانات من البنك المركزي العراقي. تظهر النتائج الرئيسية أن الدين العام نتج عن مزيج من العوامل بما في ذلك حصة صغيرة من الإيرادات غير النفطية، وزيادة الإنفاق التشغيلي على حساب الإنفاق الاستثماري للحكومة، وهجمات داعش. كما يتطرق البحث إلى الارتباط بين الطائفية والدين العام، ويستكشف عبء خدمات الدين على تراكم الدين العام. ويخلص إلى أن هناك دائما خطر زيادة عجز الميزانية. وبالتالي، فإن وجود خطة مناسبة لإدارة الدين العام أمر حيوي لمنع التآخير عن سداد الديون.

References:

Books and Articles:

Ahuja, H. L. (2010). Macroeconomic Theory and Policy. Sixteenth edition, S Chand Publication

Alzoubi, W. K. A., Khasawneh, S. N. D., & Zoubi, O. M. A. (2020). „The Relationship between Public Debt and Economic Growth in Jordan for the Period (1990-2018)". Journal of Economics and Sustainable Development, 11(12), 62-71.

Al-yasiri, A.J. and Kadhem, Z. M. (2021). The Relationship Between Public Debt And Selected Economic Indicators Of Iraqi Economy: An Analytical Study. Turkish Journal of Computer and Mathematics Education (TURCOMAT), 12(7), pp.2473-2487.

Al-Khatib, Khaled and Shamiyeh, Ahmad. (2016). Fundamentals of Public Finance, Sixth Edition, Volume 1, Wael Publishing, Amman, Jordan.

Al-Mujama'I, H. Z. KH., & Hamad, M. J. (2018). Financing the Iraqi public Budget Deficit for the Period (2003-2015) Analytical Study. Tikrit Journal of Administration and Economics Sciences, 14(41 part 2).

Driessen, A. G. (2019). Deficits, debt, and the economy: An introduction. In Congressional Research Service, US Congress (Vol. 44383).

Dickey, D. A., & Fuller, W. A. (1979). Distribution of the estimators for autoregressive time series with a unit root. Journal of the American statistical association, 74(366a), 427-431.

Elmendorf, D. W., & Mankiw, N. G. (1998). Government Debt, Handbook of Macroeconomics.

Eke, C.K. and Akujuobi, N.E., 2021. Public debt and economic growth in Nigeria: An empirical investigation. International Journal of Development and Management Review, 16(1), pp.178-192.

Ezeabasili, V. N., Isu, H. O., & Mojekwu, J. N. (2011). Nigeria's external debt and economic growth: An error correction approach. International journal of business and Management, 6(5), 156-170.

El-Mahdy, A. M., & Torayeh, N. M. (2009). Debt sustainability and economic growth in Egypt. International journal of Applied Econometrics and quantitative studies, 6(1), 21-55.

Fernandez, R., & Rodrik, D. (1991). Resistance to reform: Status quo bias in the presence of individual-specific uncertainty. The American economic review, 1146-1155.

Fatás,A., Ghosh,A.R., Panizza,U., & Andrea F. Presbitero, A. F. (2020). The Motive to Borrow, and Andrea F. Presbitero, in Sovereign Debt: A Guide for Economists and Practitioners, edt. S. Ali Abbad et. al., Oxford University Press, IMF.

Jiyad, A. M. (2001). An economy in a debt trap: Iraqi debt 1980-2020. Arab studies quarterly, 15-58.

Granger, D. N. (1988). Role of xanthine oxidase and granulocytes in ischemia-reperfusion injury. American Journal of Physiology-Heart and Circulatory Physiology, 255(6), H1269-H1275.

Gohar, M., Bhutto, N. A., & Butt, F. (2012). The impact of external debt servicing on the growth of low-income countries. Sukkur Institute of Business Administration.

Hameed, M. R., Batool, H., Hussain, I. (2020). "Dynamics of Domestic Debt and its Implications on Economic Growth: Evidence From SAARC Countries" Journal of Peace, Development and Communication, vol. Volume 4, no. Issue 3, 2020, pp. 428–444,https://doi.org/10.36968/JPDC-V04-I03-23.

Haddad, F. (2014). A sectarian awakening: Reinventing Sunni identity in Iraq after 2003. Current Trends in Islamist Ideology, 17(4), 145-176.

Hamilton, A. (2020). The political economy of economic policy in Iraq.

Ishan, S.(2006-2014). India's external debt : An analysis of growth, Causes, Management and impact. Department of Applied Business Economics Faculty of Commerce DAYALBAGH Educational Institute(Deemed University)

Iyoha, M. (2000). An Econometric Analysis of External Debt and Economic Growth in SubSaharan African Countries in External Debt and Capital Flights in Sub-Saharan Africa. Eds SI Ajayi and M. Khan. Washington, DC: IMF.

Kasidi, F., & Said, A. M. (2013). Impact of external debt on economic growth: A case study of Tanzania. Advances in Management and Applied economics, 3(4), 59.

Lopes da Veiga, J. A., Ferreira-Lopes, A., & Sequeira, T. N. (2016). Public Debt, Economic Growth and Inflation in A frican Economies. South African Journal of Economics, 84(2), 294-322

Mankiw (2016). Macroeconomics, nineth edition, Worth Publishers, A Macmillan Educaiton Imprint, New York.

Murray, C. (2008). Victorian Narrative Technologies in the Middle East. Routledge.

Mohamed, H. (2018). Egypt to lower public debt to 80% by 2020: Finance Min. Egypt today, Retrieved from:

https://www.egypttoday.com/.../3/.../Egypt-to-lower-public-debt-to-80-by-2020-Finan.

Nur Shedhan Aday (2016), Analyzzing Trends of Public Debt during (2010-2014), in Arabic, "Tehlil Masarat Al-Dein lee-Almwda 20110-2014, Baghdad, Ministry of Finance, Directory of Economy, Department of Economic Policy,

Shabbir, S. (2013). Does external debt affect economic growth: evidence from developing countries (No. 63). State Bank of Pakistan, Research Department.

Tiruneh, M. W. (2004). An empirical investigation into the determinants of external indebtedness. Prague economic papers, 3(3), 261-277.

Tabaqchali, A. (2018). Understanding Iraq's Debt: An Overview of Its Status, Outlook and Origins'. Al-Bayan Center for Planning and Studies.

Xu, M., Kim, S. H., & Moussawi, H. (2016). The US Government Debt: Consequences, Causes, and Solutions. The Journal of Applied Business and Economics, 18(1), 69.

Zawya (2021), Projects: Iraq needs to build 3-4mln houses, 21/06/2021: https://www.zawya.com/en/projects/projects-iraq-needs-to-build-3-4mln-houses-eo6j77kq

Reports:

World bank, available on: https://databank.worldbank.org/source/world-development-indicators

IMF, available on: https://www.imf.org/en/Data

The Iraqi Statistical Center, available on: https://cosit.gov.iq/ar/

The World Bank, Military Expenditure % of GDP-Iraq, available on:

Military expenditure (% of GDP) - Iraq | Data (worldbank.org)

Iraqi Central Bank, available on: https:// www.cbi.iq