

The Iraqi Devaluation: Mechanism and Effects

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Abstract: In this project, we analyze the devaluation of the official currency of Iraq, the Dinar during the crisis of 2020. We find that successful economic reform in Iraq relies on devaluation and other important approaches. We also want to emphasize that devaluation is a short-term booster of exports and growth, long-term development also requires the government to take into account the characteristics of the country.

Key Words: Iraq, devaluation, IS-LM-FX model, UIP equation

I. Motivation: Two Pieces of News

Our project is inspired by two pieces of news about the Republic of Iraq and its economy, the first one is about the devaluation of the Iraqi official currency, the Dinar, and the second one is about the successful recovery of the Iraqi economy after the break-out of the COVID-19 pandemic.

a) Dinar's Devaluation

In December 2020, the Central Bank of Iraq (CBI) stated that it has decided to reduce the value of the Iraqi dinar against the U.S. dollar due to the economic crisis that resulted from the decline in oil prices and the coronavirus pandemic.¹ The central bank decided to reduce the value of the Iraqi dinar to 1,460 dinars per U.S. dollar, instead of its previous price of 1,182 dinars per dollar as a key part of Iraqi economic reform.

Just as Figure 1 illustrates, the devaluation shock of the Dinar is one-time and didn't repeat again after that (at least until now), CBI indeed has made a lot of effort in protecting the stability of the new exchange rate to make it valid enough.

¹ 2020/12. [EB/OL]. Iraq devalues dinar to boost economy, factory production.
<https://www.al-monitor.com/originals/2020/12/iraq-economy-dinar-dollar.html>



Figure 1 The Exchange Rate between Dinar and Dollars

From the perspective of economics, this devaluation is an important monetary tool to stimulate the economy, especially to boost export by increasing the competitiveness of domestic goods. Meanwhile, it can also help safeguard foreign exchange reserves and reduce the external imbalance.

b) Successful Recovery

In April 2022, the Prime Minister of Iraq (Mustafa Al-Kadhimi) claimed that the Iraqi government has got success in achieving the highest economic growth rate among all the Arabic countries in two years in public (Iraqi News Agency, 2022).²

The GDP in Figure 2 illustrates the successful recovery intuitively, in 2020, the economy of Iraq experienced a sharp contraction of 11.3% while in 2021 the GDP growth rate achieves the transformation from negative to positive and to the level of 2.8%, which isn't easy in the complex issues Iraq is faced with. For 2022, according to the recently-published *World Economic Outlook* from the International Monetary Fund (IMF)³, Iraq's economy is forecast to grow by 9.3 percent this year, giving it the fastest real GDP growth of all the Middle East and Central Asia countries, which is a triumph under the background of crisis (IMF, 2022). All of these data show that devaluation can be regarded as an effective and powerful action for the Iraqi economy.

² 2022/4. [EB/OL]. PM: We achieved the highest economic growth rate in the Arab countries <https://ina.iq/eng/19138-pm-we-achieved-the-highest-economic-growth-rate-in-the-arab-countries.html>

³ 2022/10. [R]. World Economic Outlook (IMF) <https://www.imf.org/-/media/Files/Publications/WEO/2022/October/English/text.ashx>

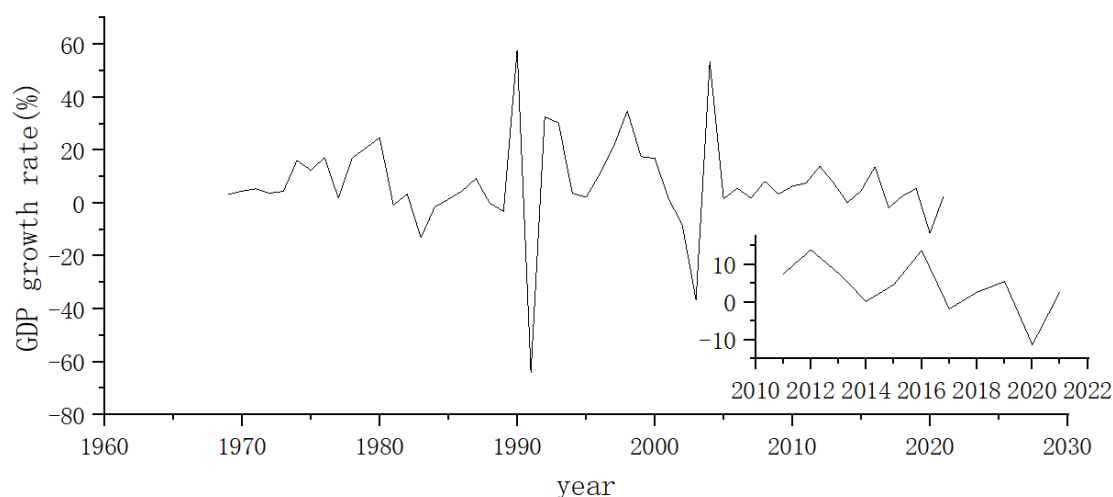


Figure 2 the GDP growth rate of Iraq from 2011 to 2021

	Real GDP	
	Projections	
	2021	2022
Middle East and Central Asia	4.5	5
Oil Exporters	4.5	4.9
Saudi Arabia	3.2	7.6
Iran	4.7	3
United Arab Emirates	3.8	5.1
Kazakhstan	4.1	2.5
Algeria	3.5	4.7
Iraq	7.7	9.3
Qatar	1.6	3.4
Kuwait	1.3	8.7
Azerbaijan	5.6	3.7
Oman	3.0	4.4
Turkmenistan	4.6	1.2

Figure 3 the GDP growth rate of Iraq in 2022 (forecasted by IMF, 2022)

II. Background: Twin Shocks in 2020

In this part, we will briefly introduce the two shocks Iraq faced in 2020, the COVID-19 pandemic and the collapse of oil prices, which are correlated with each other. They are also the direct reasons for the devaluation action towards Dinar.

a) COVID-19 Pandemic

Because COVID-19 broke out in 2020, Iraq experienced a hard time and domestic public health management was also faced with a huge challenge. The cases of infection accelerated during the summer and Iraq registered the second-highest COVID-related fatalities in the Middle East region. The lockdown and other measures of control threaten the trade and provision of products and services, which hurt the economy a lot. At the same time, the fiscal response to the pandemic has been one of the lowest because of the tight budget (IMF, 2020).⁴

b) Collapse of Oil Prices

Iraq is the second-largest crude oil producer in OPEC after Saudi Arabia. The uneven resource endowment determines that the Iraqi economy is one of the most oil-dependent in the world. In 2019, for example, the oil sector accounted for more than 43 percent of GDP and in 2018 it accounted for nearly 100 percent of export earnings. In 2020, the oil sector provided more than 90 percent of government revenues, 96 percent of export revenues, and 32 percent of GDP.

In 2020, worldwide demand for oil fell rapidly as governments closed businesses and restricted travel due to the COVID-19 pandemic. In addition, an oil price war between Russia and Saudi Arabia erupted in March when the two nations failed to reach a consensus on oil production levels. The two factors directly caused the collapse of oil prices.

Just as Figure 4 illustrates, the average price of oil in 2019 was USD 68/barrel, which dropped to USD 21/barrel by mid-2020 before a slight improvement to USD 49/barrel at the end of 2020. The average price per barrel in 2020 has decreased by 38.7 percent when compared to its price in 2019.

⁴ 2021/2. [EB/OL]. CONSULTATION—PRESS RELEASE; STAFF REPORT (IMF)
<https://www.imf.org/-/media/Files/Publications/CR/2021/English/1IRQEA2021002.ashx>



Figure 4 The Collapse of Oil Prices in 2020 (price on the last day of every month)⁵

Therefore, the twin shocks of the COVID-19 pandemic and the collapse of oil prices have caused significant economic challenges and pushed millions of Iraqis into poverty (World Bank, 2020).⁶ Moreover, there are many other uncertainties and factors emerging in Iraq in 2020: risks of social unrest, political paralysis and instability, geopolitical tensions, and insecurity.

Based on the news and background mentioned above, in this project, we want to: a) Explore the mechanism and the reasons for the success of the currency reform and b) Try to get some insights and implications for other countries having a similar situation to Iraq.

III. Mechanism and Effects

In this part, we try to analyze the mechanism and effects of the devaluation for the Iraqi macroeconomy in combination with the knowledge learned in this course, the IS-LM-FX model, the UIP equation, and the foreign exchange market.

⁵ 2022/12. [EB/OL]. Crude Oil Jan 23 (CL=F) Stock Price, News, Quote & History <https://finance.yahoo.com/quote/CL=F?p=CL=F>

⁶ 2020/11. [R]. Iraq Economic Monitor (World Bank) <https://openknowledge.worldbank.org/bitstream/handle/10986/34749/154260.pdf>

a) IS-LM-FX Model

We learned the IS-LM-FX model as a powerful tool to graphically analyze the effects of some external shocks and the domestic fiscal and monetary policies on the macroeconomy.

Figure 5 is our application of the IS-LM-FX model on the Dinar's devaluation. Firstly, a rise in the level of the fixed exchange rate, from E_1 to E_2 , implies a real depreciation of the Iraqi Dinar pegged to the Dollar (the expected exchange rate goes up as well). Hence, the FR curve shifts out, from FR_1 to FR_2 . Secondly, because of the change in the exchange rate, a devaluation of the exchange rate will make exports more competitive and appear cheaper to foreigners. This will increase demand for exports. Also, after a devaluation, Iraqi assets become more attractive. At the same time, a devaluation means imports will become more expensive for Iraq. This will reduce the demand for imports. As a result, net exports will increase at all levels of interest rate i , and therefore the IS curve then shifts out. Total output Y starts to increase. Thirdly, the rise in income causes an excess demand for money, which would push the home interest rate above the world interest rate i^* . To maintain the exchange rate at its new fixed level, E_2 , the central bank should buy foreign assets and expand the money supply until the LM curve reaches LM_2 . Finally, the equilibrium reached is Y_2 , which is much larger than the original level of Y_1 .

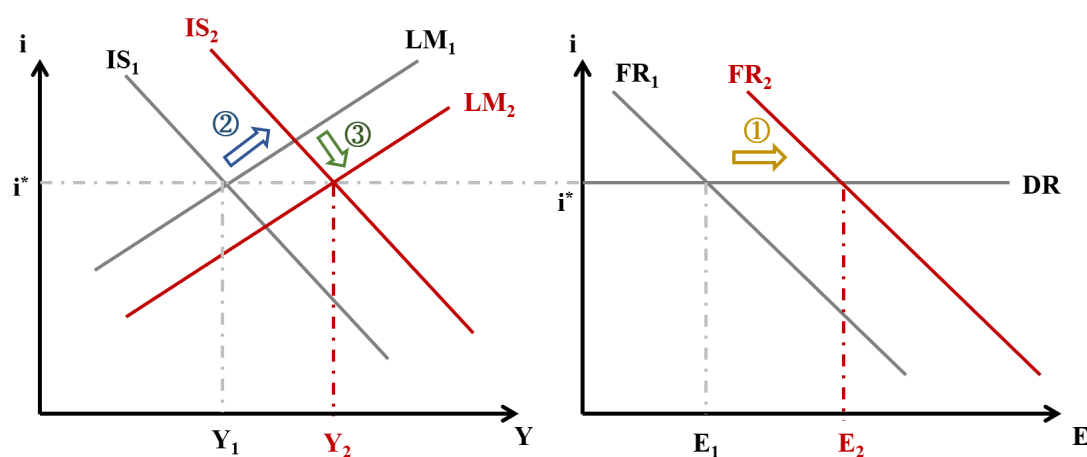


Figure 5 the IS-LM-FX Model

b) Inflation



Figure 6 the inflation rate of Iraq before and after the devaluation⁷

Figure 6 shows the inflation rate of Iraq before and after the devaluation. As we can see, the inflation rate increased significantly after the devaluation at the end of 2020, from near 0 to above 4 percent. Meanwhile, the effect of devaluation on inflation is long-term and hard to control.

Actually, inflation following the devaluation is unavoidable, it is likely to occur for two aspects and reasons. First, the cost-push inflation. On the one hand, imports are more expensive, causing the cost to go up. On the other hand, with exports becoming cheaper, manufacturers may have less incentive to cut costs and become more efficient. Therefore, over time, costs may also increase. Secondly, the demand-push inflation. That is intuitive because the people's total demand increased, and inflation happens naturally.

It is worthwhile to notice that, in 2022, Russia's war against Ukraine has exacerbated inflationary pressures, resulting in price increases, particularly on agricultural products.

c) Foreign Exchange Market

First, we want to know whether the UIP equation, which is an important condition for the balance of the foreign exchange market (or the fundamental equation of the asset approach to exchange rate), still holds before and after the devaluation of the Dinar.

⁷ The inflation data is from Tradingeconomics.com and collected from the Central Bank of Iraq.
<https://tradingeconomics.com/iraq/core-inflation-rate>

As we learned in class, the UIP (Uncovered Interest Parity) equation can be roughly expressed as:

$$i_D = i_F + \frac{\Delta E^e}{E}$$

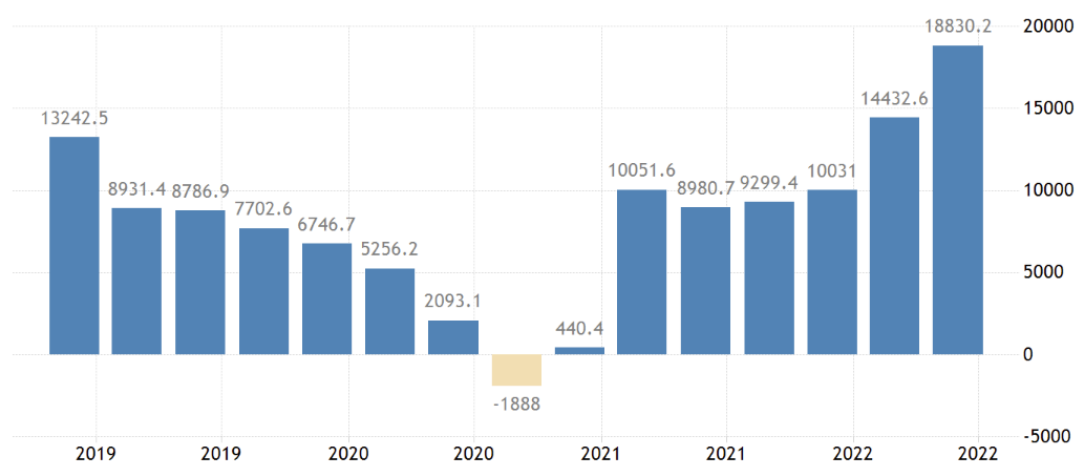
However, according to [the interest rate disclosed by the CBI](#), the policy interest rate of CBI holds stable at the level of 4 percent since 2016 and didn't adjust during the devaluation.

The UIP theory predicts that when the domestic interest rate is above the foreign rate, then the domestic currency will appreciate. Hence, the result does not accord with our expectations.

One possible explanation may be the strict financial restriction in Iraq, especially targeted to the financial flow between Iraq and the US. The financial risk in Iraq is relatively higher than in other countries because of many factors, such as decades of conflicts with the US, corruption, and irregular and high tax liabilities, which shape an unfriendly environment for foreign investors.⁸ The financial sanctions targeted at Iraq from [the UK](#), [the US](#), and other countries also boost the risk for investors and weaken capital mobility.

As for international trade, Iraq's BoP (Balance of Payment) declined significantly in 2020, and the devaluation of the Iraqi currency was also intended to be an effective response. According to the trade balance data, after the devaluation, the trade balance increased a lot, from 440 USD Million in the last quarter of 2020 to about 10000 USD Million in the first quarter of 2021, which accounts for the effectiveness of the devaluation.

⁸ 2022. [EB/OL]. Investment Climate Statements: Iraq (from U.S. Department of State)
<https://www.state.gov/reports/2022-investment-climate-statements/iraq/>



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IV. Discussion

The recovery experience provided by Iraq is important and referential for other countries with similar backgrounds and challenges. In this section, we compare some countries and their approach toward the shocks and try to list some implications of Iraq's successful experience.

a) Comparison

There are many countries in the Middle East that have a similar background of "twin challenges" to Iraq. An example is Qatar, where the curtain of the World Cup has just come down. Qatar's currency is pegged to US dollars and its economy relies hugely on natural gases and crude oil, just like Iraq. Qatar's economy unfolds great resilience too while it didn't implement a strategy of devaluation. By contrast, Qatar still keeps the peg between the Riyal and the US Dollars, which has been proved as a "credible monetary anchor". In addition, Qatar lowered the Qatar Central Bank (QCB)'s policy rates in March 2020. This is a policy action for stimulating the macroeconomy in line with the US Federal Reserve's decision to cut the interest rate. Then, given the robust recovery and abundant liquidity, Qatar increased the deposit rate by 50 bps (basis points), the lending rate by 25 bps, and the repo rate by 75 bps since March 2022. At the same time, the holistic economic strategy, with extensive reforms across new

⁹ The Trade Balance data is from Tradingeconomics.com and collected from the Central Bank of Iraq.
<https://tradingeconomics.com/iraq/balance-of-trade>

flexible regulations, digitization, and workforce inclusion policies also helps Qatar tackle the challenge in its economy.¹⁰



Figure 8 The policy rate of Qatar from 2018 to 2022¹¹

b) Implications

We can conclude and summarize that there are three main outcomes of devaluation: Boosted Exports, Shrunk Trade Balance, and Reduced Sovereign Debt Burdens. In fact, they are influenced by each other deeply. Also, the three outcomes are also the motivation and purposes when the government makes a decision for devaluation.

In addition, successful economic reform can't be separated from other important approaches. The first one is to reduce the Fiscal Deficit. The draft 2021 budget, submitted to the Iraqi Parliament, aims to reduce the fiscal deficit by some powerful measures, contain the unsustainable expansion of government wage and pension bills, and raise non-oil revenues, while significantly boosting targeted assistance to shield the most vulnerable. The authorities have also set aside sizable resources in support of their efforts to minimize the loss of life to COVID-19, including through the acquisition and distribution of a vaccine.

V. Conclusion

In this project, we analyze the devaluation of the official currency of Iraq, the Dinar during the crisis of 2020. We find that successful economic reform in Iraq relies on

¹⁰ 2022 [EB/OL]. What's the Foundation of Qatar's Economic Resilience? (Eye on Qatar) <https://partners.wsj.com/invest-qatar/eye-on/whats-the-foundation-of-qatars-economic-resilience/>

¹¹ The interest rate data is from Tradingeconomics.com and collected from the Qatar Central Bank. <https://tradingeconomics.com/qatar/interest-rate>

devaluation and other important approaches. Iraq aims to reduce the fiscal deficit by some powerful measures, containing the unsustainable expansion of government wage and pension bills, and raising non-oil revenues, while significantly boosting targeted assistance to shield the most vulnerable.

We also want to emphasize that devaluation is a double-edged sword and also just a short-term booster of exports and growth, but organic economic growth would happen with an increase in productivity and long-term capacity growth instead of an artificial domestic demand boost. The higher frequency of devaluation of currency makes the foreign investor jittery and may not encourage long-term investors to stay invested in such economies by damaging long-term economic growth. The spiral of inflation, devaluation, and inflation negatively continues making it difficult to escape the situation.

Related Materials

[1] 2022/10. [R] World Economic Outlook (IMF)

<https://www.imf.org/-/media/Files/Publications/WEO/2022/October/English/text.ashx>

[2] 2020/10. [R]. Iraq Economic Monitor (World Bank)

<https://openknowledge.worldbank.org/bitstream/handle/10986/34749/154260.pdf>