Internal Debt Options during the Two Double Shocks and Its Impact on Foreign Reserve in Iraq

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Abstract:
The research aims at a statement Internal Debt options during shocks and the impact of this borrowing in the volume of the foreign reserve, using induction and deduction with available data analysis. During the period (2004-2013) did not require the use of borrowing across (financial institutions, discounted transfers, bonds); it was only sufficient by transfer with commercial banks that can finance of temporary budget deficits: rose and decline of volume of foreign reserve according to the changes of oil prices and the volume of purchases and sales of the Central Bank of Iraq. Central Bank of Iraq (CBI) has significantly contributed to Internal Debt through bond and discounted transfers in the secondary market; thus, funding the public budget and sustaining the momentum of battles during the first double shock (2014-2017), which reflected how it is negatively affected the volume of foreign reserve, in other words, reduction the proportion of foreign assets to local assets. The second double crisis (2020) reduced the exchange rate of the Iraqi dinar against the US dollar, which was reflected at high prices; inflation reached (5.6) at the end of the first half of 2020, which means adopting a new choice to finance the budget deficit. This means that there is an inverse relationship between the volume of foreign reserve and internal debt, where decrease volume of foreign reserve during two double shocks.

Keyword: Internal Debt, Foreign Reserve, shocks

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1- Introduction

Iraq has entered into the first double crisis of reduced oil prices and fighting terrorism during the period (2014-2017) and accompanied the requirements of massive military spending and the financing of the general budget, which means that this deficit should be funded through internal debt resources. After that, Iraq came out of a difficult crisis, after the status refers to the inability of the government to pay staff dues (operational spending).

Iraq has entered the second double shock in 2020, a new crisis of a sharp drop in oil prices, as well as the COVID 19, which shook the global economy, as oil prices fell below ($ 25) and with the birth of a crisis, new economic views have appeared to face this crisis.

There was an opinion on the reduction of the Iraqi currency (Dinar) to finance operating expenses, which means the rise in the general level of prices, especially since Iraq imports many of its needs from abroad using US Dollar and therefore will affect fixed income, which is very dangerous, raising or reducing the value of the currency has significant implications under the structural of the Iraqi economy.

The research aims to explain Iraq's options in internal debt during the two crises (2017-2014), (2020), and before (2014), as well as knowledge of impact this debt in the volume of the foreign reserve and the type of relationship between these two variables.

2- Internal Debt

If current expenditures impossibility covered by financial revenues, the government is borrowing funds; in this way; government debt is the financial debt by the government sector through borrowing and the issuance of bonds, treasury transfers, treasury bonds and other tools. If current expenditures are fully covered by the financial revenue, the government borrowed funds in this way (Holtfrerich & et al. 2016: 18).

There are several different ways of the Government to finance its expenses: taxes, mandatory contributions and contributions to social security and other government establishments, private sector activities, corporate shares, central bank profits, revenue from privatization, etc. (Holtfrerich & et al. 2016: 15).

Among the local official sources, its funding the central bank (government debt), leading to additional money, which means possible consequences of inflation. This source is used by the government as maximum when other sources are not available (Dabrowski, 2014: 21).

The public authorities can create demand for government securities and can achieve this directly by obliging financial institutions to retain specific quantities of these securities. For example, French banks were binding, until the end of the 1960s, the possession of public securities equivalent to percentage a minimum of its deposit, which is determined by the French bank. These various regulatory constraints have taken many forms, which are often described as "financial suppression" (Brender & et al., 2013: 10).
For the total debt funding, the government can also use its financial and non-financial assets, for example government deposits, other financial reserves (e.g. has established financial surpluses for previous periods), sovereign wealth funds and revenue from the sale of government property (privatization) (Dabrowski, 2014:22).

Finally, financial assets and financial debt are two sides of the same coin - borrowing one person is another lending. Increased borrowing and debt can facilitate economic progress if used for productivity enhancement investments (Holtfrerich & et al. 2016: 15).

2-1 Internal Debt Instruments
Through the above can be said that government debt it's a classic tool, as follows:

2-1-1 Treasury transfers
The features of the treasury transfers are that the risks are almost not existed in addition to the high liquidity, and their market is one of the largest and most developed markets. Short achievements involve declining interest rate losses due to interest rate volatility. Another virtue of these short-term instruments has enabled both the holder and the debtor to respond immediately to changes in inflation and interest rates (Hrvoľová, 2002:28).

The short-term government securities are highly liquid and a high level of guarantee, especially in countries with developed financial and monetary markets, where this type of bonds is guaranteed in terms of sale; they also fluctuate a limited price, meaning they can recover before the date of maturity (Dulaimi,1990: 118).

2-1-2 Government bonds
Securities issued by the central government to finance public expenditure, usually with a maturity of more than one year (WB & IMF:2001:398).

Government bonds that increase their maturity for a year (long-term bonds) may recover after maturity, but these bonds are less liquid than short-term bonds (treasury transfers) because of their length of maturity but more profitable, and can be exchange or selling this Bonds in stock market (Dulaimi,1990: 118).

2-2 Foreign Reserve
The concept of the foreign reserve, according to the Balance of Payments Guide and international investment situation issued from the International Monetary Fund, is the external assets at the disposal of the monetary authority and subject to their control to meet the needs of funding Balance of Payments or intervention in exchange markets to influence the currency exchange rate, or other related purposes (as maintaining confidence in the local currency and forming a basis based on external borrowing), and the reserve assets must be already with foreign currency and existed . The concept of reserve assets is based on "control" concepts and "making use" for monetary authorities.

Based on the definition of foreign reserves above, the following can be said: (www.cbi.iq)
1. It provides a cover for local currency and tool to support the exchange rate.
2. It is the core tool for the Central Bank for interference and adjusting the balance of payment structure imbalances.
3. It provides an important element in the country's credit dependability and promotes the country’s credit rating in international transactions.
The accumulation of reserves said they could strengthen exports, which means creating better jobs and thus absorbing abundant employment in traditional sectors, mostly in agriculture. Within this strategy, the accumulation of reserves may facilitate export growth (Aizenman, 2006: 16), including the pursuit of financial stability and prices, with increased competitiveness for export (Arslan & Cantú, 2019: 2).

2-3 Effect Internal Debt in Foreign Reserve

The foreign reserve represents one of the internal lending determinants, in the sense that (foreign reserve) limits the Central Bank's ability to continue the lending process because of the internal debt; it's a seriousness of the foreign reserve, because of the increase in the asset (domestic credit) in the central balance (ratio to foreign reserve), which mean the Central Bank purchased government papers that leads to increase money base, in addition to increasing local credit to foreign reserve (Lafta, 2019: 22,97).

Internal debt from the Central Bank can be the expression (Vit, n.d : 2-3)

\[
(D_{gc} - D_{gc-1}) = (D_{g} - D_{g-1}) - (D_{gp} - D_{gp-1}) \ldots \ldots (1)
\]

whereas:

\(D_{gc} - D_{gc-1}\) : internal debt has changed in the central bank

\(D_{g} - D_{g-1}\): Internal debt

\(D_{gp} - D_{gp-1}\) : Public debt owned by the private sector

Equation (2) reflects the impact of the budget deficit on the money base

\[(MB-MB-1) = (D_{gc}-D_{gc-1}) + e (R_{c}-R_{c-1}) + (L_{cb}-L_{cb-1}) \ldots \ldots (2)\]

As:

\(MB-MB-1\) : money base.

\(e\): Nominal exchange rate

\(R\): foreign reserve for the Central Bank

\(L_{cb}\) : The balances granted to commercial banks from the Central Bank, here assume they are zero, and the equation:

\[(MB-MB-1) = (D_{gc}-D_{gc-1}) + e (R_{c}-R_{c-1}) \ldots \ldots (3)\]

With replacement \((D_{gc}-D_{gc-1})\) in equation (1), we get a new relationship to finance the budget deficit, and as follows:

\[(D_{g} - D_{g-1}) = (MB-MB-1) - (D_{gp} - D_{gp-1}) - e (R_{c}-R_{c-1}) \ldots \ldots (4)\]

3- Analysis of Internal Debt Choices

For analyzing internal debt choices, the period (2004-2020) will be divided into three periods: first (2004-2013), second (2017-2014), the first double shock of a war of ISIS (large military spending) and low oil prices (sharp decline in revenue), and third (2020-2018), which accompanied by the second double shock (2020) of COVID 19, as well as decline of oil prices, created budget deficit through 2020.

3-1 Evolution of Internal Debt (2004-2013)

Through Table 1, the continued decline debt of Ministry of Finance resulting in the continued repayment of the Ministry of Finance for this debt with holding discussions of the year (2005) with the Central Bank of Iraq, requiring rescheduling the ancient religion, which is due to the year 20031.

But note the failure of payment during (2009, 2010), due to delay of payment with the agreement to pay the remainder, which is (3,955,519) million dinars for four installments for one year, and by installment quantity a (100,000) million dinars, from date 31.3.2011.

It is noted that transfers with commercial banks have used an instrument for financing the temporary budget deficit; 2009 witnessed a significant rise in the volume of these transfer, which rose to about 8 times comparison (2008), as a result of acute reduction in oil prices, with the rate of oil ($ 58.436)^2, either in 2010, has seen the growth of debt through the transfers which mentioned in the rate of (29%), this was due to the planned budget deficit (22,922,155) million dinars (www.ar.parliament.iq).


<table>
<thead>
<tr>
<th>Years</th>
<th>Debt of Ministry of Finance</th>
<th>Financial institutional loans</th>
<th>Transfers with commercial banks</th>
<th>Discounted with the Central Bank</th>
<th>Bonds</th>
<th>Total Internal debt</th>
<th>Growth of Internal debt %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>5,137,038</td>
<td>0</td>
<td>924,650</td>
<td>0</td>
<td>0</td>
<td>6,061,688</td>
<td>-</td>
</tr>
<tr>
<td>2005</td>
<td>5,393,890</td>
<td>0</td>
<td>1,200,070</td>
<td>0</td>
<td>0</td>
<td>6,593,960</td>
<td>8.8</td>
</tr>
<tr>
<td>2006</td>
<td>5,393,890</td>
<td>0</td>
<td>251,500</td>
<td>0</td>
<td>0</td>
<td>5,645,390</td>
<td>-14.4</td>
</tr>
<tr>
<td>2007</td>
<td>4,674,705</td>
<td>0</td>
<td>519,000</td>
<td>0</td>
<td>0</td>
<td>5,193,705</td>
<td>-8.0</td>
</tr>
<tr>
<td>2008</td>
<td>3,955,519</td>
<td>0</td>
<td>500,050</td>
<td>0</td>
<td>0</td>
<td>4,455,569</td>
<td>-14.2</td>
</tr>
<tr>
<td>2009</td>
<td>3,955,519</td>
<td>0</td>
<td>4,478,530</td>
<td>0</td>
<td>0</td>
<td>8,434,049</td>
<td>89.3</td>
</tr>
<tr>
<td>2010</td>
<td>3,955,519</td>
<td>0</td>
<td>5,225,287</td>
<td>0</td>
<td>0</td>
<td>9,180,806</td>
<td>8.9</td>
</tr>
<tr>
<td>2011</td>
<td>3,555,519</td>
<td>0</td>
<td>3,891,340</td>
<td>0</td>
<td>0</td>
<td>7,446,859</td>
<td>-18.9</td>
</tr>
<tr>
<td>2012</td>
<td>3,155,519</td>
<td>0</td>
<td>3,392,000</td>
<td>0</td>
<td>0</td>
<td>6,547,519</td>
<td>-12.1</td>
</tr>
<tr>
<td>2013</td>
<td>2,755,519</td>
<td>0</td>
<td>1,500,030</td>
<td>0</td>
<td>0</td>
<td>4,255,549</td>
<td>-35.0</td>
</tr>
</tbody>
</table>

- Central Bank of Iraq, statistical website, www.cbiraq.org

Thus, during this period, the use of borrowing through (financial institutions, discounted transfers, bonds) had only been Commercial Bank transfers.  


This duration has witnessed a double shock, the first to be a massive military spending to fight terrorism (increase expenditure), and another sharp decline in oil prices (decline revenue), which led to an unprecedented rise in internal debt.

Table 2 illustrates new instruments appear (financial institutions, discounted transfer with central banks and bonds) during the years (2015, 2016, 2017), which means a rise of internal debt, internal debt increased by 237.6% at 2015, followed by an increase in year as a result of the increase in the volume of the three instruments mentioned in addition to the high volume of transfer with commercial banks also, either in 2017, debt growth in the rate simple amount to 0.66% after the end of military operations accompanied by a simple rise in oil prices.

(2) See: Ministry of Oil, raw oil marketing organization.
(Million dinars)

<table>
<thead>
<tr>
<th>Years</th>
<th>Debt of Ministry of Finance</th>
<th>Financial institutional loans</th>
<th>Transfers with commercial banks</th>
<th>Discounted with the Central Bank</th>
<th>Bonds</th>
<th>Total internal debt</th>
<th>Growth of internal debt %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>2,455,519</td>
<td>0</td>
<td>7,064,500</td>
<td>0</td>
<td>0</td>
<td>9,520,019</td>
<td>123.7</td>
</tr>
<tr>
<td>2015</td>
<td>2,355,519</td>
<td>10,461,057</td>
<td>13,086,312</td>
<td>6,225,392</td>
<td>14,525</td>
<td>32,142,805</td>
<td>237.6</td>
</tr>
<tr>
<td>2016</td>
<td>2,355,519</td>
<td>10,546,233</td>
<td>16,538,162</td>
<td>16,225,392</td>
<td>1,696,945</td>
<td>47,362,251</td>
<td>47.3</td>
</tr>
<tr>
<td>2017</td>
<td>2,155,519</td>
<td>10,546,233</td>
<td>16,069,232</td>
<td>16,225,392</td>
<td>2,682,420</td>
<td>47,678,796</td>
<td>0.7</td>
</tr>
</tbody>
</table>

- Central Bank of Iraq, statistical website, www.cbiraq.org

Figure 1 explains new instruments of internal debt, after double trauma that caused internal debt rise.

Figure (1): Internal religion in Iraq for duration (2014-2017)

3-3 Evolution of Internal Debt (2018-2020)

Table 3 explains the internal debt’s declined, where negative growth rates for internal debt during 2018, all instruments decline (loans, treasury bills with commercial banks, treasury bills with the Central Bank, Bonds) which is enhanced by declining the debt of the Ministry of Finance; also, for the Ministry of Finance repayments, this case applies to 2019, there has been a negative growth rate for internal debt and decline volume of instrument mentioned.
But, during 2020, the situation is different, with the double impact of the corona pandemic (COVID 19) and decline of oil prices (decline revenue), increase of treasury bills with Central Bank and institutional loans, which led to the growth of internal debt (67.6%), with the planned deficit (81,181,588 million dinars or (81) trillion dinars, which ended with an actual deficit (12,882,754) million dinars or (12) trillion dinars.

Table (3): Internal debt development (2018-2020)

<table>
<thead>
<tr>
<th>Years</th>
<th>Debt of Ministry of Finance</th>
<th>Financial institutional loans</th>
<th>Transfers with commercial banks</th>
<th>Discounted with the Central Bank</th>
<th>Bonds</th>
<th>Total internal debt</th>
<th>Growth of internal debt %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>1,955,519</td>
<td>9,501,043</td>
<td>13,487,775</td>
<td>14,925,392</td>
<td>1,953,189</td>
<td>41,822,918</td>
<td>-12.3</td>
</tr>
<tr>
<td>2019</td>
<td>1,755,519</td>
<td>8,651,508</td>
<td>11,877,912</td>
<td>14,125,392</td>
<td>1,921,217</td>
<td>38,331,548</td>
<td>-8.3</td>
</tr>
<tr>
<td>2020</td>
<td>1,555,519</td>
<td>14,668,508</td>
<td>5,653,619</td>
<td>40,452,392</td>
<td>1,916,521</td>
<td>64,246,559</td>
<td>67.6</td>
</tr>
</tbody>
</table>

Central Bank of Iraq, statistical website, [www.cbiraq.org](http://www.cbiraq.org)

Figure 2 shows the effect of each instrument on the gross internal debt; it shows the treasury bills with Central Bank (T-bills with CBI) great contribution to gross internal debt.

- Figure (2): Internal Debt in Iraq for duration (2018-2020)

During this period, the Central Bank has contributed to the treasury bills, as well as financial institutions through loans, either treasury bills with commercial banks. Table 3 explained the retreat volume of treasury bills with commercial banks almost from 11 to (11) trillion.
Besides the internal borrowing and at the end of 2020 reduced the exchange rate of the Iraqi dinar (to finance the deficit) for foreign currency (USD) according to three prices, follows:
- 1450 purchase price from the Ministry of Finance.
- 1460 selling price for banks.
- 1470 the sale price of banks and financial institutions for the final beneficiary.
This means the use of internal debt instruments to finance the deficit along with reducing the value of the Iraqi dinar (via exchange rate), which gives the government to pay the value of previous debt (according to less dollar revenue).
It is the results of rise of the exchange rate, follows:
- Increased foreign reserve from 78,293 trillion dinars (Dec. 2020) to 86,384 trillion dinars (Aug. 2021)³.
- Certainly, this decline in the value of the currency led to high inflation rates (0.1) points in Dec. 2019 to (3.2) points in (Dec. 2020) and continued to rise until (7.4) point at end (Jul. 2021)⁴; of course that increase in the value of dinar has been without corresponding to production of goods (weak productive system).
But the duration (2014-2017) (Double shocks) was the contrary, where the foreign reserve decline further maintains inflation rates (by exchange rate).

After analyzing internal debt, we can now develop instruments used during this period, as follows:

3-4-1 Treasury transfers
It is one of the instruments of public debt which exported by the Ministry of Finance and guaranteed from the government, which contribute to the funding deficit and support financial needs (Monetary policy report, 2016: 18).

3-4-2 Bonds
Debt instruments which are various maturity, Central Bank of Iraq is managing selling to investors. The Central Bank of Iraq authorized commercial banks to sell these bonds when they do not exist in the department of Central Bank; the Central Bank also pays interest and these holders for its holders (Waham, 2009: 64).

In practice, debt's instruments in Iraq take many forms: (Daghir, 2017: 6)
Central Securities Depositories (CSD)⁵, bonds of farmers, bonds of contractors, treasury bills with bank, bills of reserve, banking loans, national bonds, and treasury bills with Central Bank.

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(3) Data mentioned: Central Bank of Iraq: www.cbiraq.org
(4) Data mentioned: Central Bank of Iraq: www.cbiraq.org
(5) Central Securities Depositories - CSD
A system based on government bond management issued by the Central Bank of Iraq and the Ministry of Finance. The actual operation of the system was launched in 2008. The number of banks participating in the system (55) bank, as well as the Ministry of Finance, a minor care department and the General Authority for Retirement. The system has also been developed to include the following: (www.cbi)
- Issuing Islamic deposit certificates.
- Investment Unit.
3-5 Evolution of Foreign Reserve in Iraq

It is clear through Table 4 that the volume of the foreign reserve has been ranging (9,395.87 - 77,743.19) million dollars during the period (2004-2020); these fluctuations resulting from the volatility of sales volume (Central Bank sales) and Central Bank purchases from the Ministry of Finance, first has fluctuated within the range (6,108 - 55,678) million dollars, either the second has fluctuated within the range (6,554-62,000) million dollars.

In addition, a rise and low foreign reserve is also affected by oil price rates; 2020 witnessed almost rise of oil prices $ 49, after they were without this during 2019; despite a rise in oil prices, the foreign reserve decreased from (62,898.53) million in 2019 to (57,000.50) million in 2020, resulting in the negative gap between purchases and sales (-13,350) million dollars.

While, in January 2021 rose to ($ 53.5) dollars/barrel, and this rise continued until (June 2021) and at a price (70.8).  

Table (4): Iraq’s foreign exchange reserves (2004-2020) (USD million)

<table>
<thead>
<tr>
<th>Years</th>
<th>Foreign Reserve</th>
<th>Central purchases from the Ministry of Finance</th>
<th>Central sales</th>
<th>Growth of purchases</th>
<th>Growth of sales</th>
<th>Gap between purchases &amp; sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>9,395.87</td>
<td>6,554</td>
<td>6,108</td>
<td>-</td>
<td>-</td>
<td>446</td>
</tr>
<tr>
<td>2005</td>
<td>13,547.53</td>
<td>10,600</td>
<td>10,462</td>
<td>62</td>
<td>71</td>
<td>138</td>
</tr>
<tr>
<td>2006</td>
<td>18,110.81</td>
<td>18,000</td>
<td>11,175</td>
<td>70</td>
<td>7</td>
<td>6,825</td>
</tr>
<tr>
<td>2007</td>
<td>30,452.35</td>
<td>26,700</td>
<td>15,980</td>
<td>48</td>
<td>43</td>
<td>10,720</td>
</tr>
<tr>
<td>2008</td>
<td>49,219.01</td>
<td>45,500</td>
<td>25,869</td>
<td>70</td>
<td>62</td>
<td>19,631</td>
</tr>
<tr>
<td>2009</td>
<td>44,335.74</td>
<td>23,000</td>
<td>33,992</td>
<td>-49</td>
<td>31</td>
<td>-10,992</td>
</tr>
<tr>
<td>2010</td>
<td>50,622.97</td>
<td>41,000</td>
<td>36,171</td>
<td>78</td>
<td>6</td>
<td>4,829</td>
</tr>
<tr>
<td>2011</td>
<td>61,034.97</td>
<td>51,000</td>
<td>39,798</td>
<td>24</td>
<td>10</td>
<td>11,202</td>
</tr>
<tr>
<td>2012</td>
<td>70,327.02</td>
<td>57,000</td>
<td>48,649</td>
<td>12</td>
<td>22</td>
<td>8,351</td>
</tr>
<tr>
<td>2013</td>
<td>77,743.19</td>
<td>62,000</td>
<td>55,678</td>
<td>9</td>
<td>14</td>
<td>6,322</td>
</tr>
<tr>
<td>2014</td>
<td>65,365.52</td>
<td>47,515</td>
<td>54,463</td>
<td>-23</td>
<td>-2</td>
<td>-6,948</td>
</tr>
<tr>
<td>2015</td>
<td>53,822.08</td>
<td>32,450</td>
<td>44,304</td>
<td>-32</td>
<td>-19</td>
<td>-11,854</td>
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<tr>
<td>2016</td>
<td>44,516.00</td>
<td>25,653</td>
<td>33,524</td>
<td>-21</td>
<td>-24</td>
<td>-7,871</td>
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<tr>
<td>2017</td>
<td>48,417.15</td>
<td>40,355</td>
<td>42,201</td>
<td>57</td>
<td>26</td>
<td>-1,846</td>
</tr>
<tr>
<td>2018</td>
<td>60,345.35</td>
<td>52,229</td>
<td>47,133</td>
<td>29</td>
<td>12</td>
<td>5,096</td>
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<tr>
<td>2019</td>
<td>62,898.53</td>
<td>58,851</td>
<td>51,127</td>
<td>13</td>
<td>8</td>
<td>7,724</td>
</tr>
<tr>
<td>2020</td>
<td>57,000.50</td>
<td>30,730</td>
<td>44,080</td>
<td>-48</td>
<td>-14</td>
<td>-13,350</td>
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<tr>
<td>30/6/2021</td>
<td>-</td>
<td>20,787</td>
<td>13,519</td>
<td>-</td>
<td>-</td>
<td>7,268</td>
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<tr>
<td>Max</td>
<td>77,743.19</td>
<td>62,000</td>
<td>55,678</td>
<td>19,631</td>
<td>138</td>
<td></td>
</tr>
<tr>
<td>Min</td>
<td>9,395.87</td>
<td>6,554</td>
<td>6,108</td>
<td>138</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Foreign reserve, annual bulletins for the Central Bank of Iraq
- Purchases, Sales: Statistical Site of the Central Bank of Iraq: [www.cbiraq.org](http://www.cbiraq.org)

(6) Oil prices: [www.somoil.gov.iq](http://www.somoil.gov.iq)
3-6 Analysis of Two Double Shocks Effect on Foreign Reserve

The internal borrowing of the government is funded by the Central Bank of Iraq through the secondary market (indirect) by discount for local commercial banks (discounted with central bank); this negatively affects foreign reserve, this borrowing is reflected on consumer spending, which is met by mainly imported goods and services, which leads to formation of a derivative demand for foreign currency and therefore exit part of the foreign reserve to finance these imports, and this impact will continue until the maturity of securities (www.cbi.iq).

Notes through Table 5 affected the volume of the foreign reserve by increasing the volume of internal debt, especially during two double shocks, with the exception of 2009, which witness a planned deficit in the public budget, in addition to exceeding the volume of central sales to its purchases from the Ministry of Finance.

Table (5): Relationship between foreign reserve and internal debt in Iraq (2004 - 2020)

<table>
<thead>
<tr>
<th>Years</th>
<th>Foreign reserve</th>
<th>Total internal debt</th>
<th>Central purchases from the Ministry of Finance</th>
<th>Central sales</th>
<th>Gap between purchases &amp; sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>9,395.87</td>
<td>6,061,688</td>
<td>6,554.25</td>
<td>6,108</td>
<td>446.250</td>
</tr>
<tr>
<td>2005</td>
<td>13,547.53</td>
<td>6,593,960</td>
<td>10,600</td>
<td>10,462</td>
<td>138</td>
</tr>
<tr>
<td>2006</td>
<td>18,110.81</td>
<td>5,645,390</td>
<td>18,000</td>
<td>11,175</td>
<td>6,825</td>
</tr>
<tr>
<td>2007</td>
<td>30,452.35</td>
<td>5,193,705</td>
<td>26,700</td>
<td>15,980</td>
<td>10,720</td>
</tr>
<tr>
<td>2008</td>
<td>49,219.01</td>
<td>4,455,569</td>
<td>45,500</td>
<td>25,869</td>
<td>19,631</td>
</tr>
<tr>
<td>2009</td>
<td>44,335.74</td>
<td>8,434,049</td>
<td>23,000</td>
<td>33,992</td>
<td>-10,992</td>
</tr>
<tr>
<td>2010</td>
<td>50,622.97</td>
<td>9,180,806</td>
<td>41,000</td>
<td>36,171</td>
<td>4,829</td>
</tr>
<tr>
<td>2011</td>
<td>61,034.97</td>
<td>7,446,859</td>
<td>51,000</td>
<td>39,798</td>
<td>11,202</td>
</tr>
<tr>
<td>2012</td>
<td>70,327.02</td>
<td>6,547,519</td>
<td>57,000</td>
<td>48,649</td>
<td>8,351</td>
</tr>
<tr>
<td>2013</td>
<td>77,743.19</td>
<td>4,255,549</td>
<td>62,000</td>
<td>55,678</td>
<td>6,322</td>
</tr>
<tr>
<td>2014</td>
<td>65,365.52</td>
<td>9,520,019</td>
<td>47,515</td>
<td>54,463</td>
<td>-6,948</td>
</tr>
<tr>
<td>2015</td>
<td>53,822.08</td>
<td>32,142,805</td>
<td>32,450</td>
<td>44,304</td>
<td>-11,854</td>
</tr>
<tr>
<td>2016</td>
<td>44,516.00</td>
<td>47,362,251</td>
<td>25,653</td>
<td>33,524</td>
<td>-7,871</td>
</tr>
<tr>
<td>2017</td>
<td>48,417.15</td>
<td>47,678,796</td>
<td>40,355</td>
<td>42,201</td>
<td>-1,846</td>
</tr>
<tr>
<td>2018</td>
<td>60,345.35</td>
<td>41,822,918</td>
<td>52,229</td>
<td>47,133</td>
<td>5,096</td>
</tr>
<tr>
<td>2019</td>
<td>62,898.53</td>
<td>38,331,548</td>
<td>58,851</td>
<td>51,127</td>
<td>7,724</td>
</tr>
<tr>
<td>2020</td>
<td>57,000.50</td>
<td>64,246,559</td>
<td>30,730</td>
<td>44,080</td>
<td>-13,350</td>
</tr>
<tr>
<td>30/6/2021</td>
<td></td>
<td></td>
<td>20,787</td>
<td>13,519</td>
<td>7,268</td>
</tr>
</tbody>
</table>

- Foreign reserve, annual bulletins for the Central Bank of Iraq.
- Statistical Site of the Central Bank of Iraq: www.cbiraq.org
During the period (2014-2017), the internal debt increased continuously, compared to a decline in the volume of the foreign reserve arrival to 2017, which is noted increasing the volume of the foreign reserve, with the end of military operations, also notes that the gap between central purchases and central sales is negative (sales larger than purchases).

The other duration (2018-2020) was characterized by a foreign reserve rise caused by the low internal debt, except for 2020, which witnessed a double shock (a large drop in oil prices and the occurrence of COVID 19), which led to increase internal debt and thus declining the volume of the foreign reserve compared with the year 2019, taking note that the gap for 2020 amounted to (-13350); it is the largest gap after 2003, causing a severe decline in the Central Bank purchases of the Ministry of Finance.

Figure 4 illustrates the relationship between the volume of the foreign reserve and internal debt in Iraq, as the first is opposed to the other.

Figure (4): Relationship between foreign reserve and internal debt in Iraq (2004 - 2020)

While taking into account acute fluctuations in oil prices and budget deficits, some options can be put to override or to alleviate the crisis, as follows:
1- Rationalize public expenditures through the allocations of ministries.
2- Funding through internal sources (financing part of the crisis).
3- Continued private sector support (1 trillion initiative of CBI).
4- Encouraging the private sector (industrial and agricultural)
These options are connected to the security and political situation of the country, in addition to the future fluctuations of oil prices.
4- Conclusion:

During the period (2004-2013), there has been no real crisis calling for the funding of budget deficit, except 2009, which has seen a decline in oil prices (decline revenue) and therefore increased internal debt level by 89.3%.

But, during the first crisis (2017-2014) through commercial banks and Central Bank of Iraq, through transfers with commercial banks and discounted with the Central Bank, either for the second crisis (2020), internal debt increased to (64,246,559) million dinars, an increase of (67.6%), which led to a decline in foreign reserve from (62,898.53) billion dollars to (57,000.50) billion dollars. Thus, the reverse relationship between the foreign reserve and internal debt.

While the year 2020 witnessed the second crisis (COVID 19 and decline of oil prices); thus, increasing internal debt to 67.6%, as well as low dinar exchange rate.

The foreign reserve has increased when the exchange rate is increased until (Aug. 2021) because of decline sales of the Central Bank of dollar, and foreign reserve declined when maintaining the exchange rate, depending on internal debt, through discounted with Central Bank, concluded the possibility of dependent on raising the dollar exchange rate, with a flexible production.

References:

4- Central Bank of Iraq, Monetary Policy Report (2016), Directorate General of Statistics and Research, Department of Macroeconomics and Monetary Policy.


12- Waham, Badr Ghilan (2009), monetary and financial market in Iraq, Baghdad.


14- www.somooil.gov.iq

15- www.cbi.iq

16- www.cbiraq.org
خيارات الدين الداخلي خلال الصدمات المزدوجتين واثرها في الاحتياطي الاجنبي في العراق

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هذا العمل مرخص تحت اتفاقية المشاع الإبداعي نسب المصنف - غير تجريبي - الترخيص العدوي الدولي 4.0

المستخلص: البحث

يهدف البحث إلى بيان خيارات الدين الداخلي خلال الصدمات واثر هذا الاقتراض في حجم الاحتياطي
الاجنبي، وذالك باستعمال الاستقراء والاستنباط مع تحليل البيانات المتاحة. خلال المدة (2013-2004) لم يتطلب
استخدام الاقتراض عبر (المؤسسات المالية، التحويلات المخفضة والسدادات)، كان الاتفاء فقث عن طريق
حوالات لدى المصارف التجارية يمكن أن تمويل العجز المؤقت لل الموازنة. ارتفع وتراجع حجم الاحتياطي
الاجنبي وفقا للتغييرات في أسعار النفط وحجم المشتريات وبيع البنك المركزي العراقي. ساهم البنك المركزي
العراقى عبر السندات والحوالات المخصصة بنسبة الأكبر عبر (Internal Debt) بشكل كبير في عملية الدين الداخلى
والتحوارات في أسعار النفط وحجم المشتريات وبيع البنك المركزي العراقي. ساهم البنك المركزي العراقي
وابناءه (Secondary Market) في عملية الدين الداخلى، وبالتالي توفير الموازنة العامة وإدارة زمن المعركة، وذلك خلال
الساحات المزدوجة الأولى (2014 - 2017) ، وهو ما انعكس تأثيره سلبا على حجم الاحتياطي
الاجنبي، وعبيرة أخرى انخفاض نسبة الاستيراد من الاصول الأجنبية إلى الاصول المحلية. خلال الأزمة
المزدوجة الثانية (2020)، خفض سعر صرف الديناامكي مقابل الدولار الامريكي، الذي انعكس بإرتفاع
الأسعار. حيث وصل النصف (5.6) في نهاية النصف الأول من عام 2020، مما يعني اعتماد خيار جديد تمويل
عجز الموازنة. هذا يعني أن هناك علاقة عكسية بين حجم الاحتياطي الاقتصادي والديون الداخليه، حيث انخفاض
حجم الاحتياطي الاقتصادي خلال الصدمات المزدوجة.

المصطلحات الرئيسية للبحث: الدين الداخلى، الاحتياطي الاجنبي، الصدمات