Evaluation and measurement of Fiscal rules in Iraq and its impact on economic growth According to the Maastricht Treaty

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Abstract

This research deals with the Fiscal rules in Iraq for the period 1993-2013, to match international standards in accordance to the Maastricht Treaty. The paper defines that the two variables (public debt / Gross domestic product, and relative stability in the exchange rate) may stay under standards and doesn't hold to the international standard in its main standards, surplus, deficit, the interest rate, or inflation.

The Econometric analysis we used in this paper are the annual data during the period from 1993 to 2003. The importance of this research comes from the need for the introduction of Fiscal rules in effect on the GDP, to this have employed a gradient of Autoregressive distributed lag models economitric (ARDL) to investigate the effect on GDP, It results obtained, it's a positive long-term significance of the rate of inflation and GDP in response, also there is a long-term change in the exchange rate response, and not long-term change in response to interest rate, Surplus or deficit budget / GDP, public debt / GDP.

Keywords: Cointegration ; Fiscal rules in Iraq ; ARDL; bounds test; Iraq.

Introduction

The Maastricht Treaty, which was signed in a conference of European Council (EU) held on December 9th to 10th, 1991 in the Dutch city of Maastricht, was one of the most important turning points witnessed by the Economic and Monetary Union since its establishment. It resulted in a set of conditions and strict rules for some fiscal and monetary variables, to create a more stable region and access to economic unity and stability of the monetary and financial policy under different growth rates for countries, This treaty targeted reducing the budget deficit, public debt, lowering inflation rates, access to appropriate interest rates, and improving exchange rates.

With regards to Iraq, and because of the last two decades of economic isolation, it was accompanied by the first decade of the 2003 and curb economic sanctions which was

reflected on the economic and financial variables, the second century, which was standing after the 2003 financial openness and to engage in financial globalization. Therefore, this research is concerned with the diagnosis of the financial and monetary statue in Iraq, to measure the extent of the discipline of fiscal and monetary policy for Iraq as to the baseline agreed upon in the Maastricht Treaty, international financial rules, and then measure its impact on the growth of GDP rate.

Also we look in the paper at the issue of the impact of the financial rules in GDP growth in Iraq, using the co-integration of the most important bounds test analysis, and for the period 1993-2013, to analyze the content in the framework of Autoregressive Distributed Lag models (ARDL).

1- Fiscal rules

1-1- Concept

The Fiscal rule established represent a permanent boarders to fiscal policy through the digital frontier in the sum of all of the elements of the general budget over a long and lasting period of fiscal policy in order to guide, and determine the financial and operational summary index can be applied and activated easily, it is then sent to financial analysts to monitor and analyze. It is intended Fiscal rules is the application of scientific digital fixed the border on the financial and economic variables and work within a limited range (Cottarelli, 2009: 4).

The Fiscal rules are forms of restrictions on fiscal policy and usually under the law, Examples of general financial rules such as the requirement to balance the budget, reduce debt, to ensure putting of digital end to spending growth, and put limits on borrowing without the central government, fiscal rules is also linked to the condition that the golden rule states that no borrowing to finance public expenditures during the budget cycle. However, in some cases, the rules for the government to borrow are provided that allows borrowing is limited to only two types, first: the level of public investment, a base investment viable "which requires maintaining the ratio of public sector debt to GDP levels in terms of prudential available". The second when the deficit is very close to balance, under the EU Maastricht Treaty of the European Union.

The Maastricht Treaty Put rules of digital and numerical limits of public finances, among the most important types of financial variables covered by the treaty are five variables which are a budget deficit (balanced budget or maximum border), discipline borrowing, a commitment to an appropriate inflation rate, issuing reasonable interest rates to encourage the private sector to invest, and lastly fixed exchange rates. The treaty worked on the study of all the code for each variable and promised a scientific base for each variable; abide by the states for the advancement of its economy. It is intended to serve as a permanent constraint on fiscal policy, as an indication of the overall performance of public finances, in order to keep the macroeconomic performance of the gross domestic product indicators (IMF, 2007: 68).

1.2. Digital border of Fiscal variables

Before the Maastricht Treaty works on defines digital of fiscal variables borders, it Put the treaty is a prerequisite for the European consortium for the application of digital Fiscal limits a condition to achieve monetary stability.

A review of the Fiscal management and the laws of fiscal and monetary policy, especially as it comes to the five rules, To ensure the financial viability of that group, Identified variables financial rules affecting the head of the gross domestic product, And overcome the digital border financial variables Will reflect negatively on GDP, Because it is the maximum payroll of economic safety of the college, In order to achieve and maintain high growth rates should target the following rules digital frontier, According to the Maastricht Treaty the fiscal borders are: -

1. Inflation rate: that to control inflation rate in countries are seeking by preventing versions cash to finance the fiscal deficit. The Maastricht Treaty set limits of inflation, so that cannot exceed 1.5%.

2. Budget deficit: which should not be excessive and should not be a budget deficit exceeding 3% of GDP.

3. Public debt: that must be reduced to the maximum extent possible so as not to affect the normal functioning of public finances, the treaty provides that the maximum size of the debt should not exceed 60% of GDP.

4. Interest rate on long-term: tt should not be the interest rate on long-term nominal more than 2%.

5. Changing the exchange rate: country must not reduce the value of its currency within a period of two consecutive years (Fiscal Compact Treaty).

The International Monetary Fund held a recent study of a number of countries to evaluate the impact of these rules. IMF study noted that many countries have imposed long-term constraints on the overall general budget elements, and through implementing digital deficits and debt limits interest rates and inflation, it found that these limits have helped in two things: firstly Contain excessive spending and reduce the deficit pressures along with ensuring financial accountability, and the continuity of debt sustainability. Secondly, Ensure that these rules limited the transmission of negative GDP growth rate effects, It concluded that even in light of stalled financial situation of the state can help the application of the rules to maintain the growth rate (Boudina and Shekhar, 2012).

In order to achieve a high growth of gross domestic product Many countries were quick to apply strict limits to control spending and debt, These countries can be summed up their experience in 1998, As shown in the table below: -

Table (1)

Some states applied the experiences of the Fiscal rules

countries	The interest rate in the long run	Change the exchange rate	Public debt As a percentage of GDP	Surplus or deficit To GDP ratio	Inflation%
Belgium	5.7	yes	118.1	-1.7	1.4
Germany	5.6	yes	61.2	-2.5	1.4
Greece	9.8	No	107.7	-2.2	5.2
Spain	6.3	yes	67.4	-2.2	1.8

France	5.5	yes	58.1	-2.9	1.2
Ireland	6.2	yes	59.5	1.1	1.2
Italy	6.7	No	118.1	-2.5	1.8
Luxembourg	5.6	yes	7.1	1.0	1.4
Netherlands	5.5	yes	70.0	-1.6	1.8
Austria	5.6	yes	64.7	-2.3	1.1
Portugal	6.2	yes	60.0	-2.2	1.8
Finland	5.9	No	53.6	0.3	1.3

Sources: Victor Ngai, Stability and Growth Pact and Fiscal Discipline in the Eurozone, May 4, 2012. P18.

Countries that met all the conditions, If reference values not applied accurately and some of those levels were not reached in 1998, It states that approached the digital frontier, especially in debt levels, which saw a decline is France, Ireland, Luxembourg, Portugal, and Finland, Modern Asf reference debt to GDP up to 60% with the exception of Greece anti ratio.

2. The basic requirements of financial discipline bases in Iraq

2.1 Fiscal and monetary requirements in Iraq

Experiences of rich countries suggest resources that numerical fiscal rules can help in maintaining the sustainability and support macroeconomic stability over the medium term, It can be adopted in Iraq through a numerical financial base to help overcome the impact of oil price fluctuations dominant on the Iraqi economy by adhering to the Financial Rules, And maintain the achieved growth rates (IMF, 2013: 17).

Through a historical review of the Iraqi economic for the period 1993-2003, this period witnessed a very hard economic condition due to the legacy of the economic sanctions of the repercussions of dropping its shadow on the overall macroeconomic variables GDP, the financial indicators. This sought after Iraq in 2003 to aggravated orientation towards discipline and not of excessive debt, spending, and the discipline of inflation, reducing the budget deficit, to achieve high growth rates, Can contribute to the provision of financial surpluses can be invested in other areas, And the light of government commitments to the discipline of the financial meltdown and the trend towards raising fiscal and monetary indicators macroeconomic, Iraq went to macro policy that guarantees a stable macroeconomic environment to start its premises basic idea of the real integration between fiscal and monetary policies, And ensure that stimulates economic growth. Therefore it adopted a series of procedural decisions and bills as requirements contribute to the discipline of digital and reasonable limitation rules (Public debt, interest rates, budget deficits, inflation, and stabilizing the exchange rate). Prevent its impact on growth rates. Therefore, we refer to the discipline of the financial rules of the requirements of the experience undergone by the Iraqi economy and on the level of the two policies:-

Firstly Fiscal Policy: From this perspective, the state has taken several measures and laws to ease the burden on fiscal policy, Achieving financial discipline and a way to ensure access to advanced levels to high growth rates, One of these procedures and requirements was the issuing of NDP (National development plan in Iraq, 2013-2017) which included:-

1. General government debt management To ensure the provision of financing of the general budget of the state and the issuance of government bonds, To avoid inflationary pressures, Restructuring the internal debt in favor of borrowing from commercial financial institutions.

2. Reliance on external debt only through soft loans in the event of expansion in the financing of strategic projects in the plan where necessary.

3- Pursuing efficient policy in the internal and external public debt management, In order to decode tangles in the causal relationship between inflationary pressures and trends in public spending quantitative and qualitative the reason for the high cost of investment funding through the financial competition.

4. Reduce the growing budget deficit through a commitment to a policy of fiscal discipline, Financial restructuring of both sides of public revenues and public expenditure, to control the growth of public spending in general and in particular the operating rates in order to achieve fiscal balance.

5- Debt reduction with creditors in the Paris Club and other creditors.

Second. Monetary Policy: After 2003 the monetary authority in Iraq has taken a series of important measures on the monetary front steps, which aims to coordinate with fiscal policy, including the (Abd Nabi, 2015: 4)

1. The issuance of the new Iraqi Central Bank Law No. 56 of 2004, after it was under monetary policy Law No. 64 of 1976 attached to the tool fiscal policy and the policies of indiscriminate spending.

2. Monetary authorities sought to activate the role of interest rates in response to inflation expectations and the resulting, In 2003, the interest rate liberalization and the adoption of the usefulness of monetary policy objective of price as a signal and operating hourly from which to adopt a contractionary policy of anti-expansion happening in the government, both current and investment spending, In order to contain inflationary pressures and the restriction of this spending.

3. Including interest rate cut stimulates bank credit and encourages greater investment by the private sector in the production areas, and in proportion to the state's financial stability and low levels Inflation.

4. To combat inflation, monetary policy has worked to achieve the goal of stability depending on the signal the nominal interest rate and the promise of money as the price of a reference exchange rate represents the external value of money.

Both of these factors contributed to the achievement of monetary stability in Iraq through a number of fiscal and monetary reforms after 2003, including the strengthening of the relationship between the Iraqi Central Bank and Ministry of Finance, so that relationship up to draw a framework of stable cash, the evolution of the two main aims of the participants in the effects of the monetary system (Association of Iraqi banks, 2015: 16): -

- Monetary stability of the internal value of the currency, Controlling inflation and low annual price growth rates, and assess the impact on the prices of commodity and price support for paragraphs that fall within the scope of public finance targets and annual budget.

- Stability of the Iraqi dinar exchange rate or the external value of the Iraqi dinar. The changes in the internal monetary stability is subject to a number of other variables, Such as money supply and GDP and lead to the stability of exchange rates or external value, As shown in the following table: -

Table (2)

The evolution of monetary stability (thousand dinars)

years	Money supply (1)	percentage change in width Money(2)	current prices GDP(3)	percentage change GDP(4)	Monetary stability =(5) 4/2
9319	86	0	140	0	0
9419	238	152	703	-563	-0.3
9519	705	467	2252	1549	0.3
9619	960	255	2556	304	0.8
9719	1038	78	3286	730	0.1
9819	1351	313	4653	1367	0.2
9919	1483	132	6607	1954	0.1
2000	1728	245	7930	1323	0.2
2001	2159	431	9911	1981	0.2
2002	3013	854	9978	67	12.7
2003	2159	-854	29585	19607	-0.04
2004	8616	299	47959	62.1	4.8
2005	11399	32.3	14419	-69	-0.5
2006	15460	35.7	16615	15.2	2.3
2007	21721	40.4	111455	570.9	0.1
2008	28189	29.8	157026	40.9	0.7
2009	37300	32.3	139330	-11.2	-2.9
2010	51743	38.8	162064	16.3	2.4
2011	62475	20.8	217327	34.1	0.6
2012	63735	2	251907	16	0.1
2013	73830	15.9	267395	6.1	2.6

Source: The first column and the third annual releases and reports CBI.

Evident from the table that the monetary stability in Iraq saw the gaps oscillatory, Indicate the existence of changes in monetary stability coefficient, which represents the relative change in the money supply on the relative change in the gross domestic product, It is the table noticed that monetary stability was maximum (0.8) in 1996, The reason for increasing the monetary issuance, amounted to 12.7% in 2002 and then came back to rise in 2004, We also note that monetary stability improved after 2005, The reason goes back to the independence of the Central Bank of Iraq and its mission in the cash management and in line with the free market economy, As well as the liberalization of rates established forces of supply and demand, And strengthened its control over cash after writing off a large portion of the accumulated debts of Iraq, According to the system of debt management and financial analysis with the Paris and London Club, And remained the easy part without interest, Also, this control can be observed from the rate of change is relatively stable from year to year, The year of the transition towards a market, But then it took the values stabilize at relatively stable rates until 2013, In

order to contain inflation, By balancing the monetary power and real power, This requires discipline and Monetary stability.

Giving importance to go about money management came in accordance with the monetary authority's policies target achieved monetary stability, And be quiet changes and susceptibility to expect no surprises and bottlenecks or even the heart of the balance between the two currents, Which represents the beginning of attention discipline in financial management, Indicate stability coefficient values from 2004 - 2013 to the discipline and the arbitration of rates of change in the money supply on the rates of change in GDP fluctuating.

2.2. Fiscal rules in Iraq between the requirements of the financial discipline and reality.

After creating the right environment and achieving the monetary stability by the financial and monetary policies as a requirement for a major financial discipline, and the reflection of this discipline on the financial environment of financial rules, it can be seen in Table 3.

Table (3)

Financial environment and Fiscal rules in Iraq

years	Public debt (Thousand dinars)	public expenditure (Thousand dinars)	Interest%	The dollar exchange rate against the Iraqi dinar
1993	137	589	6.4	74
1994	323	199	6.8	458
1995	926	690	7.2	1674
1996	1270	542	7.2	1170
1997	1479	605	7.2	1471
1998	1965	920	7.2	1620
1999	2205	1033	7.3	1972
2000	2585	1498	7.3	1930
2001	3585	2079	7.3	1929
2002	3787	2137	6.3	1957
2003	5774	1982	16	1936
2004	5925	33657	7.8	1453
2005	6255	35981	9.4	1472
2006	5307	33487	14.0	1475
2007	8180	30315	16.90	1266
2008	6816	59403	16.58	1170
2009	8434	52567	14.07	1170
2010	9180	64351	13.39	1170
2011	7446	78757	12.97	1170
2012	6547	105139	12.91	1166
2013	4255	106873	12.79	1166

Source: CBI different bulletins for multiple years.

Note from the table (3) the exchange rates took a gradual improvement, Which reflects the high value of the Iraqi dinar through a reduction in the amount of dinars paid, This improvement is calculated to the monetary authority in Iraq after 2003 and through their

instruments used by the central bank and the improvement of mechanisms, Which helped in reaching these included goals mechanisms (Association of Iraqi banks, 2015: 16)

- Foreign currency auctions (buying and selling of the dollar).
- Auctions remittances, bonds or open market operations.
- Lending facilities.
- Reserve requirements.
- Free of interest rates.

The interest rate was the Iraqi orientation of monetary policy as a tool to be used as its main indict, instead of the money supply, but the decline of the banking system and weak financial intermediation, the dominance of the public sector to 80% of GDP and 20% of it to the private sector and activities of service, As well as the dominance of oil revenues led to a decline and a large fluctuation in interest rates, and diminishing role in the conduct of macroeconomic activity (Dagher, 36: 2010). With regard to spending, it achieves high levels in this period, Table 3 indicates that there is an increase in spending; The reason is due to the rise in oil revenues, reflected on the state budget, and therefore reflected in the rise in spending.

As can be seen from the table rising domestic public debt value, this means the country's dependence on debt to finance public expenditures in that period, it points out that monetary policy took it upon them to provide a large amount of foreign currency as a cover to spend.

2.3. The status of the Fiscal rules in Iraq

After the monetary stability achieved during the course material especially after 2004, and legislation and laws and recommendations provided on the joint work between the economic policies of the control of the financial variables affecting the GDP. Under these requirements, the outcome of the economic and financial variables, The outcome of the economic and financial variables of their impact on the financial rules and to what extent digital or the percentage of those policies has been able to reach them when compared to internationally agreed standards, Can be illustrated in the table (4).

Table (4)

The status of the Fiscal rules in Iraq According to international standards agreed

Years	Inflation rate (1)	Interest% (2)	Budget surplus or deficit / GDP(3)	Public debt / GDP (4)	dollar exchange rate against the dinar (5)
	Standard agreement (1.5)	Standard agreement (2)	Standard agreement (3.0)	Standard agreement (60.0%)	Standard agreement (No reduction)
1993	207.6	6.4	42.1-	97.9	74
1994	492.1	6.8	24.6-	45.9	485
1995	387	7.2	25.9-	41.1	1674
1996	-16	7.2	14.2-	49.7	1170

1997	23	7.2	5.9-	45.0	1471
1998	14.7	7.2	8.6-	42.2	1620
1999	12.5	7.3	4.8-	33.4	1972
2000	4.9	7.3	4.6-	32.6	1930
2001	16	7.3	8.0-	35.8	1929
2002	19	6.3	8.0-	37.9	1957
2003	32.6	16	0.6-	19.5	1936
2004	26.9	7.8	1.8	12.4	1453
2005	36.9	9.4	98.0	43.4	1472
2006	53.2	14.0	66.1	31.9	1475
2007	30.8	16.90	16.6	7.3	1266
2008	2.6	16.58	13.3	4.3	1170
2009	-2.8	14.07	1.9	6.1	1170
2010	2.5	13.39	3.2	5.7	1170
2011	5.6	12.97	13.8	3.4	1170
2012	6.1	12.91	11.5	2.6	1166
2013	1.9	12.79	2.6	1.6	1166

Source: column first, second and fifth bulletins Central Bank of Iraq for the years 2003-2013. Third and fourth column: the work of a researcher based on the annual releases of the Central Bank of Iraq.

Note from the table (4) Digital border economic policies able to access them, and when compared with the internationally agreed standards, we find that:-

-The inflation rate did not reach the agreed standards, but it seemed closer to the international standard in 2013.

- Interest rate did not stand to internationally agreed standards.

- The budget deficit: in accordance with international standard it should not exceed more than 3% deficit, according to this standard the public budget in Iraq has recorded a deficit in the budget during 1993- 2002, There is a sense of not approaching this standard during the half period, but in 2003 and beyond did not record budget deficit during the period, But it recorded (89% and 66%) in the years 2005 to 2006 cannot calculate the ratio (surplus / GDP) surplus, which reached a maximum, respectively. Because of this surplus ministries and relevant institutions cannot spent on capital projects during the fiscal year, there is also Article (22 / II of Chapter II expenditure and deficit) in the federal budget provides for the budget to cover certain financial year deficit of cash retained from the previous year to be added to the budget of the following year to operating expenses Law, And this reinforces the adopted method to cover the budget deficit in Iraq, the tendency to convert the investment allocations of surplus to the ongoing allocations(Amar and Huwaish .2011: 17).

- Domestic public debt: Note from the table (4) shows that the economic policy in Iraq in the early nineties has been unable to reduce the ratio to the lowest have because of the economic blockade, hyperinflation, And the need for the state to public debt, But after this period and the reforms that have experienced economic policy has been able to reduce the proportion of domestic public debt / GDP compared to the international standard, which reached the highest percentage (43.4%, 31.9%) for two years (2005.2006), respectively.

- Iraqi dinar exchange rate: International Standard on non-devaluation states, but note that the value of the Iraqi dinar against the dollar is continuing to rise, especially in recent years.

3. Measurement of financial rules in Iraq and its impact on economic growth

3.1. methodology

The common characteristic Non-stationary among many economic time series macroeconomic and financial, The error can include false relationship in the economic methodology, For this reason there is a need for stability in the time series which are used further processing of the data is fixed only for the long-term equilibrium model, Defined as a linear combination of a fixed duration of the series in question, then every deviation from the correct balance in the coming period is supposed.

So proposed (Transition from instability to stability) many styles econometric approach to investigate the long-term, It is the common standard methods of Co-integration, which is consistent with many of the time-series variables. The purpose of our study we chose (Autoregressive distributed lag) (ARDL), which put all of the modeling Pesaran and Pesaran (1997), Pesaran and Smith (1998), and Pesaran et al (2001). And it became (ARDL) wide applications because of the many advantages:-

- It can be applied regardless of the integrated study variables order(0) 1 or order (1)1, Or integrated of the same order.
- It can be applied in the case if it was a small sample size.
- Use helps to estimate components of the long and short-term (HAMUDA& Veronika, 2013: 63).

After evaluating the financial rules in Iraq through the digital frontier reached by the Economic Policy in Iraq, In order to measure the impact of the Fiscal rules in Iraq 2003-2013 the GDP, We will assume that the function takes the following linear form:-

$$y = f(X1^{+}\ X2^{-}\ X3^{+}\ X4^{-}\ X5^{+})$$

Where

y= GDP
X1= inflation rate
X2= Interest rate
X3= Surplus or deficit balance / GDP
X4= Public debt/ GDP
X5= exchange rate

And it describes the signals above all the expected relationship between the dependent variable Y and independent variables variable X.
So we can express linear model as follows:-

$$y = \propto_0 + \propto 1\ X1 + \propto 2\ X2 + \propto 3\ X3 + \propto_4 X4 + \propto_5 X5 + E_t$$

If (E_t) random errors

It includes testing (ARDL) estimate Correction Model Error (ECM) Model (ARDL) by model (P, q_1, q_2) as following (Hamuda & Veronika, 2013: 63) -:

$$\Delta y = \delta + B_1 X1_{(t-1)} + B_2 X2_{(t-1)} + B_3 X3_{(t-1)} + B_4 X4_{(t-1))} + B_5 X5_{(t-1)}$$

$$+ \sum_{i=1}^{p-1} \emptyset 1_i \, \Delta y_{(t-1)} + \sum_{i=0}^{q_1-1} \emptyset 2_i \, \Delta X1_{(t-1)} + \sum_{i=0}^{q_2-1} \emptyset 3_i \, \Delta X2_{(t-1)}$$

$$+ \sum_{i=0}^{q_3-1} \emptyset 4_i \, \Delta X3_{(t-1)} + \sum_{i=0}^{q_4-1} \emptyset 5_i \, \Delta X4_{(t-1)} + \sum_{i=0}^{q_5-1} \emptyset 6_i \, \Delta X5_{(t-1)} + u_t$$

Where Δ denotes the difference operator, ∅ constant, ut random errors, (P,q1,q2.... q_k) lag for Variables (X1, X2, X3, X4, X5)
Through the equation shows that the rate of growth in GDP can be explained by the lagged values of the independent variable, Because the lagged values were introduced to take into account the adaptation of growth in the GDP of the changes that occur in the independent variables, For this reason, the model (ARDL) separating the effects of the short-term for long-term.
The null hypothesis is tested by looking at the model Unrestricted Error Correction (UECM) Growth equation in GDP, through two assumptions:-

First: As in equation (H_o) called the null hypothesis
Ho: $\propto_1 = \propto_2 = \propto_{k+1} = 0$

Second: As in the equation (H_1) is called the alternative hypothesis.
H1: $\propto_1 \neq \propto_2 \neq \propto_{k+1} \neq 0$
Were ∝: lag variables Parameters for a period of one.
The common moral test lag variables transactions for a single test by (F), Which have a distribution of non-standard and calculated (F) in the following :-

$$F = \frac{(\mathrm{SSeR} - \mathrm{SSeu})/\mathrm{M}}{\mathrm{SSeu}\ /(\mathrm{N} - \mathrm{K})}$$

SseR = Residuals group model restricted (null hypothesis)
Sseu= Group residuum Square model unrestricted (alternative hypothesis)
M= Number of model parameters restricted
K= Number of model parameters unrestricted
N = sample size

3.2. Empirical results

Table (5) shows the lag determine the length of the model error correction unrestricted, Based on three criteria info criterion (AIC), Schwarz criterion (SC), and Hannan-Quinn (H-Q).

Table (5)
period of lag optimal (UECM)

lag	H-Q	SC	AIC
0	61.68327	61.92368	61.62496
1	57.43211*	59.11495*	57.02392*

Source: output Eviews.9

Results Show that a period of slow variables first difference is the first period of lag according to three criteria used, Because the standards values give less value, So it will (ARDL) order of one.

Table (6)
Tests for Unit Root

State of integration	(PP)		(ADF)		Variables
	first difference data	original level of data	first difference data	original level of data	
(0)1		-7.07		-4.64	Change in GDP(Y)
(1)1	-5.31	-1.79		-5.91	Inflation (X1)
(1)1	-12.82	-1.95	-6.36	-2.09	Interest (X2)
(1)1	-5.25	-2.47	-4.52	-2.49	Surplus or balance deficit / GDP (X3)
(1)1	-13.37	-3.53		-3.59	Public debt/ GDP (X4)
(1)1	-4.74	-3.34	-4.67	-3.35	exchange rate (X5)
			-3.83 -3.02 -2.65	-3.80 -3.02 -2.66	Critical values Level 1% Level 5% Level 10%

Source: output Eviews.9

Note from the table (6) Based on the critical values, The GDP change (Y) is stable in the original content of the data, which means that the degree of integration of zero (0)1, independent variables are unstable at the original level, And become stable after taking the first differences of the data in both tests, It any integrated first-class (1)1.
In this case, the bounds is a test model (ARDL), To detect common integration relationship among the independent variables (x1,x2,x3,x4,x5) and GDP.

Table (7)
Bounds Test

Test Statistic	Value	K
F. Statistic	5.067740	5
Critical Value Bounds		
Significance	min	High
10%	2.26	3.35
5%	2.62	3.79
2.5%	2.96	4.18
%1	3.41	4.68
R^{-2}	0.832	
F. Statistic	12.813	
Prob(F. Statistic)	0.000142	

Source: output Eviews.9

Results The table above shows that the calculated value of F statistic equal to (5.067), It is larger than the critical value of F when alone at the highest moral level (1%) is equal to (3.41), Which means acceptance of the alternative hypothesis that there is no long-term balance between independent variables and the dependent variable during the period of study. As can be seen from the table that the moral test of the model as a whole account (F) because it is bigger than (F) Probability, and R^{-2} (0.832) Which gives the explanatory power of the model.

Table (8)
A preliminary evaluation of the model ARDL

Variable	Coefficient	Std. Error	t-Statistic	**Prob.**
Y(-1)	-0.744920	0.083214	-8.951825	0.0009
Y(-2)	-0.151268	0.057902	-2.612492	0.0593
X1	-0.925619	0.658005	-1.406706	0.2323
X1(-1)	1.014768	0.299394	3.389409	0.0275
X2	13.23908	5.148442	2.571474	0.0619
X3	-0.464388	0.659761	-0.703873	0.5203
X3(-1)	0.455661	1.047374	0.435051	0.6860
X3(-2)	1.599505	0.826352	1.935622	0.1250
X4	-3.198256	1.776214	-1.800603	0.1461
X4(-1)	-0.768915	2.835520	-0.271173	0.7997
X4(-2)	8.112215	2.000033	4.056040	0.0154
X5	-0.069058	0.062964	-1.096795	0.3343
X5(-1)	-0.141293	0.095700	-1.476424	0.2139
X5(-2)	0.213557	0.069392	3.077533	0.0370
C	-182.0528	84.21807	-2.161683	0.0967
R-squared	0.996369	Mean dependent var		66.76231
Adjusted R-squared	0.983659	S.D. dependent var		138.7076
S.E. of	17.73144	Akaike info criterion		8.609359

regression			
Sum squared resid	1257.616	Schwarz criterion	9.354969
Log likelihood	-66.78891	Hannan-Quinn criter	8.735546
F-statistic	78.39291	Durbin-Watson stat	2.143558
Prob(F-statistic)	0.000364		

Source: output Eviews.9

The table supports (8) and having a long-term equilibrium relationship through statistical tests such as R-2 (0.983), And the value (F) (78.3) It is greater than the probability.

Table (9)
Coefficient Long Run for ARDL

Variable	Coefficient	Std. Error	t-Statisti	Prob.
X1	0.423588	0.305087	1.388414	0.1925
X2	7.997537	14.878892	0.537509	0.6016
X3	0.731222	1.548854	0.472105	0.6461
X4	-0.46412	3.071579	-0.151102	0.8826
X5	0.060058	0.081924	0.733090	0.4788
C	-146.349544	220.138643	-0.664806	0.5199

Source: output Eviews.9

From the table above, there is a positive long-term significance of the inflation rate in response to (X 1) and GDP (y), And also there is a long-term response to the changing exchange rate (X 5), The table shows the lack of long-term variable interest rate response (X2), budget surplus or deficit /GDP(X3), and debt/ GDP (X4), because the parameters were not significant statistically.

Table (9)
Coefficient Short Run

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(X1)	0.001951	0.400703	0.004869	0.9962
D(X2)	8.304613	15.655888	0.530447	0.6063
D(X3)	0.759299	1.579196	0.480813	0.6401
D(X4)	-8.390874	5.453582	-1.538599	0.1522
D(X5)	0.062364	0.088738	0.702787	0.4968

Coint Eq(-1)	-1.038396	0.207382	-5.007156	0.0004

Source: output Eviews.9

From the table above it is clear that error correction coefficient (CE) which expresses the speed of adaptation of the short-term to long-term negative and very significant, It is expected when a common integration relationship. The parameter value indicates that the imbalance in the long-term balance corrects by 103% of the per period (year).

Conclusion

The financial bases in Iraq (inflation, interest rates, the surplus or deficit, public debt, exchange rate) for the period 1993-2013, It did not reach the agreed international standards with some variables through fiscal and monetary policy, Where the study found analytical to the arrival of the two policies to internationally agreed standards in the two variables (public debt / GDP, and relative stability in the exchange rate), And lack of access to the international standard in the two variables (surplus or deficit, the interest rate, inflation).

The Econometric analysis of financial rules has shown that there is a direct and long-term significance of the rate of inflation and gross domestic product in response, And also there is a long-term change in the exchange rate response, Lack of long-term change in response to interest rate, Surplus or deficit budget / GDP, and public debt / GDP because the parameters were not significant statistically.

Coefficient Short Run Show that the error correction coefficient (CE) which expresses the speed of adaptation of the short-term to long-term negative and very significant , It is expected when a common integration relationship, The parameter value indicates that the imbalance in the long-term balance corrects by 103% of the per period (year).

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