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The Impact of Liberalisation of the Financial Sector on Economic Growth in Iraq for the Period 2004-2018

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The goal of this study is to examine the impact of financial liberalisation on economic growth in Iraq by using Johansen Counteraction tests through time series data from 2004 to 2018. This study analyses the effect of financial repression on economic growth in Iraq, and also investigates the elements of economic growth in Iraq. The index of financial liberalisation is applied in the models with the help of the determinants of economic growth which are used according to the economic growth theory of Solow, the Endogenous growth model of Cobb Douglas and the last one is the Export led growth hypothesis. The results show that capital and financial liberalisation has a negative and insignificant relationship, and that financial intermediations and exports have a positive relationship but insignificant relationship between them. Research and development have a negative but significant relationship. Labour has a positive and significant relationship on economic growth which shows that in Iraq labour force plays an important and effective role in promoting economic growth.

Key words: *Financial Liberalisation, Economic Growth, Iraq.*

Introduction

Abaid, Oomes & Ueda (2008) explained the conceptual definition of financial liberalisation as a decrease in the role and increase in the role of financial markets. More recently, Abiad, Detragiache, & Tressel (2010) and Bumann & Lensink (2016) propose that financial liberalisation includes a set of government involvements in the financial sector in order to, for example, eliminate entry barriers for new financial institutions, decrease reserve requirements, lift limitations on capital accounts or privatise financial organisations. Agnello, Mallick, &

Sousa (2012) add that financial liberalisation needs the deterioration of the financial sector through the government.

The financial system has very important part in the whole procedure of the economic and financial development. Its main job is to channel the rare monies from whom to borrow for the utilisation and investments. By providing finance for the loan and borrowing of funds, this financial system enables economic growth. This agrees the banks, and not savers, who grasp a key position in the procedure of economic growth (Studart, 1995). It is undisputable that both the technological and financial inventions have a straight relation on the financial growth and big technological innovation needs huge investments which are supported by banks and other financial organisations.

Developing and developed countries have implemented diverse policies for financial sectors that play an ongoing important part in the whole procedure of the financial and economic. Before the 1970s, brutal economic and financial polices triumphed in underdeveloped countries. These policies were extremely prejudiced by Keynesian thoughts which helped the repression of the economic and financial areas, particularly across interest rate controls (Beim & Calomiris, 2001).

After a number of years of struggling, underdeveloped countries commenced reconsidering their plans. Liberalisation of the financial area was a most important scheme of these countries to confirm the growth of these financial policies and systems and considered as an important plane of economic and financial growth. Most of the countries have developed their economic growth with the help of financial liberalisation, whereas many of the others had annoying results at the same time and had financial disasters, hence delaying their economic and financial growth. A large number of theoretical studies and experimental studies have claimed that developed financial structure is a requirement of economic and financial growth and liberalisation is an important thing in achieving financial development. Shaw & McKinnon (1973) emphasised the implication of liberalising the financial system to attain good savings and helping investment growth. According to Roubini & Sala-i-Martin (1992), the effect of the policies of the financial repression on financial development and on economic growth was negative. Similarly, Demetriades & Luintel (1997) explained that the financial deepening negatively affected the policies of financial repression. Iraq has implemented liberalised financial policies and systems since 2003. Before this, systems against the financial repression triumphed. As yet, no study has observed the effect of these polices, concerned with the oppressive and the liberalised on the financial growth of the country. Thus, the main aim of this study is to observe the effect of the financial liberalisation on the financial and economic growth in Iraq.

Financial repression denotes a condition where the government applies a number of regulations and political limitations to avoid financial mediators from execution on their comprehensive ability. The governments have interfered in the financial area not defend the financial strength and only to defend public damages, but also focuses on the wealth (Reinert et al, 2009).

The roots of financial repression can be outlined in the years from the second World War when governments all over the world attempted to check the provision of loans by setting the rates of interest down from the market. So, after some period, financial liberalisation has engaged, and mostly, governments of all countries have comfortable or uninvolved in such type of controls to evade financial and fiscal charges related to financial repression.

Hermes & Lensink (2005) explained that financial repression has six dimensions: (i) when the government and not financial markets channel credit; (ii) when the government not financial markets regulate the rate of interest; (iii) when the government regulates the new organisations who would be permissible to access the financial area; (iv) when the government applies parameters on bank operations; (v) when mostly financial organisations are retained or measured by the government; and (vi) when the government selects from whom to loan the money, to whom to loan the money and what the terms and conditions are (Hermes & Lensink, 2005).

The financial repression has advantages and prices. For example, Capiro et.al. (2001) elaborated that financial and economic growth in a number of countries has deteriorated slowly through the financial repression. In most of the countries the financial structure has shrunk and persisted, and the effectiveness of credit has persisted a bit low, ultimately goes to general for bank bankruptcies. The objective of government policies did not attain, whereas the receivers of the charges that were made by the financial repression have adopted a political region for their continuation. Therefore, the economic development and the macroeconomic constancy has been reduced (Caprio et al, 2001).

Oosterbaan et. al. (2000) described that the ceiling rate of interest is executed by governments to evade banks from getting very high interest rates against the loans. So, such policies of financial repression effects the rise in bank spread that is change between credit rates and the borrowing rates. Because of getting deposits rate of interest, the banks would usually claim cost, they are engaged to suggest the low rate, decreasing the finance provided through depositors. To balance this decrease in the deposits, the bank enhancing the rate of loan that, goes a widespread between the loan rates and the borrowing rates (Oosterbaan et al, 2001). The financial repression goes to decrease in existing loans. Eventually, controlled financial segment depresses both the savings and the investments due to the setting of interest rate because it is fixed on a point that opposes with the point that can be indomitable in the competitive market. On the other way, in a suppressed structure, the financial intermediaries flop the channel saving

to the appropriate investments (Reinert et al, 2009). However, the financial repression avoids effective dispersal of the capital, therefore, costs the economic and financial growth. In contrast, Shaw & MacKinnon (1973) explained that a liberalised financial economic structure can attain economic growth by effective circulation of capital.

In spite of their disadvantages, governments select to request financial control policies so as to control the fiscal possession and to channel the resources for their own ideas on account of market processes. In the meantime, instead of the capital controls, nearly all the savings persist in the local economic assets, that can be taxed simply through government (Reinert et al, 2009).

Moreover, most of the countries encourage banks to convene essential reserves ratios and the use of these particular reserves to make good government income. As per this situation, the requirements of the reserves check the banks from pointing payments into creative investments. The source of this type of income is called “implicit taxation” (Reinert et al, 2009).

In general, Feridun (2009) said that some of the reasons for applying financial repression strategies can be explained as: (1) to avert lending, such as gaining high rates of interest on loans illegally; (2) incapability of government to increase taxes either because of administrative inadequacies or political restrictions; (3) a repressed financial area under the limitations delivers an easy way to finance for the government; (4) due to this the government has good grip on the money supply; (5) the government trusts they can assign savings at the best way for society as compared to the market forces (Feridun, 2009).

Literature Review

Krause and Rioja (2006) explained that financial development is defined as upgrading the quality and effectiveness of the financial intermediary facilities. Due to this the financial growth mentioned to how proficiently mediators and the financial markets are operational, and the economy of the country depends on financial policies.

Shaw & MacKinnon (1973) elaborated that the financial growth and development is promoted when all the rules and controls, which have the reason of the financial repression are deleted, financial can liberalisation occur. It could be encouraged using suitable direction and a well-controlled structure to care for local and international investors and relocation of sources made through new savings to the effective investments.

Development of the financial structure creates better provisions of the financial sources in the presence of a good financial and economic system and policy. In this situation, firms can increase their business due to borrowing at low rates. Financial mediators can concentrate their

money to the best relevant system. This is too anticipated to go for development in the quality and the quantity and the effectiveness of the financial intermediate facilities (Ang, 2008).

Shaw and McKinnon (1973) recommended that the liberalisation of the financial structure means to develop the financial deepness and economic growth that has been accepted by a great number of under developed countries since 1970s. Mostly, Arab regions began liberalizing their financial policies since 1990s (Nashahibi et al, 2001). All the world which accepted financial liberalisation theory, try to build up the part of the market services of interest rate, the provision of loan and overall measure of the financial intermediation. All these determinations sought to activate mostly national savings such as financial deposits and making an effective distribution of the financial sources for more useful investments.

Most of the studies have been accepted about financial liberalisation, which have a very vital role in financial and economic growth. Generally, some remarkable studies concluded that the significance of credit as an issue in economic growth and finance is insignificant (Odedokun, 1996). Whereas, another group emphasises the possibility that the relationship between finance and the economic growth is negative (Buffie, 1984).

A large number of researcher's arguments support the financial liberalisation and explained related to the practical studies which have a positive connection with the financial development and the economic development effected by the financial liberalisation (Outreville, 1999). These studies elaborated two main assumptions. First, they declare that applying an open policy and healthy and impartial competition in the open market will rise the rate of interest on the deposits and produce a good saving rate. This enhances the finance which is presented for the investment and it too begins a rise in investment efforts to help to rise the finance required for investment and growth. Second, the competition areas to emphases on the fund of the suppliers, particularly the rate of interesting rate are required for the loans. Which decrease the capital cost of and rise in the economic growth and savings. Greenwood and Jovanovic (1990) described the financial models through which the facilities of the financial sector support in taking the economic growth of that particular area. Schumpeter (1911) described an experimental analysis on the industrial sector countrywide and at the firm level, the cross-countrywide comparison showed a positive and strong connection between development in the financial policy and economic development of this sector.

Many of the papers in the literature describe the networks by the financial liberalisation can go to the economic and the financial growth. In an important research, Levine and Zervos (1996) describe the suggestion that the liberalisation delivers accountability for the stock, that enables the development in market being as the depositors can get and effect thr market very simply. Hermes & Lensink (2005) explained financial markets when liberalised, can be more dynamic in announcing new financial tools and decreasing the cost of expense costs through refining

banks and risk management. Similarly, Greenwood & Jovanovic (1990) presented a model in which the financial mediators can recognise the investing and valuable schemes in a better way as compared to the persons which itself goes to the good return and support to the development and growth.

Bekaert et al (2005) provided a suggestion on capital controls that international investors are the reasons for the organisation, which increases local corporate management, that eventually goes to economic development. Hosseini-Nasab & Balanchi (2003) describe that limited systems, such as the restrictions of the branch and the credit ceiling, have negatively affected economic development. Whereas a rise in the loan facilities in the main areas, such as agriculture and industry, has a positive effect on economic development. Khan and Qayyum (2006) explained that the effect of business and financial liberalisation on the economic development and growth in Pakistan, obtains that both the trade and financial systems play a vital role in increasing the growth.

Fung et. Al, (2005) described that improves Chinees financial policies how much can effect on the economic performance for the long run. They monitor and check the difference between the government and other informal institutions which offered credit and regulate the impact of financial liberalisation on macroeconomic accumulates.

Levine (2001) described his study that liberalising constraint goes to international flows that increase the economic growth which is affected by increasing the efficiency of the growth. Bekaert et al (2005) explained the financial liberalisation indicates a rise in the GDP through one percent of the development and the growth. Bonfiglioli (2005) offers a practical suggestion taken from ninety-three countries in which the financial liberalisation motivates the efficiency of the growth and a little bit affects capital accumulation. Diversely, in some studies it is explained that there is no positive effect between them and indicate negative significances. For example, many opinions attribute the financial liberalisation previous adversities, and demand that the financial liberalisation enhances the country's experience to the foreign financial disasters. For example, Baldacci (2002) described that financial liberalisation enhances the option of currency disasters. Additionally, Dornbusch & Reynoso (1989) elaborate there is not any assured plain about financial liberalisation regarding the positive effect on the economic development. Ranciere et. al, (2006) showed the direct relation of the financial liberalisation on the development and the growth by compensates indirect impact through a higher tendency to the crisis.

MacKinnon &Shaw (1973) described that financial liberalisation can encourage financial development and growth through rising the investments and output, the financial liberalisation anticipated to go to the higher rate of interest and increase in the savings. The return, more savings, would be anticipated to support a higher investment, thus, goes to the higher economic

and financial growth. Moreover, Mandel (2009) describes that the financial liberalisation can be useful if its outcomes are (a) more savings; (b) reduction in the cost of capital; and (c) adoption of good governance practices.

Moreover, Chou & Chin (2002) point out that financial liberalisation increases financial innovations and also increases the financial mediators output. Chan-Lau & Chen (2001) explain inappropriate combinations of both the financial growth and the liberalisation procedures goes to the rise in the financial disasters. In some cases, to save from financial disasters, it is important that the financial liberalisation associated to financial growth expands the financial area efficiently.

Generally, financial liberalisation from the reviews explained that financial liberalisation rises the number of chances offered for the economic development by refining modification of the groups, decreases liquidity restraints and decreases the loan rate. On the other hand, some of the reviews from literature converses that financial liberalisation has a negative impact due to currency crises.

Data and Methodology

As explained in beginning, the aim of the paper is to examine the effect of financial repression on economic growth in Iraq. Empirically, this is not directly to take and measure its size and importance of financial liberalisation. In this paper, repressive financial plans and policies related to Iraq are taken through financial constrictions index raised by Taghipour (2009). It is used by financial liberalisation multiplied by -1 and applied in the models with innovative factors of economic growth. All the variables are taken from current economic growth theories such as (i) the Solow growth model which proposes that labour and capital are factors of economic growth.; (ii) the Endogenous growth model explains labour and research and development play an important role in economic growth; (iii) the Cobb-Douglas production function that explains physical capital, labour and technology; (iv) the AK model explains total factor productivity and financial intermediations; and (v) the Harrod-Domar model points out the physical and human capital.

Moreover, as explained in the beginning, the MacKinnon-Shaw theory proposes that the financial liberalisation goes to the economic growth. Therefore, the constructs taken from the model of the theories on financial growth are shown in Table.

According to the review on the economic growth, the data used in this paper is explained below in Table 1.

Table 1: Variables and Source of the Data

Variables	Data	Source of the Data	Abbreviation
Labour	Total labour	The World Bank-WDI	LB
Capital	Gross capital formation (% of GDP)	The World Bank-WDI	CAP
Research and Development	Research expenses in Iraq	The World Bank-WDI	RD
Financial Intermediation	Domestic credit provided by the banking sector (% of GDP)	The World Bank-WDI	FI
Exports	Export of goods and services (% of GDP)	The Central Bank of Iraq	EXP
Financial Liberalisation	Financial repression index * -1	The Central Bank of Iraq	FLIB

As explained in the table, the financial repression index attained from Taghipour (2009) is multiplied by -1 and to denote the financial liberalisation that is reverse case of the financial repression.

GDP is the dependent variable which effects the economic growth (Zingales, 2003). Therefore, the predictable equation of the models can be explained in the empirical structure as described below. Though, the variables cannot be put in this similar model because of problems of multicollinearity.

$$GDP = f(LB, CAP, RD, FI, EXP, FLIB)$$

In the above model GDP is the function of the labour (LB), capital (CAP), and research and development (RD). FI is financial intermediation, EXP is exports and FLIB is the financial liberalisation. All the variables are anticipated to have a positive coefficient. On the other hand, they are anticipated to have a positive effect on economic growth.

Measurement of the Financial Liberalisation

Financial liberalisation cannot be measured directly in Iraq, in this study an index was used which was presented by Taghipour (2009) where the financial repression variable has an effect on the economy of Iraq. All these are related to credit programs, such as interest rate (deposit

and lending), liquidity requirements and the interest rate controls. The index should be multiplied by -1 to change it to index attaining the financial liberalisation.

Methodology

Ordinary Least Squares Regression (OLS) is the main source to investigate the economic model in time series econometrics. It is usually used in econometric for analysis, but it required the data of variables as a stationary. Nevertheless, in real life, mostly the economic data was not stationary. So, in this situation OLS cannot be applied. If the data of the variables is not stationary and is $I(1)$, like combined of order 1, after this Johansen cointegration analysis is used to that agrees the fundamental variables to be $I(1)$.

In the study the Johansen cointegration technique is used to examine the relationshipss between the dependent variable and the independent variables. So, the firstly should focus on however the cycle are $I(1)$, that is combined of order 1. Therefore, logarithms were taken for time series along with two different tests, the first one, which is called the ADF Augmented Dickey Fuller, PP- Phillip Perron test was used to test the data for stationary. The second test is the Johansen cointegration which was applied to examine the relationship between the independent variables and the dependent variables in the long run.

Unit Root Tests

We should take a logarithm of variables before unit root tests because log variables provide us flexible and decrease effect of outliers and pressed out from time series (Maddala, 1992). Then, variables embodied in logs are represented by prefix L. So, logs which comprise negative explanations are not considered. Following are the outcomes of unit root tests.

Table 2: Augmented Dickey Fuller and Phillip-Perron Tests

Name of Variables	ADF		Conclusion at 5%	Phillip-Perron		Conclusion at 5%
	Level	Difference		Level	Difference	
LGGDP	-2.93389	-3.99001	I(1)	-16.0084	-	I(0)
LGGDP	-3.19837	-3.23659	I(1)	-22.3849	-	I(0)
LGGDP	-6.96218	-	I(0)	-6.08225	-	I(0)
LGCAP	-2.04855	-4.23011	I(1)	-2.04855	-4.22722	I(1)
LGCAP	-1.90477	-4.03293	I(1)	-1.90477	-4.03002	I(1)
LGCAP	-0.69397	-4.37881	I(1)	-0.65609	-4.37304	I(1)
LGLB	-2.46536	-3.50388	I(1)	-4.67768	-	I(0)
LGLB	-2.31677	-3.41753	I(1)	-2.91679	-6.78569	I(1)
LGLB	-1.81769	-3.19364	I(1)	-2.3865	-	I(0)
LGEXP	-2.17455	-3.58561	I(1)	-2.35424	-3.71746	I(1)
LGEXP	-2.1651	-4.24324	I(2)	-0.98942	-6.37507	I(1)
LGEXP	-0.95477	-3.63973	I(1)	-1.29213	-3.6519	I(1)
LGFI	-0.84959	-4.59341	I(2)	-0.83924	-7.44861	I(2)
LGFI	-4.17515	-	I(0)	-1.38873	-9.07758	I(2)
LGFI	1.56977	-2.36328	I(1)	1.433964	-2.35235	I(1)
LGRD	-4.71438	-	I(0)	-4.58468	-	I(0)
LGRD	-3.99212	-6.83864	I(1)	-3.93219	-14.6132	I(1)
LGRD	0.199323	-7.49943	I(1)	-0.3196	-8.96907	I(1)
LGFLIB	-1.20852	-5.80363	I(2)	-1.22553	-5.83055	I(2)
LGFLIB	-0.47496	-6.48984	I(2)	-0.86749	-15.5293	I(2)
LGFLIB	-0.97404	-6.02308	I(2)	0.107871	-2.39123	I(1)

As shown in Table 2, some of the variables are stationary after the first differences and some are stationary after the second difference explained by I(1), except financial intermediation and financial liberalisation, which is stationary at the second difference in both tests. Nevertheless, variables like GDP are stationary in the Philip Perron test in trend and intercept.

Before applying the model, it should be checked whether the data is stationary or non-stationary, and if the problem of multicollinearity occurs it is basically a problem which explains the correlation among the independent and dependent variable.

Often, the data used in the multiple regression cannot give conclusive answers because of the high standard error, low t-ratio and the confident intervals are very wide with the parameters. The situation when the explanatory variables are very much intercorrelated is mentioned to as a multicollinearity (Maddala, 1992, p. 269).

So, multicollinearity happens when two independent variables are highly correlated with each other, so in this situation, one of them needs to be removed. But there is no perfect rule to remove this variable due to high correlation.

Table 3: Correlation Matrix

	LGGDP	LGLB	LGCAP	LGRD	LGFI	LGEXP	LGFLIB
LGGDP	1.000	-0.125	-0.012	-0.626	0.035	-0.024	-0.034
LGLB		1.000	-0.643	0.525	-0.642	0.147	0.837
LGCAP			1.000	-0.465	0.630	-0.485	-0.754
LGRD				1.000	-0.192	-0.102	0.291
LGFI					1.000	-0.826	-0.885
LGEXP						1.000	0.599
LGFLIB							1.000

According to the consideration, under mentioned models have been created with different combinations as summarised in this table:

Table 4: Models for Cointegration Tests

Model	**Explanatory Variables**
Model A	LGGDP LGLB LGCAP
Model B	LGGDP LGLB LGCAP LGEXP
Model C	LGGDP LGLB LGCAP LGEXP LGFI
Model D	LGGDP LGEXP LGFI LGFLIB
Model E	LGGDP LGFI LGRD LGFLIB

In this research the independent variables which are applied after lagging of one year because variables hypothetically predictable that these have an impact on GDP. The annual data was used in this paper, lagging the independent variables for the period looks to be a suitable method to check the effect of all variables on the dependent variable after one period instead of measuring their coexistent effects. The findings of the model of cointegration test which has showed the occurrence of the cointegration relations have been presented.

Johansen Cointegration Tests

In this test the first step is to finalise lag length. There are a number of measures available for this solution like AIC, SIC, HQ, LR and FPE. The results are obtained by using the Eviews software.

The results are not shown here due to the space limitation. The results of cointegration which generated a relation of cointegrating with practical results are shown below. In all the tables, the values of the both Maximum Eigenvalue and the Trace tests are described.

Table 5: Maximum Eigenvalue and Trace Tests for Model A

Hypothesised Number of Co Integration Equations	Maximum Eigen Value Statistic	0.05 Critical Value	Trace Statistics	0.05 Critical Value
R==0	14.07897	21.13162	25.79971	29.79707
R<=1	9.241269	14.2646	11.72075	15.49471
R<=2	2.479476	3.841466	2.479476	3.841466

* denotes that the hypothesis is rejected at 0.05. Lag length is chosen as 1 based on LR, FPE, AIC, SC, HQ.

As per the analysis of the findings which is shown in Table 5 for the model A, both the value of Trace value and Maximum Eigenvalue tests shows that there are not any cointegrating vectors found at the 5% level.

Table 6: Maximum Eigenvalue and Trace Tests for Model B

Hypothesised Number of Co Integration Equations	Maximum Eigen Value Statistic	0.05 Critical Value	Trace Statistics	0.05 Critical Value
R==0	97.79564	27.5843	131.3464	47.85613
R<=1	20.92176	21.13162	33.55079	29.79707
R<=2	11.1932	14.2646	12.62903	15.49471
R<=3	1.435832	3.841466	1.435832	15.49471

* denotes that the hypothesis is rejected at 0.05. Lag length is chosen as 1 based on LR, FPE, AIC, SC, HQ

As shown in Table 6 for the model B, both the Trace and Maximum Eigenvalue tests specify that there are two cointegration vectors found at the level of 5%.

Table 7: Maximum Eigenvalue and Trace Tests for Model C

Hypothesised Number of Co Integration Equations	Maximum Eigen Value Statistic	0.05 Critical Value	Trace Statistics	0.05 Critical Value
R==0*	42.46958	27.58434	67.7021	47.85613
R<=1	15.55913	21.13162	25.23252	29.79707
R<=2	9.269929	14.2646	9.673395	15.49471
R<=3	0.403467	3.841466	0.403467	3.841466
R<=4				

* denotes that the hypothesis is rejected at 0.05. Lag length is chosen as 1 based on LR, FPE, AIC, SC, HQ

As shown in Table 7 for the model C, the Trace test explains that there is one cointegrating vector whereas the Maximum Eigenvalue test explains only one cointegrating vector at the level of 5%.

Table 8: Maximum Eigenvalue and Trace Tests for Model D

Hypothesised Number .of Co Integration Equations	Maximum Eigen Value Statistic	0.05 Critical Value	Trace Statistics	0.05 Critical Value
R==0	172.1838	27.58434	216.1238	47.85613
R<=1	22.64181	21.13162	43.94002	29.79707
R<=2	14.66452	14.2646	21.29821	15.49471
R<=3	6.633688	3.841466	6.633688	3.841466

* denotes that the hypothesis is rejected at 0.05. Lag length is chosen as 1 based on LR, FPE, AIC, SC, HQ

In Table 8 the results from the model D show that the Trace test indicates that there are four cointegrating vectors at the level of 5%.

Table 9: Maximum Eigenvalue and Trace Tests for Model E

Hypothesised Number .of Co Integration Equations	Maximum Eigen Value Statistic	0.05 Critical Value	Trace Statistics	0.05 Critical Value
R==0	37.48277	27.58434	68.79823	47.85613
R<=1	18.23534	21.13162	31.31545	29.79707
R<=2	9.376415	14.2646	13.08011	15.49471
R<=3	3.703694	3.841466	3.703694	3.841466

* denotes that the hypothesis is rejected at 0.05. Lag length is chosen as 1 based on LR, FPE, AIC, SC, HQ

As the result of Table 9 for model E, Trace test indicates that two cointegrating vectors are found at the level of 5%.

Table 10: Summary of Long Run Results of the Johansen Cointegration Tests

DV	LGGDP					
Model	Model A	Model B	Model C	Model D	Model E	Main Model
LCAP	0.15737* (0.26205)	0.19522* (0.30942)	0.22456* (0.31952)	-	-	-0.6419* (-1.1693)
LLB	13.61099** (2.4889)	11.4802* (1.44331)		-	-	37.7657** (4.45524)
LFI	-	-	-0.1971* (0.08373)	-0.73225* (-0.20676)	-2.39605* (-0.81284)	1.0099* (0.4922)
LFLIB	-	-	-	-0.08728* (-0.25686)	0.01188* (0.03268)	-0.4736* (-1.62687)
LEXP	-	0.260145* (0.38225)	0.87942* (0.8971)	0.89649* (0.91497)	-	1.0092* (1.716537)
LRD	-	-	-	-	-590.7410* (-0.8367)	-1612.80** (-3.41485)

**** Significant at 0.05 level**

The results shows of the above table from the model A is reject the null hypothesis. Capital has a positive and in significant effect on economic growth while labour has a positivel and significant impact on economic growth. In model B capital and labour have a positive effect but are insignificant. In model C, capital financial intermediations have a positive but insignificant relationship between the dependent variable. In model D the relationship is negative and insignificant between the financial intermediations and financial liberalisation while positive and insignificant on exports. In model E there is a negative and insignificant relationship between the financial intermediations and research and development whereas a positive but insignificant relationship between financial liberalisation. In overall discussion in the model according to the above table it shows that labour has a positive and significant relationship with the dependent variable. Research and development also have a significant relationship but a negative impact. Capital hasa negative and insignificant effect, financial intermediations have a positive but insignificant effect, financial liberalisation has an insignificant and negative relationship while exports have a positive but insignificant effect**.**

Conclusion

The objective of this paper was to examine the impact of financial liberalisation on financial development/growth in Iraq by using the time series data from 2004 to 2018. The paper has described that the economy of Iraq has been established by number of ways. The economic conditions of the Iraq are not good due to political and financial crises which were created by the war imposed by the Americans in addition to other internal issues. The empirical part of this paper examined the determinants of the economic growth in Iraq whereas testing for the effect of the financial repression in Iraq on the economic growth. An index of financial liberalisation was applied in the econometric models, the repressive financial systems in Iraq were taken by the financial constraint index created by Taghipour (2009), multiplied by -1 to us as a proxy of financial liberalisation and applied along with the predictable and the theoretical determinants of the economic growth as proposed in the theories.

More specifically, this paper examined if the financial liberalisation index would have a positive effect on economic growth, whereas other determinants of the economic growth were also be examined. The results of this article proposed that capital and financial liberalisation have a negative relationship and are also insignificant while research and development has a negative relationship but is significant. On the other hand, financial intermediation has a positive but insignificant relationship. Only labour has a positive and significant relationship. Hence, the conclusions regarding the role of labour are according to the theory because the results propose that labour has a positive effect on the economic growth related to Iraq, which proposes that labour force in Iraq is very effective in encouraging economic growth. This can be endorsed to high efficiency of the labour in Iraq. All these results are from a small data sample but these factors need to be exposed by using a larger data sample.

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