

# Financial Liberalization and Banking System Development: Evidence from Arab Countries

Naïma Hleli<sup>1\*</sup>, Mounir Smida<sup>2</sup>

<sup>1</sup>PhD Candidate in Economics at Faculty of Economics and Management of Sousse, University of Sousse, Tunisia

<sup>2</sup>Professor of Economics, Department of Economics, Faculty of Economics and Management, University of Sousse, 4023, Tunisia

DOI: [10.36348/sjef.2023.v07i03.005](https://doi.org/10.36348/sjef.2023.v07i03.005)

| Received: 09.02.2023 | Accepted: 12.03.2023 | Published: 21.03.2023

\*Corresponding author: Naïma Hleli

PhD Candidate in Economics at Faculty of Economics and Management of Sousse, University of Sousse, Tunisia

## Abstract

Financial liberalization is a process that could be profitable for growth but it may pose serious problems to the development and economic prosperity. The objective of this paper thesis is to evaluate by using panel data, the effect of financial liberalization and institutional quality on banking development on a sample of 17 Arab countries over the period 1990-2012. The empirical findings suggest that financial liberalization could have a positive effect as well as the institutional quality on banking development for the Arab region.

**Keywords:** Financial Liberalization, Banking Development, Institutions, Panel Data.

**Copyright © 2023 The Author(s):** This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

## 1. INTRODUCTION

Most developing countries are going through a crisis of economic policy in the late 1970s and early 1980s due to adverse circumstances and the deteriorating economic and financial conditions, the financial system has proved unable of generating economic growth. Under the influence of the World Bank and the International Monetary Fund, many countries including the Arab countries have undertaken economic reforms to create a sustainable investment environment. These reforms were aimed at the development of the private sector through an economic system based on market mechanisms. Financial liberalization is an important element of these reforms. It's important to give the central bank more independence in the conduct of monetary policy, to establish more movement of privatization and restructuring of the banking sector. For Arab countries in our study, bank financing plays a dominant role in the financial arena against the financial markets. It is for this reason that the majority of financial reforms introduced in the 1980s and 1990s targeted the development of the banking sector in these countries. The financial deregulation measures have included the liberalization of interest rates, the elimination of credit controls, removing barriers on the movement of capital flows and the removal of obstacles to competition between financial institutions, privatizing public financial institutions, etc. The most important argument supporting financial liberalization is to improve

financial development and achieve higher economic growth.

The theory of financial liberalization was born with the work of McKinnon (1973) and Shaw (1973). The work of these two authors supported the idea that the liberalization of the financial sector in contrast to what they call "financial repression" is used to boost growth through more direct channels. In their works, they have highlighted the deficiencies of a repressed financial system and tried to show that financial liberalization was the most effective way to develop banking intermediation, boost capital accumulation and increase growth. McKinnon (1973) and Shaw (1973) pointed inefficiency of financial markets (due to government intervention in their operations) as the main cause of the weakness of the developing economies of the early 1970. The intervention of the Government in the functioning of the financial and economic manifested in the credit control, the setting of interest rates, the nationalization of banks and the distribution of funds to priority projects considered. The World Bank in a study published in 2001 and Rajan and Zingales (2003) were inspired by the approach of McKinnon and Shaw on the financial development.

The discussion of the effect of financial liberalization on economic development was launched in 1973 by McKinnon and Shaw. These authors criticize the repression of financial system characterized

by the direct control of the decisions of the banking system and credit. These choices are often guided by political considerations rather than efficacy. McKinnon (1973) and Shaw (1973) use two main arguments against financial repression. First, the ceiling on interest rates reduces the levels of savings, the supply of loanable funds and the financial sector resources. This is likely to reduce the investment and delays, therefore, the process of economic growth. Furthermore, financial repression leads to a misallocation of funds. The financial system is under the direct control of the State, which limits competition between banks generating adverse effects on financial development and therefore on economic activity. It is clear that government intervention can lead to financial distortions. To correct these distortions, McKinnon (1973) and Shaw (1973) proposed the adoption of financial liberalization. This policy was presented as a simple and effective way to achieve economic growth. Many economists have analyzed the impact of financial liberalization on the efficiency of the bank. Empirical results are controversial. Some researchers show that financial liberalization has a positive impact on efficiency and improving the productivity of banks. Other authors consider that liberalization has a negative effect on the efficiency of the bank and may cause the outbreak of financial crises.

Taylor (1983) and Van Wijnbergen (1983) give great importance to the role played by the informal sector in the financing of the economy to point out the limits of a financial liberalization policy. Beji (2009) considers that in their work, informal markets are supposed to be an alternative and competitor to formal banking market, especially as the money is supposed to flow freely between the two sectors. In their models, we cannot talk about the financial markets except in the situation where financial liberalization is successful.

Van Wijnbergen (1983) thinks that the asymmetric information problems are almost non-existent in the informal market because the loans are granted only to employees in the same group. According to the neo-structuralism school, the theory of financial liberalization neglects an important aspect that is manifested by the presence of informal financial markets. For neoliberals, banks are the main financial market participants and the presence of organized informal market is only a consequence of financial repression. The latter is doomed to disappear in case of financial liberalization. This market is not a consequence of the repression, but it coexists freely with the formal financial market. Structuralism adds another critical to liberalization theory related to interest rates. Van Wijnbergen (1983) and Taylor (1983) point out in their model that the growth in interest rates can have a negative effect on the growth of the product.

The main objective of this paper is to quantify the effect of financial liberalization on the banking development. To better understand our main problem, we split up into sub-subsidary issues: Does financial liberalization leads to increasing growth? Financial liberalization is she accompanies adverse effects on the economy as financial instability?

## 2. OVERVIEW OF RELATED LITERATURE

In the literature, a number of empirical studies have tried to determine the direct impact of financial liberalization on the performance of the banking sector. Indeed, many empirical studies find that there is a relationship between the banking and financial activities and financial liberalization policies. In case there is an increase in accounts payable rates on their deposits due to financial liberalization, banks will be required to hold riskier assets. This may involve a reduction in the share of low-paid assets and encourage the least risky borrowers to encourage funding by the market less costly than bank loans.

The debate on the actual effects of financial liberalization has intensified over the past three decades. Similarly, there was no consensus about the value of the monitoring of financial openness policies.

Fry (1981) observed significant results in terms of the relationship between real interest rate and the volume of domestic credit on a sample of 12 Asian countries. Levine (2001), Mishkin (2005), Bekaert (2005) and Prasard et al (2003) have also shown the importance of the liberalization of capital flows. Indeed, Bekaert (2005) notes that the liberalization of financial markets has had a remarkable attraction at the economic activity, as it push to achieve a 1% annual real economic growth. In the same vein, Ronciere *et al.*, (2006) combine panel data and qualitative data on a sample of 60 countries over the period (1980- 2002) to show the important role of financial liberalization in future growth. Other economists such as Menkhoff and Suwanaporn (2007), Currie (2006) and Noy (2004) stipulate that financial liberalization, followed by a strengthening of prudential regulation and reliable internal and external control; help reduce the risk of banking crises. Kose *et al.*, (2009) argue that financial liberalization, if adopted on a wide scale, could act indirectly on productivity through the simulation of institutional reforms and improvement of the macroeconomic environment.

The necessity of the use of financial liberalization according to the idea of Fry (1995) is that it has a positive impact on the level of savings, which in turn improves the supply of credit, in the hope that this action leads to a high growth rate. Other authors as Prasad et al (2004) find that the liberalization of capital flows may have a positive effect on economic growth through increased domestic savings. Ozdemir and Erbil (2008) argue that financial liberalization has a positive

effect on economic performance not only short term but also long-term. Financial liberalization is seen as a future policy tool to achieve the acceleration of economic activity in emerging markets. Ozdemir and Erbil (2008) are also developing links between economic growth and financial liberalization using a panel for the 1995-2007 periods and verify a positive correlation between the two. Moreover, these two economists found that financial liberalization is a tool of the policy objective of stimulating economic activity and growth in emerging countries. On another level, McDonald and Schumacher (2007) study the relationship between financial liberalization and development using a model using panel data on a sample of 37 sub-Saharan countries. They find that financial liberalization facilitates among others the development of financial markets. Despite the multitude of studies showing a positive relationship between financial liberalization and growth, there are also various empirical studies to the contrary. Tornell *et al.*, (2004) report the negative impact of financial liberalization on growth. Same for Basher and Khan (2007), Demirguç-Kunt and Detragiache (1998) Kaay (1998) report that there is no clear relationship between openness and growth indicators in the conclusion of a study encompasses 117 developed and developing countries.

Several studies such as those of Diaz-Alejandro (1985), Kaminsky and Reinhart (1999) and Kose et al (2003) show that financial liberalization is characterized by strong macroeconomic volatility. Kaminsky and Reinhart (1999) concluded after a study of 20 countries panel data over the period 1970-1995 that the probability of a crisis increases by 40% if a country liberalizes its domestic banking system. Noy (2004) conducted a study to examine the relationship between financial liberalization and banking crises for a sample of 61 non-OECD countries over the period 1975-1997. Thus, since the early XIXth century, there was a remarkable correlation between banking crises

The model is specified in the following equation:

$$Banking_{it} = \alpha_0 + \alpha_1 Trade_{it} + \alpha_2 Kaopen_{it} + \alpha_3 Inflation_{it} + \alpha_4 Governance_{it} + \alpha_5 GDP_{it} + \mu_{it}$$

The specific countries selected for the study and the time frame was dictated by data availability. These include 17 Arab countries: Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, UAE and Yemen. The study covers the period from 1990-2012. With Financial Development (total credit to private sector as a ratio of GDP), financial openness, institutional Development, GDP per capita (constant 2005 US\$), inflation rate, and trade openness (% of exports and imports of GDP). Regarding the econometric methodology for estimating the set of equations presented is the Least Squares Method. This method is suitable for solving the problem of endogeneity of one or more explanatory variables. The

and capital mobility. In the same study where capital mobility was stopped, there was a reduction in the frequency of banking crises.

In another analysis, Kaminsky (2008) showed that with the existence of a high level of financial integration, the brutal risk of capital flow increases even in the absence of macroeconomic imbalances found in the host country. More recently, Joyce (2010) used a study to assess the impact of financial integration not only on the costs of crises but also on their lives during the period 1976 to 2002 for a sample of 20 countries. He explained the role of capital flows on the stability of the banking sector. It also found that an improvement in foreign direct investment (FDI) in a country tends to reduce the number and duration of the shocks, while external debt has an inverse effect. Greene and Villanueva (1991) find that an increase in interest rates causes a decrease in the level of investment in 33 developing countries. Same result for Demetriades and Devereux (1992) with a sample of 64 developing countries. For the neo-structuralism Taylor (1983) and Van Wijnbergen (1983), rising interest rates on bank deposits may result in a decrease in the level of demand for money balances, which led to the decrease in supply of loanable funds. Interest rates will thereby increase leading to a higher cost of capital and the fall in investment and income. In a more simple way.

### 3. EMPIRICAL METHODOLOGY

#### 3.1. Econometric Modelling

The objective of the estimated coefficients of the model below is to study the impact of the opening of the financial account and institutional development on the banking sector development for the Arab countries. The dependent variable here is the development bank, and the explanatory variables are trade openness, financial openness, institutional development, GDP and inflation.

application of this method consists in the introduction of variables, called instrumental variables strongly correlated with the endogenous variable but at the same time independent of the term of the error.

#### 3.2. Hypotheses

**H1:** Financial liberalization has a very big influence on the risk of the bank through changes in banking competition in economically and institutionally developed countries. There is a considerable attention in the literature about the link between financial liberalization and crisis. Financial liberalization could be detrimental to countries that adopt it, causing serious financial crises that plunge into long periods of stagnation

and economic recession: Kaminsky and Reinhart (1999) show how currency crises have often preceded banking crises. Moreover, the information asymmetries in financial markets are greater when transactions take place among agents separated by physical and cultural distances (Stiglitz, 2000). Moreover, relaxing restrictions on banking activities may increase banks' opportunities to take risks. Allen shows that financial liberalization may trigger a financial crisis when there is uncertainty. Kaminsky and Schmukler (2008) show that liberalization is followed by large financial cycles in the short run only in emerging economies whereas institutions improve and financial markets tend to stabilize in the long run. Demirgüç-Kunt and Detragiache (1999) also find evidence that a weak institutional environment makes liberalization of bank interest rates more likely to lead to a banking crisis.

**H2:** Financial liberalization improves the liquidity levels in the economy, due to the possible influx of international capital.

## 4. DATA AND RESULTS

### 4.1. Data and descriptive statistic

Annual data With Financial Development (total credit to private sector as a ratio of GDP), financial openness, institutional Development, GDP per capita (constant 2005 US\$), inflation rate, and trade openness (% of exports and imports of GDP), are downloaded from the World Bank's World Development Indicators and from the International Financial Statistics (International Monetary Fund). Data is for the period 1990–2012. The specific countries selected for the study and the time frame was dictated by data availability. These include 17 Arab countries (Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, UAE and Yemen).

### 4.2. Main results and discussions

**Table 1: Descriptive statistics**

variables	Means	Standard deviation	Minimum	Maximum	Observations
Banking	36.72514	23.48733	.271659	91.68594	371
KAOPEN	.5588953	1.688572	-1.875024	2.421764	384
Governance	2.126598	.5356402	.5356402	2.935	322
GDP	10283.2	14689.26	257.0081	92632.68	369
Inflation	10.16551	18.06084	-32.81441	159.267	355
Trade	82.65053	32.80953	11.08743	210.161	350

**Notes:** TRADE = Variable Trade openness; KAOPEN; INFL = inflation rate; Governance= institutional Development; GDP; Banking; Financial=financial development

**Table 2: Estimating equation results**

	Expected signs	Results
Banking	(+) ou (-)	2,2 (0,003) ***
Governance	(+)	14,764 (0,000) ***
GDP	(+)	0,0004 (0,000) ***
Inflation (Inf)	(+) ou (-)	0,0033 (0,920)
Trade	(+)	-0,162 (0,004) ***
Constant		12,61 (0,120)

**Table 3: I'm, Pesaran and Shin Test (1997)**

Variables	Model specification	IPS
Banking	- trend	0,19 (0,57)*
	+ trend	-1,4 (0,07)*
Kaopen	- trend	-4,19 (0,00) ***
	+ trend	0,12 (0,54)*
Governance	- trend	-6,33 (0,00) ***
	+ trend	-6,16 (0,00) ***
GDP	- trend	-1,846 (0,032) **
	+trend	-0,032 (0,487)*



Variables	Model specification	IPS
Inflation	- trend	-9,74 (0,00) ***
	+ trend	-7,32 (0,00) ***
Trade	- trend	-1,42 (0,07)*
	+ trend	-1,96 (0,02) **

Source: Author's own calculation using STATA and Eviews.

Notes: \* Coefficient significant at 1% level;

\*\* Coefficient significant at 5% level;

\*\*\* Coefficient significant at 10% level Values in parentheses are the estimated p-values..

The estimation results show that financial liberalization could have a positive effect on the banking development. Indeed, the sign of the variable of financial liberalization is positive and significant at 1%. This result tells us that for Arab countries should encourage financial openness policies in order to receive their benefits on banking development and growth in general. However, do not forget the spirit of openness that these policies must be gradual, conducted with caution and in stages.

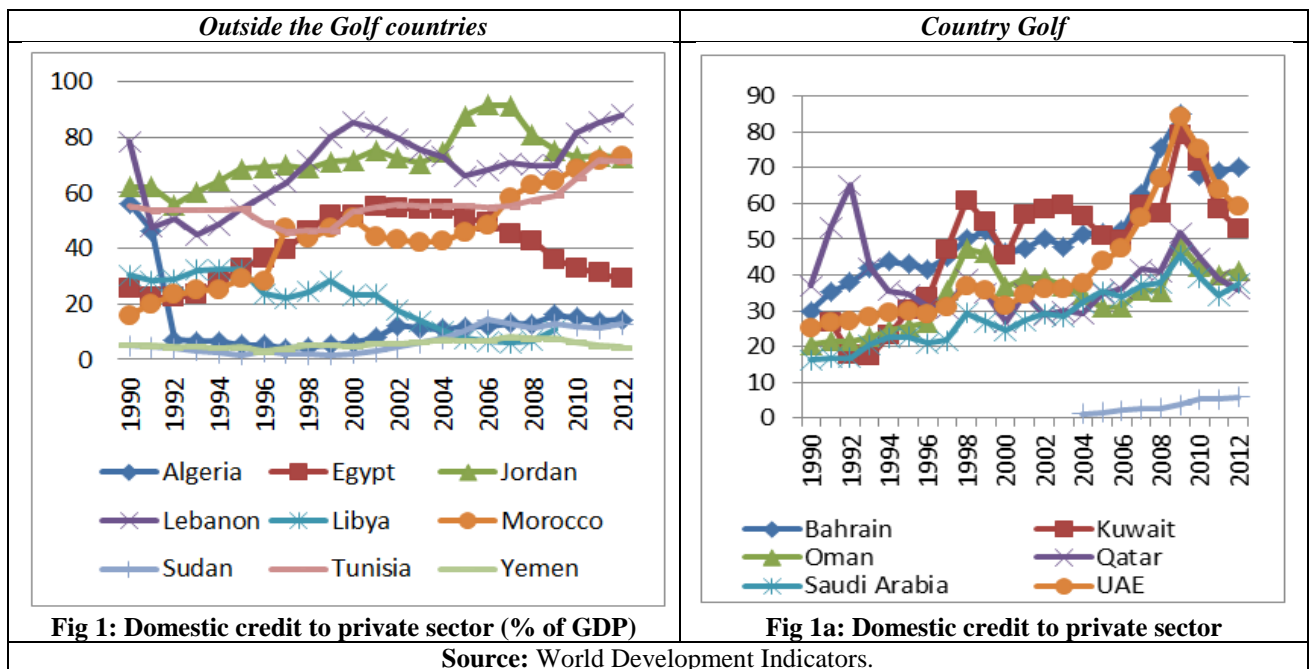
They must be accompanied by measures stabilizing the macroeconomic environment, financial regulatory structures and adequate banking supervision, modernization of banking systems and especially an improved political and institutional environment in these countries. Indeed, the coefficient on institutional development is positive and significant for our case. This proves that the growth of the banking sector in the Arab countries is sensitive to the quality of institutions and governance rules. More democratic nature of reforms that focus on the fight against corruption, strengthening of property rights, respect for the rule of law and transparency and dissemination of accounting and financial information could prove beneficial to the development of Arab banks. Furthermore, economic

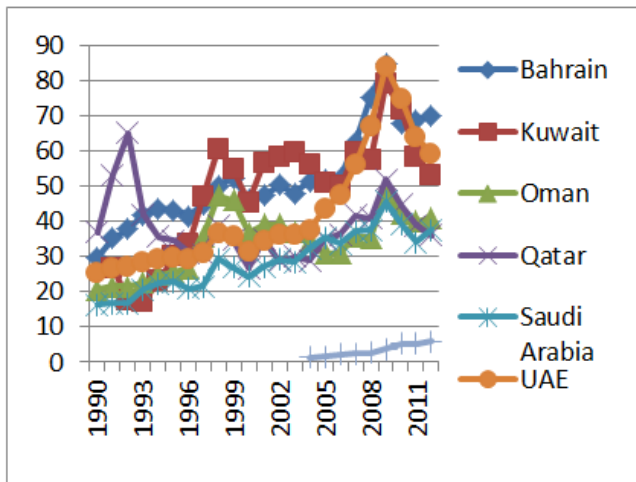
development seems to have a positive and highly significant relationship with the banking development.

This result corroborates the assertions of theoretical studies, asked the second chapter, showing a circular relationship between financial development and growth. The choice of the least squares method is legitimized, indeed, by the recommendations of these theories. The variable of trade openness seems to have a sign contrary to the expected sign. This result "surprising" can be explained by the likely presence of a nonlinear relationship between trade openness and bank development. Indeed, it is possible that trade openness can have a positive effect on the banking development that from a certain threshold beyond which, trade openness will begin to act positively on the development of the sector banks. The only non-significant variable in our equation is the variable relative to inflation.

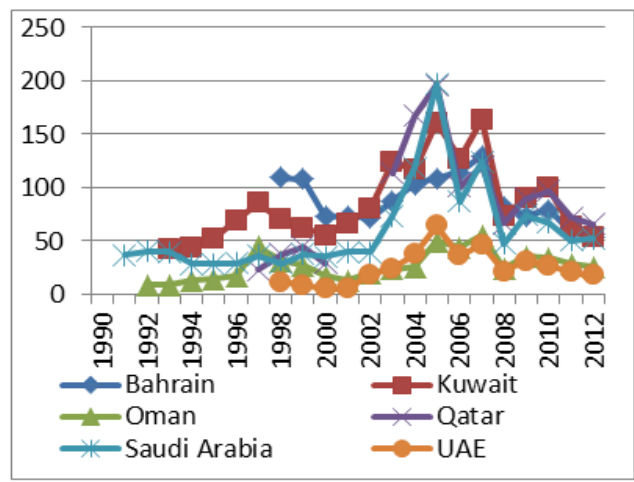
### 4-3 Impulse response analysis

We present in this section, indicators relating to the financial development in Arab countries. The indicators relate both to the banking development than financial development.



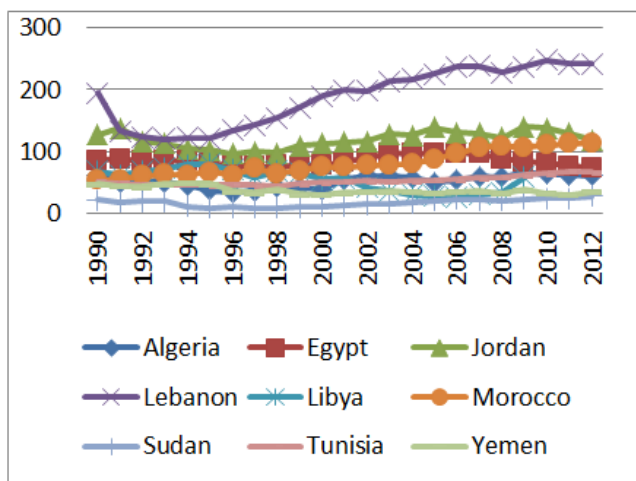


**Fig 2: Market Capitalization /GDP**

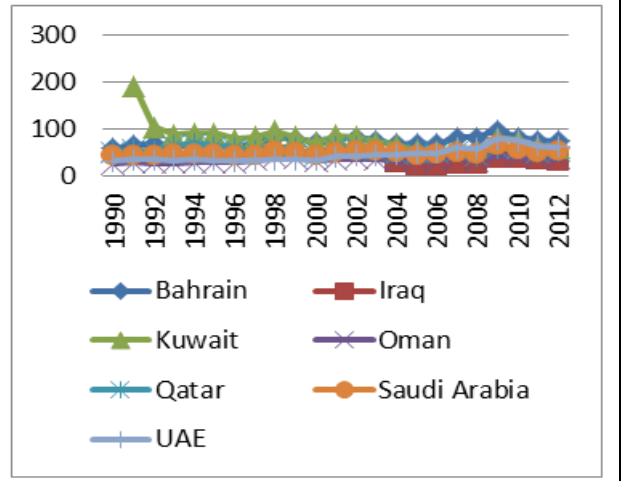


**Fig 2a: Market Capitalization/GDP**

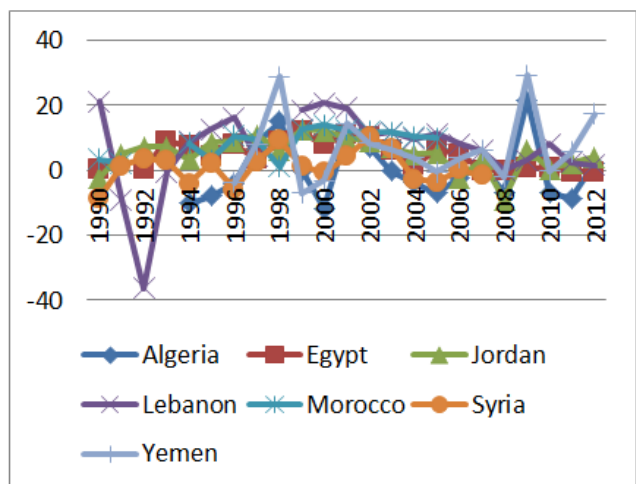
Source: World Development Indicators.



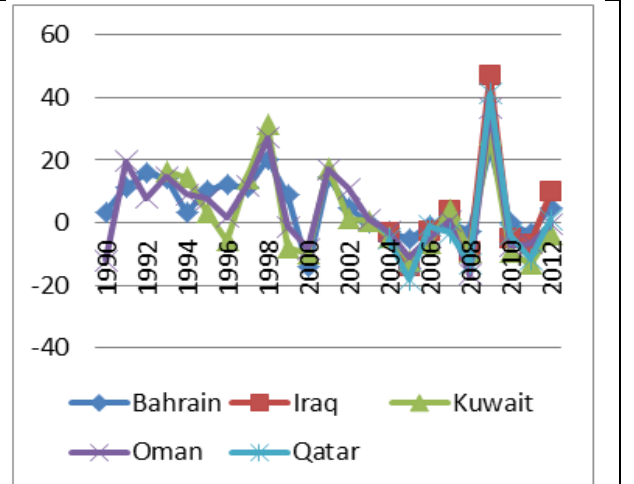
**Fig 3: M2/GDP**



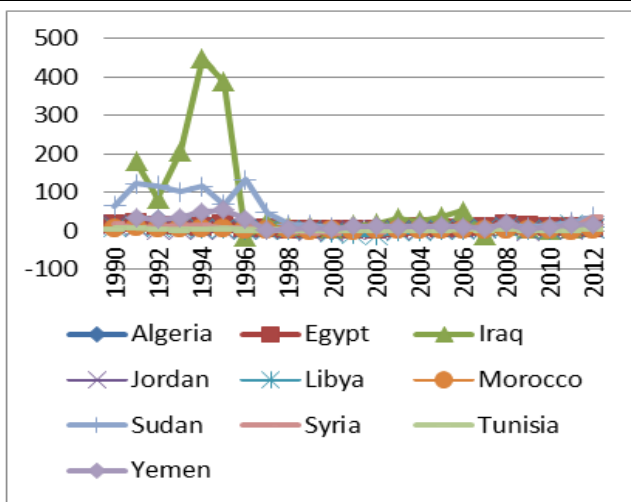
**Fig 3a: M2 /GDP**



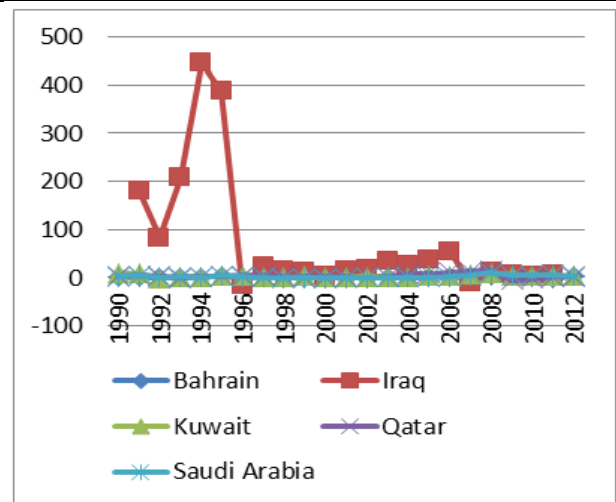
**Fig 4: Real interest rate**



**Fig 4a: Real interest rate**

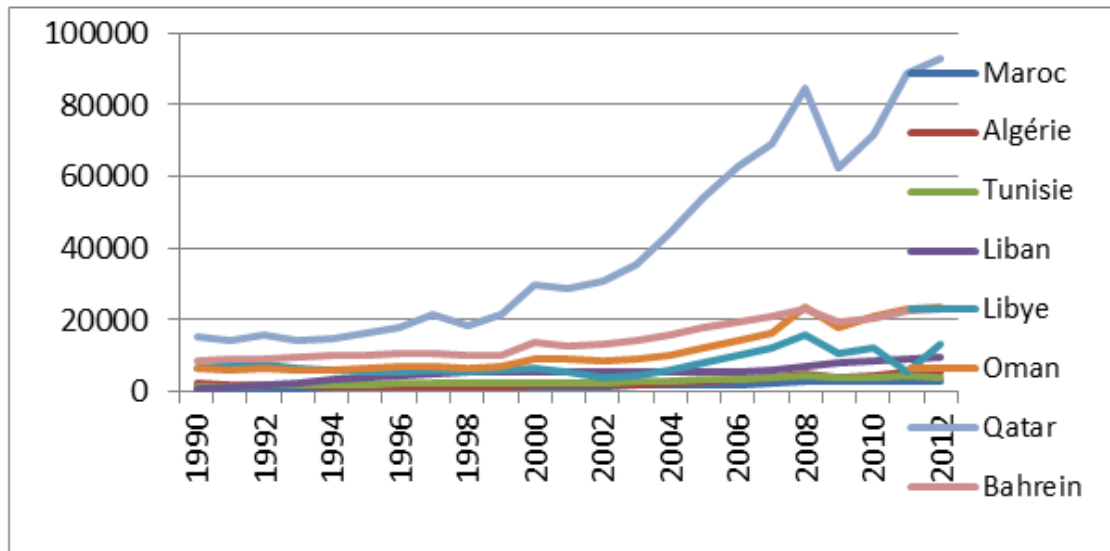


**Fig 5: Inflation, price index for consumption**



**Fig 5a: Inflation, price index for consumption**

Source: World Development Indicators.



**Fig 6: GDP per capita (in US dollars)**

Source: World Development Indicators.

The ratio of domestic credit provided by banking sector (% of GDP) (Fig 1), has experienced a slow, gradual improvement for all countries from the 1990s, apart from the case of Algeria in 1991. The period of severe political instability experienced by this country, from the early 1990s explains the drop in private sector funding by banks. This shows the importance of institutional and political environment in the functioning of the financial sector (banking in this case). For all other countries, we observe a widespread and continuous improvement in this ratio. Lebanon, Morocco, Tunisia and Jordan are the countries with the best banking performance among developing countries in the region. It just worth drawing attention to the slight decrease in the volume of Bank financing in Jordan from 2007 release date of the subprime crisis in the United States.

The total financial openness enjoyed by Jordan in 2001 is certainly the explanation for this fall. The same applies to all the Gulf countries, which have become integrated in international finance since the early 1970s by liberalizing their financial accounts. The decline in bank financing is noticeable in these countries in 2009, two years after the outbreak of the subprime crisis. This case reminds the Gulf countries that financial liberalization has not only benefits the functioning of the banking sector.

Jordan recorded a remarkable increase in the ratio from 2002, just after the entry into force of the liberalization of the financial account (Fig 2). The fall in this ratio coincides with the fall in the ratio of bank financing in response to the subprime crisis imported from the United States. Likewise for all the Gulf countries, which have experienced a substantial decrease in this ratio from 2007 for the same reasons.

For Tunisia, the market capitalization remained stable from 1997-2008 despite having a slight increase in the period before 1997. A slight return to form of the Tunis nevertheless recorded just after 2008 but halted by the unrest Political known by the country at the end of 2010. In general, one can notice the preponderance of bank financing compared to financial markets for all countries in the region (excluding the Gulf countries and the Gulf States).

The graphic (Fig 3), shows the different observations in the ratio M2 to GDP in Arab countries. Indeed, Lebanon and Jordan have a well-developed financial sector this indicator. To a lesser degree, we also note a relatively high level of this ratio in Tunisia and Morocco, which reflects an increase in levels of access to services offered by the banking sector. For Tunisia, this ratio has been stable since the beginning of the period with an average slightly hovers around 52%. Moreover, we note that the level reached by countries other than the Gulf countries is higher than that recorded by the Gulf countries. This finding may be due to high levels of GDP in the Gulf countries with respect to the other group of countries.

From graphic in (Fig 4), we can observe a high volatility of real interest rates in Lebanon due to significant fluctuations in the inflation rate throughout the period. We know that rising interest rates put them in difficulty, since it induces a lower growth reduces tax revenues and thus worsening their deficits. The period of internal financial liberalization (internal deregulation, privatization of public banks, etc.) experienced by all countries in the region in the early 1990s explains the upward trend, but short period observed in the graph 4 especially in Morocco and Jordan. In the Gulf, almost identical one notices an evolution of real rates of different countries from the late 1990s. This can testify to the homogeneity of the monetary policies of all the countries that should lead them to the creation of a monetary union in 2015-2016.

Inflation (Fig 5) has declined significantly stable and for all countries in the early 1990s, except for the case of Iraq which experienced the turmoil at the start of the decade due to the war that crossing the country. This decrease is attributable to the consolidation of public finances and the improvement of the framework of monetary policy in many countries. It should be recalled in this regard the recommendations of the Structural Adjustment Plan contained a component to the stability of consumer prices. Many countries in the region have experienced this program as: Tunisia, Morocco, Algeria, Egypt, etc. Sudan has experienced the highest inflation rates compared to other countries and then Lebanon and precisely during the period 1988-1996, while in Algeria, the inflation rate has increased since 1990-1992, but after this rate became stable until 2012.

For GDP per capita (Fig 6), this ratio shows that Qatar has the highest GDP per capita compared to other countries. We also see an increase in this indicator in recent decades in Morocco, Bahrain and Oman. Indeed, the ratio of per capita GDP began to decline from 2001-2005 in almost all selected countries except Qatar which registered a continuous increase throughout the period 1990-2012. In Tunisia, this ratio has increased slightly since 2003 compared to its level in 1999, but remains relatively low compared to other countries. On the contrary, Bahrain recorded a remarkable increase from 1999. From 2000-2010, gross domestic product (GDP) increased by 1.1% on average each year; reported the number of inhabitants, it increased by 0.5% per year. Between 1990 and 2000, GDP grew faster (1.5% on average), the crisis has had a significant impact on GDP in 2008.

## 5. CONCLUSION

The impact of financial liberalization has received much attention in the existing economic literature. We have tried in this article to analyze the impact of financial liberalization on the performance of the banking sector in the Arab countries. After presenting a brief overview of the theoretical literature, we concluded that financial liberalization could have positive effects on banking sector development. Thus, it improves the liquidity levels in the economy, due to the possible influx of international capital. Furthermore, liberalization pushes financial institutions and banks to precisely choose new behaviors in light of the changing economic environment. It also allows a better distribution and better diversification of types of risk by increasing investment opportunities. However, financial liberalization could be detrimental to countries that adopt it, causing serious financial crises in long periods of stagnation and economic recession. As was the case in the late 1990s for the countries of Southeast Asia, Russia, Turkey, Argentina, etc. This requires that these policies are accompanied by preventive measures that serve as safeguards to the excesses of globalized finance. The stabilization of the macroeconomic environment (choice of public policies, monetary and fiscal policies), strengthening and modernization of the financial system, improving the political, institutional and business climate are the best measures accompaniment to any financial liberalization policy.

The empirical results found at the end of this study show that the Arab countries can bet on more financial liberalization in the coming years to achieve a better functioning banking and thus stimulate growth. Arab countries have interest: to meet international standards of financial regulation and banking regulation, modernize their financial systems to manage crisis situations when they arise and improve their policies and institutional infrastructure to be successful the proposed transition.



## 6. Appendices: Estimation results Im, Pesaran and Shin (1997)

### Descriptive statistics

Variables	Model specification	IPS
<b>Banking</b>	- trend	0,19 (0,57)*
	+ trend	-1,4 (0,07)*
<b>KAOPEN</b>	- trend	-4,19 (0,00) ***
	+ trend	0,12 (0,54)*
<b>Governance [<sup>1</sup>]</b>	- trend	-6,33 (0,00) ***
	+ trend	-6,16 (0,00) ***
<b>GDP</b>	- trend	-1,846 (0,032) **
	+ trend	-0,032 (0,487)*
<b>Inflation</b>	- trend	-9,74 (0,00) ***
	+ trend	-7,32 (0,00) ***
<b>Trade</b>	- trend	-1,42 (0,07)*
	+ trend	-1,96 (0,02) **

Variables	Moyenne	Ecart-type	Min	Max	Observations
<b>Banking</b>	36.72514	23.48733	.271659	91.68594	371
<b>KAOPEN</b>	.5588953	1.688572	-1.875024	2.421764	384
<b>Governance</b>	2.126598	.5356402	.5356402	2.935	322
<b>GDP</b>	10283.2	14689.26	257.0081	92632.68	369
<b>Inflation</b>	10.16551	18.06084	-32.81441	159.267	355

	<b>Banking</b>	<b>Financial</b>	<b>KAOPEN</b>	<b>Governance</b>	<b>GDP</b>	<b>Inflation</b>	<b>Trade</b>
Banking	1.0000						
Financial	0.5354* 0.0000	1.0000					
KAOPEN	0.3219* 0.0000	-0.0543 0.2998	1.0000				
Governance	0.5427* 0.0000	0.3615* 0.0000	0.3641* 0.0000	1.0000			
GDP	0.2005* 0.0001	0.0175 0.7376	0.4506* 0.0000	0.3078* 0.0000	1.0000		
Inflation	-0.2756* 0.0000	-0.1712* 0.0013	-0.1730* 0.0012	-0.4835* 0.0000	-0.0762 0.1577	1.0000	
Trade	0.5098* 0.0000	0.1076* 0.0461	0.4431* 0.0000	0.3722* 0.0000	0.3388* 0.0000	-0.2903* 0.0000	1.0000

<sup>1</sup> This variable is the average of the following six institutional sub-indicators: Control of Corruption, Rule of Law, bureaucratic Quality, Ethnic Tensions, Democratic Accountability, and Investment Profile.

## REFERENCES

- Aizenman, J., Chinn, M. D., & Ito, H. (2010). The emerging global financial architecture: Tracing and evaluating new patterns of the trilemma configuration. *Journal of international Money and Finance*, 29(4), 615-641.
- Arestis, P., & Stein, H. (2005). An institutional perspective to finance and development as an alternative to financial liberalisation. *International Review of Applied Economics*, 19(4), 381-398.
- Arestis, P. (2005). Financial liberalization and the relationship between finance and growth, *CEPP Working paper*; N° 05/05.
- Bae, K. H., & Goyal, V. K. (2003). Property rights protection and bank loan pricing.
- Beck, T., Levine, R., & Loayza, N. (2000). Finance and the Sources of Growth. *Journal of financial economics*, 58(1-2), 261-300.
- Beck, T., & Laeven, L. (2006). Institution building and growth in transition economies. *Journal of Economic Growth*, 11, 157-186.
- Chinn, M. D., & Ito, H. (2008). A new measure of financial openness. *Journal of comparative policy analysis*, 10(3), 309-322.
- Arteta, C., & Hale, G. (2008). Sovereign debt crises and credit to the private sector. *Journal of international Economics*, 74(1), 53-69.
- Demirgüç-Kunt, A., & Detragiache, E. (1998). Financial Liberalization and Financial Fragility, *International Monetary Fund, Working Paper*, pp 98-83.
- Edison, H. J., Levine, R., Ricci, L., & Sløk, T. (2002). International financial integration and economic growth. *Journal of international money and finance*, 21(6), 749-776.
- Detragiache, E. (1999). Liberalizing Capital Movements: Some Analytical Issues, *IMF Economic Issues*, N°17.
- Edison, H. J., Levine, R., Ricci, L., & Sløk, T. (2002). International financial integration and economic growth. *Journal of international money and finance*, 21(6), 749-776.
- Detragiache, E. (1999). Liberalizing Capital Movements: Some Analytical Issues, *IMF Economic Issues*, N°17.
- Eschenbach, F. (2004). Finance and growth: A survey of the theoretical and empirical literature. *Tinbergen Institute Discussion Paper*, 39(2), 18.
- Fry. (1978). Money and Capital or Financial Deepening in Economic Development? *Journal of Money, Credit and Banking*, 10, pp. 464-475.
- Favara, G. (2003). An Empirical Reassessment of the Relationship between Finance and Growth, *IMF Working Paper*, WP/03/123, European I Department.
- Gablis V. (1977). Financial Intermediation and Economic Growth in less developed countries: A theoretical Approach, *Journal of Development Studies*, 13(2), 58-72.
- Gupta, P., Kochhar, K., & Panth, S. (2011). Bank Ownership and the Effects of Financial Liberalization: Evidence from India, *IMF Working Paper*; N° 50.
- Hermes, N., & Nhung, V. T. H. (2008). The impact of financial liberalization on bank efficiency: evidence from Latin America and Asia. *Applied Economics*, 42(26), 3351-3365.
- Johnston, R. B., & Sundararajan, V. (1999). *Sequencing financial sector reforms: Country experiences and issues*. Intl Monetary Fund.
- Kapur, B. (1992). Formal and Informal Financial Markets, and the Neo-Structuralism Critique of the Financial Liberalization Strategy in Less-Developed Countries, *Journal of Development Economics*, 38, pp. 63-77.
- Kaminsky, G., & Schmukler, S (2008). Short-Run Pain, Long-Run Gain: Financial Liberalization and Stock Market Cycles, *Review of Finance*, 12(2), p. 281.
- Kose, M. A., Prasad, E., Rogoff, K., & Wei, S. J. (2006). Financial Globalization: A Reappraisal, *IMF Working Paper*, N°189, p. 33.
- Klein, M. W. (2003). Capital Account Openness and the Varieties of Growth Experience, *NBER Working Paper N°9500*.
- Klein, M. W., & Olivei, G. P. (2001): Capital account liberalization, financial depth and economic growth, unpublished manuscript.
- Loayza, N., & Rancière, R. (2002). Financial Development, Financial Fragility and Growth », *Central Bank of Chile Working Paper*, N°145.
- Levine, R. (1997). Financial development and economic growth: views and agenda. *Journal of economic literature*, 35(2), 688-726.
- Levine, R., Loayza, N., & Beck, T. (2000). Financial intermediation and growth: Causality and causes. *Journal of monetary Economics*, 46(1), 31-77.
- Levine, R. (1997). Financial development and economic growth: views and agenda. *Journal of economic literature*, 35(2), 688-726.
- Bordo, M. D., Meissner, C. M., & Stuckler, D. (2010). Foreign currency debt, financial crises and economic growth: A long-run view. *Journal of international Money and Finance*, 29(4), 642-665.
- Hamdi, H., & Jlassi, N. B. (2014). Financial liberalization, disaggregated capital flows and banking crisis: Evidence from developing countries. *Economic Modelling*, 41, 124-132.
- Nsouli, S. M., Rached, M., & Funke, N. (2002). The speed of adjustment and the sequencing of economic reforms: Issues and guidelines for policymakers, *IMF Working paper*, N°132, p.19.
- Pagan, M. (1993). Financial Market and Growth, *an Overview*, *European Economic Review*, pp 613-622.

- Prasad, E. S., & Rajan, R. G. (2008). A pragmatic approach to capital account liberalization. *Journal of Economic Perspectives*, 22(3), 149-172.
- Alvarez-Plata, P., & Schrooten, M. (2004). Misleading indicators? The Argentinean currency crisis. *Journal of Policy Modeling*, 26(5), 587-603.
- Quinn, D. (1997). The correlates of change in international financial regulation. *American Political science review*, 91(3), 531-551.
- Sahoo, S. (2013). Financial structures and economic development in India: an empirical evaluation. *Reserve Bank of India WPS*, (02).
- World Bank. (1989). World Development Report 1989, *Oxford University Press*, New York, p. 67 cité dans Venet. B (1994). p. 9.