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How the Triptych "Economic Freedom-Financial Development-FDI" Can Affect the MENA region's Economic Growth?

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ABSTRACT: This study examines the impact of the triptych economic freedom-financial development-FDI on economic growth in 12 MENA countries (Algeria, Bahrain, Egypt, Iran, Jordan, Kuwait, Morocco, Saudi Arabia, Syria, Tunisia, Turkey and Yemen) over the period 1995-2012, by using OLS, panel fixed effects (FE), panel random effects (RE) and generalized method of moments (GMM). The main findings indicate that economic freedom contributes positively and significantly to economic growth, because greater economic freedom fosters economic growth by inducing competition and steering resources to the most efficient use. Furthermore, financial development indicators exert a positive and significant impact on the growth of selected MENA economies, thus, it can be said that the financial development play a preponderant role in enhancing the MENA region's growth prospects by encouraging savings and investments, and allowing the efficient allocation of resources, it is also accountable for absorbing FDI benefits. As well as, the results show the positive growth effect of FDI. Based on these findings, it could be concluded that policy actions should be directed towards strengthening economic institutions, promoting access to finance and enhancing competition through the removal of stringent entry barriers and improvement of credit information. Further, MENA countries can improve their growth performance by opening their doors more widely to FDI inflows and enacting favorable investment policies. Additionally, policy makers in the MENA region should create the enabling environment conducive to financial development and implement far-reaching reforms in the financial area along with embarking on deeper and broader institutional reforms.

KEYWORDS: Economic Freedom, Financial Development, FDI, Economic Growth, MENA region.

JEL CLASSIFICATION NUMBERS: F21, O16, O43, O53.

1 INTRODUCTION

Economic freedom is commonly viewed as one of the necessary ingredients of the recipe for economic success, it is unquestionably a prerequisite for broad-based economic growth; further, many economists have brought to the fore the importance of economic freedom in explaining differences in growth across countries. In fact, the International Monetary Fund, the World Bank and pioneer countries of modern finance have praised the fundamental role played by economic freedom that gained momentum with the increased calls for liberalization and breaking all restrictions. Moreover, there is a growing consensus among researchers concerning the preponderant role played by financial development that has been defined in many different ways, Charles Amo Yartey (2006) stated that the "financial development refers to the development of well-functioning financial markets and intermediaries" [1]. According to Gounder Neelesh (2012) and Agnieszka Gehringer (2013) "financial development includes setting up sound financial institutions and broadening financial markets that uphold investment and economic growth" [2]. In general, we define financial development as the broad-based promotion of financial system that offers access to a wide range of high-quality and efficient financial services and strengthens financial ties with the entire economy.

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An advanced stage of financial development allows the efficient allocation of resources and steers them toward the most productive uses (*Levine, 2005*) [3]. Indeed, a reliable financial system positively influences economic growth via increases in investment efficiency (*Greenwood and Jovanovic, 1990; Kojo Menyah et al., 2014*) ([4], [5]), because the smooth functioning of financial system improves competitiveness and allows investors to realize fictional gains through offering more diverse investment options and disclosing information (*King and Levine, 1993a*) [6]. Further, the positive growth effect of FDI requires reaching a certain level of financial development; more aptly put, financial freedom and financial development together shape the salient features of economic prosperity.

Most MENA countries have embarked on reforming their financial sectors over the past three decades, but the rapid pace of financial globalization reflects the inadequacy of efforts made. Moreover, modest economic growth in most MENA countries can be traced to modest economic freedom and the thinness of financial sectors. Thus, the present *study aims to* test the impact of the triptych economic freedom-financial development-FDI on economic growth in 12 MENA countries (Algeria, Bahrain, Egypt, Iran, Jordan, Kuwait, Morocco, Saudi Arabia, Syria, Tunisia, Turkey and Yemen) over the period 1995-2012, by employing a panel data analysis. For this purpose, the remainder of this paper is organized as follows: Section 2 presents a theoretical and empirical review on economic freedom, financial development and FDI and the links with economic growth, section 3 discusses economic growth, economic freedom, financial development and FDI in MENA countries, section 4 introduces the data and analyzes the empirical results and finally section 5 concludes the paper.

2 THEORETICAL AND EMPIRICAL REVIEW ON ECONOMIC FREEDOM, FINANCIAL DEVELOPMENT AND FDI AND THE LINKS WITH ECONOMIC GROWTH

Many economists have stressed the potent growth effect of economic freedom and pointed out that an open and effective financial system guarantees transparency and fosters competition which is responsible for introducing the most efficient financial intermediation, in addition they stated that the efficiency of financial services provision contributes to explain growth differences across nations (*Schumpeter, 1911; Goldsmith, 1969; McKinnon, 1973*) ([7], [8], [9]), because the underdeveloped financial system keeps the advanced technology farther away from poor countries and inhibits their potential for growth. By contrast, countries with high-quality financial systems tend to grow faster as compared to the former group of countries (*Levine, 2005*) [3]. In this way, an advanced level of financial development is commonly viewed as one of the necessary ingredients of the recipe for economic success (*King and Levine, 1993b; Levine et al., 2000*) ([10], [11]). In other words, a well-developed financial system is unquestionably a prerequisite for broad-based economic growth (*Kojo Menyah et al., 2014*) [5].

In retrospect, Greenwood and Jovanovic (1990) illustrated that a reliable financial system positively influences economic growth via increases in investment efficiency [4]. In the same vein, King and Levine (1993a, b) stated that the healthy financial system allows investors to realize fictional gains through offering more diverse investment options and disclosing information ([6], [10]), further, it ensures the efficient allocation of resources and steers them towards the most productive uses, thereby leading to higher growth rates. Moreover, Levine (1991, 1997, 2005) ([12], [13], [3]) asserted that financial development can affect economic growth in the following five ways: 1) providing reliable information about investment opportunities for better capital allocation; 2) monitoring investments and exerting effective corporate governance; 3) expediting trade and managing risks; 4) mobilizing and pooling savings; and 5) facilitating the dyadic exchange of goods and services. Additionally, Sajid Anwar and Sizhong Sun (2011) claimed that an advanced level of financial development enhances the households' confidence and induces them to save and deposit their money, thus, funds will be available for the most promising investors [14]. As well as, Khan (2001) [15] pointed out that financial intermediaries secure good funding opportunities for producers and other economic agents, further, the granting of loans allows investors and producers keep up with the latest technology. Recently, Sajid Anwar and Arusha Cooray (2012) [16] argued that financial development encourages capital supply to meet demand and guarantees the effective allocation of financial resources; also, the well-developed stock market enables firms raise capital by issuing securities, therefore the sound financial system helps to highlight the lucrative business opportunities.

In general, the financial development fosters growth rates through its positive influence on capital accumulation and total factor productivity, since a healthy financial system induces savings and steers them to promote both domestic and foreign capital investment, and thereby improves the economy's competitive strengths.

Furthermore, the new wave of globalization has pushed countries around the globe to adopt more open and transparent policies in terms of trade, FDI and financial markets that can doubtlessly maximize these countries' economic output (*Rym Ayadi et al., 2013*) [17], besides, it has allowed the least globalized countries to rise from the bottom and ride the wave of

economic prosperity. In this context, it is worthwhile to note that the inward FDI contributes to higher GDP growth by affecting international trade, bringing capital, technology and know-how, spurring competition, promoting privatization, providing labor opportunities, augmenting capital accumulation and generating tax revenues (*De Mello, L., 1997; Henryk Gurgul et al., 2014*) ([18], [19]) . Indeed, the host countries' financial development is accountable for absorbing FDI benefits; in other words, the greater the financial development, the greater the benefits from the presence of Multinational Corporations (MNCs) (*Ang, 2008*) [20], since an efficient financial system makes the investment atmosphere more attractive to foreign investors who want carrying out their financial transactions under the best possible circumstances (*Deichmann et al., 2003*) [21].

On the other hand, the fruits of the neoteric financial system can be reaped only in a sound institutional atmosphere. Generally, institutions have gained wide interest as determinants of economic growth among economists who have brought to the fore the importance of institutional background in explaining growth differences among countries (*Acemoglu et al., 2005a,b; Houssem Rachdi and Sami Mensi, 2012*) ([22], [23], [24]). Accordingly, growth mechanisms cannot be sufficiently explained by factor accumulation and technological change alone, even though the importance of these elements, but instead by involving institutional factors such as property rights and corruption (*Demetriades Panicos and Siong Hook Law, 2004*) [25]. As well as, the explanatory power of factors like geography and international trade dwindles in front of institutions (*Rodrik et al., 2002; Knack and Keefer, 1995*) ([26], [27]).

The pioneer countries of modern finance have praised the fundamental role played by economic institutions in their financial progress; further, they have preened with a brilliant institutional background (*Badi H. Baltagi et al., 2009; Farah Hussain and Deb Kumar Chakraborty, 2012*) ([28], [29]). Many institutional perspectives like financial freedom, economic freedom, property rights enforcement, governance practices, regulatory oversight, accounting systems and bankruptcy laws determine the pace of financial development, which in turn enhances growth rates (*Iftekhar Hasan et al., 2009; Michael K. Fung, 2009*) ([30], [31]).

The enforced property rights are deemed as one of the supporting pillars of economic prosperity. Further, they increase the flexibility of financial system that permits entrepreneurs to hunt the remunerative economic opportunities (*Iftekhar Hasan et al., 2009*) [30]. In fact, countries with reliable legal systems that enforce the creditors' rights enjoy well developed banks compared to other countries with weak legal systems (*Houssem Rachdi and Sami Mensi, 2012*) [24]. La-Porta et al., (1998) [32] showed that the legal system is the main responsible for protecting property rights that are required in the financial sector. Also, Hasann Watchel and Zhou (2009) [33] illustrated that the well defined property rights are intrinsically linked to stronger growth.

Moreover, the widespread corruption can erode the property rights enforcement and gnaw away at the legal system and in such a situation, financial development tends to slow down; more precisely, corruption raises transaction costs and drives resources allocation into unproductive directions, as well as, it creates uncertainty and reduces productivity, thus it is harmful to economic growth; generally, it is associated with high public investment and low-quality public infrastructure (*Shleifer and Vishny, 1993; Mauro, 1995; Wouter Ebben and Albert de Vaal, 2009*) ([34], [35], [36]). In fact, good institutions intervene in putting out the fire of information asymmetry and burdensome transaction costs that can exist in the financial system (*M. Kabir Hassan et al., 2011*) [37].

In addition, high economic institutional quality proxied by greater economic freedom fosters economic growth by inducing competition and accelerating technology dissemination (*Guglielmo Maria Caporale et al., 2009*) [38]. As well as, one of the major lineaments of economic freedom is the financial liberalization, which steers financial resources to the most efficient use, hence good economic institutions can propel the relationship between financial development and economic growth (*Sajid Anwar and Arusha Cooray, 2012*) [16]. From an empirical perspective, Claessens and Laeven (2003) [39] confirmed that financial development and property rights have an interactive impact on economic growth, by facilitating access to financial services and ensuring the efficient allocation of assets. Acemoglu and Johnson (2005) [22] stated that good economic institutions contribute significantly to economic success; also, Kojo Menyah et al., (2014) [5] revealed that the smooth functioning of financial system is related to higher investment and trade freedoms.

In contrast, an inadequate institutional environment postpones the process of financial development and thus dampening the economy's growth rate; even more aptly put, weak financial systems coupled with inefficient economic institutions frustrate the growth rate.

Despite the growing consensus on the preponderant role played by financial development, the Asian economic crisis has muddied waters (*Kojo Menyah et al., 2014*) [5]. Furthermore, the recent global financial crisis has shaken the most developed

financial systems in the world causing bearish cracks in economic growth rates; thence, it has sparked widespread doubt about the assured growth effect of financial development (*Jyh-Lin Wu, 2010*) [40]; especially, that the overwhelming presence of foreign banks expedites the propagation of financial crisis that is deemed as an economic plague's contagion (*Guglielmo Maria Caporale et al., 2009*) [38].

The finance-growth nexus has received a great deal of attention from economists who are keen to provide further explanations and more sophisticated empirical models, the Table 1 summarizes recent empirical studies that analyzed the link among economic freedom, financial development, FDI and economic growth. Moreover, an ample body of empirical research has underlined the glowing positive link among the previously mentioned variables.

Table 1. Empirical Evidence on the Link among Financial Freedom, Financial Development, FDI and Economic Growth

Authors	*Sample*	*Empirical approach*	*Results*
Beck, Thorsten et al., (2000) **[41]**	71 countries 1960–1995	The generalized method of moments (GMM)	Financial development is positively associated with economic growth.
Baliamoune, M. (2002) **[42]**	African countries 1980-1999	Panel estimation technique, fixed-effect and adjusted fixed effect estimations.	There is a positive link between FDI and economic growth, whereas *international trade openness* seems to have a negative impact on growth rates especially in poor countries. Moreover, economic freedom is a key determinant of economic growth.
Anisha Madan (2002) **[43]**	31 countries 1987-1999	Panel data analysis	An increase in economic freedom generates a better quality of life.
Niels Hermes and Robert Lensink (2003) **[44]**	67 countries 1970-1995	OLS panel data analysis	The development of the financial system of the recipient country *is a prerequisite* to *yield positive* growth effects of FDI.
Favara G. (2003) **[45]**	85 countries 1960-1998	OLS panel data analysis	Financial development delivers high rates of economic growth.
M.M.G. Fase and R.C.N. Abma (2003) **[46]**	9 emerging economies in South-East Asia 1978–1999	OLS panel data analysis	Financial development *matters* so much more to *economic growth*.
Demetriades Panicos and Siong Hook Law (2004) **[25]**	72 countries 1978-2000	OLS cross-country estimator; the mean group (MG) and pooled mean group (PMG) estimators.	Financial development has a larger impact on growth under a sound institutional framework.
Dimitris Kenourgios and Aristeidis Samitas (2007) **[47]**	Poland 1994-2004	Johansen cointegration test	Credits to the private sector play a crucial role in *generating* higher *long-run growth rates*.
Suleiman Abu-Bader and Aamer S. Abu-Qarn (2008) **[48]**	Egypt 1960–2001	Vector autoregressive (VAR) framework	Financial development leads to higher growth rates by increasing resources for investment.
Michael K. Fung (2009) **[31]**	57 countries 1967- 2001	Dynamic panel GMM with fixed effect	Economic freedom has a significantly positive impact on the countries' steady-state level of per-capita income.
Iftekhar Hasan et al., (2009) **[30]**	31 Chinese provinces 1986–2002	OLS and the generalized method of moments (GMM) techniques	The development of financial markets and property rights protection are associated with stronger economic growth. Further, the capital market depth and openness appear with positive and significant coefficients.

***Guglielmo Maria Caporale et al., (2009)* [38]**	10 transition countries from Central and Eastern Europe 1994-2007	The system GMM estimator	Liquid liabilities exert a significant positive influence on economic growth, and credit to the private sector has *a positive but* statistically *insignificant* impact on growth.
***Samson O. Odeniran and Elias A. Udeaja (2010)* [49]**	Nigeria 1960-2008	Johansen Cointegration test	The private credit appears to be an important fundamental *cause* of *economic growth, whilst* deposit liabilities have an insignificant impact on economic growth.
***Jyh-Lin Wu et al., (2010)* [40]**	13 countries in European Union (EU) 1976–2005	Panel data analysis	There is a long-run relationship among banking development, stock market development and economic development.
***Anwar, S. and Nguyen, L.P., (2011)* [50]**	61 provinces in Vietnam 1997–2006	Panel data analysis	Financial development contributes significantly to economic growth in Vietnam.
***M. Kabir Hassan et al., (2011)* [37]**	Low- and middle-income countries classified by geographic regions 1980–2007	Ordinary least squares (OLS) regression, robust-heteroscedastic errors, vector autoregressive (VAR) models	There is a strong long-run relationship between financial development and economic growth.
***Sajid Anwar and Sizhong Sun (2011)* [14]**	Malaysia 1970–2007	The generalized method of moments technique	The stock of foreign investment has a positive impact on the stock of domestic capital and economic growth.
***Ryan Compton and Daniel Giedeman (2011)* [51]**	90 countries 1970-2004	System-GMM dynamic panel analysis	Economic growth is significantly positively influenced by private credit and good institutions.
***Gounder, Neelesh N. (2012)* [2]**	Fiji 1970-2005	Johansen cointegration test	Private credit appears to significantly accelerate economic growth.
***Jin Zhang et al., (2012)* [52]**	286 Chinese cities 2001–2006	First-differenced and system GMM estimators	Financial development indicators are positively correlated with economic growth.
***Sajid Anwar and Arusha Cooray (2012)* [16]**	6 South Asian economies 1970- 2009	OLS, fixed effects estimation and system GMM	Financial development contributes positively to economic growth and increases the benefits of FDI in South Asia.
***Gazi Salah Uddin et al., (2013)* [53]**	Kenya 1971–2011	ARDL bounds testing, Gregory and Hansen's structural break cointegration approaches	Financial development has a sizable positive impact on long-run economic growth.
***Imen Mohamed Sghaier and Zouheir Abida (2013)* [54]**	4 North African countries-Tunisia, Morocco, Algeria and Egypt 1980-2011	Generalized method of moment (GMM) panel data analysis	FDI inflows and financial development promote the North African countries' prospects for economic growth. More specifically, the development of the domestic financial system enhances the positive growth effects of FDI.
***Filippidis Ioannis (2013)* [55]**	44 countries 1988- 2007	System GMM estimator	Economic institutional quality is highly and positively *associated* with financial development.
***Ogunyiola, Ayorinde (2013)* [56]**	Cape Verde 1980-2011	Johansen cointegration test, pairwise granger causality test, the VECM approach	*There* exists a strong *link between* financial development indicators and *long-run economic growth*.

Meshach Jesse Aziakpono (2005)	SACU countries 1980-2000	The Zellner seemingly unrelated regressions estimation (SURE) method	The coefficient on credit to private sector is positive for Botswana, Lesotho and South Africa, but *it is insignificant* and *negative* in Swaziland. On the other hand, the ratio of *liquid liabilities* to GDP is positively correlated with economic growth in Botswana and South Africa, but the coefficient tends to be negative for Lesotho and Swaziland.
***Wan-Chun Liu and Chen-Min Hsu (2006)* [58]**	3 Asian economies, Taiwan, Korea, and Japan 1981-2001	The generalized method of moments (GMM)	High investment play a positive role in *promoting* Japan's *economic growth,* but the efficient allocation of investments is a prerequisite for good economic *performance* in Taiwan and Korea cases.
***Sassi, Seifallah and Goaied, Mohamed (2011)* [59]**	16 MENA countries 1962-2006	The system GMM estimates	Credits to private sector has a negative and insignificant impact on growth rates, whereas, the liquid liabilities–growth relationship is weak.
***Houssem Rachdi and Sami Mensi (2013)* [24]**	13 Middle East and North African (MENA) countries 1990-2008	The generalized method of moments (GMM) system approach	Liquid liabilities and central bank assets are positively linked with economic growth, while the coefficient on private credit tends to be negative and significant.
***Rym Ayadi (2013)* [17]**	Northern and Southern Mediterranean countries 1985-2009	Fixed effect with time dummies, random effects and GMM models	Inward FDI and liquidity exhibit a strong impact on growth, especially *under* a *reliable institutional* environment. While, credit to private sector and bank deposits are negatively and significantly linked with economic growth.
***Kojo Menyah et al., (2014)* [5]**	21 African countries 1965–2008	Least squares (FGLS) estimator	Financial development and trade freedom do not seem to have made a significant influence on economic growth.

Source: Constructed By Authors

3 Economic Freedom, Financial Development and Economic Growth in the MENA Region

3.1 Economic Growth in the MENA Region

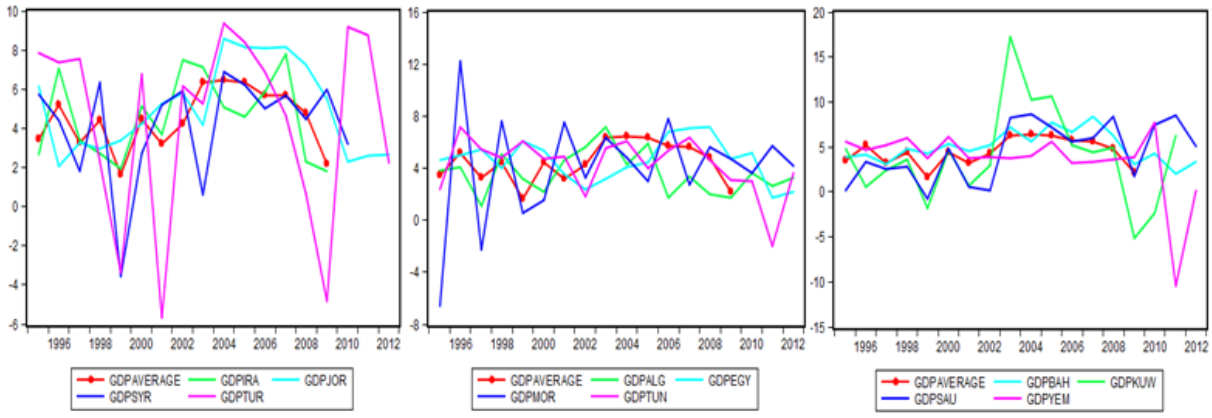

Fig. 1. Economic Growth (The Annual Percentage Growth Rate of GDP) in MENA Countries, 1995-2012.

Source: World Bank, World Development Indicators, the data are available online at: http://data.worldbank.org *(accessed 04/04/2015).*

Fig. 1 illustrates that the MENA region's economic growth has been characterized by sharp fluctuations. In general, MENA oil monarchies have succeeded to bolster their growth rates, particularly the GCC countries have skillfully utilized the increased oil revenues to feed the growth requirements such as infrastructure modernization, human capital formation and R&D, moreover these countries have made valuable contributions to the manufacturing and services sectors (*Garbis Iradian and George T. Abed, 2013*) [60]. Likewise, Morocco, Egypt, Jordan, Lebanon and Turkey have boosted their growth prospects through strengthening the tourism sector, developing the human capital and pursuing macroeconomic stability (*Mustapha Kamel Nabli and Marie-Ange Véganzonès Varoudakis, 2004; Anthony O'Sullivan, Marie-Estelle Rey and Jorge Galvez Mendez, 2011*) ([61], [62]).

The region, as a whole, has been far below its enormous potential, and even more it has hardly missed outstanding opportunities to keep up with the pace of globalization by failing to diversify its export base away from oil and to attract substantial FDI inflows into the non-oil sectors (*Hossein Askari, 2006*) [63]. Furthermore, the inability of the oil-exporting MENA countries to diversify their economies, made them more vulnerable to predation by the 2008 financial crisis, as shown in the Fig. 2. It is also observed that the economic growth of GCC countries has been shrunk by the financial meltdown, because of these countries' close ties with global financial markets (*World Bank, 2010*) [64].

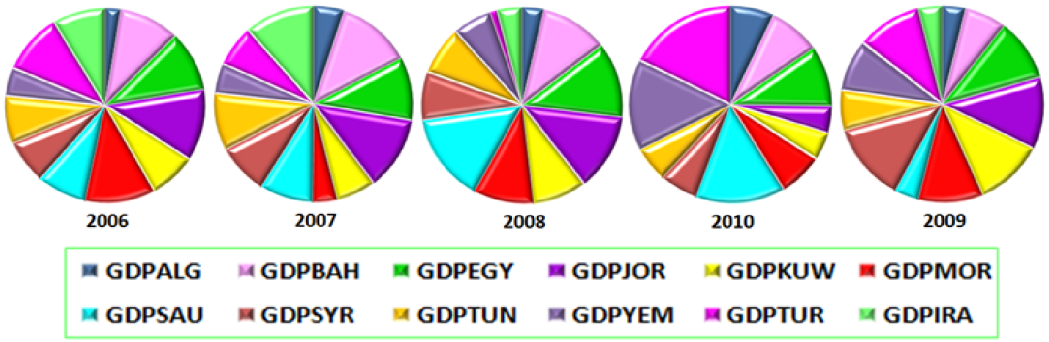

Fig. 2. Economic Growth (The Annual Percentage Growth Rate of GDP) in MENA Countries, 2006-2009.

Source: World Bank, World Development Indicators, the data are available online at: http://data.worldbank.org *(accessed 04/04/2015).*

In 2011, a first-of-its-kind phenomenon known as the Arab Spring has swept Tunisia, Egypt, Yemen and Syria, causing cracks in some surrounding countries like Lebanon, Jordan and Algeria, further this unexpected turmoil has caused a growth collapse in the worst-hit countries (*Anthony O'Sullivan, Marie-Estelle Rey, and Jorge Galvez Mendez, 2011*) [62]. Moreover, the financial, manufacturing and tourism sectors in the Arab spring countries have been hardly slashed due to the escalating rebellion and security threats (*World Bank, 2013*) [65].

3.1 ECONOMIC FREEDOM IN THE MENA REGION

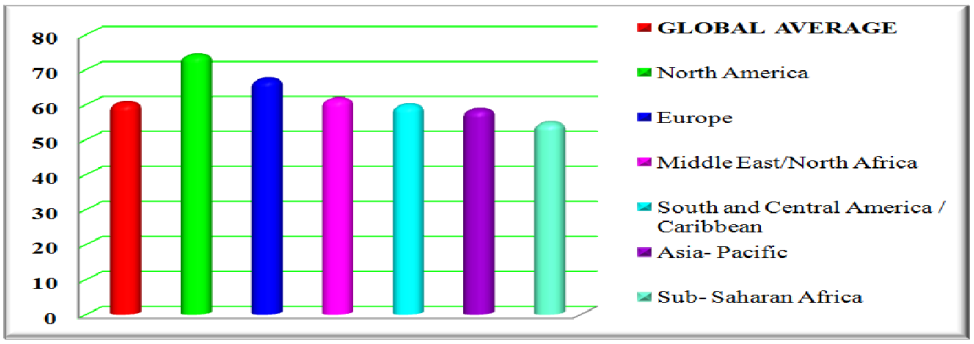

Fig. 3. The 2014 Index of Economic Freedom by Region

Source: Heritage Foundation's Index of Economic Freedom, the data are available online at: http://www.heritage.org/index/explore?view=by-region-country-year *(accessed 04/04/2015).*

As can be seen in the Fig. 3, the MENA region's economic freedom occupies the third place in the 2014 index after North America and Europe, with a score of 61.5 that is 0.3 point lower than last year, wherefore the region is still considered as 'moderately free', and this score has been achieved by dint of valuable efforts made by Bahrain, Qatar and UAE, despite the threat of political and social unrest that persists in some MENA countries (*Heritage Foundation, 2014*) [66].

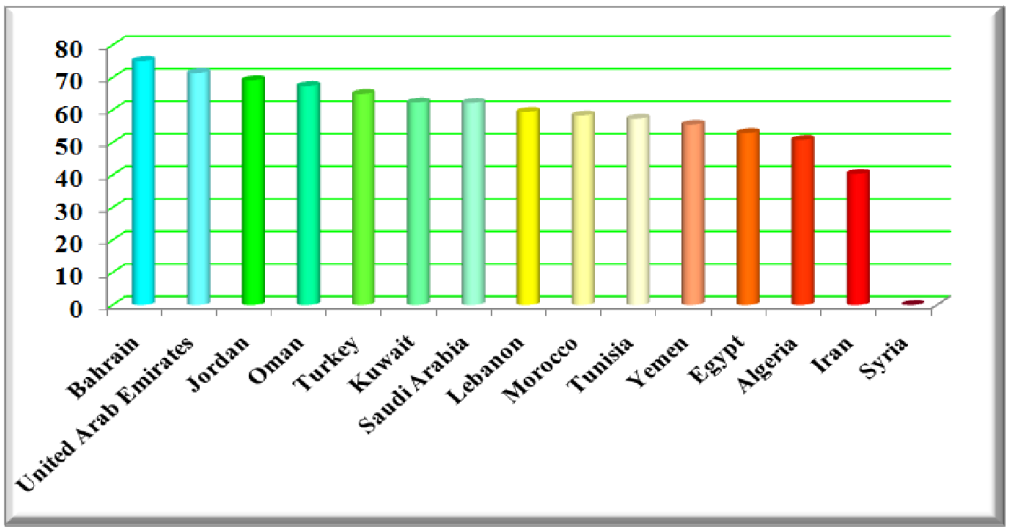

Fig. 4. The 2014 Index of Economic Freedom for MENA Countries

Source: Heritage Foundation's Index of Economic Freedom, the data are available online at: http://www.heritage.org/index/explore?view=by-region-country-year *(accessed 04/04/2015).*

According to the Fig. 4, Bahrain and UAE are considered 'mostly free', while Jordan, Oman, Turkey, Kuwait and Saudi Arabia are classified as 'moderately free', whilst the 'mostly unfree' category includes *the remaining MENA countries with the exception of Iran which is deemed a repressed economy, knowing that Syria has been excluded from this year's index.*

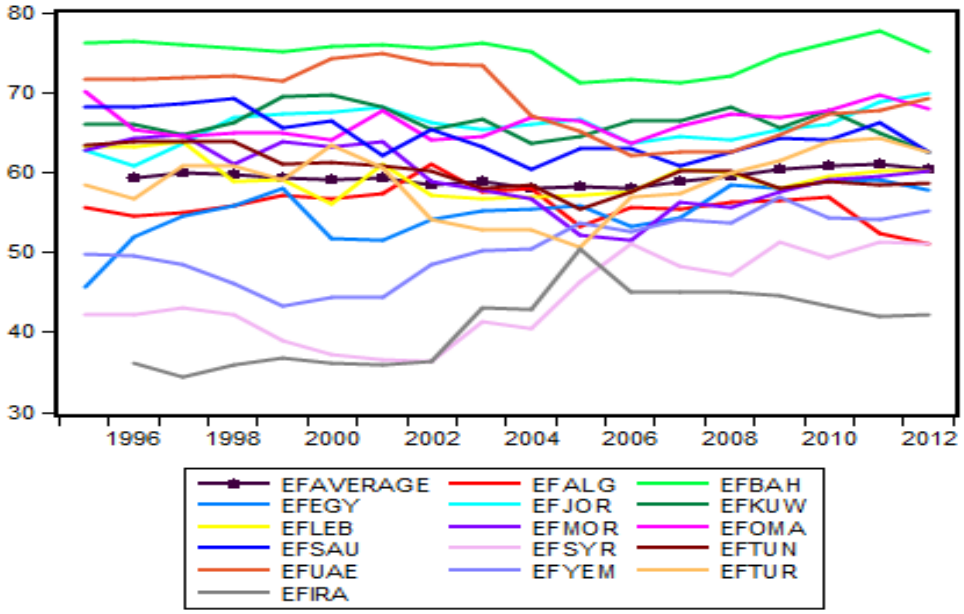

Fig. 5. Economic** Freedom **in MENA Countries, 1995-2012.

Source: Heritage Foundation's Index of Economic Freedom, the data are available online at: http://www.heritage.org/index/explore?view=by-region-country-year *(accessed 04/04/2015).*

Fig. 5 shows that seven MENA countries: Bahrain, Oman, Jordan, UAE, Saudi Arabia, Kuwait and Turkey have registered an economic freedom score higher than the regional average, these countries have also performed well in *lowering regulatory burdens,* controlling government spending and promoting fiscal freedom, while the remaining MENA countries *did not exceed the regional average during the period under consideration, as a result of inadequate efforts aimed at improving the business atmosphere.* Moreover, in 2010-2011, a *devastating political turmoil has hit* Tunisia causing cracks in *Egypt*, Libya, *Yemen* and *Syria, and the associated political* and *social* instability *have* worsened economic freedom in the Arab spring countries. Furthermore, this dire situation is expected to exacerbate economic conditions in *Egypt and Syria, reflecting a risky* and *unsafe business environment*. *But overall,* many constraints continue to ravage the MENA region's economic environment such as financial sector underdevelopment, high unemployment rates, weak property rights protection, pervasive corruption and other *institutional* constraints, therefore the region's *governments* should make vigorous *efforts* to root out these *problems* (*Heritage Foundation, 2014*) [66].

3.2 FINANCIAL DEVELOPMENT IN THE MENA REGION

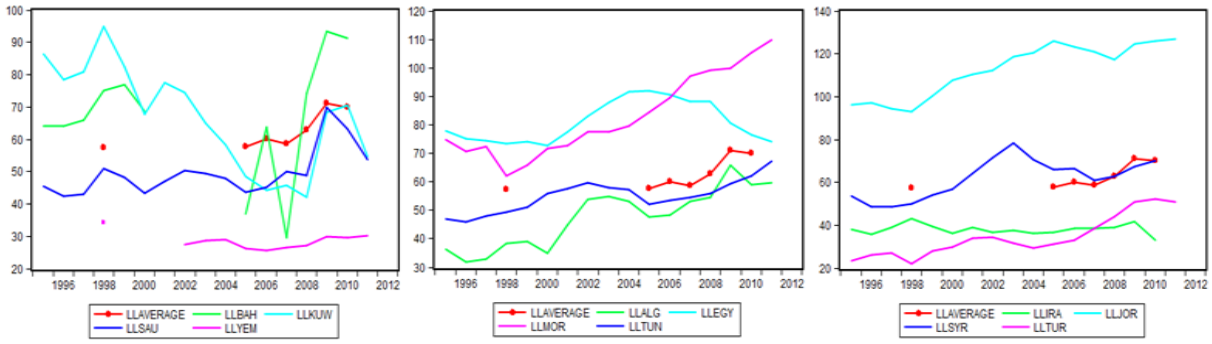

Fig. 6. Liquid Liabilities as a Share of GDP in MENA Countries, 1995-2012.

Source: World Bank database of financial development and structure, the data are available online at: http://www.worldbank.org *(accessed 04/04/2015)*

According to the Fig. 6 and Fig. 7, the ratios of liquid liabilities and private credit over GDP are higher in Bahrain, Jordan and Morocco, reflecting that there is an efficient financial intermediation and a competitive financial sector that provides a good performance in terms of lending activities. Hence, these countries have higher levels of financial development. Moreover, they enjoy a modernized and efficient banking sector that plays a vital role in attracting investments and boosting the growth prospects, because they have made significant strides forward in reforming and liberalizing their financial services, there is also a successful intermediation between savings and private sector credits.

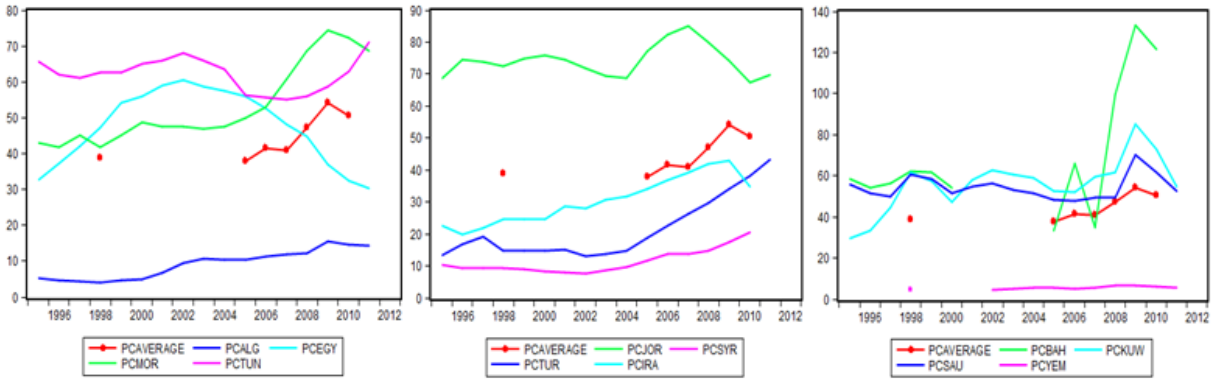

Fig. 7. Private Credit by Deposit Money Banks and Other Financial Institutions /GDP in MENA Countries, 1995-2012.

Source: World Bank database on financial development and structure, the data are available online at: http://www.worldbank.org (accessed 04/04/2015)

While in the other MENA countries such as Kuwait and Saudi Arabia, the dominance of the public banking sector further slow the pace of financial liberalization, whilst few countries like Algeria, Iran, Syria and Yemen display values below the

regional average because they suffer from a semi-paralyzed banking sector; thus, these countries urgently need to develop their financial sector by harnessing all available means. The last group of countries was less affected by the financial crisis; they also recognized the greatest risks of financial openness. In contrast, this financial meltdown did not spare the GCC countries because of their strong linkages to the global financial markets.

It can be said that high-income countries enjoy high levels of financial development and vice versa, since there is a great demand for good quality financial services in these countries. Thus, the differences between the GCC countries and other MENA countries are substantial. Furthermore, most non-GCC countries continue to restrict foreign ownership of financial assets and repatriation of profits; the nonbank financial sector remained negligible due to the lack of institutional support. Additionally, the poor secondary markets for government securities had a crucial role to play in frustrating financial development (*Susan Creane, Rishi Goyal, A. Mushfiq Mobarak and Randa Sab, 2004, 2007*) ([67], [68]) . In general, there is a lack of access to finance in these countries, and only a limited number of borrowers benefit from good funding opportunities (*IMF, 2013*) [69], and it is worthwhile to note that the ratio of private credit to GDP highlights the greater financial depth, but it doesn't reflect the easy access to financial services (*Pearce Douglas, 2010*) [70].

Most MENA countries have embarked on reforming their financial sectors over the past three decades, but the rapid pace of financial globalization reflects the inadequacy of efforts made. Moreover, modest economic growth in most MENA countries can be traced to the thinness of financial sectors. Thus, MENA countries experiencing financial system weaknesses need to hasten financial sector reforms and strengthen the legal framework, they also have to remove all restrictions in the financial services sector and develop the nonbank financial institutions. Further, they must reduce the overwhelming state banks and induce greater competition in the financial sector. In other words, improving access to financial services stimulates investment, innovation and production, and thus enhances prospects for sustained growth, because there will be an ability to convert the untapped potential for finding into productive activities.

Accordingly, more attention should be paid to strengthening institutional quality, since it is broadly perceived that economic freedom and institutional background play an intrinsic role in the financial development through the well-defined and enforced property rights, rule of law and sound judicial system.

4 DATA AND EMPIRICAL RESULTS

4.1 DATA

The present paper aims to investigate the impact of financial freedom and financial development on economic growth in MENA countries, using an econometric methodology to estimate an empirical model that includes the following variables:

GDP: GDP per capita (constant 2005 US$) is used as a proxy for economic growth (the dependent variable), from the World Development Indicators database.

EF: Economic Freedom is used as a proxy for economic institutions, introduced by Heritage Foundation and Wall Street Journal.

FINF: Financial Freedom compiled by the Heritage Foundation jointly with the Wall Street Journal.

'Liquid Liabilities', 'Private Credit by Deposit Money Banks and Other Financial Institutions' taken *from the World Bank's database on financial development and structure*, are the most widely used measures of financial development in the pioneer works by (*King and Levine, 1993a, b; Levine, 1997; Levine, 1998; Levine and Zervos, 1998; Beck, Demirgüç and Levine, 1999; Levine, Beck, and Loayza, 2000; Levine, 2005*) ([6], [10], [13], [71], [72], [73], [11], [3]), and these measures are as follows:

LL: Liquid Liabilities/GDP measures the absolute size of financial intermediaries (such as the central bank, deposit money banks and other financial institutions); it equals currency plus demand and interest-bearing liabilities divided by GDP.

PC: Private Credit by Deposit Money Banks and Other Financial Institutions/GDP measures the activity of financial intermediaries, it is calculated as the credit issued to the private sector by banks and other financial intermediaries divided by GDP, excluding the credit issued to government, government agencies and public enterprises (*Beck, Demirgüc, Levine, 1999; Meshach Jesse Aziakpono, 2005; Dietrich Vollrath and Lennart Erickson, 2007; Huang Yongfu, 2010*) ([73], [57], [74], [75]).

FDI: represents the foreign direct investment net inflows (% of GDP) from the World Bank's *World Development Indicators* (WDI).

Thus, the availability of data for all explanatory variables determines a unified sample period that goes from 1995 to 2012. Additionally, our sample covers 12 MENA countries (Algeria, Bahrain, Egypt, Iran, Jordan, Kuwait, Morocco, Saudi Arabia, Syria, Tunisia, Turkey and Yemen); it has been chosen on the basis of data availability.

4.2 DATA ANALYSIS TOOLS

The panel data estimation is employed to examine the impact of the triptych economic freedom-financial development-FDI on economic growth in 12 MENA countries using a panel data analysis, because it controls for both observed and unobserved heterogeneity, also it increases the degree of freedom and reduces the collinearity problems, and hence improves the efficiency of econometric estimates [76] (*Cheng Hsiao*, *2003*), there are three main models: *Pooled OLS Model, Fixed Effects Model, Random Effects Model*. Furthermore, we also employ the Generalized Method of Moments (GMM) dynamic panel estimator proposed by Arellano and Bond (1991) [77] and developed by Arellano and Bover (1995) [78] and Blundell and Bond (1998) [79], because it is able to overcome or circumvent the problems of endogeneity and heterogeneity that may arise in panel data models, by including relevant instrumental variables, in other words this technique can handle endogenous variables that display a high degree of persistence especially in growth models.

4.3 ANALYSIS OF EMPIRICAL RESULTS

Table 2. Descriptive statistics of the variables, 12 MENA Countries, 1995-2012

	GDP	EF	LL	PC	FDI	FINF
Mean	6821.096	58.15514	61.87279	42.33918	2.667498	43.62162
Median	2646.726	59.00000	57.64137	47.42815	1.366770	50.00000
Maximum	35185.93	76.40000	127.1415	133.3709	33.56602	90.00000
Minimum	746.9546	34.50000	21.84658	4.146938	-3.468654	10.00000
Std. Dev.	8735.961	9.359219	25.20778	25.33368	4.212077	20.09130
Skewness	1.936618	-0.561799	0.680243	0.225169	3.622474	-0.075768
Kurtosis	5.823360	3.097504	2.876534	2.856281	21.78530	2.328249
Jarque-Bera	177.0859	9.804836	14.38504	1.722495	3124.780	3.655386
Probability	0.000000	0.007429	0.000752	0.422635	0.000000	0.160784
Sum	1261903.	10758.70	11446.47	7832.748	493.4872	8070.000
Sum Sq. Dev.	1.40E+10	16117.48	116919.5	118090.3	3264.453	74273.51
Observations	185	185	185	185	185	185

Source: Author's Computation Using Eviews 8.0.

Table 2 presents descriptive statistics for economic growth, economic freedom, liquid liabilities, private credit, FDI and financial freedom, the data consists of 12 MENA countries over the period 1995-2012. Some countries were excluded due to missing data.

As can be seen from the data, GDP have an average of 6821.096 and a maximum value of 35185.93, indicating that there is a large growth gap among MENA countries, also the average of economic freedom index is 58.15514, which means that the region is classified as 'mostly unfree'. Both 'liquid liabilities' and 'private credit by deposit money banks and other financial institutions' show that there is a considerable variation across countries in terms of financial development. In addition, FDI has an average of 2.667498 and a maximum value of 33.56602, indicating that many countries in the region are less attractive for FDI inflows. While, the mean of financial freedom index (43.62162) points out that the region as a whole is classified as 'Repressed' in terms of financial freedom.

Table 3. Regression Results for 12 MENA Countries

Dependent Variable: GDP per capita				
Coefficient Estimates (P-value)				
Independent Variables	**Pooled OLS Model**	**Fixed Effects Model**	**Random Effects Model**	**Panel GMM**
EF	761.8355 (0.0000)***	24.11958 (0.0002)***	3.918076 (0.8667)	930.7181 (0.0000)***
LL	101.0450 (0. 1325)	17.96050 (0.0423)**	18.38864 (0.0371)**	58.41309 (0.1003)
PC	81.38542 (0.0115)**	15.68213 (0.0602)*	16.50584 (0.0476)**	88.21996 (0.0229)**
FDI	262.7211 (0.0494)**	57.89425 (0.0082)***	58.39078 (0.0076)***	1181.786 (0.0002)***
FINF	166.9381 (0.0003)***	15.80242 (0.0751)*	15.55539 (0.0790)*	207.3018 (0.0018)***
R-squared	0.402828	0.988871	0.066929	0.333868
Prob (F-statistic)	0.000000	0.000000	0.028508	0.000000
J-statistic [p-value] (Hansen test: Over-identification test for all instruments)				1.525808 [0.466310]
Number of instruments				7
Number of countries				12
Number of observations				165

Source: Author's Computation Using Eviews 8.0.

As is shown in the Table 3, economic growth, economic freedom, liquid liabilities, private credit, FDI and financial freedom seem to have the expected signs in all regressions, further, these explanatory variables appear to be statistically significant in three models, except liquid liabilities and economic freedom that tend to be insignificant in the Pooled OLS and Random Effects Models, respectively. Hence, the next step involves employing the Hausman test which is worthy in selecting between the fixed and random effects specifications.

Table 4. Hausman test

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test period random effects			
Test Summary	**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**
Cross-section random	15.448897	5	0.0086

Source: Author's Computation Using Eviews 8.0.

According to the Table 4, the Hausman test generates a highly significant Chi-square statistic (Prob (0.0086 < 0.01), indicating that the fixed effects model is the most appropriate one, and thus we focus on the FE results.

The fixed effects model implies that economic freedom exerts a statistically significant positive impact on economic growth, suggesting that high-quality economic institutions foster economic growth. The model also reveals that liquid liabilities exert a positive and significant impact on the growth of selected MENA economies. Furthermore, the private credit has a positive and statistically significant influence on economic growth, it can be said that the financial development play a preponderant role in enhancing the MENA region's growth prospects by encouraging savings and investments, and allowing the efficient allocation of resources, further, it is accountable for absorbing FDI benefits. As well as, the results show the positive growth effect of FDI and this is consistent with the theoretical facts. Likewise, financial freedom contributes positively and significantly to economic growth, because greater financial freedom fosters economic growth by inducing

competition, steering financial resources to the most efficient use, encouraging the economic expansion and highlighting the lucrative business opportunities.

Moreover, the R^2 value of 0.9888 denotes that 98.88 % of the variation in economic growth is explained by the independent variables (EF, LL, PC, FDI and FINF). Also, the F-value is highly significant at the 1% level, proving the joint impact of explanatory variables on economic growth. Moreover, all explanatory variables carry the expected signs and tend to be statistically significant in the panel GMM model, except liquid liabilities that tend to be statistically insignificant, and it is worthwhile to note that the Hansen J test of over-identifying restrictions confirms the validity of the instruments, because the related p-values are found to exceed 0.05.

To sum up, the empirical results confirm that economic freedom, financial sector development and FDI spur economic growth in MENA countries. In other words, the selected countries are able to enhance their growth prospects through raising economic freedom and promoting financial sector development. Further, MENA countries can improve their growth performance by opening their doors more widely to FDI inflows and enacting favorable investment policies.

5 CONCLUSION

This study examines the impact of the triptych economic freedom-financial development-FDI on economic growth in 12 MENA countries (Algeria, Bahrain, Egypt, Iran, Jordan, Kuwait, Morocco, Saudi Arabia, Syria, Tunisia, Turkey and Yemen) over the period 1995-2012, by using OLS, panel fixed effects (FE), panel random effects (RE) and generalized method of moments (GMM). The main findings indicate that economic freedom exerts a statistically significant positive impact on economic growth, suggesting that high-quality economic institutions foster economic growth. Furthermore, liquid liabilities exert a positive and significant impact on the growth of selected MENA economies. Likewise, private credit has a positive and statistically significant influence on economic growth, it can be said that the financial development play a preponderant role in enhancing the MENA region's growth prospects by encouraging savings and investments, and allowing the efficient allocation of resources, further, it is accountable for absorbing FDI benefits. As well as, the results show the positive growth effect of FDI and this is consistent with the theoretical facts.

Based on these findings, it could be concluded that policy actions should be directed towards strengthening economic institutions, promoting access to finance and enhancing competition through the removal of stringent entry barriers and improvement of credit information. Indeed, efforts must be concentrated in reducing government intervention in the financial system by reassessing the role of state banks.

The MENA region's policymakers should abandon financially repressive policies and create the enabling environment conducive to financial development. Further, MENA governments should implement far-reaching reforms in the financial area along with embarking on deeper and broader institutional reforms; obviously much more attention should be given to enhancing the investment climate.

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