



## Foreign Direct Investment Inflows, Current status and Future Prospects: Case of Libya during (1970 - 2010)

\*Mohammed S. Moussa , Abdulhamid A. Yousef  
Faculty of Agriculture, Tripoli University, Libya

\*Corresponding author: [Moh.mousa@uot.edu.ly](mailto:Moh.mousa@uot.edu.ly)

**Abstract** Using an econometric model, we investigated FDI inflows to the Libyan market and its determining factors, gross domestic product in real terms GDP, the exchange rate of the Libyan Dinar ER, Inflation INF and the rate of investment RINV from 1970 to 2010, and future of FDI after the Arab spring in Libya and the expected implication on political and economic changes, as the country tends to start a new era to modernize the economy through an ambitious economic reform program. Since the lifting of the UN sanctions in 1999, Libya is at a turning point, both politically as well as economically. Numerous impediments of the economic cooperation removed; hence, there is a scope for a growing developmental dynamics. The Law No 5 of 1997 and its amendments offered tax concessions to investors for the first five years; an exemption on customs duty on imports of materials used in the project; provisions to allow foreigners to buy real estate for their project. FDI inward flows into Libya stood at the lowest level compared with neighboring countries such as Egypt and Tunisia, after maintaining a negative value for the past several years. An empirical model using some macro-economic variables utilized to obtain a general characterization of FDI in the Libyan economy.

**Key Words** : FDI, Econometrics, Macroeconomics, Economic Development, Libya.

### تدفقات الاستثمارات الأجنبية المباشرة: الوضع الحالي وفاق المستقبل، دراسة عن ليبيا خلال الفترة (1970 - 2010)

\*محمد سالم على موسى و عبد الحميد ابوبكر يوسف

قسم الاقتصاد الزراعي - كلية الزراعة - جامعة طرابلس، ليبيا

\*المراسلة: [Moh.mousa@uot.edu.ly](mailto:Moh.mousa@uot.edu.ly)

**المخلص** باستخدام نموذج اقتصادي قياسي لدراسة تدفق الاستثمارات الأجنبية المباشرة الي السوق الليبي خلال الفترة (1970 - 2010)، واهم المحددات التي تساهم في جذب وتفق الاستثمار الأجنبي المباشر، وقد تم ادخال عدد من المتغيرات ذات العلاقة بنمو وتطور حجم الاستثمار الأجنبي في ليبيا وتلك العوامل هي الناتج المحلي الإجمالي وسعر صرف الدينار الليبي و معدل التضخم في الاقتصاد الوطني ومعدل الاستثمار وهو نسبة الاستثمار الي الناتج المحلي الإجمالي بالقيم الحقيقية، وقد بينت النتائج ان تدفق الاستثمار الأجنبي قد تطور خلال فترات الدراسة خاصة خلال الفترة الزمنية 2004 - 2010، خاصة بعد صدور قانون تشجيع الاستثمار رقم 5 لسنة 1997 وتعديلاته والذي ساعد في جذب الاستثمار الأجنبي الي السوق الليبي، غير ان مستوي تفق الاستثمار الاجنبي رغم التحسن الملحوظ فقد بقي في مستوي ادني مقارنة بدول الجوار ك مصر وتونس فقد بينت النتائج ان السوق الليبي واعد ويحتاج الي وضع سياسات مستقبلية لجذب الاستثمار الأجنبي والاستفادة منه في تطوير وتنمية القطاع الاقتصادي في ليبيا.

**الكلمات المفتاحية:** الاستثمار الاجنبي المباشر، الاقتصاد القياسي، الاقتصاد الكلي، التنمية الاقتصادية، ليبيا.

#### Introduction

Foreign Direct Investment (FDI) inflow in a country is considered to be an important waterway for the transmission of new ideas, technologies and business skills among different nations. It can have better impact on the developmental efforts of a country in transition. The prospects for growth can get better with an increase in the total level of capital investment in the economy and by introducing more productive technology and techniques. Some countries face shortages of foreign exchange to import foreign products and equipments necessary to put an impetus to the development process. This shortage also slogs the ability of a nation to promote trade links with other nations in the process of globalization. Foreign companies not only make investment in the host country but also

make limited trade with parent country, making an increase in the host countries trade, helping it out to integrate with the world economy. The use of FDI as a tool for entering a global market considered most essential. An intensive growth of the technology in the specific industry also motivates FDI. In addition, many FDI's motivated by defensive tactics such as responding to a saturated home market or reacting to problems in the home market.

Over the last few years, some developing countries have built a strategy for economic development based on foreign investment in their economies. These countries have realized the key-role of FDI in increasing the industrialization and stimulating economic growth. The benefits of FDI appear in the technological transfer, employment, productivity gains, competitiveness, etc. In view

of these considerations, attracting FDI has an integral element of policy reforms in many developing countries.

Growth in world foreign direct investment (FDI) exceeded growth in either world production or world trade. While merchandise trade grew about 85 percent, and world production grew 27 percent, world FDI flows increased by 535 percent. This growth shared almost equally between industrialized and developing countries. Indeed, between 1990 and 1999, developing countries' share of the world inward stock of FDI increased from 20.6 percent to over 30 percent (Youssef, 1998; UNCTAD, 2000). Even the least developed countries are starting to see significant increases in FDI inflows (UNCTAD, 2001).

In other words, flows of FDI exceeded \$700 billion in 2003, and the total stock exceeded \$6 billion. Over the last decade, FDI flows have grown at least twice as fast as trade (Meyer 2003). Over the period 1980-1998, the share of Sub-Saharan African countries grew by 59% and East Asia and Pacific by 942%, while the high inflows for Latin America grew by 455% (World Bank 2000).

FDI could be an important source of income for the Libyan economy and one of the major driving forces of transition. However, its potential remains yet unrealized. Despite natural comparative advantages, Libya has one of the lowest levels of FDI inflows among North African countries suffering negative annual FDI of between US\$80 million and US\$150 million in 2003 (Wallace and Wilkinson, 2004). After lifting of UN sanctions in 1999, the situation was reversed and Libya became more attractive and recorded a positive FDI flows during 2003 of up to US\$ 700 million (UNCTAD, 2005). The contribution to the Libyan economy seems very weak. This seen in the first years of transition from the socialism to the free-market 1990-2010. In addition, the comparison between Libyan FDI performance and some countries in transition shows dissimilarity in terms of FDI performance index. Furthermore, the study shows that the relationship between FDI annual change and GDP annual change in Libya was negative (Efhialel bum and Flatau, 2013).

In a case study of FDI in Turkey and Libya, it has revealed that the encountered external obstacles to the functioning of the new-liberal economic policy framework in the MENA region are quite similar defined as follows: inflexibility of political elites associated with the inertia of management of economic processes. The statist mindset and absence of genuine inclination to modernization rather to totalitarian regime living on the conservation and endemic corruption. In addition, the high employment, economic stagnation, lack of noticeable diversification in peripheral economies, bureaucratic corporatism, and continuous subjection of the private sector to the single state monopolies inherited from, the former import substitution industrialization policy (kravchenko,2013).

Even though, Libya has a good investment climate due to its strategic location, feasible natural resources (oil and gas) and new open-door policies which were designed to attract firms to invest in

Libya and allow private-owned corporations to participate in joint venture alliance with foreign investors (Wallace and Wilkinson, 2004).

The objective of this paper is to examine the determinants of FDI inflows in Libya; however, an attempt made to identify the economic factors that determine FDI inflows. This, of course, is a prerequisite for designing policies to boost the ability of Libya to be more successful at attracting FDI.

#### **FDI in Libya (Past, Present and future)**

The Libyan economy continues driven by the oil sector, which contributed about 56 percent of GDP in 2000-05. The remaining economic activities include services (28 percent of GDP) and the sectors of agriculture, industry, transportation, and construction with the size of each remaining very modest (about 4-5 percent of GDP each) (Central Bank of Libya, 2005).

During the 1970s, the Libyan government expanded growth through high levels of public spending financed through the rising receipts from oil exports earning, structural adjustment measures designed to eliminate the bias against export activities, liberalizing the import regime, and enhancing the allocation role of the financial sector.

In 1999, after the lifting of United Nation sanctions, Libya invited oil companies to invest in the oil and gas sector and all economic activities based on the investment law No. 5 for the year 1997. The law gives guarantees and incentives for foreign investment in all sectors, and the main aim of the law is to attract foreign capital in investment projects within the framework of the general policy of the state and the objectives of economical and social development.

Overall, the non-oil sector remains largely dependant on imports, as evidenced by the high non-oil imports- to non-oil GDP ratio (70 percent), and the low coverage of non-oil imports by non oil exports (11 percent in 2004). In general, the economy is closely relating to the health of the oil sector. The percentage of GDP derived from oil accounted for more than 60 per cent in the 1970's, around one-quarter of GDP over the period 1993-1997, and nearly 40 per cent in 2000s (Townsend, 2001).

On the structural front, in 2005 some progress in liberalizing the economy has been made, including unifying the exchange rate; passing a new banking law that enhances the role of the Central Bank of Libya (CBL). And opens up the banking sector to domestic and foreign competition, privatizing some state enterprises, simplifying procedures for business application, removing customs duty exemptions enjoyed by public enterprises, liberalizing most prices, removing restrictions on external trade, and allowing foreign investment in some sectors.

Although the wealth obtained from oil revenues, Libya well advised to diversify its economy; and as luck would have it, opportunities for diversification and investment abound. The development of a tourism industry offers endless possibilities considering that the "hundreds of miles of pristine Mediterranean coastline, a short

hop from Europe” has not exploited for that purpose yet. Tunisia and Egypt have both been able to offer themselves as desirable tourist destinations to the West, garnering substantial inflows of visitors annually; and there is no reason why Libya should not do the same. There is also potential for the development of an agriculture industry due to the thousands of square miles of arable land, which is at present undeveloped. In addition, this opportunity would offer Libya the occasion to curtail its reliance on imports for foodstuffs, and improve its food security by producing more of the products, which its citizenry consume

Moreover, the banking and insurance industry which had previously attracted some attention from offshore investors following the lifting of sanctions in 2004 can seek revival and further development presuming a more stable

administration emerges as is hoped. It is anticipated that the new administration will be friendly to the West and it is in light hereof – granted sufficient stabilization occurs – that other foreign companies not previously engaged in Libya may look to the country with renewed positivity.

In the immediate future Libya will not be short of new opportunities for economic development and securing foreign direct investment. Bengdara seems positive that Libya’s economic output can double from pre-conflict levels over the next ten years to become the “star of the region.” In order to achieve this, Libya must continue to commit itself to an ambitious but achievable roadmap leading to peaceful transition, free and fair elections, and the implementation of the principles of good governance. In so doing, Libya indeed has the potential to rise as a phoenix from the ashes.

**Table (1): Evolution of the FDI on 1970 – 2010 (in million Dollars)**

Years	1970-75	1975-80	1980-85	1985-90	1990-95	1995-00	2000-10
FDI	640	540	400	210	100	145	560
%GDP	12	3.1	1.4	0.9	0.34	0.48	2.12
%MENA	6.8	5.2	4.3	3.8	3.33	2.4	5.0
% North Africa	40	34	23	9.0	7.0	4.8	10.28

Source: UNCTAD (2011), *World Investment Report* and Ministry of Economics, Trade and Investment, Annual Reports.

#### Standard Specification and Variables Definition

*The dependent variable (FDI):* is the dollar value of inward FDI flows.

*The gross domestic product (GDP):* used to test the influence that the countries’ market size and the dynamism of the host country have on the volume of direct investment that they receive. On the other hand, a non-significant relationship would mean that foreign firms would be more interested in exports than in supplying domestic markets. Other authors prefer to consider the GDP growth rather than GDP level (Goldberg, 1972). However, Both GDP and GGDP can plausibly used to represent the market size hypothesis.

**GDP=** Gross Domestic Product in real terms.

**GGDP =** Growth of Gross Domestic Product in real terms.

*The dynamism of the Libyan economy:* specified that public investment constitutes the backbone of investment in the country, this variable reflects the level of infrastructure.

**RINV =** Rate of Investment (Investment on GDP).

**RP** measures the stringency of regulatory policies that affect the FDI inflows. RP takes the value 0 before 1986 and 1 after 1997.

*The level of inflation:* used as an indicator of macroeconomic instability, reflecting the presence of internal economic pressures or inability to restrict money supply.

**INF =** Deflator of GDP approximated by consumer prices.

*The real exchange rate:* In theory, the influence of this variable on FDI is doubtful, and depends on the motivation of foreign investors. For instance, depreciation derives low cost of assets, goods and services produced in the local economy leading to an increase in the inflows of FDI.

**RER =** the real exchange rate of Libyan Dinar against all commercial partners currencies.

#### FDI Inflows Econometric Analysis

Theoretical research on the multinational firm and its determinants has expanded. Yet, empirical research is lagging behind the theoretical advancements. Few studies on the determinants of FDI based on a consistent, general-equilibrium model of multinational activity. Moreover, most evidence on what determines FDI relates to developed countries, with the majority using data on U.S. and Japanese FDI. This paper, on the other hand, exploits a new data set on disaggregated FDI inflows into Libya to shed light on the empirical determinants of FDI in a developing rather than a developed country.

Early theoretical analyses of the multinational firm considered FDI as determined by ownership, location, and internalization advantages (introduced by Dunning, 1977). Recent theoretical treatments have instead built general equilibrium models in which multinationals arise endogenously. While the early literature has treated horizontal (Markusen 1984) and vertical (Helpman 1984) multinationals separately, the theory appears to work well empirically for FDI that either originates or is targeted at the U.S. (Markusen, and Markus, 2001). The previous hypotheses have been tested using FDI inflows in Libya during the period 1970 -2010.

#### Model Structure:

The estimated model of FDI inflows in Libya is:

$$LFDI = a_0 + a_1 LGDP + a_2 LRER + a_3 LRINF + a_4 LRINV + a_5 LRP + \varepsilon_T$$

All variables are in logarithmic form except for  $\varepsilon_T$  is the error term. The results of our estimated model are as presented in table 2:

**Table 2: Results of OLS Estimation (1970-2010)**

Independent Variables	Coefficient	(t-ratio)
Constant	15.916	(7.44)*
LGDP	1.075	(5.58)*
LRER	- 0.103	(-3.058)*
LRINF	- 0.968	(-2.171)*
LRINV	1.413	(3.249)*
RP	0.864	(2.010)*
R2-adjusted	74%	
DW	1.86	

\* Significant at 5% level

### Research findings:

By analyzing the econometric model to estimate the relationship between the dependent variable, which represents the volume of direct investment in Libya and the independent variables related to the flow of foreign direct investment into the Libyan economy, the results of the estimated equation were as follows:

The expected signs of the equation coefficient are:  $\alpha_1$ ,  $\alpha_4$  should be positive, while  $\alpha_2$  and  $\alpha_3$  are expected to be negative. The estimation results in the above table indicate that GDP has a positive impact on FDI inflows. This variable can also reflect the dynamism of the Libyan economy. It reflects that any growth in the GDP leads to improve infrastructure as one of the important factors attracting foreign investors to the local market. (RINF) is significant with expected sign. This result suggests that the macroeconomic stability is an important determinant of investments arrival.

We find that the ratio of national investment on GDP (RINV) has a positive impact on FDI. In the case of Libya, foreign and domestic investments are complementary. In addition, the impact of RER on FDI inflows found to be as expected i.e., any increase in the exchange rate of the Libyan Dinar against commercial partners' currencies leads to decrease FDI inflows.

### Summary

In this paper, the determining factors of FDI inflows have investigated. However, using time-series data, we investigated the temporal relationship between FDI and its main determinants in Libya for the period 1970-2010. The paper provided evidence of the increasing inflow of FDI to the Libyan Economy in particular after the lifting of sanctions imposed, thus constituting one of the defining features of Libya's economic development in the next few years. The rise of inflow of capital in the form of direct investment increased, but remained below expectations compared to neighboring countries. During the period 2000-2005 the value of FDI inflows to Libya reached US\$ 2,4 billion.

The creation of the Euro-Mediterranean Free Trade Area is an opportunity to establish the basic option on the axes of business co-operation, but Libya needs extra time to diversify local products of different goods rather than relying solely on oil and gas as the main sources of income.

With the former regime out of power, the crucial matter for Libya now is how to rebuild its economy. On the one hand, Libya appears to be economically strong. It is a major oil producer,

has one of the world's largest sovereign wealth funds, has little debt, and its per capita GDP on par with much of Eastern Europe. However, oil production stopped during the fighting and Libya's foreign assets were frozen. Additionally, Libyan wealth generally failed to reach the Libyan people. As a result, getting the Libyan economy back on track and organized for future growth will be a major challenge.

There are many opportunities for investment within Libya. One possibility, given Libya's Mediterranean coastline and proximity to Europe, is the development of a tourism industry. In fact, international and Arab banks have already begun investing in Libya. Other opportunities include mining, agriculture, and financial services.

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