
The Determining Factors of Foreign Direct Investment in Libya

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ABSTRACT:

Using an econometric model, we investigated the determining factors of foreign direct investment (FDI) in Libya from 1970 to 2005. During the period 1970-1996, Libya did not allow direct Foreign Investment except on limited forms mainly in oil strategic industries, the reasons behind that are mostly due to Libya's political vision towards the private economy and multinational corporations.

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 have been removed; hence there is a scope for a growing developmental dynamics. Law No 5 of 1997 offered tax concessions to investors for the first five years; an exemption on customs duty on imports of materials to be used in the project; provisions to allow foreigners to buy real estate for their project. FDI inward flows into Libya stood at \$700 million in 2003, after maintaining a negative value for the past several years. An empirical model using some macro-economic variables was utilized to obtain a general characterization of FDI in the Libyan economy.

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

1- Introduction:

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 is 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 as 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).

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 is 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.

2- Foreign Direct Investment in Libya (Past and Present)

The Libyan economy continues to be 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 related 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.

In addition, the investment law defined the economic activities of foreign capitals in the industry, agriculture, tourism, health and services sectors in order to transfer technology to the local market, and diversify sources of income

Recently, the government promulgated the Law No. 9 of 2000 for organizing transit and Free Zones to promote transit trade and various manufacturing or processing operations that change the condition of goods.

Table (1): Evolution of the FDI on 1970 – 2005 (in million Dollars)

	1970-75	1975-80	1980-85	1985-90	1990-95	1995-00	2000-05
FDI	640	540	400	210	100	145	360
%GDP	12	3.1	1.4	0.9	0.34	0.48	1.12
%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 (2004), *World Investment Report* and Ministry of Economics, Trade and Investment, Annual Reports.

3-The Determinants of Inward FDI in Libya: Theory and Evidence

At any rate, the most widely used theoretical base, at least in studies of an empirical nature, is what is known as the “OLI -Ownership, Location, and Internalization- paradigm” (Dunning 1974, 1980 and 1993). As revealed by (Bénassy et al 2000), the exchange rate strategies are also important for attracting FDI. These strategies affect both the level of the real exchange rate (i.e. the competitiveness and the international power of

the currency) and the risk associated to the nominal rate (i.e. the volatility of the exchange rate), which both determine foreign investment decision

4- Standard Specification and Variables Definition

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

The gross domestic product (GDP): is 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 be 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 back bone 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: is usually 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.

5- An Econometric Analysis of the Bilateral Inflows of Direct Investment

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 are 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 Maskus, 2001). The previous

hypotheses have been tested using FDI inflows in Libya during the period 1970 -2005.

5-1: Model Structure:

The estimated model determining factors of FDI inflows in Libya is as follows:

$$LFDI = \alpha_0 + \alpha_1 LGDP + \alpha_2 LRER + \alpha_3 LRINF + \alpha_4 LRINV + \alpha_5 RP + \varepsilon_T$$

All variables are in logarithmic form except for RP, and ε_T is the error term. The results of our estimated model are as presented in table 2:

Table2:
Results of OLS Estimation (1970-2005)

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	0.72	
S.E of regression	0.510	
DW	1.76	

* Significant at 5% level

In theory, the expected signs of the equation coefficient are: α_1 , α_4 should be positive, while α_2 and α_3 are expected to be negative. The estimation results in the above table indicate that LGDP 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.

(LRINF) 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 was 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.

6- Summary

In this paper, the determining factors of FDI inflows were investigated. However, using time-series data, we investigated the temporal relationship between FDI and its main determinants in Libya for the period 1970-2005. 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 since the Libyan economy was put on the right track. 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 cooperation, but Libya needs extra time to diversify local products and different goods rather than relying solely on oil and gas as the main sources of income.

المخلص:

ركزت الورقة على دراسة العوامل المحددة لتدفق الإستثمار الأجنبي المباشر الى ليبيا خلال الفترة الزمنية 1970-2005 ف . وقد أوضحت نتائج البحث ارتفاع حجم وقيمة التدفقات لأجنبية وخاصة بعد رفع الحظر الإقتصادي الذي كان مفروضاً على ليبيا، والذي شكل أحد أهم العوامل في زيادة وتفعيل دور تلك الإستثمارات في المساهمة في التنمية الإقتصادية وتنوع مصادر الدخل الوطني، وقد بلغت قيمة الإستثمارات الأجنبية أكثر من 2.4 مليار دولار خلال الفترة 2000-2005 ف .

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