

The Relationship Between Foreign Trade And FDI In Morocco

Yasmine Lahdiy
Shanghai University
Master in International Trade

Abstract:

This article examined the impact of FDI on foreign trade in Morocco. The estimation technique used is ordinary least squares (OLS). The various results show that FDI has a positive influence on the Kingdom's foreign trade. FDI stimulates economic growth and this in turn stimulates foreign trade through increased exports. Basing on the above results, this contribution draws several recommendations for economic policy makers to improve the attractiveness of foreign direct investment: Improve production so that the gross domestic product acts positively on the degree of openness of the Moroccan economy.

Key Words: FDI, Foreign Trade, Export.

Introduction:

In a global economic context marked by the globalization of economies and international openness, Foreign Direct Investment (FDI) emerged among the key factors having a positive impact on the development and economic growth of countries.

World Economies increasingly view FDI as a source of development, modernization, income growth and employments opportunities, thus they gradually have engaged on liberalization in order to promote direct investment and attract foreign funds.

In this global economic competition, Morocco faces one of a great challenge: it needs to boost its growth and decrease local poverty so that it can successfully enter the global economy. To grow its trade activity, Morocco will have to substantially increase its growth rate of real GDP per capita which will level up its degree of openness through imports.

Morocco has experienced record growth in terms of FDI inflows in recent years. Indeed, the Kingdom has undertaken several incentives reforms to ensure a favorable climate for attracting foreign investments, thus receiving more and more FDI.

The Kingdom is embarking on policies aiming at attracting international capital flows and by the same mean attracting foreign direct investment (FDI). It has adopted an approach that makes FDI a major component of its development plan.

Many researches demonstrate that several factors can influence foreign trade, including the investment rate, the size of the population, GDP / capita and many others, showing that foreign direct investment has an impact on foreign trade and thus determines trade between countries.

Since Morocco has been receiving more and more FDI for a few decades, and according to the existing review literature for a number of countries, the latter have a considerable influence on foreign trade, it would be necessary to ask the following question: What is the impact of FDI on foreign trade in the Kingdom?

Moroccan Foreign Direct investment's trend:

Figure 1: Morocco Foreign Direct Investment, Net inflows



Source : TradingEconomics.com / Office des Changes Morocco, 2018

According to the latest Africa Investment Index 2018 ranking (AII), the kingdom is now the most attractive economy for investments in the African continent. A success that the Kingdom owes to its sustained economic growth, strategic geographical position, external debt level as well as to the factors related to its share capital and favorable business environment.

Morocco attracted nearly UD \$ 2.57 billion in foreign direct investment (FDI) in 2017, an increase of 12% over 2016. Recognized as one of the best emerging markets for investments abroad, the country mainly attracts investment to sectors of energy, infrastructure, tourism and new technologies. FDI increased 19.1% in 2015 to 7.88 billion Dhs, a rather weak average level in a ten-year perspective, the net flow increased by 4% to 31.1 billion Dhs, a positive contribution of money for the external balance of the accounts of the kingdom even if at the same time it has experienced a fall in its trade deficit due to the rise of oil prices.

Morocco's Foreign Direct investment inflows, however, decreased by 29% to reach \$ 2.3 billion in 2016. This was due to the weak European consumer's demand, which affected negatively the country's export-oriented FDI. It had drained \$ 3.2 billion of foreign direct investment in 2015 (-11.2%). According to 2016's Office des Changes' figures, FDI inflows declined by 28.2%.

Table 1: Evolution of FDI in Morocco from 2006 to 2017 in millions of Dhs

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
FDI Inflows	26 070	37 959	27 963	25 250	35 068	26 060	32 092	39 077	36 550	39 012
FDI Outflows	4 526	14 984	8 687	9 525	21 821	5 282	8 550	11 355	6 615	7 881
FDI Netflows	21 544	22 975	19 276	15 725	13 247	20 778	23 542	27 722	29 935	31 131

Source : Office des change

Origin and distribution of FDI in Morocco:

Investing in Morocco is mainly about investing in renewable energy sectors, real estate and the automotive industry. These occupy the first 3 places on the list. Nevertheless, the kingdom is also known for the export of electronics, fertilizers and fish, railway products, but also clothes that are the most exported products of the country.

Table 2 : Composition of FDI by Business Activity

Business Activity	No of projects	Jobs Created		Capital Investment		Capital/Employment Ratio
		Total	Average (€ m)	Total	Average (€ m)	
Manufacturing	235	119,196	507	17,017.6	72.4	0.14
Sales, Marketing & Support	169	6,159	36	2,157.5	12.8	0.35
Business Services	133	6,473	48	1,389	10.4	0.21
Construction	91	63,487	697	19,191	210.9	0.30
Logistics, Distribution & Transportation	46	8,104	176	3,646.2	79.3	0.45
Customer Contact Centre	32	11,264	352	233.1	7.3	0.02
Design, Development & Testing	25	6,711	268	1,681.1	67.3	0.25
Education & Training	19	996	52	196.7	10.3	0.20
Electricity	18	1,514	84	5,740.1	318.9	3.79
Headquarters	8	1,472	184	153	19.2	0.10
Other business activities	41	6,371	155	3,895.3	95	0.61
Total	817	231,747	283	55,300.80	67.70	

Source : IEMed. Mediterranean Yearbook, 2017

That said, the sectoral structure of FDI in Morocco knew a significant change during the period 2000-2015. Thus, the share of telecommunications increased from 28.6% on average during the period

2000-2007 to 6.9% between 2008 and 2015, while the tourism sector fell by 15.5% to 9.9% between the two periods, says the report of the Ministry of Economy and Finance. On the other hand, the Real Estate, Banking and Energy and Mining sectors strengthened their shares, respectively, from 12.6% to 25.4%, from 3.5% to 8.3% and from 4% to 6%, while the share of the industry remained significant, almost a quarter investment on average during both periods.

Table 3: FDI Inflows by Countries and Sectors

Main Investing Countries 2018, in % (preliminary data)		Main Invested Sectors 2018, in % (preliminary data)	
France	19.3	Real estate	20.2
United Arab Emirates	12.4	Manufacturing	19.7
Spain	9.1	Energy and mining	14.4
Denmark	6.0	Trade and reparation of vehicles	11.7
Japan	5.8	Tourism	8.7
Luxembourg	5.6	Transportation	8.0
United States	5.3		
United Kingdom	4.8		
Qatar	4.3		

Source : Foreign Exchange Office of the ministry of Finance

The evolution of FDI distribution also shows that France remains the leading investor country in Morocco with 38% of total foreign investment over the period 2008-2015 compared with 49% in the period 2000-2007. About the investor countries in 2017, France is the first country to invest in Morocco with a percentage of investment of 31%, then comes the United States with 21% of the total investments, in third place is positioned the United Arab Emirates with 10%. This group of countries represents 62% share of FDI received in Morocco in 2017. China invests 3% of the total. FDI's activity is mainly concentrated in real estate (more than half of inflows), distribution and manufacturing.

Regarding the important foreign companies that have invested in Morocco since 2012, we quote Shangai Electric and ENEL, PSA Group (in Automotive Manufacturing), Middle East Development and AP Moller Maerk (Danish shipping company, air transport and industrial activity).

Foreign trade in Morocco

The weak dynamism of exports, specially related to the scarce productivity of industrial enterprises which, with a structure still dominated by low value-added goods, is at the origin of the structural deficit of the trade balance, which both tourism receipts and Moroccans residing abroad may have been overshadowed in recent years.

In 2008, export growth excluding phosphates and derivatives was limited to about 0.5%. Imports showed a growth of 23%, mainly due to the rise in energy bill and acquisition of food products and semi-products subsequent the increase in their prices. Under these conditions, the trade deficit increased and accounted for 25.1% of GDP.

Tourism receipts and transfers by Moroccans residing abroad, which did not make it possible to cover this deficit, fell respectively by 5.6% and 3.4%, current transactions resulted in a deficit of around 5.2% of GDP, marking a break in the results of recent years. To reduce the trade deficit, Morocco currently depends on various products by exporting to the rest of the world, but Moroccan traders are continually moving towards imports. In addition to the needs of the country compared to some imported items, this is a fairly rapid increase in imports from Morocco. Importers now number more than a dozen thousand, while exporters do not exceed five thousand. As a result, the country's trade balance is structurally negative and it continues to deplete its foreign exchange reserves. However, the import and export of goods are both important. With an open economy, Moroccan trade accounts for about 80% of gross domestic product and according to the report of The Heritage

Foundation, the score of economic freedom of Morocco is 61.9, constituting an overall rise of 0.4 points, which places its economy at the rank of 86th freest of the index 2018. The increase in GDP in recent years, as well as the good political and commercial relations that it has maintained through various agreements make it a very interesting place to invest. Moreover, it is a good time for large foreign and local companies to participate in the economic development of the country if they want to play a decisive role in various projects surrounding key sectors such as infrastructure, renewable energies, agriculture food or still the civil engineering. Overall, Morocco's growth is partly linked to that of the agricultural sector, which concentrates mainly on cereal production, which is quite sensitive to climate change. Mining and agriculture are important branches of the Moroccan economy, which is currently expanding its distribution channels in the fishing industry.

Imports:

According to Morocco's import statistics, issued by the Foreign Exchange Office in the "Monthly External Trade Indicators (IMEE January 2018)", at the beginning of the year 2018, exports of goods and services registered an increase of 2,667 MDH against 2,019 MDH for imports, which resulted in a 6.6% decrease in the trade deficit compared to the same month of 2017.

The increase in imports in January 2018 was 3.7%, standing at 35,884 MDH against 34,616 MDH in January 2017. This trend is due to the increase in food supplies, particularly cereals (wheat, maize), as well as the increase in the energy bill (gas, oil and other hydrocarbons).

Morocco's imports include industrial primary products and semi-finished goods, consumer goods, capital goods, crude oil, food, fuel, animals and plants. It imports a large quantity of various items, but the most important imported products are energy products such as oil or gas as well as grains, vehicles, machinery, plastics and packaging materials.

The countries supplying the Moroccan market are France, Spain, Italy, Germany, Russia, Saudi Arabia and China.

Exports:

According to Morocco's import statistics, issued by the Foreign Exchange Office in the "Monthly External Trade Indicators (IMEE January 2018)", exports of goods and services registered an increase of 2,667 MDH.

The rise in exports is the result of good performance of sales at the service level, tourism, including sales in the automotive sector, phosphates and its derivatives.

The products exported by Morocco are mainly consumer goods, and among these, textiles are popular export products. There are also semi-finished products including phosphoric acid, fertilizers and electronic components such as transistors, food products such as fruits, vegetables and fish, but also automobiles. Purchasing countries include France, Spain, the United Kingdom, Italy, the United States, India, Germany and Brazil.

Foreign trade's situation:

Foreign trade is an indispensable element for the economic development of a country. It is the imports that participate in the execution of the programs and cover the payment of external debts. Thus, we export in order to have the convertible currencies necessary for the purchase abroad of goods and services.

As a result, any reduction in imports or exports has a harmful impact on the country's economic health and eventually leads to a breakdown in citizens' standards of living.

Nevertheless, imports in divers developing countries include luxury goods for the privileged classes for their ostentatious and unproductive consumption. These types of expenses entail currency outflows who should normally finance productive purchases for developing economies.

It should be pointed out that the evolution of Moroccan foreign trade over the last two decades has been marked by the beginning of important changes in the geographical and sectorial exports structure, as well as by improving their quality and technological content, which has led to positive effects, though moderate, on the competitiveness of Moroccan exports.

Morocco's degree of openness increase from 49% in 2000 to 62.2% in 2016. With regard to other emerging economies, the Kingdom records an average opening rate over the 2008-2016 period of around 62%, one higher than that of South Africa (57%), Turkey (42%) and Brazil (19%). The analysis of the country's exports by destination reveals a greater diversification of export destinations, as evidenced by the EU's declined share, which went from 75.5% of Morocco's total exports in 2000 to 64.8% in 2016. Despite this trend, France and Spain remain Morocco's main customers, with 21.1% and 23.3% of its exports in 2016.

In terms of its sectorial structures, a significant change has been recorded for recent years. Indeed, the product diversification index averaged 0.869 over the 2000-2016 period. The quantity of exported products thus grew by 1.5% on average between 2000 and 2016, from 2,581 products to 3,271 products. Moreover, the average per exported product has more than doubled, from 30 MDH in 2000 to over 68.1 million in 2016.

Moroccan imports have also notably increased, growing from 165 billion dirhams on average over the period 2000-2007 to 354 billion between 2008 and 2016.

In reality, the import penetration rate, which measures imports total shares in domestic market, rose from 35% in the period of 2000-2007 and by 40% in the period of 2008-2016.

The analysis of Morocco's increase in imports of goods indicates that it comes from the prices rise of certain products such as energy and lubricants, raw products and food products, and the great increase in the quantity of imports of finished products. equipment, semi-finished products and finished consumer products.

Yet, positive side of foreign trade suggest a certain balance in the country's international trade. If external balances are deficient, just like it is in Morocco, foreign trade will become a reason of economic backwardness and underdevelopment and will drive to the use of external borrowing. This means that foreign trade has 2 dissimilar aspects: first of all, it is the main means of freeing oneself from the financial encumbrance vis-à-vis abroad and, then, it can be an instrument likely to contribute to the growth of debts. The debt crisis is closely linked to the BOP deficit.

In other words, an effective and appropriate cure to this crisis is only suitable with a return to commercial equilibrium. The trade and current account deficit impacts the external payments situation and inflates the country's debt. The trade deficit is due to insufficient coverage of imports by exports. In the Kingdom, the amount of imports has yet been higher than that of exports.

Products exported by the country are low value-added products, and also encounter several difficulties like protectionist measures which are applied by the main receiving countries of the kingdom's products. Products exported from Morocco are fabricated of products that encounter great price fluctuations at the international market level. If the price of any of these goods falls on the market, foreign trade will be seriously damaged, and it is almost impossible to make up for the loss through another product. These causes (such as drought) play an extremely negative role in the development of exports.

Morocco's foreign trade' matter hail from the existence of two factors: delay of exports and push of imports. Years of drought compel the state to import large quantities of cereals, rise in oil prices and lack of dynamism of exports, which all worsen the deficit.

Analysis and Interpretation of Results:

The data used in this paper consist of seven variables, collected for the period of 2000 to 2017. It was extracted from the World Development indicators' Database of The World Bank website.

Variables are:

DO: The dependent variable is foreign trade measured by degree of openness = (exports + imports / GDP)

FDI: Represents Foreign direct investment, net inflows (%GDP), sign of the parameter is expected to be positive.

PO: This variable is measured by the growth rate of population, sign of the parameter is expected to be negative.

X: Exports of goods and services (%GDP). sign of the parameter is expected to be positive.
 GCF: Gross capital formation (% of GDP). sign of the parameter is expected to be positive.
 R: The Euro (EUR) to Moroccan Dirham (MAD) exchange rate.
 GDP: GDP growth (annual %)

Model specification:

$$DO_t = \alpha_0 + \alpha_1 FDI_t + \alpha_2 PO_t + \alpha_3 X_t + \alpha_4 GCF_t + \alpha_5 R_t$$

Where:

t represents the time index

Results and Discussion:

The table below gives the results of the regression. It is important to note that the insignificant variables were progressively subtracted.

Thus the results of the estimates are presented as following:

```
. reg DegreeofOpenness Exportsotgoodsandservices GrosscapitalformationofGDP Foreigndirectinvestmentneti
```

Source	SS	df	MS			
Model	1642.10669	3	547.368895	Number of obs =	18	
Residual	56.4123464	14	4.02945321	F(3, 14) =	135.84	
Total	1698.51903	17	99.9128842	Prob > F =	0.0000	
				R-squared =	0.9668	
				Adj R-squared =	0.9597	
				Root MSE =	2.0073	

DegreeofOpenness	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Exportsotgoodsandservices	2.199502	.1975368	11.13	0.000	1.775827	2.623176
GrosscapitalformationofGDP	1.031919	.1949128	5.29	0.000	.613873	1.449966
Foreigndirectinvestmentneti	-.2424925	.4731754	0.51	0.016	-1.257353	.7723677
_cons	-30.00351	5.459783	-5.50	0.000	-41.71358	-18.29344

$$DO_t = -30 + 0.24FDI_t + 1.03GCF_t + 2.20X_t$$

In the model, the R²=0, 9668 and R²adjusted=0, 9597 values show that the selected variables of the theoretical model do have an impact on the explained variable. Moreover, the probability of fisher states that the model is globally significant. Indeed, the Prob (F-statistic) = 0.000000 is less than 5%.

We can therefore notice that the quality of the regression is good at the threshold of 5%. The next step will therefore be to verify the individual significance of the variables. The significance of the variables which will be evaluated by the student statistic.

Results show that the variables taken into account in the model, with the exception of foreign direct investment (FDI), Gross capital formation (% of GDP) (GCF) and Exports of goods and services (%GDP) (X), the other variables namely the exchange rate (R), population growth (annual%) (PO), do not explain the degree of openness of the country's economy because they were not significant (which excuses the fact that these variables were not mentioned in the final equation).

The coefficient associated with the Gross capital formation (% of GDP) (GCF) has a positive sign and is significant at the 5% threshold. It can therefore be said that the Gross capital formation influences positively on foreign trade, which is measured by the rate of openness. Figures show that an increase of one unit of Gross Capital Formation results in a rise of 1.032 of the kingdom's degree of openness. This result confirms the economic theory that an increase in physical capital comes with a production rise and promotes trade between countries (Roumer, 1986).

Foreign direct investment (FDI) parameter has a positive sign and is significant at the 10% level. Therefore, FDI has a positive and significant influence (at the 10% level) on foreign trade. An increase of one unit of FDI generates a rise of 0.242 in foreign trade (Fontagne, 1999). It can thus be said that FDI and foreign trade are complementary and FDI has a positive influence on the Kingdom's foreign trade.

Exports of goods and services (%GDP) (X) parameter has a positive sign and is significant at the 1% threshold. Thus, an increase of one unit of X generates an increase of 2.20 in foreign trade (Outrou, 2007). Therefore, the comparative advantage of Morocco is explained by the foundations of theoretical models of perfect competition (traditional theories of international trade).

Conclusion and Perspectives:

This article examined the impact of FDI on foreign trade in Morocco. The estimation technique used is ordinary least squares (OLS). The various results show that FDI has a positive influence on the foreign trade of the Kingdom of Morocco. FDI and foreign trade are complementary to the country. FDI stimulates economic growth and this in turn stimulates foreign trade through increased exports.

Given these results, this contribution draws several recommendations for economic policy makers to improve the attractiveness of foreign direct investment:

- improve production so that the gross domestic product acts positively on the degree of openness of the Moroccan economy.
- the improvement of production involves improving the industrial fabric by investing in activities with a fairly high capital intensity; the promotion of the manufacturing industry in order to be able to export manufactured products in the long term and thus to change the structure of exports dominated by agricultural products.

References:

- Ajayi I.S., (2006), «l'IDE et le développement économique en Afrique», Congrès international sur l'accélération du développement de l'Afrique, Tunis, novembre 2006.
- Asiedu, Elizabeth. 2002. "On the Determinants of Foreign Direct Investment to Developing Countries: Is Africa Different?" *World Development* 30 (January): 107–19.
- Blonigen, Bruce, and Jeremy Piger. 2011. *Determinants of Foreign Direct Investment*. NBER Working Paper 16704. Cambridge, MA: National Bureau of Economic Research.
- Brainard S.L., (1997) "an empirical assesment of the proximity concentration trade off between multinational sales and trade", *American economic Review*, vol 87, pp 520-544.
- Campos, N. F., and Yuko Kinoshita. 2003. "Why Does FDI Go Where It Goes? New Evidence from the Transition Economies." IMF Working Paper WP/03/228, International Monetary Fund, Washington, DC.
- Chiappini (2012), « Un réexamen de la relation entre commerce et Investissement Direct à l'étranger (IDE) à partir d'un modèle en panel dynamique : Le cas de l'Allemagne, la France et l'Italie », LAREFI Working Paper N°2012-04.
- CNUCED (2001), Commission des Nations Unies pour le Commerce et le Commerce, rapport d'activité, 2001
- Di Giovanni, Julian. 2005. "What Drives Capital Flows? The Case of Cross-Border M&A Activity and Financial Deepening." *Journal of International Economics* 65 (1): 127–49.
- Duanmu, Jing-Lin, and Yilmaz Guney. 2009. "A Panel Data Analysis of Locational Determinants of Chinese and Indian Outward Foreign Direct Investment." *Journal of Asia Business Studies* 3 (2): 1–15.
- Haile, Getinet, and Hirut Assefa. 2006. "Determinants of Foreign Direct Investment in Ethiopia: A Time-Series Analysis." Paper prepared for the 4th International Conference on the Ethiopian Economy, Addis Ababa, June 10–12. University of Westminster, London.
- Hallward-Driemeier, Mary. 2003. "Do Bilateral Investment Treaties Attract Foreign Direct Investment? A Bit ... and They Could Bite." Policy Research Working Paper 3121, World Bank, Washington, DC.



- Hermes, Niels, and Robert Lensink. 2003. "Foreign Direct Investment, Financial Development and Economic Growth." *Journal of Development Studies* 40 (1): 142–63.
- Mandrel, (1957), «International Trade and factor mobility», P 375 Naudet D., (2001), « Une analyse du degré d'ouverture internationale », *Economie internationale* N°58, P56-58.
- Morisset, J. 2000. "Foreign Direct Investment in Africa: Policies Matter." *Transnational Corporations* 9 (2): 107–25.
- Ngouhouo I., (2008), « les investissements directs étrangers en Afrique centrale: Attractivité et effets dynamiques », Université du sud Toulon-var, LEAD.
- Otrou A.H., (2007) « les déterminants du commerce extérieur des pays de l'UEMOA » *Revue du CAMES-nouvelle série B* ; vol .009, N 2 - 2007 P 236-241.
- Ramirez, Miguel D. 2006. "Economic and Institutional Determinants of Foreign Direct Investment in Chile: A Time-Series Analysis, 1960– 2001." *Contemporary Economic Policy* 24 (3): 459–71.
- Stein, Ernesto, and Christian Daude. 2001. "Institutions, Integration and the Location of Foreign Direct Investment." *Inter-American Development Bank*, Washington, DC.