The Impact of Foreign Direct Investment on Economic Growth in Palestine

Omar A. Abdelrahman
Finance Department, Arab American University, Jenin, West bank, Palestine
E-Mail of the corresponding author: omar.rahman@aaup.edu

Abstract
Foreign Direct Investment (FDI) is usually considered an important factor for economic growth in developing countries. FDI plays an important role in transferring technology from developed to developing economies. It also stimulates domestic investments and enhances human as well as physical capital in the host countries. This study aimed at identifying the effect of FDI and some other variables on the Palestinian economy. In the light of data analysis, time series data for FDI inflows, gross capital formation (GCF) and labor force (LF) were gathered for Palestine over the period 2005-2019.The study found that an increase in foreign direct investment by 1% leads to an increase in GDP by 0.149%, and this satisfies the assumption that increasing foreign direct investment leads to a high rate of economic growth in Palestine.
Keywords:foreign direct investments, economic growth, developing countries, gross domestic product, the Palestinian economy.

1. Introduction

Foreign direct investment (FDI) is one of the most important economic issues in recent years, as developing countries are particularly work hard to attract foreign direct investment. Foreign direct investment takes place when a company invests directly in the production or marketing of a product in a foreign country. FDI is defined as an investment involving a long term interest and control of a resident entity in the host country. Foreign direct investment (FDI) is the movement of foreign capital to invest directly in a foreign country, which is one of the main drivers of economic growth in the host country. In many ways, foreign direct investment contributes to expanding the investment base in the host country and helps solve the problem of unemployment by creating new jobs. It has been recognized that the maximizing benefits of FDI for the host country can be significant, including technology spillovers, human capital formation support, enhancement of competitive business environment, contribution to international trade integration and improvement of enterprise development(Kastrati, 2013).Foreign direct investment can make a positive contribution to a host economy by supplying capital, technology and management resources that would otherwise not be available. Such resource transfer can stimulate the economic growth of the host economy (Hill, 2000).The issue of foreign direct investment is, therefore, receiving considerable attention from decision makers around the world. Hence, Potential host countries are generally aware of the importance of foreign direct investment, so they always seek to attract foreign investment to them by creating the appropriate climate that stimulates foreign investment, providing facilities and incentives to foreign investors. FDI is an important source of financing, especially in developing countries, including Arab countries, where foreign direct investment plays an important role in driving economic growth in these countries.

1.1 The concept of foreign direct investment

Generally, FDI takes place when an investor establishes foreign business operations or acquires foreign business assets, including establishing ownership or controlling interest in a foreign company. With FDI, foreign companies are directly involved with day-to-day operations in the other country. This means they aren't just bringing money with them, but also knowledge, skills and technology. The report of the United Nations Conference on Trade and Development defines FDI as "a type of investment involving a long-term relationship that reflects permanent interests and the ability to manage the company in the parent country and the company in another country, with the parent company's participation rate exceeding 50%".

1.2 The Importance of Foreign Direct Investment:

Almost all developing countries are competing to attract a major share of FDI inflows. In fact, the share of net FDI inflows in the gross domestic product (GDP) of middle income countries increased from 0.1 percent of global GDP in 1970 to 3% in 2001. Foreign direct investment (FDI) is considered an important means to achieve economic growth by developing countries It contributes to higher investment rates through FDI flows. It also plays an important role in creating new jobs and reducing unemployment. Foreign direct investment also affects the balance of payments through the inflow of foreign capital, making it a good source of foreign

currency access and the increase of physical capital in host countries on one hand. On the other hand, foreign direct investment (FDI) contributes to the transfer of advanced technology and management skills to host countries, which have a major role in developing the skills of workers and raising production efficiency due to the foreign companies experience and extensive knowledge in the arts of production and marketing. FDI also contributes to the development of the export sector as the local firms in the same industry may learn by observing what multinationals produce and export and in this way upgrade the quality of their own exports. It increases the interest in R & D in the host countries. Overall. FDI increases productivity and facilitates production, thus increasing national income and thus increasing average per capita income.

2. Literature Review

Several studies have examined the impact of foreign direct investment on economic growth and most of these studies agreed on a direct relationship between FDI and economic growth. For example, Li and Liu (2005) found A significant relationship between FDI and economic growth both directly through promoting economic growth by itself and indirectly through its positive effect on human capital exerting a strong positive effect on economic growth in developing countries. Kok and Ersoy (2009) concluded that the interaction of FDI with some FDI determinants have a strong positive effect on economic progress in developing countries, while the interaction of FDI with the total debt service/GDP and inflation have a negative impact. Alfaro et al. (2004) examined the relationship between foreign direct investment (FDI) and economic growth.using cross-country data between 1975 and 1995. They showed that FDI alone plays an ambiguous role in contributing to economic growth. However, countries with well-developed financial markets gain significantly from FDI. Sufian and Moise (2010) discussed the effects of FDI on MENA countries through examiningthe relationship between FDI and economic development in these countries. The results showed that some of these variables had a positive impact on the flow of foreign investment, such as GDP and the degree of openness, while some others have negative effects, such as the corruption index, inflation rate, and government spending. Al Khathlan (2014) analyzed the role of FDI in the economic growth of Saudi Arabia from 1980 to 2010. He found that FDI has a positive but insignificant role in economic growth in the country over the long term. Hamdi et al. (2013b) using annual data for the period 1976-2010 explored the nexus between FDI and growth in Tunisia performed an econometric model based on cointegration and error correction modeling techniques. The empirical results showed that foreign direct investments did not have significant impacts on Tunisian economy: however exports are the main engine for growth . Jude and Levieuge (2013) investigated the impact of foreign direct investment on economic growthin many developing countries over the period 1984-2009, Their study revealed that the impact is conditional on the institutional quality of host countries. Omran and Bolbol (2003) carried out a research paper on some Arab countries about FDI, gross domestic product (GDP), and financial development. They found that Arab FDI will have a favorable effect on economic growth if interacted with financial variables at a given threshold level of development. Moreover, the results also revealed that policies that promote FDI will encourage the decision of foreign investors to invest in these countries, which will finally lead to an increase in the rate of economic growth and financial development. Alsmadi and Oudat (2019) analyzed the relationship between FDI and financial development in Bahrain during the period 1978-2015. Employing Granger causality to capture causality relationship, the obtained results showed that there was a significant positive relationship between FDI and financial development in short and long run. Hussein (2009) examined the relationship between foreign direct investment FDI and economic growth in the six GCC countries during the period 1996–2007. He found a weak relationship between FDI and growth for the sample of the GCC. Almfraji and Almsafir (2014) investigated how FDI inflows affect Qatar's business cycles. A dataset was collected from 1990 to 2010. The result indicated that there was a long-run relationship between FDI inflows and the economic growth in Qatar. Alfaro et al. (2004) examined the various links among foreign direct investment (FDI), financial markets, and economic growth. They found that countries that have a high-efficiency financial market could contribute to economic growth through FDI. Choe (2003) found that strong positive associations between economic growth and FDI inflows do not necessarily mean that high FDI inflows lead to rapid economic growth.. Mencinger (2003) explored the relationship between FDI and economic growth in eight transition countries - EU candidates - in the period 1994-2001.He found an important evidence of the causality from FDI to economic growth and this causality is unidirectional. Zhang (2001) argued that FDI tended to be more likely to promote economic growth when host counties adopt liberalized trade regime, improve education and thereby human capital conditions, encourage export-oriented FDI, and maintain macroeconomic stability.

3. Methodology

3.1 Data resources

The unique data set used in this study comes from the annual report for Palestinian Momentary Authority and *Palestinian Central Bureau of Statistics*.

3.2 Model specification:

The study aims at measuring the impact of foreign direct investment on economic growth in Palestine during the period 2005- 2019.In respect to this study, individuals

variables of the analyzed model can be written as follows:

$Y = \beta_0 + \beta_1 X_1 - \beta_2 X_2 + \beta_3 X_3 + U$

Y = GDP: It is the main indicator for economic growth; measures the volume of production within Palestine's boarders.

million at current prices.

X_1 = FDI: Measures the investment made by foreign entities from different nationalities in the host country (Palestine) at $ 1 million at current prices.

X_2 = GCF: Measures the increase in the country's assets and inventories at a certain period of time. Assets include plants, machinery, construction projects and inventories include "work in progress" and finished goods.

X_3 = Labor force: (per 1,000 people)..

U = Random variable

4. Data Analysis

4.1 Descriptive Statistics

Table 1: Descriptive statistics of the dependent and independent variables (2005-2019)

Variables	Mean	Standard Deviation N	Min Value	Max Value	N
Ln GDP	9.2758	.41187	8.54	9.27	15
Ln FDI	6.9077	.55184	5.82	7.58	15
Ln GCF	7.8208	.14502	7.05	8.44	15
Ln LF	7.7375	.51812	7.61	8.03	15

Table 2: Pearson correlation among dependent and independent variables

		lnGDP	LnFDI	LnGCF	LnLF
PearsonCorrelation	lnGDP	1.000	.716	.938	.964
	LnFDI	.716	1.000	.600	.613
	LnGCF	.938	.600	1.000	.982
	LnLF	.964	.613	.982	1.000
Sig.(1-tailed)	lnGDP	.	.001	<.001	<.001
	LnFDI	.001	.	.009	.008
	LnGCF	.000	.009	.	.000
	LnLF	.000	.008	.000	.
N	lnGDP	15	15	15	15
	LnFDI	15	15	15	15
	LnGCF	15	15	15	15
	LnLF	15	15	15	15

Table3.VariablesEntered/Removed

VariablesEntered/Removed^a			
Model	VariablesEntered	VariablesRemoved	Method
1	Ln LF, Ln FDI, Ln GCFb	.	Enter
DependentVariable:GDP			
Allrequestedvariablesentered.			

Table 4. Model Summary

ModelSummary^b								
Model	R	R^2	Adjusted RSquare	Std.ErroroftheEstimate	ChangeStatistics			
					R SquareChange	FChange	df1	df2	Sig. FChange
1	.978	957	.946	.09612			3	11	<.001
Predictors:(Constant),Ln LF, Ln FDI, Ln GCF								
DependentVariable:GDP								

Table 5 ANOVA: Variance analysis for impact of FDI, GCF, and LF and imports on GDP

ANOVA^a						
Model		SumofSquares	df	Mean Square	F	Sig.
1	Regression	2.273	3	.758	82.012	.000^b
	Residual	.102	11	.009		
	Total	2.375	14			
a.DependentVariable:GDP						
b.Predictors: (Constant), Ln LF, Ln FDI, Ln GCF						

Table6.Coefficients: Resultsof model estimation.

Coefficients^a						
Model		UnstandardizedCoefficients		StandardizedCoefficients	t	Sig.
		B	Std.Error	Beta		
1	(Constant)	-14.390	5.475		-2.628	.023
	Ln FDI	.149	.059	.200	2.529	.028
	Ln GCF	-.200	.266	-.251	-.750	.469
	Ln LF	3.092	.962	1.089	3.213	.008
a.DependentVariable:GDP						

5. Empirical Results

The first step in evaluating the regression model is using R^2 (coefficientof determination). R squared is the proportion of the variation in the dependent variable that is predictable from the independent variables. Thus, from Table 5, it can be concluded that the R squared value indicates that about 96% of the changes in the economic growth rate can be attributed to foreign direct investment and human capital. In addition, Table 5 shows that multiple R values represent the multiple correlation of 0.978 (column "R"), indicating a high degree of correlation between all forecasters in the model (FDI, human capital value (labor force), and the dependent variable which is economic growth. And Durbin-Watson d = 1.153, where this value between the two forest values is 0.562<d<2.220 (alpha = .005). Thus, it can be assumed that there is no automatic correlation in the current multiple linear regression data. The regression output above shows that the FDI and LF predictor variables are statistically significant because their p-values equal 0.000. On the other hand, GCF is not statistically significant because its p-value (0.469) is greater than the usual significance level of 0.05. The estimated general line has given the best results, as follows: LnGDP =-14.390 + 0.149 lnFDI + 3.092 lnHC and this satisfies the assumption that increased foreign direct investment leads to the higher economic growth rate in Palestine. As shown in table 7 above that the estimated values of the parameters were as follows: The independent variable (ln FDI) coefficient (.149) was positive..

6. Conclusion

After analyzing the data using several techniques for statistical analysis or disclosing the relationship between the independent variables (foreign investment, labor force, Inflation rate in the Palestinian economy) and the dependent variable (GDP) for 15 years during the period 2005-2019, the researcher reached the following conclusions: Acceptance of the main premise on which the study was based that is the increase in foreign direct investment leads to a high rate of economic growth in Palestine. In the light of data analysis, time series data for FDI inflows, gross capital formation (GCF) and labor force (LF) were gathered for Palestine over the period 2005-2019.The study found that an increase in foreign direct investment by 1% leads to an increase in GDP by 0.149%, and this satisfies the assumption that increasing foreign direct investment leads to a high rate of economic growth in Palestine. In addition, the multiple R values represent the multiple correlation of 0.97 (column "R"), indicating a high degree of correlation among all forecasters in the model (FDI, human capital

value (labor force), economic growth (dependent variable), , and Durbin Watson = 1.153, where this value is between the two values of forest **0.562 < d < 2.220** (α = .005) .

REFERENCES

Alfaro, L., Chanda, A., Kalemli-Ozcan, S. & Sayek, S. (2004)," FDI and Economic Growth: Role of Financial Markets". Journal of International Economics, 64(1), .89-112.

Al Khathlan, Khalid (2014), "Foreign Direct Investment Inflows and Economic Growth in Saudi Arabia: A co-integration analysis", *Review of Economics and Finance,* 4 (1),70–80.

Almfraji, Mohammad Amin, and Mahmoud Khalid Almsafir (2014), "Foreign Direct Investment and Economic Growth Literature Review from 1994 to 2012", ProcediaSocial and Behavioral Sciences, 129, 206–213.

Alsmadi, A. &Oudat, M. (2019),"The Effect of Foreign Direct Investment on Financial Development: Empirical Evidence from Bahrain", Ekonomski Pregled, 70(1), 22-40.

Choe, J.I. (2003), "Do Foreign Direct Investment and Gross Domestic Investment Promote Economic Growth?", Review of Development Economics, 7(1), 44-57.

Jude, C. &Levieuge, G. (2013), "Growth effect of FDI in Developing Economies: The role of institutional Quality", MPRA Paper No. 49321.

Hamdi, Helmi, AbdelazizHakimi, and Sbia Rashid (2013a), "Multivariate Granger Casuality between Financial Development, Investment and Economic Growth: Evidence from Tunisia", Journal of Quantitative Economics, 11(2), 111–129.

Hamdi, Helmi, Sbia Rashid, AbdelazizHakimi, and WafaKhlaifiaHakimi (2013b), Multivariate Granger Causality between Foreign Direct Investment and Economic Growth in Tunisia", *Economics Bulletin,* 33(2), 1193–1203.

Hussein, Muawya Ahmed 2009), "Impacts of Foreign Direct Investment on Economic Growth in the Gulf Cooperation Council (GCC) Countries" , International Review of Business Research Papers, 5(3), 362–376.

Hill, C. (2000), " International Business - Competing in the Global Marketplace", University of Washington: Irwin McGraw-Hill.

Kastrat, Salma (2013), " The Effects of Foreign Direct Investments for Host Country's Economy", European Journal of Interdisciplinary Studies, 5 (1), pp. 26-38.

Kok, R. &Ersoy, B.A. (2009), "Analyses of FDI Determinants in Developing Countries", International Journal of Social Economics, 36(1), 105-123.

Li, X. & Liu, X. (2005), "Foreign Direct Investment and Economic Growth: an Increasingly Endogenous Relationship", World Development, 33(3), 393-407.

Mencinger, J. (2003), "Does Foreign Direct Investment Always Enhance Economi growth?" , International Review for Social Sciences, 56(4), 491-508.

Omisakin, O., Adeniyi, O., &Omojolaibi, A. (2009), "FDI, Trade Openness and Growth inNigeria", Journal of Economic Theory, 3(2):13-18.

Omran, M., and Bolbol A. (2003), "Foreign Direct Investment, Financial Development, and Economic Growth: Evidence from the Arab Countries. Review of Middle East", Economics and Finance, 1(3), pp.3755

Sufian, E. &Moise G. (2010), " Another Look at the Determinants of Foreign Direct Investment in MENA Countries: An Empirical Investment", Journal of Economic Development", 35(2), pp. 75-95.

Wint, A.G. & Williams, D. (2002), "Attracting FDI to Developing Countries: A changing Role for Government ?", International Journal of Public Sector Management, 5(15), 361-374.

Zhang, J., Alon, I. & Chen, Y(2014), "Does Chinese Investment Affect Sub-Saharan Africa Growth?", International Journal of Emerging Markets, 9(2), 257- 275

UNCTAD (2005), "World Investment Report. Transnational Corporations and the Internationalization of R&D", United Nations Conference on Trade and Development New York and Geneva, 2005.