The Relationship of Economic Growth and Foreign Direct Investment on Financial Development: Empirical Evidence from Palestine

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ABSTRACT

Purpose: The purpose of this research is to investigate the impact and current link between economic growth and foreign direct investment (FDI) on financial development in Palestine, as well as the role of financial development in influencing this relationship.

Design/Methodology/Approach: The logical reasoning approach associated with quantitative research was applied in this study, which was backed up by experience and positivism as philosophical viewpoints. Data on economic growth indicators, foreign direct investment (FDI), financial development, and other control variables were also used, spanning the years (1998 to 2019). To determine whether there is an effect and a relationship between economic growth, foreign direct investment (FDI), and financial development in Palestine, Johansen's co-integration analysis method will be used.

Results: Johansen's co-integration discovered that economic growth, foreign direct investment (FDI), and financial development have a favourable influence and a Long-Term association. Furthermore, there was a statistically significant relationship between stock market financial development indices and foreign direct investment (FDI).

Practical Implications: This study adds to the literature by evaluating whether foreign direct

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investment (FDI) drives growth through financial development networks and other factors that can drive growth in addition to foreign direct investment (FDI). A well-developed financial market, according to research, will boost the impact of indirect foreign direct investment (FDI) on economic growth. By offering enough liquidity services that increase links between local and global investors, a well-developed stock market will promote capital accumulation activities and output growth.

**Originality/Value:** This study is unique in that it examines the impact and relationship between economic growth and foreign direct investment (FDI) in Palestine on financial development, which must be considered in all developing countries’ Long-Term development plans. Simultaneously, this study is a step ahead in examining the relationship between economic growth and foreign direct investment (FDI) in Palestine, as well as their primary function in financial development.

**Keywords:** Economic growth; Foreign Direct Investment (FDI); financial development; Palestine.

**JEL Classifications:** C58, E44, E47, F40, F43, G00.

1. **INTRODUCTION**

Foreign direct investment (FDI) is currently one of the most important components of a country’s economic growth and development [1-3]. Capital, technology, marketing experience, management methods, and other external elements, which are external resources for foreign direct investment (FDI), have a substantial impact on capacity productivity in the host country [4].

The economy of the Mashreq countries has always been affected by the political volatility in the Middle East, and constant economic and demographic pressures are producing economic and financial instability in the region due to chronic geopolitical situations [44]. In Palestine, however, a progressive economic liberalization policy has been implemented, which invites and stimulates capital inflows [5].

FDI, according to several studies [2,6,7,8] can not only boost productivity and technological development but also reduce unemployment and the gap between gross domestic savings and desired gross domestic investment.

However, the impact of FDI on economic growth is ambiguous [9,120], and the prospective effects on economic growth and the FDI link have not been demonstrated [9,161].

The relationship between economic growth and foreign direct investment (FDI) depends on other dominant factors such as the local conditions of the financial markets.

Furthermore, the degree of financial market development influences the impact of foreign direct investment (FDI) on economic growth [10-13]. Economic growth, on the other hand, is influenced by other factors such as the quality of the business environment [104] or tourism and services, which are particularly important in states with abundant natural resources [2].

The main goal of this article is to empirically examine the relationship between economic growth and foreign direct investment (FDI) in Palestine and to investigate how financial development shapes this relationship, based on the current role of directing financial markets in the contribution of foreign direct investment (FDI) to development economics [162].

Many studies have looked into the elements that may influence foreign direct investment (FDI) flows to Palestine [102]. Those researches looked at the relationship between foreign direct investment (FDI) and economic growth in Palestine using a variety of approaches to see what factors might be influencing it.

For example, a study by [103] indicated that location is a factor of foreign direct investment (FDI). During their research, they looked at time series data for the primary geographical criteria to see if they had an impact on the amount of FDI flowing into Palestine over time (2001 to 2011).

According to research, the size of the local market is proportional to the host country’s infrastructure, openness to foreign trade, and foreign direct investment.

The study’s main data set included indicators like real economic growth, foreign direct investment, and financial development.

The availability of Palestinian data observations across the period from (1998 to 2019) was a
primary basis for selecting this period, and the sample consists of time series data consisting of 22 observations. Other factors were used as control variables (engines of growth and determinants of foreign direct investment (FDI)), including population growth, government consumption/GDP, inflation and trade openness. The World Bank's Statistical Bulletin of World Development Indicators was used to obtain data.

The Johansen test was used to assess the co-integration in this study to determine whether there is a Long-Term relationship between economic growth, foreign direct investment (FDI), and financial development using the econometric approach [157,158].

The next sections of the article are organized as follows: Section 3 explains theoretical concepts and empirical facts, section 4 specifies data and methods used in the analysis, section 5 discusses the results and section 6 the conclusions.

1.1 Objectives of the Study

The main objective of this study is:

- To empirically analyze the impact and relationship between economic growth and foreign direct investment (FDI) on financial development in Palestine.
- To examine the role of financial development in shaping this relationship between the periods (1998 to 2019).

2. LITERATURE REVIEWS

The literature is awash with studies demonstrating how advantageous FDI is to the home economy, i.e., foreign enterprises can introduce new products and processes into the domestic market, resulting in increased productivity.

The reasons for a company's participation in international markets can vary and be reactive or proactive, target markets might shift from closer to farther away geographically and culturally, and different entry tactics are used. It is required to research the foreign investment laws in effect in the chosen country's area [10].

Foreign companies can also encourage the transfer of new technology and the dissemination of technical knowledge and management skills [14,160]. Knowledge sharing has an impact on many aspects of a company, including human capital in terms of employee learning and adaptability, efficiency and innovation, which affects product benefit and new products, emerge because of new knowledge [159].

In light of these benefits, the positive impact of foreign direct investment (FDI) on economic growth will be determined by the absorptive capacities identified in the derived literature on foreign direct investment (FDI) [15] and one of the main components of those absorbing markets is the development of functional national financial markets [16,17,18,19,12,19].

Capital accumulation, economic growth, and technical innovation have all been heavily debated in the context of well-functioning financial markets [20-23].

There is little doubt that economies, particularly developing economies, require more FDI, even though the impact of taxation and the institutional framework are important considerations [24-26].

2.1 Illustrious History of Foreign Direct Investment (FDI)

"Foreign direct investment" (FDI) is defined as "the net inflow of investments to a firm operating in a country other than the investor's, to acquire a Long-Term interest in management" [15,156].

Financial transactions were largely lent in the form of cash by the United Kingdom to the host countries, resulting in the growth and development of the host country's economy on a worldwide scale. Foreign direct investment (FDI), on the other hand, began to drop after a while, particularly after World War II. Following WWII, foreign direct investment (FDI) remittances to host nations continued to rise as new technologies were developed and sold around the world [27,155].

UNCTAD [28,154] over the years, the United States has seen the most inflows and outflows, resulting in it becoming a significant provider of foreign direct investment (FDI) outflows. This is due to the increased awareness-raising operations and branches of American companies, particularly outside of their national borders, as well as the United States' global participation in expanding resources and assistance to various countries by providing labour, technical expertise, money, and technology.
Other affluent countries, such as China, the United Kingdom, Germany, France, Singapore, and Japan, are having a tremendous impact on the global economy by sending massive amounts of money to rising and developing economies. According to the [29,152] World Investment Report, current FDI inflow patterns reveal that emerging nations account for 52 per cent of global foreign direct investment (FDI) inflows. Flows in Latin America have been increasing in recent years (2018 and 2019), while flows in emerging Asia have been relatively flat during the same period. Foreign direct investment (FDI) inflows to transition economies increased by 59% to $54 billion, while FDI inflows to developing countries declined by 2% to $684 billion [28,151].

Foreign direct investment (FDI) is a driving force to boost the performance of the economy amid an insufficient investment base in transition and emerging economies [30].

According to UNCTAD [31, 150], foreign direct investment (FDI) is a strategic policy response to host economic development, and this approach articulates the urge for foreign direct investment (FDI) integration and coordination based on recipient nations’ competitive advantages and business strategies. As a result, for FDI to be addressed effectively as a global solution to economic development, it must be customized to the host country’s conditions [141].

A contrasting school of thought, however, maintains that a liberalized, informal economy may be less advantageous and more damaging to growth [31,145,146]. For example, to encourage foreign direct investment (FDI), host economies should create tax incentives, support systems, and other sorts of incentives that may be unsustainable in the Long-Run [147].

Kumar, [32] argues that the host country’s national policies should be properly crafted to harmonize FDI interests [33].

Much of the study on foreign direct investment (FDI) seeks to explain the variables that favourably influence foreign direct investment (FDI), causing it to behave as if it were concealed, damaging, or detrimental to growth. External factors, such as large capital mobilization to increase domestic investment and technology transfer, are dominant in the manner or nature of foreign direct investment (FDI) inflows into and out of the economy. Furthermore, one of the positive effects of FDI on economic growth is external factors, such as large capital mobilization to increase domestic investment and technology transfer [34,35,31].

Sectoral foreign direct investment (FDI) and causal impacts were adjusted for in the framework of the co-integration model in post-reform research in India [34,153,36].

This study claims that foreign direct investment (FDI) affects different industries differently and that the relationship between growth and foreign direct investment (FDI) has changed to different sectors. In the manufacturing sector, for example, there was an internal association between productivity and foreign direct investment (FDI) stock and no evidence of a causal relationship in the primary sector. The second example of spillovers between industries is the flow of goods between the service and manufacturing sectors [27].

In terms of financial market development, the article relating economic growth, financial markets, and foreign direct investment (FDI) found that nations with established financial markets have higher returns from foreign direct investment (FDI) that is favourable also showed that examining the effects of foreign direct investment (FDI) in isolation yields ambiguous results [36,149].

2.2 A Summary of the Study: Foreign Direct Investment “FDI” in Palestine

Analyzing the many forms of ratings gathered and published by international organizations is one technique to assess a country's investment attractiveness. Foreign capital inflows began to arrive in Palestine in the late (1990s) [37]. Palestine can be considered one of the top three nations in the Middle East and North Africa (MENA) in terms of receiving FDI inflows [38] with an increasing and consistent trend [39,148].

Arab foreign direct investment (FDI) is one of the most important components of Palestinian FDI, with average foreign direct investment (FDI) growth among the highest in the area [12]. However, disparities in these flows have arisen because of the region’s political instability and volatility [143,144].

Some of the explanations for the expansion of foreign direct investment (FDI) in Palestine have been absorbed, including investor confidence in the Halal and Shouting Economic System (2010), Attractive Investment Climate [12], and the Palestinian Muhtasib Investment Promotion Law

According to [40] the performance of incoming foreign direct investment (FDI) flows in Palestine is inferior to that of other Arab Mashreq countries in terms of capacities [141,142]. The investment climate in Palestine still needs to be greatly improved. Inflows of foreign direct investment (FDI) in millions of dollars to Palestine and other developing nations in the Middle East and North Africa are shown in Table 1. (Stacked columns used for comparison).

2.3 Trend Analysis of Foreign Direct Investment “FDI” Inflow to Palestine (1998 to 2019)

The statistics on the flow of foreign direct investment (FDI) into Palestine over the period are presented in Table 2. (1998 to 2019). FDI inflows increased from US$15.51 million to US$360.93 million between (2001 and 2002). Inflows increased to more than US$3544.01 million in (2005) and reached a high of US$2216.10 billion in (2009). Foreign direct investment (FDI) accounts for a modest percentage of Palestine’s GDP, but it accounted for 1.267 per cent in (2006).

3. METHODOLOGY OF THE STUDY

The logical reasoning method associated with quantitative research was applied in this study, which was backed up by experience and positivism as philosophical viewpoints [41, 138] suggests that quantitative research should be used to describe social life in general, with an emphasis on the use of estimate processes [139, 140].

<table>
<thead>
<tr>
<th>Year</th>
<th>Palestine</th>
<th>Iran</th>
<th>Iraq</th>
<th>Egypt</th>
<th>Lebanon</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>622.6</td>
<td>1984.5</td>
<td>515.3</td>
<td>5375.6</td>
<td>3321.5</td>
</tr>
<tr>
<td>2006</td>
<td>422.2</td>
<td>3544.0</td>
<td>383.0</td>
<td>10042.8</td>
<td>3131.7</td>
</tr>
<tr>
<td>2007</td>
<td>962.6</td>
<td>2622.1</td>
<td>971.8</td>
<td>11578.1</td>
<td>3376.0</td>
</tr>
<tr>
<td>2008</td>
<td>336.9</td>
<td>2826.3</td>
<td>1855.7</td>
<td>9494.6</td>
<td>4002.0</td>
</tr>
<tr>
<td>2009</td>
<td>513.1</td>
<td>2413.1</td>
<td>1598.3</td>
<td>6711.6</td>
<td>4378.9</td>
</tr>
<tr>
<td>2010</td>
<td>1226.2</td>
<td>1688.6</td>
<td>1396.2</td>
<td>6385.6</td>
<td>3708.4</td>
</tr>
<tr>
<td>2011</td>
<td>1462.7</td>
<td>1485.9</td>
<td>1882.3</td>
<td>-483.0</td>
<td>3137.1</td>
</tr>
<tr>
<td>2012</td>
<td>1311.2</td>
<td>1548.3</td>
<td>3400.4</td>
<td>6031.0</td>
<td>3111.3</td>
</tr>
<tr>
<td>2013</td>
<td>1663.2</td>
<td>1946.8</td>
<td>-2335.3</td>
<td>4256.0</td>
<td>2661.9</td>
</tr>
<tr>
<td>2014</td>
<td>1876.3</td>
<td>2178.4</td>
<td>-10176.4</td>
<td>4612.0</td>
<td>2862.6</td>
</tr>
<tr>
<td>2015</td>
<td>1552.9</td>
<td>1600.3</td>
<td>-7574.2</td>
<td>6925.2</td>
<td>2159.3</td>
</tr>
<tr>
<td>2016</td>
<td>1234.7</td>
<td>1553.0</td>
<td>-6255.9</td>
<td>8106.8</td>
<td>2568.5</td>
</tr>
<tr>
<td>2017</td>
<td>1962.1</td>
<td>2029.7</td>
<td>-5032.4</td>
<td>7408.7</td>
<td>2522.4</td>
</tr>
<tr>
<td>2018</td>
<td>789.7</td>
<td>949.9</td>
<td>-4885.1</td>
<td>6797.6</td>
<td>2879.8</td>
</tr>
<tr>
<td>2019</td>
<td>1048.3</td>
<td>1326.5</td>
<td>-3998.4</td>
<td>7459.8</td>
<td>2438.7</td>
</tr>
</tbody>
</table>

Source: UNCTAD Statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>FDI</th>
<th>FDI/GDP</th>
<th>Year</th>
<th>FDI</th>
<th>FDI/GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>-33.55</td>
<td>-0.933</td>
<td>2009</td>
<td>2216.10</td>
<td>0.300</td>
</tr>
<tr>
<td>1999</td>
<td>2.85</td>
<td>-0.366</td>
<td>2010</td>
<td>1688.60</td>
<td>0.106</td>
</tr>
<tr>
<td>2000</td>
<td>13.31</td>
<td>-0.400</td>
<td>2011</td>
<td>1485.92</td>
<td>0.105</td>
</tr>
<tr>
<td>2001</td>
<td>15.51</td>
<td>-0.616</td>
<td>2012</td>
<td>1548.31</td>
<td>0.017</td>
</tr>
<tr>
<td>2002</td>
<td>360.93</td>
<td>0.134</td>
<td>2013</td>
<td>1633.22</td>
<td>0.062</td>
</tr>
<tr>
<td>2003</td>
<td>310.01</td>
<td>0.026</td>
<td>2014</td>
<td>1366.11</td>
<td>0.046</td>
</tr>
<tr>
<td>2004</td>
<td>156.40</td>
<td>0.055</td>
<td>2015</td>
<td>1243.56</td>
<td>0.037</td>
</tr>
<tr>
<td>2005</td>
<td>3544.01</td>
<td>-0.904</td>
<td>2016</td>
<td>1463.22</td>
<td>0.065</td>
</tr>
<tr>
<td>2006</td>
<td>2622.14</td>
<td>1.267</td>
<td>2017</td>
<td>1865.36</td>
<td>0.098</td>
</tr>
<tr>
<td>2007</td>
<td>2826.26</td>
<td>0.058</td>
<td>2018</td>
<td>1556.12</td>
<td>0.076</td>
</tr>
<tr>
<td>2008</td>
<td>2978.32</td>
<td>0.163</td>
<td>2019</td>
<td>969.76</td>
<td>0.022</td>
</tr>
</tbody>
</table>

Source: UNCTAD Statistics
As a result, quantitative parameters include everything from evaluating central tendency (mode, median, and mean) to measuring sample dispersion (variance and standard deviation), as well as statistical procedures like correlation analysis and regression. The quantitative research search technique is impartial and reductive [134, 135].

To test the hypothesis that financial development might boost capital accumulation, resulting in stronger linkages between economic growth and foreign direct investment (FDI), this article on economic growth and foreign direct investment (FDI) will look at quantitative secondary data [131, 132, 133].

In contrast to the inductive technique, where data analysis is followed by the formation of a theory, the deductive approach in Figure 1 demonstrates or disproves a certain theory by examining the data collected [147].

The major data set employed in the study was measures and sources of real economic growth, indicators of foreign direct investment (FDI), and indicators of financial stock development. A selection of 22 observations from a time series spanning the years from (1998 to 2019) [127].

The World Bank's World Development Indicators (WDI) figures were used to derive financial development indicators as well as some of the most important factors including inflation and population growth. The UNCTAD web database, which provides net foreign direct investment (FDI) flows both external and inward, was used to obtain FDI data [136, 137].

3.1 Measurement Variables Description

Growth indicators: As a follow-up to [2], the study's dependent variables were real GDP per capita, which may be calculated by calculating the population's real GDP ratio. [42,43,130] per capita utilized GDP in studies. Because the use of absolute GDP in the relationship between growth and foreign direct investment (FDI) has failed to reflect citizens' purchasing power or income, the literature has questioned the correlation of studies, and it has thus become a poor indicator of foreign investor products with market potential [44,45,128,129].

FDI Inflows: Long-Term participation in the management of a corporate entity located in an economy other than the investing country is evaluated by net foreign direct investment (FDI) inflows. The aggregate of reinvestment of profits, equity capital, and other short and Long-Term capital is indicated in the balance of payments as a foreign direct investment (FDI) [46]. The model used in this study is based on net flows to the Palestinian economy [124, 125, 126].

Financial Development Variables: Several major studies have shown that economic growth is favourably connected with financial development and capital accumulation on a worldwide scale [47, 48, 21,22,49, 123].

![Fig. 1. Process of deduction](Source: [40])
Indicators of financial development are divided into two classes, according to the literature: (a) market-based indicators and (b) bank-based indicators. The market-based indices used in this study are primarily concerned with the stock market [50] broke down stock market indexes into variable fluidity and volume variables. The major form of the volume variable is the market capitalization to GDP ratio, whereas the main variants of the liquidity variables are volume / GDP and market turnover [49, 118, 119].

Dependent Additional Variables: As extra factors in this study, several variables such as (a) Trade openness, (b) Trade openness, (c) Trade openness, (d) Trade openness, (e) Trade openness, (f) Trade open The greater the FDI inflow, the more open the economy can be to attract and thus more growth [51]. A measure of the ratio between trade (exports and imports) and GDP, the less restricted and more open the economy is, the greater the foreign direct investment (FDI) inflow, the more open the economy can be to attract and thus more growth [51]. (b) Government consumption, which is a measure of the government's size and total spending. Some economic development models established by [52, 143] have demonstrated that a larger government will contribute to economic growth. (c) The population growth rate, which is a measurement of how quickly a population grows. A high rate of population expansion can propel economic growth [143].

However, the evidence is conflicting because some researchers have found a negative association between population expansion and economic growth. (d) The rate of inflation, which is a metric for macroeconomic stability. High inflation, according to recent studies, is both damaging and unproductive to economic growth [52-55, 107].

3.2 Econometric Analysis Description

Financial and economic time series frequently indicate trends, with the argument that trends can be deterministic (i.e. time-dependent) or stochastic (a random but Long-Term link) [56, 105, 106].

To uncover links between economic variables, it is necessary to model changes in stochastic patterns across time. Common stochastic trends can also be identified via co-integration. When economic variables have a Long-Term relationship, it suggests they are interconnected. Co-integration analysis can give a framework for interpretation, estimation, and inference [120, 121, 122].

This research attempts to examine the trajectory of financial development in which foreign direct investment (FDI) may be advantageous to growth; as a result, it is critical to first examine the joint movement of economic growth, foreign direct investment (FDI), and financial development indicators [57-58, 117].

To determine whether there is a link between economic growth, foreign direct investment (FDI), and financial development, Johansen's co-integration analysis method will be used. Because it acknowledges more than one complementarity relationship, this research has used Johansen's co-integration approach [113, 114]. The participants in the Johansen test, on the other hand, are subject to some asymptotic characteristics, such as the usage of large samples. When the sample size is fewer than 30, the results may not be accurate [115, 116].

Even though the sample size utilized in this study was (T = 25), which is less than 30, Julius' technique is still in use due to a lack of data. Before undertaking a thorough econometric analysis, you must be able to define a data set and uncover the relationships between distinct variables [111, 112].

As a result, descriptive statistics are used to determine the numerical features of variables so that they can be compared [147]. The results of descriptive statistics will summarize the sample into a structure of variables, which will serve as the foundation for econometric analysis. The descriptive analysis is split into two sections; the first is a preliminary test of the data set that included unit root and univariate analysis. The second section examines the study's many linear relationships as well as the correlation between the measurement variables [108, 109, 110].

4. RESULTS AND DISCUSSION

4.1 Analytical Descriptive

Before undertaking a thorough econometric analysis, you must be able to define a data set and uncover the relationships between distinct variables. As a result, descriptive statistics are used to determine the numerical features of variables so that they can be compared [147].
The results of descriptive statistics will summarize the sample into a structure of variables, which will serve as the foundation for econometric analysis [105, 106]. The descriptive analysis is split into two sections; the first is a preliminary test of the data set that included unit root and univariate analysis. The second section examines the study’s many linear relationships as well as the correlation between the measurement variables [103, 104].

4.1 Measurement Variable Characteristics

The findings of the univariate analysis statistics performed on the variables in this study are summarized in this section. Table 3 shows the variables’ properties, including their maximum and minimum values, mean, and standard deviation [100, 101, 102].

4.1.1 Stationary Unit Root Test

Measurement of the stability of time-series data must be evaluated before undertaking a full regression analysis [59], because the variance and mean of time-series constant data must remain constant across time to avoid problematic regression results. If a non-stationary time-series data set is employed in the regression, however, erroneous and misleading findings can follow [97, 98, 99].

To test if variables have unit roots, Dickey and Fuller (1979 and 1981) created a method [92]. The null hypothesis variable is considered to have a unit root, whereas the alternative hypothesis variable is supposed to be without one. Below is a diagram illustrating the hypothesis, with (H0) representing the null hypothesis and (H1) representing the alternative hypothesis:

H0: $\partial = 0$: Variable does have a unit root (Non-Stationary) = I(1)
H1: $\partial \neq 0$: Variable doesn’t have a unit root (Stationary) = I(0)

When the total value of the ADF test is less than the crucial value, the null hypothesis is not rejected. Table 4 shows the results of the ADF test for the variables utilized in this investigation. Six measurement variables are non-stationary, while three are stationary (order of integration I), according to Table 4. (0).

The results showed that the value of real GDP per capita (-0.807) is greater than the values of all other crucial values (-3.750, -3.000, and -2.630), showing that the unit root exists and that the null hypothesis of real GDP per capita cannot be rejected (1).

4.1.3 The Test of Multi-Collinearity

It is said to be multilinear when a linear regression model is used with a high degree of correlation between the variables. A poly-linear relationship can be flawless or defective. The poly-linear relationship is called perfect if the regressions are perfectly correlated, and the regression coefficients with undefined independent variables and infinite standard errors are in full poly-linearity [98].

The numerous linear relationships are less than ideal when the regression components are imperfectly correlated, and the regression coefficients have substantial, but still specific, standard errors. This suggests erroneous transaction estimation. According to Montgomery and Beck (1982), the following factors can result in a multiple linear relationship: (i) flaws in the

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP Per Capita</td>
<td>2702.633</td>
<td>1110.759</td>
<td>1353.257</td>
<td>4241.789</td>
</tr>
<tr>
<td>FDI</td>
<td>1234.815</td>
<td>1018.275</td>
<td>-33.550</td>
<td>3544.006</td>
</tr>
<tr>
<td>FDI/GDP</td>
<td>0.005</td>
<td>0.422</td>
<td>-0.933</td>
<td>1.278</td>
</tr>
<tr>
<td>Market Turnover</td>
<td>5.73E+09</td>
<td>7.74E+09</td>
<td>3.50E+08</td>
<td>2.72E+10</td>
</tr>
<tr>
<td>Trading Volume</td>
<td>33.130</td>
<td>47.412</td>
<td>4.986</td>
<td>186.566</td>
</tr>
<tr>
<td>Trade Openness</td>
<td>116.812</td>
<td>15.862</td>
<td>90.054</td>
<td>144.881</td>
</tr>
<tr>
<td>Inflation</td>
<td>3.529</td>
<td>2.941</td>
<td>-0.877</td>
<td>13.971</td>
</tr>
<tr>
<td>Population Growth</td>
<td>3.529</td>
<td>1.367</td>
<td>1.761</td>
<td>5.476</td>
</tr>
</tbody>
</table>

Source: Author own composition
Table 4. The Test of Unit Root

<table>
<thead>
<tr>
<th>Variable</th>
<th>ADF Test Statistic Z(t)</th>
<th>Critical Value (1%)</th>
<th>Critical Value (5%)</th>
<th>Critical Value (10%)</th>
<th>MacKinnon ~ p-value for Z(t)</th>
<th>No of Lags</th>
<th>Conc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real FDI Inflows</td>
<td>-1.732</td>
<td>-3.75</td>
<td>-3</td>
<td>-2.63</td>
<td>0.4149</td>
<td>1</td>
<td>I(1)</td>
</tr>
<tr>
<td>FDI/GDP</td>
<td>-5.878</td>
<td>-3.75</td>
<td>-3</td>
<td>-2.63</td>
<td>0.0000</td>
<td>1</td>
<td>I(0)</td>
</tr>
<tr>
<td>Real GDP Per Capita</td>
<td>-0.807</td>
<td>-3.75</td>
<td>-3</td>
<td>-2.63</td>
<td>0.8171</td>
<td>3</td>
<td>I(1)</td>
</tr>
<tr>
<td>Market Turnover</td>
<td>-2.453</td>
<td>-3.75</td>
<td>-3</td>
<td>-2.63</td>
<td>0.1274</td>
<td>4</td>
<td>I(1)</td>
</tr>
<tr>
<td>Trading Volume</td>
<td>-1.872</td>
<td>-3.75</td>
<td>-3</td>
<td>-2.63</td>
<td>0.3454</td>
<td>1</td>
<td>I(1)</td>
</tr>
<tr>
<td>Trade Openness</td>
<td>-1.120</td>
<td>-3.75</td>
<td>-3</td>
<td>-2.63</td>
<td>0.7070</td>
<td>1</td>
<td>I(1)</td>
</tr>
<tr>
<td>Government Expenditure</td>
<td>-0.189</td>
<td>-3.75</td>
<td>-3</td>
<td>-2.63</td>
<td>0.9398</td>
<td>1</td>
<td>I(1)</td>
</tr>
<tr>
<td>Population Growth</td>
<td>-4.069</td>
<td>-3.75</td>
<td>-3</td>
<td>-2.63</td>
<td>0.0011</td>
<td>4</td>
<td>I(0)</td>
</tr>
<tr>
<td>Inflation</td>
<td>-4.662</td>
<td>-3.75</td>
<td>-3</td>
<td>-2.63</td>
<td>0.0001</td>
<td>1</td>
<td>I(0)</td>
</tr>
</tbody>
</table>

Source: Author own composition
data collection procedure; (II) limitations of the particular model or population sampled. When there are several linear relationships, finding the regression can be difficult since the percentage of standard errors will be higher. One of the most successful approaches for detecting multi-collinearity is to estimate the variance inflation factor (VIF) [95, 96].

Higher VIF values suggest that the independent variable is more collinear. According to Klein Baum and colleagues (1988), the value of VIF is larger than 10, which occurs when R2 is greater than 0.9, indicating that the variable is strongly collinear. The VIF and R2 values are reported in Table 5.

Because their VIF value is less than 10, which is below the threshold, Table 5 reveals five independent non-overlapping variables. However, three variables have a VIF value larger than 10, indicating that multi-collinearity may be an issue if these factors are included in the regression computations [93, 94].

To summarize, the mean VIF value for all variables is 15.22, which is on the very edge of the threshold. Poly-linearity is a major difficulty when the condition number is greater than 15, and it becomes a very serious one when it is greater than 30 [140]. Because the high values of VIF had to be dropped, two of the financial development factors (market turnover and turnover) were left out. As seen in Table 6, this resulted in a considerable drop in the average value of VIF (2.79).

### 4.1.4 Correlation

Finding the correlation is a numerical approach to determine the strength of a relationship between two variables [60]. The correlation coefficient (r) between two variables (X and Y) can be any value between 1 and -1; if R is positive, X and Y have a positive association.

When R-values are negative and r is zero, there is a negative correlation, and X and Y have no relationship [98]. Table 7 shows the correlation values for all measurement variables discovered in this study. With a few exceptions, there is little association between variables.

There is a substantial positive association between real GDP per capita and real foreign direct investment (FDI) (R = 0.67), which explains Palestine’s high economic growth over the research period, which reflects large growth in foreign direct investment. This is following other studies that show a Long-Term beneficial association between economic growth and foreign direct investment (FDI) [61, 62, 92].

### Table 5. Initial Multi-Collinearity Testing

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
<th>R2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Turnover</td>
<td>45.03</td>
<td>0.0222</td>
<td>0.9778</td>
</tr>
<tr>
<td>Trading Volume</td>
<td>38.37</td>
<td>0.0261</td>
<td>0.9739</td>
</tr>
<tr>
<td>Trade Openness</td>
<td>12.84</td>
<td>0.0779</td>
<td>0.9221</td>
</tr>
<tr>
<td>FDI</td>
<td>7.85</td>
<td>1.27E-01</td>
<td>8.73E-01</td>
</tr>
<tr>
<td>Government Expenditure</td>
<td>7.35</td>
<td>0.1360</td>
<td>0.8640</td>
</tr>
<tr>
<td>Population Growth</td>
<td>5.05</td>
<td>0.1981</td>
<td>0.8019</td>
</tr>
<tr>
<td>Inflation</td>
<td>3.48</td>
<td>0.2875</td>
<td>0.7125</td>
</tr>
<tr>
<td>FDI/GDP</td>
<td>1.82</td>
<td>0.5492</td>
<td>0.4508</td>
</tr>
<tr>
<td>Mean VIF</td>
<td></td>
<td>15.22</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author own composition

### Table 6. The Final Test of Multi-Collinearity

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
<th>R2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Expenditure</td>
<td>4.49</td>
<td>0.2227</td>
<td>0.7773</td>
</tr>
<tr>
<td>Trade Openness</td>
<td>4.01</td>
<td>0.2496</td>
<td>7.50E-01</td>
</tr>
<tr>
<td>FDI</td>
<td>2.61</td>
<td>0.3830</td>
<td>0.6170</td>
</tr>
<tr>
<td>Population Growth</td>
<td>2.51</td>
<td>0.3990</td>
<td>0.6014</td>
</tr>
<tr>
<td>Inflation</td>
<td>1.73</td>
<td>0.5792</td>
<td>0.4208</td>
</tr>
<tr>
<td>FDI/GDP</td>
<td>1.38</td>
<td>0.7225</td>
<td>0.2775</td>
</tr>
<tr>
<td>Mean VIF</td>
<td></td>
<td>2.79</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author own composition
Table 7. Matrix of Correlation

<table>
<thead>
<tr>
<th></th>
<th>Real GDP Per Capita</th>
<th>FDI</th>
<th>FDI/GDP</th>
<th>Market Turnover</th>
<th>Trading Volume</th>
<th>Population Growth</th>
<th>Trade Openness</th>
<th>Government Expenditure</th>
<th>Inflation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP Per Capita</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDI</td>
<td>0.6615</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDI/GDP</td>
<td>0.2160</td>
<td>0.2045</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market Turnover</td>
<td>0.1977</td>
<td>70.56E-01</td>
<td>2.94E-01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trading Volume</td>
<td>-0.0139</td>
<td>-0.6125</td>
<td>0.3167</td>
<td>0.9448</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population Growth</td>
<td>0.3703</td>
<td>0.4015</td>
<td>-0.1896</td>
<td>0.3077</td>
<td>0.1857</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade Openness</td>
<td>-0.3597</td>
<td>-0.2645</td>
<td>-0.0197</td>
<td>0.6607</td>
<td>0.7370</td>
<td>0.3892</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government Expenditure</td>
<td>0.9406</td>
<td>-0.5739</td>
<td>-0.1987</td>
<td>-0.1172</td>
<td>0.0146</td>
<td>-0.3946</td>
<td>0.3617</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Inflation Rate</td>
<td>0.0787</td>
<td>0.3373</td>
<td>-0.1692</td>
<td>0.5475</td>
<td>0.4408</td>
<td>0.3146</td>
<td>0.5772</td>
<td>0.0510</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Author own composition
Table 8. The Test of Johansen’s Co-Integration

<table>
<thead>
<tr>
<th>Constant Trend</th>
<th>Observation Number =24</th>
<th>Lags =2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration: 1998 - 2019</td>
<td>Maximum Rank</td>
<td>Parms</td>
</tr>
<tr>
<td>0</td>
<td>42</td>
<td>-1059.2273</td>
</tr>
<tr>
<td>1</td>
<td>53</td>
<td>-1034.5925</td>
</tr>
<tr>
<td>2</td>
<td>62</td>
<td>-1015.6712</td>
</tr>
<tr>
<td>3</td>
<td>69</td>
<td>-1004.0692</td>
</tr>
<tr>
<td>4</td>
<td>74</td>
<td>-997.62075</td>
</tr>
<tr>
<td>5</td>
<td>77</td>
<td>-996.86833</td>
</tr>
<tr>
<td>6</td>
<td>78</td>
<td>-996.86833</td>
</tr>
</tbody>
</table>

Source: Author own composition

Other underlying factors may lead to or influence the link between real foreign direct investment (FDI) and per capita GDP; the correlation does not indicate a causal relationship (e.g. human capital, carrying capacity of domestic institutions, institutional quality physical infrastructure, and financial development) [89,90,91].

However, real GDP per capita had negative associations with trade openness (R = -0.36), government GDP consumption (R = -0.94), and turnover ratio (R = -0.01) in this study. Market turnover, on the other hand, was found to have a positive association (R = 0.2) with real GDP per capita.

Surprisingly, all of the financial development factors have positive relationships with real foreign direct investment (FDI) [87,88]. The relationship between financial development and market turnover was found to be substantial (R = 0.77), indicating that higher levels of financial development can be related to higher levels of foreign direct investment (FDI), or stock market development. This suggests that economies with emerging financial markets can attract FDI, which could help to encourage financial development if foreign direct investment (FDI) levels increase [84,85,86].

However, this study did not include FDI and causation in the development of financial markets.

4.2 Empirical Analysis

The Long-Run link between economic growth and foreign direct investment (FDI) can be discovered after studying the descriptive qualities of the data. A co-integration analysis is created in this part. The Johansen approach, which gives the number of co-integration equations, can be used to find co-integration linkages between economic growth and foreign direct investment (FDI). The Johansen test, according to [130], is the most appropriate for testing the co-integration of numerous variables.

STATA was used to follow the suggestions of [122,149]. Only non-stationary variables, such as real GDP per capita, real foreign direct investment (FDI), market turnover, trade openness, turnover, and government spending, are included since co-integration can only take non-stationary variables [82,83], as shown in Table 7.

Table 8 shows that in a model with two lags, a null hypothesis without co-integration was discovered, indicating that at least one Long-Term link exists between one of the measurement variables and the individual’s real GDP [78,79,80,81].

Because the variables have at least one co-integration relationship, there is a correlation between financial development, foreign direct investment, and economic growth. As a result, Johansen's co-integration study discovered that foreign direct investment (FDI), financial development, and economic growth have a Long-Term link [57,58,63].

The correlation between stock market financial development indices and foreign direct investment (FDI) was statistically significant. This suggests that stock market development indicators tend to impact economic growth and the relationship between foreign direct investment (FDI) and Palestine [75,76,77].

This suggests that the growth benefits of foreign direct investment (FDI) into Palestine are boosted by the country's level of financial development. The findings also reveal that market turnover and population expansion are
the two most important positive growth factors in Palestine [73,74].

In Table 8 as shown above, the author conducted a hypothesis analysis test based on the variables used in the study. The author reached several results as shown by the numbers in the above table. The table also shows the results of Johnson’s co-Integration Test and the analysis for the period (1998 to 2019), which showed positive results and conclusions. Describes the type of relationship between economic growth and foreign direct investment (FDI) on financial development, and this reflects a positive nature of such type of economic relations, which showed the direct and real impact of these variables that were addressed in this study according to the period that was taken into account.

5. CONCLUSIONS

The impact of financial development on the relationship between foreign direct investment (FDI) and economic growth in Palestine was investigated in this article.

In addition, the impact of other variables on Palestinian economic growth was evaluated. Developing countries have embraced foreign direct investment (FDI) as a key approach for economic progress over the years. Capital growth, technology transfers, expertise, and productivity improvements are all key positive consequences of foreign direct investment (FDI) for the host country [4,34,35,31].

However, multiple studies have revealed that the host nation needs to have the absorptive capacity to allocate the benefits of foreign direct investment (FDI), which includes expanding financial markets, according to the [15,18,64].

The influence of indirect foreign direct investment (FDI) on economic growth can be improved by having a well-developed financial industry, according to this study. By providing enough liquidity services and enhancing links between local and foreign investors, a well-developed stock market will boost capital accumulation activities and output growth [47,49,65].

By evaluating whether foreign direct investment (FDI) encourages growth through financial development networks and other factors that can drive growth alongside foreign direct investment (FDI), this study adds to the literature [69,70,71,72].

Despite its importance and contribution, this study has certain drawbacks. First, the data set employed had a small number of observations (N = 22), limiting the methodological approach. Other strategies may be viable when the number of observations is greater (e.g., N > 200).

Initial unit root and multi-collinearity tests were employed to solve those issues. Second, the study’s second disadvantage is that it does not include some influencing variables for growth models, such as gross fixed capital formation, measures of institutional quality, rule of law, bureaucratic quality, corruption, and political stability (due to missing or incomplete data). As a result, removing such factors may raise the likelihood of skewed model findings.

Future studies will concentrate on three topics. First, various absorptive capacities, such as infrastructure development and human capital, will be evaluated to see if they increase the growth benefits of foreign direct investment (FDI). Second, considering that foreign direct investment (FDI) flows to Palestine could be driven by other sectors, it would be interesting to know which segments promote more development gains than others do.

As a result, the influence of this link on the Palestinian economy's Long-Term development must be considered. However, access to data at specific sectoral rates may be limited.

Finally, it may be necessary to investigate the indirect environmental and social effects of foreign direct investment (FDI). Environmental activities and extractive businesses are intertwined on a global scale.

6. POLICY RECOMMENDATIONS OF THE STUDY

Based on the results of the current study, the following recommendations were made:

- The Palestinian government should provide an enabling business/investment climate, a foreign direct investment (FDI) that encourages ease of doing business in the country encourages foreign investors,
and established businesses to thrive, raise economic growth rates and expand foreign direct investment (FDI) in the country to escape from it and to reach the required financial stability rate and financial development.

• The Palestinian government must ensure that foreign loans are legally and properly invested in the specific projects/programs for which they were borrowed in the first place, as the negative effects on Palestinian financial stability are not constant or constant, but on average and Long-Term duration. These programs will have positive effects on the Palestinian economy and financial stability and financial development will increase the ease of doing business and investing in the country.

• The Palestinian government should also curb illegal and illicit trade and investment practices, as these infrastructure projects and programs will reduce the country's production costs.

• The Palestinian government should create an appropriate investment environment for foreign investments to increase economic growth rates and encourage businesspersons and capital owners to invest these funds inside the country to maintain stability in the country.

• The Palestinian government must use all foreign aid funds in the appropriate place to raise the rate of economic growth, inject these huge funds coming from abroad into successful projects, and create job opportunities for the unemployed, thus achieving positive rates in Palestinian financial stability and financial development.

7. LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FUTURE STUDIES

The study explores the impact of economic growth and foreign direct investment (FDI) and its relationship to financial development in Palestine by estimating the growth model. This effect is considered a positive impact on Palestinian financial stability and financial development.

To achieve this goal, the period (1998 to 2019) was chosen based on the availability of data on the variables used in the study. It should be noted the previous studies that dealt with the title of the current study, and what are the most important results, conclusions and recommendations of those studies.

Therefore, the current study represents some important determinants, such as its reliance on previous studies and an appropriate scientific approach to the problem of the study and the process of data analysis, and data from reliable official government sources were used and analyzed in the study. It reached positive, good and satisfactory results.

However, the conclusions and recommendations are fit for purpose based on the data analyzed by the author, and another important limitation is that this study used the quantitative approach to the data more extensively and the qualitative method less.

The statistical method has been used to reach those results available for future studies, and future studies will benefit from this study, where the results, conclusions and recommendations are summarized and written in the most prominent ones.

Besides, the type of scientific method used and the methodology used to solve and examine the study problem are appropriate and useful for future studies and research.

In addition, One of the important determinants of this study is that it revealed the real impact of the relationship of economic growth and foreign direct investment (FDI) on financial development in Palestine, and the impact of the flight of local and foreign investors on economic growth and financial stability, and the volume of incoming remittances also affects the process of economic growth and financial development in the country.

As for the short and Long-Term, it showed the impact of each of the variables used in the study on the process of financial development in Palestine, and the study proved that with empirical evidence from the current Palestinian economic situation.

Therefore, future studies and research will benefit from the current study for its findings, conclusions and recommendations, and will help the authors and other researchers in this field to conduct broader studies related to the topic and problem of the current study.
Besides, the study result is limited in terms of data quality. This limitation arises from the inconsistency and inaccuracy of the data reported by various government institutions, private sector enterprises, and even by different departments in the country.

In addition, there is a lack of data used in our study due to the lack of available sources, and due to the length of the study period, these data could not be used, as they should.

NOVELTY OF THE STUDY

The novelty of this study lies in the new findings, conclusions and recommendations that provide a real benefit to decision-makers in the state and the decision-making process in another way.

The analysis of the data and the analysis of the quantitative content of these data in the study showed that there is a noticeable positive impact of the relationship of economic growth and foreign direct investment (FDI) on financial development in Palestine.

It should be noted that the process of economic growth and foreign direct investment (FDI) has caused an increase in the rate of Palestinian financial development and progress in economic development as a whole. This novelty can be deduced from the results of the study in addition to the conclusions and recommendations made by the study, and this novelty is a useful model for future studies in this regard.

DECLARATIONS

The views, conclusions, and recommendations derived here are the narratives concluded by the author, based on the data (Facts/Tables) that derived in this paper, which do not reflect the official views and perspectives of the Organizations where the authors are associated now. This study was conducted in early (2021), in the second year of the onset of (Covid-19).

DATA AVAILABILITY STATEMENT

The data and materials that support the findings of this study are available from the corresponding author upon request. Datasets are derived from public resources and made available to the author. Data analyzed in this study were a reanalysis of existing data, which are openly available at locations cited in the references section.

ACKNOWLEDGEMENTS

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COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES


32. UNCTAD. World Investment Report. Investment and new Industrial policies.


58. Fischer, S., Modigliani, F. 1978. Towards an understanding of the real effects and


101. Innovative development of socio-economic systems based on the methodology of foresight and cognitive modeling. / Under the editorship of GV, Gorelova ND.

Available: www.ijier.net


144. Shtayeh Ahmad. The Palestinian Economy in the interim phase // The Palestinian Economic Council for Development and Reconstruction (PECDAR); 2011.


147. Tornell A, Velasco A. The Tragedy of the Commons and Economic Growth: Why


