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The Effect of Foreign Direct Investment (FDI), Remittances, Inflation, Education, Trade and Unemployment on the Palestinian Economic Growth*

ABDULLAH AL-MUTAIRI[1], DINA NASER[2], HANI NASER[3] and KAMAL NASER[4]

[1] Assistant Professor, International University of Science and Technology in Kuwait, e-mail: Abdullah.almutairi.@iuk.edu.kw
[2] PhD candidate, International relations and Journalism Specialist, e-mail: Dina_naser @hotmail.com
[3] Senior Accounting Advisor, Grante Thornton, e-mail: hani_naser@hotmail.co.uk
[4] Dean of College of Business Administration, International University of Science and Technology in Kuwait
e-mail: kamal.naser@iuk.edu.k

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ABSTRACT

The objective of this study is to investigate the factors that impact the economic growth in the Palestinian territories. To attain the study's objective, data were collected from the World Bank DataBank for the period 1996–2020. While, the results of the data analyses pointed to a positive and significant association between economic growth and education, negative and significant association appeared between economic growth and each of unemployment and inflation. Insignificant positive association appeared between personal remittances and economic growth; whereas, FDI negatively but insignificantly affects economic growth. Despite the high rate of education among the Palestinians, the Palestinian economy will not realize its potential to achieve the United Nations sustainable development goals (SDGs) without stopping the implementation of the Paris Protocol and giving the Palestinians the full right to control their natural resources, their land, sea and air crossings, the freedom to trade with the outside world, the right to issue their national currency and the freedom to manage their public finance.

* Views and opinions expressed in this article are those of the authors and do not necessarily reflect the views and opinions of their employers.

INTRODUCTION

The Palestinian economy began to take shape after signing the Oslo Accords between the Palestine Liberation Organization (PLO) and the Israeli occupation in 1994 and the Palestinian National Authority (PNA) was established in accordance with the Accords in parts of the West Bank and Gaza Strip. Before 1994, the economy of the West Bank and Gaza Strip was run by the Israeli occupation. In 1994, the PLO and the Israeli occupation signed the Paris Protocol that formalizes economic relations between the two sides for five years. Despite the expiry of the protocol more than 24 years ago, the protocol still organizes the economic relations between the two sides and forms a basis for PNA economic, monetary, and fiscal policies. According to the Protocol, the Israeli occupation allows Palestinians to work in Israel. The Protocol annexed the Palestinian economy to the Israeli economy through a customs union, with Israel controlling all borders leaving the Palestine without any direct independent entrance to the outside world. The Protocol emphasizes the use of the Israeli currency in the PA territories. The PA is not permitted to independently issue a national currency. Even although, three major currencies are used in the PA, namely the US dollar, the Jordanian dinar and the currency of the Israeli occupation. This would bear the consequences of fluctuation in the prices of these currencies as a result of changes in the economies of the countries that issue these currencies.

Imports and exports, including types and quantities, are subject to the approval of Israeli occupation. The Protocol further gave the Israel occupation the sole right to collect taxes on imports and the value added tax (VAT). Although collecting taxes will provide a large source of income for the PNA, it allows the Israel occupation to monitor the Authority's revenues and use them as a punitive measure or to exert political pressure.

Palestinians trade with other countries should pass through Israeli air and sea ports or through border crossings between the PA, Jordan and Egypt under full control of the Israeli occupation. The protocol created a customs union under which the Israel's trade policy is imposed on the West Bank and Gaza intensifying the suppression and annexation of the Occupied Palestinian Territory (OPT). Although the Paris Protocol legalizes the occupation, the Israeli occupation violated it, as it freely dictates the quantities and types of goods coming from Israel towards the Palestinian territories, while restricting the movement of people and goods within the Palestinian territories and from the Palestinian territories towards Israel. In addition, controlling the boards and the closure policies restricted foreign trade and converted the Palestinian territories into a captive market for exports from Israel.

Despite all this, the economic and social indicators published in the World Bank's Databank showed that during the period between 2010 and 2020, the Palestinian economy achieved an average annual growth of 1.83%[1]. This positive average annual growth was achieved at a time when the Palestinian National Authority does not exercise control its land, air and sea boarders. It does not also enjoy the freedom to trade with the outside world and has no control over its natural resources. In this study, the attempt will be made identify factors responsible for economic growth in the Palestinian economy. The importance of this study stems from the fact that it covers a unique economy, as it has no control over its natural resources, it does not have a national currency, it has no control over its land, sea and air crossings and does not have the right to free trade with the outside world. However, it must be mentioned that the Palestinian National Authority receives financial aid from the European Union, the USA, Japan, and Arab countries to reduce the deficit in its annual budget. Most of this aid supports the payment of Palestinian National Authority employees' salaries. There are also a number of international aid institutions operating within the Palestinian territories who work directly with the Palestine society. Yet, the aids that they provided do not constitute a decisive factor in bringing about economic and social development in the Palestinian territories.

Studying the factors that affect economic growth of the Palestinian economy that operates under abnormal conditions where the Palestinian National Authority is not allowed to monitor its land, sea and air borders, nor its natural resources. It is not also allowed to import and export any goods or services without

[1] As a result of the spread of the Corona epidemic and the complete lockout of PNA areas in 2020, the economy registered -11.46% growth.

the approval of the Israeli occupation authorities, and this can only be done through Israeli intermediaries. Moreover, the spread of the military checkpoints in the West Bank, the closure of Jerusalem to residents of the West Bank and the Gaza Strip, and the blockade on Gaza Strip restricts the movement of travelers, goods and services, and impedes economic activity. More importantly, the lack of a national currency and the use of three currencies (the Israeli shekel, the Jordanian dinar and the US dollar) impacts the Palestinian economy. All of these factors make the study of the factors affecting the growth of the Palestinian economy unique and would add a new dimension to the literature of economic development.

The rest of the paper is organized as follows: A review of the related literature and hypotheses development are presented in the following section. Data collection and study methodology are explained in section three. While the findings are discussed in section four, the conclusion is offered in the last section.

1. RELATED STUDIES AND HYPOTHESES DEVELOPMENT

While economic growth is measured by the increase in goods and services produced by an economy or a nation within a specific period of time, economic development measures various aspects of the economy such as wealth, health, education, access and quality of housing, employment and change in environment. Although economic growth is a narrow measure of economic development, it is unlikely to achieve economic development without economic growth. Hence, the focus of previous empirical research was on the main factors that impact economic growth. The main factors intensively used in previous research included: capital formation, education, health, inflation, trade, employment, foreign investment, financial deepening and remittances. This study will employ foreign direct investment, remittances, trade, inflation, education, trade and employment to explain economic growth in the Palestinian economy. Excluding fixed capital formation, and health is due to the fact that they were used by a recently published study (Al Mutairi et al. 2022). The financial deepening was excluded due to the lack of a national currency issued by the Palestinian National Authority and its lack of control over the money supply used within the Palestinian territories.

1.1 Foreign Direct Investment

Foreign direct investment (FDI) is viewed as an important factor in economic growth. FDI is not only restricted to securing finance for the acquisition of capital assets, it also assists in transferring technology and organizational forms from developed countries to the recipient country. FDI further leads to positive spillovers to the receiving economy through the link with local suppliers, competition, simulation and training. FDI is expected to inject capital and transfer knowledge and technology to the recipient country. This will lead to labor force training, transfer of skills and new managerial and organizational practices.

However, it has been argued that FDI and the technology transfer might be costly for the recipient country. Forgien's entreprisses are generally repatriate their profits. Foreign technology transfers can be inappropriate to the recipient country and its human capital and would affect the social and cultural norms of the recipient country. Ram and Zang (2002) contend that FDI would affect domestic enterprises since they will find difficult to compete with powerful foreign enterprises. This would negatively affect domestic investment. FDI may lead to negative spillovers in cases where it pushes local competitors to shut down as a result of lack of financial resources to pay for advanced technology that enables them to compete. In addition, positive spillovers may not be attained due to institutional bureaucracies and barriers. FDI as a source of finance to the recipient country can increase the rate of domestic savings.
Capital assets purchased by foreign direct investors and any additional paid up capital together with reinvestment of retained profits will be restricted to the foreign investor's country. Foreign investors' enterprises may also borrow from their national banks. In some cases, FDI may involve the acquisition of existing plants and equipment, where the ownership of existing assets is transferred from locals to foreigners resulting in reduction in local enterprises rather than creating new ones. Furthermore, in many direct investments, foreign enterprises bring with them their national personnel and this will negatively affect employment levels in the recipient country and prevent local working forces to benefit from training.

Empirical evidence on the relationship between FDI and economic growth are mixed. Koojaroenprasit (2012) *examined the impact of FDI on economic growth in South Korea. The researcher reported a strong and positive impact of FDI on economic growth*. Ayenew (2022) explored the effect of foreign direct investment on the economic growth and found it to be favorable and significant, but in the short-run statistically insignificant. Dinh et al. (2019) investigated the effect of FDI on economic growth of low-middle-income countries in the short and long- run in. The researchers revealed that although FDI has a negative impact in the short run, it has a stimulating effect on economic growth in the long run. Belloumi and Touati (2022) showed that FDI has positive and significant effect on economic growth in the long run. Nguyen (2022) considered the relationship between and reported a directional relationship going from FDI to GDP growth.

Although the review of the empirical studies confirmed the relationship between FDI and economic growth, there was no consensus on the direction of such a relation. It is, therefore, hypothesized that:

Hypothesis 1: *Economic growth in the PA territories is positively influenced by FDI.*

1.2 Remittances

Remittances constitute one of the most significant sources of external finance for many developing countries. Remittances present vital support for people all over the world, especially low and middle-income countries. Remittances in some cases exceed the flows of FDI. For instance, while, in 2020, personal remittances to the Palestinian Territories formed 17% of the GDP, the net inflows of FDI accounted for less than 1% of the GDP. Chammartin, ILO, explained how effective use of remittances promotes economic development. She affirmed that remittances generate a steady stream of foreign currency, thereby assisting in improving the creditworthiness of the receiving country. They expand access to more financial resources and the cost of borrowing. They positively affect the national income, assist significantly in poverty reduction and reduce income inequality. They further facilitate consumption and ensure the stability of receiving economy by balancing possible foreign exchange losses. Remittances can also assist on the micro level by developing human, physical and financial capital (education, health care reducing child labor micro-enterprises, purchasing property, plant and equipment, investments and savings). Hence, remittances may stimulate financial development since they enhance credit and reduce imperfection in the capital market. They are expected to assist in assets accumulation, increase investment and entrepreneurial activities and all of this would positively affect economic growth. Remittances, however, may result in appreciation in the currency of the receiving country and increase production cost and decrease profits. They would also negatively affect the labor supply of those who receive the remittances since they opt not to work. Remittances can be an alternative way to finance investment and help in overcoming liquidity constraints. Hence, remittances are viewed as being a significant source of economic growth.

The importance of remittances is evident in the developing countries since their citizens are generally migrate abroad to search for job opportunities that provides income for the family they left behind. It is, therefore, not surprising to see that a large proportion of remittances going to developing countries. Remittances go to developing countries for the purpose of either to support families, saving or investment. In case the purpose of the remittances is to support families, this means that the transferred money will be spent in the economy. This will enhance the purchasing power, increase production and stimulate growth. If the purpose of transferring money is to deposit and save the transferred money in the national banks, since the immigrants' presence in the countries where they are temporary and they will one day return to their country of origin, this will enhance the sources of finance for these banks. It increases their credit capacity to extend them to potential local investors.

The increase in investments leads to increase in domestic production, create new job opportunities and stimulate economic growth. The same applies to remittances for investment purposes. New investments result in new projects, new products, more production, new job opportunities and economic growth. Therefore, remittances to developing countries are viewed as a significant factor in stimulating economic growth. However, remittances can be counterproductive if the money is transferred to countries experiencing economic problems and have weak governance, bad institutions, lack of investors' protection and widespread of corruption. For example, when the savings of workers abroad are transferred to their

countries and these countries suffer from significant economic problems; this means a sharp devaluation of the currency. It will negatively affect the savings value in the local currency and they will lose a lot of their purchasing power. This applies to investments in local currency, as the investments will go through substantial loss in their values. The problem here is not limited to the money deposited in local currency and the significant loss in its value. Even if deposits were made in a foreign currency such as the US dollar, the depositors will find it very difficult to withdraw their savings and there is a possibility of losing part or all their savings if the state lacks the protection of depositors. Perhaps the clearest evidence to support this what is happening in Lebanon, where the value of the currency has fallen by more than 90% and prices have risen in an imaginary way. The banks in Lebanon also allow depositors to withdraw limited amounts of money from their savings. Therefore, savings may turn into a waste of money and do not contribute to economic growth.

Empirical evidence on the relationship between economic growth and personal remittances in different countries are inconsistent about its direction. Khurshid et al. (2020) tested remittances-growth relationship in 58. The results exposed that remittances have a positive impact on economic growth within the two income groups. Bajra (2021) investigated the impact of migrant remittances on economic growth in the Western Balkans and reached the conclusion that migrant workers' remittances do not provide strong support for economic growth. It is, therefore, hypothesized that:

Hypothesis 2: Economic growth in the PA territories is positively influenced by personal remittances.

1.3 Inflation

Inflation rate is one of the important variables that affects economic growth. According to Gül¸sen and Özmen (2020), interest rates respond to inflation and this affect the levels of output and economic growth. Some researchers highlighted that higher inflation expectations have more positive effects on economic activity during periods of fixed nominal interest rates (Coibion et al. 2020). Madurapperuma (2016) tested the impact of inflation on economic growth in Sri Lanka. The results show that there is a long run negative and significant relationship between economic growth and inflation. Dinh (2020) examined the effect of inflation rate on economic growth, in the short and long run, in Vietnam. The study found that the inflation rate is positively related to economic growth. Christie et al. (2021) examined the relationship between inflation rate and economic growth in Southern African Customs Union (SACU) countries. The results of the study show that inflation has a positive impact on economic growth. Ebenezer et al. (2022) investigated the relationships between inflation and economic growth and reported a negative association between them. Although their results pointed to a causal relationship between the two variables, it was not the same across all time horizons. They describe the relations as being unidirectional in the short-run and medium-run but bi-directional in the long-run.

Thus, it is evident from the review of the related studies that the direction of the relationship between inflation and economic growth is not obvious. It is, therefore, hypothesized that:

Hypothesis 3: Economic growth in the PA territories is negatively influenced by the levels of inflation.

1.4 Education

Education is defined by the World Economic Forum (WEF, 2016) as "the stock of skills, competencies, and other productivity-enhancing characteristics". Education is viewed as an important component in a country's human capital as it enhances the efficiency of individuals and supports the economy by increasing productivity. The importance of education in achieving social and economic development has been reflected in four out of the seventeen United Nations SDGs. Consequently, education is important to the formation of human capital that stimulates economic growth. According to Al Mutairi et al (2022) education extends individuals' knowledge, improves their skills and enhances their competencies and efficiencies. Lucas (1988) observed positive association between education and economic growth. Lucas (1988) believes that education in developing countries is essential to technology transfer and technology advancement. Kakar *et al.* (2011) reported a long- run relationship between economic growth and education. They

concluded that better education standards improve the efficiency and productivity of labor force and affect the economic development in the long run. Goczek et al. (2021) studied the effect of quality education on economic growth. They concluded that education is a significant component of economic growth. They emphasized the significance of educational skills and the importance of the quality of primary and secondary education for economic development. On other hand, Hamdan et al. (2020) empirically examined the relationship between expenditure on higher education and economic development and found it to be insignificant. Sebki (2021) tested the effect of education on economic growth and noticed that enrollment in tertiary education had a significant positive effect on economic growth, while secondary education enrolment has a significant negative effect. Ziberi (2022) examined the education effect on Economic Growth and noticed that a one-point increase in public expenditures on education positively impact economic growth.

Thus, it is evident from the review of the related studies that most of the reviewed studies confirmed the positive effect of education on economic growth. However, few studies reported different results. It is, therefore, hypothesized that:

Hypothesis 4: Economic growth in the PA territories is positively influenced by the education.

1.5 International Trade

International trade is viewed as being an important factor in stimulating economic growth. This view has been supported by Minford et al. (1995) who gave examples of countries such Australia, Canada, Denmark, New Zealand and Sweden that were transformed in the 19th century from underdeveloped to developed countries due to strong international trade. Similarly, countries such as Hong Kong, Singapore, South Korea and Taiwan have been transformed, in the 20th century, to so-called newly industrialized countries. Haq and Luqman (2014) tested the effect of international trade on economic growth through its effects on human capital accumulation. They reached the conclusion that international trade enhances the accumulation of human capital and contributes to economic growth positively through human capital accumulation. Farahane and Heshmati (2020) empirically tested the hypothesis that trade can act as an engine of growth of the Southern African Development Community (SADC). Their results revealed that while export expansion motivated growth, trade openness reduced it. Tahir and Hayat (2020) tested the potential effect of trade openness on economic growth for of Brunei. They disclosed a positive and statistically significant relationship between them.

Thus, the review of empirical studies undertaken to establish the relationship between economic growth and trade showed a lack of consensus on its direction. It is, therefore, hypothesized that:

Hypothesis 5: Economic growth in the PA territories is positively influenced by the trade.

1.6 Unemployment

Unemployment is viewed as being an economic problem that impedes social progress. In addition to being a major loss in the use of human resources, it stands as a stumbling block in achieving social progress in terms of lower output, lower income, poverty and lower standard of living. Botelho and Dias da Silva. (2019) demonstrated that economic growth is strongly supported by employment growth and by the stable decline in the unemployment. Kenny (2019) tested the relationship between unemployment and economic growth in Nigeria and found unidirectional causal relationship between them indicating that the level of economic activities does not granger cause unemployment rate. Dayioglu and Yilmaz (2021) analyzed the relation between economic growth and unemployment in Turkey. They reported inverse relationship between the two variables. Similarly, Louail and Benarous (2021) explored the relationship between the real GDP and unemployment in Algeria. The empirical results pointed to negative and significant relationship between the two variables.

Thus, the review of studies conducted to identify the relationship between economic growth and trade resulted in an inconclusive result about the direction of the relation. It is, therefore, hypothesized that:

Hypothesis 6: Economic growth in the PA territories is negatively influenced by the unemployment.

2. DATA COLLECTION, METHODOLOGY AND MODEL SPECIFICATION

To achieve the aim of the current study and to test the stated hypotheses, annual data, covering the period 1996- 2020, about the West Bank and Gaza Strip, have been collected from the world DataBank and the Palestinian Central Bureau of Statistics.

The independent variables employed in the current study were chosen on the basis of economic growth theories advanced in the literature together with the review of the studies in this area of research and with data availability. GNI per capita (constant 2010 USD) is used to proxy economic growth. Figure (1) presents GNI per capita in the West bank and Gaza Strip during the period 1996- 2020. The figure disclosed that the constant GNI per capita ranges between USD $1,709 in 2002 and USD $3,408 in 2018. The average annual income during the period 1996- 2020 was USD $2,744.

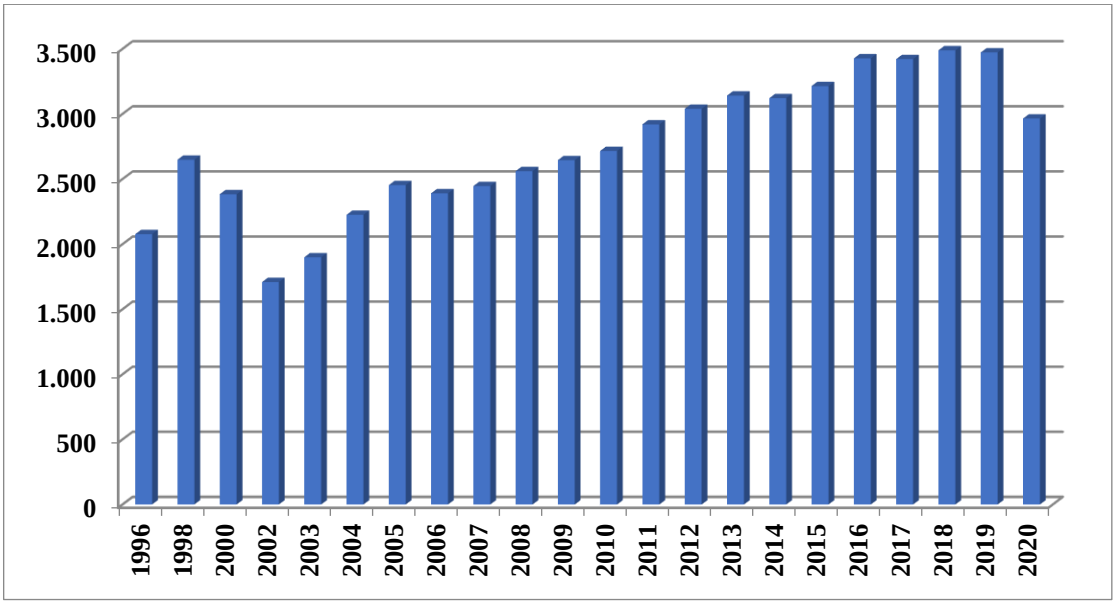

Figure 1. West Bank and Gaza Strip annual GNI per capita (constant 2010 US$)

Source: own

The independent variables, discussed in the previous section, employed in this to explain economic growth constitute: foreign direct investment (FDI), remittances, inflation, education, trade and unemployment. The dependent and independent variables employed in the current study are expressed in the following regression model.

$$GROWT = \alpha + \beta_1 FDI + \beta_2 REMT + \beta_3 INFL + \beta_4 EDUC + \beta_5 TRAD + \beta_6 UNEM + \varepsilon$$

Where:

GROWT	=	GNI per capita (constant 2010 USD)
α	=	Constant
FDI	=	Foreign direct investment, net inflows (% of GDP)
REMT	=	Personal remittances, received (% of GDP)
INFL	=	Inflation, consumer prices (annual %)
EDUC	=	Education represented by lower secondary completion rate, total (% of relevant age group)
TRAD	=	Trade/ GDP. Trade is the sum of exports and imports of goods and services.

UNEM	=	Unemployment, total (% of total labor force) (modeled ILO estimate)
ε	=	Standard Error
β_1- β_6	=	Parameters of the model

3. EMPIRICAL ANALYSIS

3.1 Unit root tests

Before performing the regression analysis of the time series data, a unit root test needs to be performed. The unit root test is used to check for the stationarity of the time series. The test helps to confirm whether the time variables are stationary. A time series is stationary when the statistical properties such as the mean, variance and covariance of the distribution are constant overtime. A nonstationary series is with trend, whereas stationary series without trend. Hence, a stationary test is necessary before performing the regression analysis; if the time series is nonstationary, the regression results will become meaningless. Accordingly, the unit root test was performed. The outcome of the test is presented in Table (1).

Table 1. Unit Root Test Results (ADF)

	At Level	*FDI*	*REMT*	*INFL*	*EDUC*	*TRAD*	*UNEM*
With Constant	t-Statistic	-3.3966	-2.0988	-1.1589	-4.0723	-1.6848	-2.5752
	Prob.	***0.0236***	***0.2469***	***0.6693***	***0.0139***	***0.4240***	***0.1136***
		**	n0	n0	**	n0	n0
With Constant & Trend	t-Statistic	-3.1222	-1.9866	-5.3320	-0.8724	-2.3250	-3.0542
	Prob.	***0.1281***	***0.5747***	***0.0019***	***0.9154***	***0.4039***	***0.1420***
		n0	n0	***	n0	n0	n0
Without Constant & Trend	t-Statistic	-2.8548	-0.6136	-1.1811	1.0760	-1.1358	0.3098
	Prob.	***0.0067***	***0.4394***	***0.2083***	***0.9151***	***0.2244***	***0.7658***
		***	n0	n0	n0	n0	n0
	At First Difference						
		d(FDI)	*d(REMT)*	*d(INFL)*	*d(EDUC)*	*d(TRAD)*	*d(UNEM)*
With Constant	t-Statistic	-4.8102	-7.0860	-9.2459	0.1390	-4.7405	-5.7322
	Prob.	***0.0013***	***0.0000***	***0.0000***	***0.9545***	***0.0014***	***0.0002***
		***	***	***	n0	***	***
With Constant & Trend	t-Statistic	-5.0127	-8.1081	-5.5055	-3.0700	-4.6760	-5.6482
	Prob.	***0.0040***	***0.0000***	***0.0018***	***0.1654***	***0.0070***	***0.0010***
		***	***	***	n0	***	***
Without Constant & Trend	t-Statistic	-4.7808	-7.2275	-9.3769	-0.9116	-4.6370	-5.6058
	Prob.	***0.0001***	***0.0000***	***0.0000***	***0.2947***	***0.0001***	***0.0000***
		***	***	***	n0	***	***

Notes:

a: (*) Significant at the 10%; (**) Significant at the 5%; (***) Significant at the 1% and (no) Not Significant
b: Lag Length based on SIC
c: Probability based on MacKinnon (1996) one-sided p-values

Table (1) demonstrates that all variables estimated in the regression model were not stationary either at level or after the first difference test. The current study has employed E-views to estimate the model. It automatically determines the number of optimal lags by utilizing Akaike information criterion (AIC) and Schwartz information criterion (SIC).

3.2 Descriptive statistics

Table (2) contains descriptive statistics about all explanatory variables used to estimate the regression model. The table revealed that the FDI/ GDP range between 0.27% and 5.2% over the period between

1996- 22020. During this period, the annual mean of FDI/ GDP was 1.5%. Personal remittances received/ GDP range between 7.38% and 26.02%, with an annual mean of 13.47%. Inflation rate ranges between -0.74% and 9.89% with annual mean of 2.8%.

What attracts attention in the table is the lower secondary completion rate as a percentage of the relevant age group since it ranges between 65.42% and 93.48% with a mean around 81%. This is one of the highest rates among the Arab world. The table also showed significant fluctuations in trade measured by exports and imports. In this respect, it is important to mention that, on average, imports account for 80% of trade. Hence, a significant proportion of trade is imports of goods and services. Finally, the annual mean of the unemployment over the period covered in this study was 20.75% of the total labor force. Between the period 2012- 2020, unemployment rate showed a steady annual increase of about 5%.

Table 2. Descriptive statistics of the variables employed in the regression model

Variables	*Mean*	*Median*	*Std. Dev.*	*Minimum*	*Maximum*
GNIPCC	2,744	2,682	520	1,709	3,488
FDI	1.50	1.14	1.47	0.27	5.20
REMT	13.47	12.95	4.88	7.38	26.02
INFL	2.80	2.78	2.41	-0.74	9.89
EDUC	80.95	81.60	7.21	65.20	93.48
TRAD	75.53	73.28	8.73	65.42	92.00
UNEM	20.75	20.98	5.01	10.61	27.47

3.3 Model Estimation

To recognize factors responsible for growth in the economy of the Palestinian Authority, *GNIPCC* was regressed against the above discussed explanatory variables. The results of the regression are summarized in table 3.

Table 3: Serial correlation lm test and heteroskedasticity test

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	1.445002	*Prob. F (2,9)*	0.2856
*Obs*R-squared*	4.375111	*Prob. Chi-Square (2)*	0.1122

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	3.826028	*Prob. F(6,11)*	0.0262
*Obs*R-squared*	12.16895	*Prob. Chi-Square (6)*	0.0583
Scaled explained SS	3.864303	*Prob. Chi-Square (6)*	0.6950

It can be deduced from table (3) that education represented by lower secondary completion rate, total (% of relevant age group) is the most significant variables positively impacted economic growth. The table, however, disclosed negative and significant relationship between economic growth and each of inflation and unemployment. Although table (3) pointed to a positive relationship between personal remittances and economic growth, the relationship was statistically insignificant. Similarly, negative and insignificant relationship appeared between economic growth and FDI.

The outcome of the serial correlation and heteroskedasticity tests is summarized in table (4) showed that the model is appropriate and it is free from any serial correlation or heteroskedasticity problems.

Table 4. OLS results

R-squared	0.783283	Adjusted R-squared		0.665073
F-statistic	6.626222	Prob. (F-statistic)		0.003622
		Durbin-Watson stat		1.582872
Variable	*Coefficient*	*Std. Error*	*t-Statistic*	*Prob.*
C	8.354105	0.562530	14.85094	0.0000
FDI	-0.035198	0.041577	-0.846585	0.4153
REMT	0.010512	0.008470	1.241174	0.2404
INFL	-0.027539	0.014446	-1.906350	0.0831
EDUC	0.016336	0.005273	3.098271	0.0101
TRAD	-0.017733	0.004999	-3.547156	0.0046
UNEM	-0.021717	0.010246	-2.119561	0.0576

4. FINDINGS

The finding appeared in table (3) showed a positive and statistically significant relationship between economic growth represented by constant GNI per capita and education represented by lower secondary completion rate, total (% of relevant age group). The table also pointed to positive but insignificant association between economic growth and personal remittances. On the other hand, the table pointed to negative and statistically significant relationship between economic growth and each of inflation and unemployment. A negative but insignificant association appeared between economic growth and FDI.

Positive and significant association between growth in the economy of Palestinian Territories and education supports in support results achieved by Goczek et al. (2021) and Sebki (2021) who affirmed the positive and significant role that education plays in economic growth. The result is also in support of results reported by Gemmell (1996) who acknowledged the human capital as being a foundation for economic growth. The result is further in support of Al Mutairi et al. (2022) who emphasized that education extends individuals' knowledge, improves their skills and enhances their competencies and efficiencies. Education in developing countries is vital in acquiring technology and in technology advancement. This would result in rapid improvement in productivity and quick increase in per capita income. The quality of education would affect individuals' productivity and economic growth. Good education standards improve the efficiency and productivity of labor force and affect the economic development in the long-run (Kakar *et al.* 2011). Therefore, it is not surprising that the United Nations stresses the role of education in achieving the SDGs.

Education has a key role in comprehending social, economic, and cultural structural changes. It is unlikely to fight poverty, increase productivity, improve individual income and stimulate the national economy without good quality education. Improving the education standards accelerates employment where males and females can contribute to the national economic development. Good quality education positively influences individual's health and wellbeing and positively affects work and productivity.

In the current technologically-based global economy, human capital: knowledge, skills, competencies and other attributes that are vital to economic activity and the key to stimulating economic growth. Given that the Palestinians are among the highly educated nations in the world, education is an important factor in developing human capital since it promotes efficiency, upsurges productivity and accelerates economic growth. The negative and statistically significant association between economic growth and inflation appeared in this study is in support by results reported by Madurapperuma (2016) and Ebenezer et al. (2022). This result is justified on the grounds that higher inflation rates results in an increase in interest rate and this will restrict economic activities, reduces output and new employment opportunities and economic growth.

Exports of goods and services are seen as the generator of economic and social development since they push the exporters to improve the quality of the exported goods and services in order to maintain their share in the international markets and ensure increased sales and profits. Exports further minimize dependency on local small markets and market volatility. In addition, the increase in exports results in increase in the access to the foreign currencies that increases the reserves in foreign currencies and assist

in minimizing fluctuations in the exchange rate of the national currency against major international currencies. This is expected to improve the standard of living and contribute to higher economic growth. Imports, however, reflect the country's inability to secure its needs by itself and makes it dependent and at the mercy of exporting countries. Unlike exports, imports are associated with the exit of the foreign currency and deterioration in the trade balance and negative economic growth.

More importantly, the economy of the Palestinian territories suffers from its inability to trade freely without an intermediary from the Israeli occupation. The restriction of movement at the land, sea and air crossings and the lack of control over the natural resources in the Palestinian Territories make the export process difficult, if not impossible. This results in difficulty in importing and exporting, a rise in import costs, and a decline in export revenues and profits. It was therefore not surprising to find a significant negative relationship between trade and economic growth. In this respect, the PA must renegotiate the Paris Protocol signed between the PLO and the Israeli occupation in 1994 and expired on 1999.

The negative and significant relationship appeared between unemployment and economic growth is in line with results achieved by Botelho and Dias da Silva. (2019), Dayioglu and Yilmaz (2021) and Louail and Benarous (2021). Unemployment is considered one of the main economic problems since it hampers social progress. It also forms a significant loss in the use of human resources. It prevents achieving social progress since it reduces output and income, promotes poverty, lowers standard of living and prevents economic growth. Unemployment rate in Gaza Strip reached 50% of the national workforce in 2020 and about 15% in the West Bank.

The problem of unemployment is worsening in the Palestinian Territories, as a result of placing Gaza Strip under a suffocating siege for more than fourteen years, which has increased the levels of poverty to reach about 53% of the population in 2020. At the same time, this percentage was more than 14% of the population in the West Bank. The continuous siege on the Gaza Strip, the checkpoints spread between the West Bank cities and towns, the continuous incursions, arrests, closure and killings, restrictions imposed on imports and exports, and the lack of control over natural resources that play an important role in activating the economic sectors all contributed to increasing unemployment levels and significantly and negatively affected economic growth in the Palestinian Territories. Perhaps this result confirms the need to reconsider the Paris Protocol, which was expired in 1999, and the Israeli occupation did not commit to implementing it, not only by failing to secure job opportunities for the Palestinian workforce inside Israel, as stipulated in the protocol, but also by imposing a siege on the Gaza Strip and a closure on the West Bank.

The partially significant negative effect of the levels of inflation and economic growth in the Palestinian Territories is mainly due to the fact that three currencies are in circulation there. This means that prices of goods and services will be determined by changes in the exchange rates of these currencies. Inflation reduces the purchasing power by increasing prices. This affects the aggregate demand, levels of output and negatively affects economic growth.

The result is consistent with (2013), Bittencourt et al. (2015), Madurapperuma (2016). The partially strong negative relationship between inflation and economic growth can be explained on the basis that three currencies are in circulation in the Palestinian Territories. This means that many citizens open deposits accounts and conduct commercial transactions using these currencies. The diversity in these currencies may have a significant impact on reducing inflation levels in the Palestinian territories. A decrease in the exchange rate of one currency can be compensated by an increase in the exchange rate of another currency. Thus, multi-use and savings in three different currencies can be a positive factor in diversifying and reducing the risks of the exchange rate of the traded currencies. However, the PNA must think about issuing a national currency. This step may collide with the Israeli occupation opposition, as it will be considered a step towards liberation and independence. The PNA should consider introducing digital currency to prevent the occupation authorities from obstructing it.

The positive but insignificant relationship between economic growth and personal remittances that appeared in table (3) calls for consideration, because remittances constitute, on average, 13.5% of the Palestinian GDP. It represents a relatively large source of income for the Palestinian economy. Therefore, the Palestinian National Authority is required to take steps to help in increasing these remittances and to develop incentive policies for their optimal use in the Palestinian economy. The PNA can enhance the flow

of remittances by reducing transaction costs, strengthening the formal financial infrastructure that support remittances through encouraging competition and improving the technology of money transfers and its presence in small and remote areas within the country and facilitate access to financial services. The PNA can also give tax exemptions for remittance income, provide incentives to attract diaspora investments with income tax breaks, gives access to foreign exchange and reduce duties on imports and support migrant projects.

The negative but insignificant relationship between FDI and economic growth that appeared in the (3) countries is not surprising, although it is consistent with results achieved by several studies due to the restrictions imposed by the Israeli occupation on the entry of capital into the Palestinian territories. The entry of foreign capital and foreign investments require prior approval from the Israeli occupation. The nature of the investment, the invested amount and individuals/ enterprises wishing to invest in the Palestinian territories are subject to the approval of the Israeli occupation, and often this approval is subject to political considerations. For example, if the individual investor or the organization belongs to a state that criticizes the Israel's policies against the Palestinians, their request to invest in the Palestinian territories will be rejected under the justification that the applicants are anti-Semitic. Thus, foreign investment is limited to individuals/ organizations that side with the occupation policies.

Naturally, this will reflect negatively on Palestinian economic growth; as the number of these individuals/ organizations is limited, their negative impact on Palestinian economic growth will be insignificant. Therefore, it is necessary to reconfirm the need for reconsidering the expired Paris Protocol and amending it to allow the PNA to choose foreign investments that contribute to the growth of the Palestinian economy and not promote the interests of the occupying authorities.

CONCLUSION

The objective of this study is to identify factors that affect economic growth in the Palestinian Territories. To achieve this objective, data were collected from the World Bank DataBank for the period 1996-2020. Constant GNI per capita has been employed in this study to signify economic growth. Six explanatory variables repeatedly appeared in previous research and it was possible to collect data about them are employ in the current study. The variables encompass, FDI net inflows as a percentage of GDP, personal remittances received as a percentage of GDP, inflation, education measured by lower secondary completion rate, trade including exports and imports as a percentage of GDP and Unemployment as a percentage of labor force.

The result of the data analyses revealed that economic growth in the Palestinian Authority is positively and significantly influenced by education. However, unemployment and inflation appeared to be significantly negatively associated with economic growth. Although remittances appeared to be positively related to economic growth, but the relation was insignificant. Finally, the results of the data analyses pointed to insignificant association between FDI and economic growth. It is expected that the Palestinian economy will continue at its current performance, and the Palestinian Authority will not be able to increase economic growth without reconsidering the expired Paris Protocol signed with the Israeli occupation.

The current study did not address some important variables such as the impact of the effectiveness of governance in the Palestinian National Authority, the amounts it spends on its security services, and what it spends on education and health on economic growth. The picture will be clearer regarding the determinants of economic development in the areas of the Palestinian National Authority if data on these variables are available. Also, the availability of data on the expenditures of international support institutions and the agencies and sectors that benefit from this support will help give a clearer account of the factors that affect economic development in the areas of the Palestinian national basket and help them in shaping their future economic and social policies.

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