إقرار

أنا الموقع أدناه مقدم الرسالة التي تحمل العنوان:

" أثر عجز الموازنة على الحساب الجاري: دراسة حالة (الأراضي الفلسطينية 1996-2012)"

The Effect of Budget Deficit o Current Account: Case Study (Palestinian Territories 12996-2012)

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Deanery of Graduate Studies
Faculty of Commerce
Master of Development Economic

The Effect of Budget Deficit on Current Account: Case Study (Palestinian Territories 1996 – 2012)

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وبعد المداولة أوصت اللجنة بمنح الباحث درجة الماجستير في **كلية *التجارة*/ قسم** اقتصاديات التنمية.

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والله ولي التوفيق ،،،

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﴿وَلَا تَجْعَلْ يَدَكَ مَغْلُولَةً إِلَىٰ عُنُقِكَ وَلَا تَبْسُطْهَا كُلَّ الْبَسْطِ فَتَقْعُدَ مَلُومًا مَحْسُورًا﴾

[سورة الإسراء- الآية (29)]

Abstract

This study aimed to examine the effect of public budget deficit account on the current account in the Palestinian territories for the period (1996 - 2012) in order to identify the nature of the relationship between both accounts, and to study the impact of government revenues and expenses on the Palestinian current account.

The main objectives of the study are to clarify the type of relationship between the public budget and the current account, and determine the appropriate economic and fiscal policies should adopt to reduce the chronic deficit in the current account. Through study the nature and components of government expenditures and revenues. In addition, to highlight the role of different Israeli policies have contributed to influence in the nature of all of the public budget and the current account. Moreover, to show the negative role-played by the division between the West Bank and the Gaza Strip.

This study has reviewed many previous studies on this subject. Moreover, the analytical descriptive approach adopted to analysis the components of the public budget and current account. Then it used statistical analysis approach by using econometric models to illustrate the impact of public budget deficit on current account in the Palestinian territories. This is after checking the stationary of time series by adopting unit root test using Augmented Dickey Fuller test. After that, it was ensured that all economic variables included in the models have cointegration relationship at long-term by using Johansen cointegration method.

Findings of the study confirm the positive relationship between the public budget deficit and the current account in the Palestinian territories. Whereas, the increase in the public budget deficit by one million U.S. dollars, leading to increase a current account deficit of 3.08 million U.S. dollars. In addition the deficit in the trade balance increased by 465.3 thousand U.S. dollars, when the other independent variables in the model remain constant, such as government and private investment. The study also confirmed the important positive role played by government investment in reducing the current account deficit. While the private investment shows negative impact on current account. This was because of the nature of private investment, which depends highly on consumer imports.

The study provided a set of recommendations concerning government institutions, private sector, and academic institutions. It should rationalize the public current expenditures, and reallocation larger part of public spending capital spending. In addition to support and enhance the domestic productive base and to direct the private investment into productive projects that lead to imports substitution and then to increase exports.

ملخص الدراسة

هدفت هذه الدراسة إلى بحث أثر عجز حساب الموازنة الحكومية على الحساب الجاري في الأراضي الفلسطينية للفترة (1996-2012), و ذلك للتعرف على طبيعة العلاقة بين كلا من الحسابين, و دراسة مدى تأثير الموازنة الحكومية من إيرادات و نفقات على الحساب الجاري الفلسطيني.

الأهداف الرئيسية للدراسة تمثلت في تحديد نوع العلاقة بين الموازنة الحكومية و الحساب الجاري, و تحديد السياسات المالية و الاقتصادية المناسبة لتخفيض العجز المزمن في الحساب الجاري و ذلك من خلال دراسة طبيعة و مكونات كلا من الإنفاق و الإيراد الحكومي, و تحديد دور السياسات الإسرائيلية المختلفة التي ساهمت بالتأثير في طبيعة كلاً من الموازنة الحكومية و الحساب الجاري. بالإضافة إلى الدور السلبي الذي لعبه الانقسام بين الضفة و القطاع.

اعتمدت الدراسة على مراجعة الدراسات السابقة التي تناولت هذا الموضوع في الأراضي الفلسطينية و البلدان الأخرى. و تم استخدام كلا من المنهج الوصفي التحليلي في تحليل مكونات الموازنة العامة الحكومية و الحساب الجاري و من ثم استخدام المنهج الإحصائي التحليلي, باستخدام نموذج قياسي يوضح أثر عجز الموازنة في الأراضي الفلسطينية على الحساب الجاري بعد أن تم التحقق من سكون السلاسل الزمنية عن طريق اختبار جذر الوحدة. فتم استخدام اختبار ديكي فولر الموسع للتحقق من ذلك فتبين أن جميع المتغيرات المشمولة بالنموذج ساكنة عند المستوى الثاني. بعد ذلك تم التأكد من وجود علاقة تكاملية طويلة الأجل بين المتغيرات الاقتصادية المشمولة في النموذج و ذلك باستخدام طريقة جوهانسن للتكامل المشترك.

توصلت الدراسة إلى نتائج تؤكد على العلاقة الطردية بين عجز الموازنة الحكومية و الحساب الجاري في الأراضي الفلسطينية. فكانت الزيادة في عجز الموازنة الحكومية بمقدار مليون دولار أمريكي تؤدي إلى زيادة في العجز في الحساب الجاري مقداره 3.08 مليون دولار أمريكي. بالإضافة إلى عجز في الميزان التجاري بمقدار 465.3 ألف دولار أمريكي. عند ثبات المتغيرات الأخرى في النموذج مثل الاستثمار العام و الخاص. كما أكدت الدراسة على الدور الإيجابي المهم الذي يلعبه الاستثمار الحكومي في تخفيض عجز الحساب الجاري بينما أوضحت الدراسة الأثر السلبي الكبير الذي يسببه الاستثمار الخاص في زيادة عجز الحساب الجاري, و يرجع السبب إلى طبيعة الاستثمار الخاص و الذي يعتمد على الواردات الاستهلاكية بشكل كبير.

قدمت الدراسة مجموعة من التوصيات تخص المؤسسات الحكومية و المؤسسات في القطاع الخاص بالإضافة إلى المؤسسات الأكاديمية. بضرورة ترشيد الإنفاق الحكومي الجاري, و تخصيص جزء اكبر للإنفاق الحكومي الاستثماري. بالإضافة إلى دعم القاعدة الإنتاجية المحلية و توجيه الاستثمار الخاص إلى المشاريع الإنتاجية التي تؤدي إلى إحلال الواردات و من ثم زيادة الصادرات.

DEDICATION

I dedicate my dissertation work to

The Memory of my father

My beloved mother who loves, care, supports, and inspired me to reach thus far.

My beloved life partner, my wife, and my children (Mohammad, Fatima, and Dima)

My beloved brothers (Mohammad, Mousa, and Ismail)

My Friends and colleagues

My teachers and academic staff of IUG

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Abbreviations

ADF	Augmented Dickey Fuller
D.W	Durbin Watson
GDP	Gross Domestic Product
GFS	Government Finance Statistics
GNI	Gross National Income
Ibid	Ibidem (Latin phrase means "the same place")
ILO	International Labor Organisation
IMF	International Monetary Fund
MAS	Palestine Economic Policy Research Institute
OECD	The Organisation for Economic Co-operation and Development
OLS	Ordinary least Square
op cit	Opere Citato, (Latin phrase means "in the work cited")
PCBS	Palestinian Central Bureau of Statistics
PLO	Palestinian Liberation Organisation
PMA	Palestinian Monetary Authority
PMF	Palestinian Ministry of Finance
PNA	Palestinian National Authority
UNDP	United Nation Development Program
VAT	Value Added Tax
VIF	Variance Inflation Factor

Chapter one

Study Framework

1.1 Introduction:

Economists are concerned about the study of public budget, current account, and balance of payments deficit. They interested on searching the reasons for the imbalance in both budget and current account, the purpose of this analysis is to restore balance to both deficits (budget and current account).

Since budget and current deficits, become ingrained at most of economies structure, making those deficits effects appear negatively on economy. such as inflation, deterioration of the purchasing power of the currency, deterioration in living standards, growth of internal and external debt, and increased the burden of debts services, causing a strain and drain of reserves and foreign assets. Thereby adversely, affect the balance of payments, and cause pressure on the international reserves of central banks to deficit countries. Therefore, the government must develop appropriate economic policies to reduce the budget deficit because it affects the performance of the economy (Growth slowdown, Recession, Unemployment, or Inflation).

Current account in the Palestinian territories consider an important determinant of Palestinian economy performance , and trade account considered the most important component in the current account, as the volume of external trade (exports and imports) of goods and services account about 97% of nominal GDP during the study period.

Palestinian public finance relies mainly on customs duties and taxes imposed on imports. Whereas revenues generated from customs (clearance), account for more than 56% of the total current revenue (Table 3.11 page 94). In contrast, the salaries and wages accounted for 57% of the total public current expenditure (Table 3.5 page 84), and there are approximately 90% of salaries and wages spent on imports. This refers to contribution of government spending to increase imports, and high degree of interdependence between the Palestinian public finances and external trade (the largest component of the current account). The lack of policies of controlling imports at the expense of gross domestic product, led to an increase in imports to meet domestic demand, and thus deepen the deficit in the trade balance, which lead to the expansion of the deficit in the current account also, in addition to the chronic deficit in the public budget.

1.2 Research Problem:

Based on, the previous introduction to the negative effects of public budget and current account deficits, moreover the effect of public finance (budget) on the current account. Therefore the main research problem is:

Is there a significant relationship between the budget deficit and the current account at the Palestinian Territories at significant level equal or less than 5 % ($\alpha \leq 0.05$)?

1.3 Objectives:

The objectives of study the effect of public budget deficit on current account in Palestinian Territories listed as follows:

1 Prove if there is direct relationship between budget deficit and current account deficit in Palestinian territories.
2 Test the tools used by the Palestinian National Authority to treat the deficit in budget and current account.
3 Analyzing the public spending and revenues policies adopted by Palestinian National Authority through the study period.
4 Recognize the suitable mixed macroeconomic policies to reduce the current account and budget deficit.
5 Show the negative role-played by the Israeli occupation on the performance of the Palestinian economy.
6 Suggest some conclusions and recommendations that lead to treat the imbalances in both the public budget and the current account in Palestinian Territories.

1.4 Research Importance:

The importance of studying the relationship between budget deficit and current account deficit is this twin deficit linked to the role played by the PNA in the Palestinian economy, the international organizations donors, and the Israeli occupation, in the Palestinian economy.

The PNA also has a weak monetary policy tools because there is no national currency, which cause poor control in the balancing of budget and current account.

1.5 Rational and Justifications:

Palestinian National Authority (PNA) suffers from a structural deficit in the budget during study period; the PNA has a crisis on three axes, a financial crisis, internal, and external political crisis. Some of the economics analysts diagnose the significant structural deficit is referred to the weakness of tax revenues of the PNA. Also the Israeli practices contributed by holding the taxes revenue (clearance revenues) of the PNA, which aggravate the budget deficit. Where these taxes contribute two-thirds of PNA budget revenues and the main reason for the financial crisis is the boycott from the donors and Israel to the PNA, and its banking institutions. In addition, the banks forced the PNA to repay their debts, which equals one-third foreign aids in 2006. This lack of liquidity and the drop in purchasing power affect negatively on Palestinian economics activity, which reduce the revenues of the PNA.

Therefore, it should fix these imbalances, rebuilt the system of public financial management, and achieve financial stability. This can be achieved by clarify the policies to be taken to treat the budget deficit, which effect negatively on all aspects of economical and social life.

This research will discuss the policies required to finance the budget deficit, reduce this deficit in the Palestinian territories. Such policies should not rely on borrowing. It should highlight the role of fiscal, monetary, and trade policy should adopted to face these crisis, in addition it should concentrate on monetary policy, because it is not use widely in the Palestinian territory, due to not having national currency.

1.6 Scope:

The statistical information needed for the research purpose, include the data for Occupied Palestinian territories[1] for period from 1996 up to 2012.

1.7 Study Variables:

1.7.1 Dependent variable:

The researcher conducts two groups of regression models; first group use a Current Account (CA)[2] as a dependent variable, and the second group use a Trade Account (TA) as a dependent variable, because a trade account consider as a major

[1] Palestinian Territories West Bank and Gaza Strip, and not including the occupied part of Jerusalem in 1967, because of lacking of data

[2] Refer to chapter 4 for definitions of current and trade account.

component of current account and trade account consider a important and truth measure for the economy. Other component of current account such as Income and current transfers consider unstable components, because it almost follow the political situation and stability

1.7.2 Independent Variables:

The study mainly aimed to test the relationship between public budget and current account. So the main independent variables related to the public budget[3] and other controlling variables are:

- **TBDF**: Total Budget Deficit/Surplus after Grants and Aid (Numeric variable)
- **CPI**[4]: Consumer Price Index (Numeric variable)
- **AID**: External support to public budget (Numeric variable)
- **CR**: Government Current Revenues (Numeric variable)
- **CENL**: Government Current Expenditure and Net Lending (Numeric variable)
- **IG**[5]: Government Investment (Numeric variable)
- **IP**: Private Investment (Numeric variable)
- **PS**: Political Situation "Represent 1 in unstable political situation, and 0 if stable situations" (Dummy variable)

1.8 Hypothesis:

Based on the study and review of the literature and previous studies, this study will test the following hypothesis:

1. There is a significant relationship between (CPI, AID, CR, CENL, IG, IP, and PS) and current account at Palestinian Territories at significant level equal or less than 5 % ($\alpha \leq 0.05$).

2. There is a significant relationship between the current account and public budget account in the Palestinian Territories at Palestinian Territories at significant level equal or less than 5 % ($\alpha \leq 0.05$).

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[3] Refer to chapter 3 for budget components definitions, such as TBDF, AID, CR, and CENL

[4] Consumer Price Index (CPI) is a statistical tool used to measure the average changes in the prices of goods and services that households consume between two different periods one called the base period and the other is the comparison period

[5] Investment" shall be defined as actual monetary investment of capital (fixed capital assets) by an investor in an Enterprise, whether a newly created or an existing enterprise (Palestinian Investment Promotion Agency, p. 6, 1998).

1.9 Methodology:

Research methodology will depend on the analytical descriptive method and quantitative analytical method (econometric) to study the relationship between budget deficit and current account deficit in the Palestinian territories, for a period (1996-2012).

The research is used econometric analysis for time series data to determine the impact of budget deficit of the PNA on the current account. Almost time series data are non-stationary. Therefore, that ordinary least squares (OLS) method leads to biased coefficient estimates. The stationary can be tested by adopting Augmented Dickey Fuller test (ADF), to test the unit root for the variables. Therefore, the time series data will be stationary after taking the differences of variables (level, 1st, or 2nd difference). If the data become stationary, then cointegration test shall performed to ensure that studied variable are integrated by using Johansen cointegration test, to confirm the existence of an equilibrium relationship at short and long run between twin deficit. Then, will derive an econometric model to clarify the form of the relationship between current account and public budget and to clarify the extent of the impact of other economic controlling variables in reducing the current account deficit such as private and public investment, and the political situations. In addition, the researcher will use available version of Eviews software to examine previous tests, and test the impact of other economic variables in the current account.

1.10 Data Sources:

The study is relied on time series data (quarter data[6]) for the Palestinian economy. The data starts from the first quarter of 1996, to fourth quarter of 2012, and it has collected from the official publications of the Palestinian Central Bureau of Statistics (PCBS), and Palestinian Monetary Authority (PMA). In addition to the fiscal data (current government expenditures, government investment, government revenues, and international aid) was collected from Palestinian Ministry of Finance (PMF).

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[6] The data collected from sources as follows:

- Public budget data such as TBDF, AID, CR, and CENL are available at quarter basis from source (PMF)
- Data for CPI and TA are available on quarter basis from source (PCBS)
- Data for CA is available on annual basis for period 1996-2010 and it is available in quarter basis for 2011, and 2012. Therefore, the annual data converted to quarter date by using Eviews (quadratic sum method).
- Data for IG and IP are available on annual basis. Therefore, it converted to quarter data by using Eviews (quadratic sum method).

1.11 Previous Studies:

After the U.S. economy has coincided in the Public budget deficit and the current account deficit during the eighties of the 20th century, and the spread of this phenomenon in many developed and developing countries, the questions raised by many researchers in their applied studies, the nature of the relationship between government budget deficit and the current account deficit. While, the results of testing such hypothesis in previous empirical studies have varied among different countries, and it may get different results depending on types of econometrics techniques used, or depending on the period taken in the same country.

So, before define the relationship between government budget deficit for the Palestinian National Authority and the current account, it was useful to review some of these previous applied studies about the relationship between the budget deficit and the current account in many countries, so it should review some local, regional and international studies for the relation between above-mentioned deficits.

1.11.1 Local Studies:

1. **(Rajab, 2011).**

"أثر السياسة الإنفاقية في التضخم في فلسطين"

"The Effect of Sumptuous Policy on Inflation in Palestine"

The study has analyzed the impact of Palestinian National Authority (PNA) spending policy in controlling the inflation in Palestine during the period (1996-2008), and aimed to determine the features of the spending that adopted by PNA, and identify the most important effects of the inflation in the Palestinian economy. The research methodology of data follows the descriptive analysis and use the correlation coefficient, and regression analysis (simple and multiple). The researcher most important findings include the follows. There is a statistically significant effect of the independent variables (Total expenses, current expenses and net lending, wages and salaries, transfer expenses, net borrowing) on Consumer Price Index (CPI), as a dependant variable, where the increases in total spending lead to increasing in CPI. That, emphasize that spending policy adopted in Palestine did not succeed in treating the inflation due to internal and external factors, such as the dependency of the Palestinian economy to Israeli economy. Then it was reached that the majority of foreign aids are directed to cover the current expenditures, and did not used for investment generating future revenues for the Palestinian economy.
The researcher recommended the following: Adopting spending policy based on rationalizing the government expenditures. Release from dependency to Israeli

economy. Use the foreign aids for investment, and infrastructure projects. Finally give the role for private sector to stimulate the national economy.

2. **(Hodhod, 2010)**

''التسرب المالي لدى خزينة السلطة الفلسطينية و علاقته بالمستوردات غير المباشرة''

"**Financial Leakage of the Palestinian Authority's Treasury and Its Relationship with the Indirect Imports**"

The study aim to identify the revenues of the Palestinian treasury, and the financial leakage from these revenues, in all its forms; further, the study raise to financial leakage which occurs in the customs revenues and the impact of these forms of leakage on the treasury. The study also illustrated the indirect imports and the volume of public revenues to the Palestinian treasury. In addition, the study tackled the trade between the Palestinian Authority and Israel and its relationship with these indirect imports. The study finally examined the impact of the agreements signed with Israel, on the financial leakage from the treasury and indirect imports.
After statistical data analysis, the researcher concluded that there is a necessity to educate the Palestinian citizen about the importance of customs revenues and the need to stop the Palestinians from depending on Israeli businesspersons. She also suggests that the Ministry of Economy and the chambers of industry and commerce activate their role to decrease financial leakage resulting from importation. These two bodies also asked to ask the economic and political decision makers to change the economic agreements to secure freedom for the Palestinians to trade directly with the outside world and to do away with the Israeli control of their imports. It found that a significant part of the leakage was due to these unjust agreements.

3. **(Abu Muatafa, 2009)**

''دور و أهمية التمويل الخارجي في تغطية العجز الدائم لموازنة السلطة الوطنية الفلسطينية (دراسة تحليلية مقارنة عن الفترة من 1999-2008)''

"The Role and Importance of External Financing to Cover the Palestinian National Authority Permanent Budget Deficit (Comparative and Analytical Study from 1999 - 2008)"

The study stands on the scope and requirements of getting external financing from the general dept "loans" and grants. It also aims to explain the issue of general loans in terms of their definition, advantages, the reasons behind borrowing, the importance and types of loans knowing the positive and negative effects of external debt and the problems resulting from using it excessively. Moreover, it clarify the

motives and impact of the international assistance by clarifying the concept, types, forms, sources, objectives, characteristics of international assistance, and thus identify the factors affecting the volume of foreign aid. The research methodology depends in the analysis of data on the descriptive analysis. The researcher clarified the actual results of the correlation coefficients that show real relationship between the dependent variable and independent variables to verify the validity of each hypothesis.

A group of results found in the study. First, there is a statistically significant relationship between the deficit as a dependent variable and the salaries, wages, manufacturing costs, grants and soft loans; in addition, there is no statistically significant relationship between deficit and the operational expenses, development expenses and local public income.

The researcher recommended a series of recommendations. First, decreasing the spending of the government especially on salaries and wages, (through applying the policy of early retirement, and orientation towards administrative reform); Second, releasing from the dependency on Israeli economy, Third, replacing the international aid with Islamic and Arab aids, so that aids become separable from the political goals. Finally, directing grants and assistance to the establishment of investment projects instead of directing them to cover current expenses and infrastructure project

4. **(Khatib, 2006)**

"دور الإيرادات الضريبية في تمويل الموازنة العامة في فلسطين"

"Role of Tax Revenues in the Financing of the General Budget in Palestine (1996-2003)"

This study sought to identify the most important features of the tax regime effective in Palestine since the Palestinian National Authority (PNA)'s taking over of the financial powers in 1994. It also investigated the size of tax revenues, their components (elements) and their role in financing public expenditure between "1996-2004". Further, this study drew some important trends in the taxation policy and its impact on the Palestinian economy particularly in financing public spending.
The results of the study: There was no growth in tax revenues during those years. The tax revenues combined had contributed an average of 53% while non-tax revenues had contributed an average of 11%. In contrast, grants and foreign aid combined had contributed about 36% to the public revenues. But the spending on wages and salaries took the lion's share of public expenditure. Salaries and wages took about 47% and represented 80% of local revenues. That is, 80% of local

revenues were directed towards covering wages and salaries. Security expenditures took 25% of public spending while social expenditure took 26%.
In the light of these findings to increase tax collection, the researcher suggested expanding the base of taxpayers to include the PNA's employees, private sector employees, and the self-employed in all Palestinian areas.

5. **(Mosiemee, 2006)**

"السياسة الضريبية و دورها في تنمية الاقتصاد الفلسطيني"

"**The Tax Policies and its Role in Economic Development**"

This study aims to have acknowledged on the tax policies that implied on the Palestinian areas through the study of the Palestinian tax system, and to know the role of these policies in establishing true economic development especially within the current situation that the Palestinians have and its adequacy to the economical, social, and political conditions predominant in Palestine.
The researcher has reached, through this study to, several results. The most important is that taxes in Palestine are only a tool in planning and orienting the Israeli economy because of the control and the semi – completed dependency to Israel. In addition, the design of the Palestinian tax policy conducted separately from the political, social, and economical present situation in Palestine. In addition, indirect taxes contribute more than direct taxes in the financing of public revenues in GDP and national income, where the percentage of contribution of direct taxes is 6.03% while the indirect taxes contribution to the percentage 47%.

6. **(Othman, 2004)**

"دور السياسة المالية في زيادة القدرة الاستيعابية للاقتصاد الفلسطيني"

"The Role of Fiscal Policy in Increasing Labor Absorptive Capacity for the Palestinian Economy"

This study aimed at acquainting with the role of the financial policy adopted is the Palestinian authority in increasing the comprehendible capability for the Palestinian economy. Then the role of tax policy analyzed in increasing the comprehendible capabilities to the Palestinian economy through studying aims and directions of the tax policy and a group of policies and measures which the policies. Moreover, it measures which the Palestinian followed to influence the Palestinian tax system, and the extent of its applicability to achieve the aim of comprehendible capability increase to the Palestinian economy. The study showed that the tax policy adopted by the Palestinian Authority was applicable for encouraging the private sector to invest in Palestine. The study showed the influencing comprehendible capability

volume to the Palestinian economy and whole investment volume, because of the reiterate, security laxity of the political, and security atmosphere which limited the hopeful role the tax policy may play in encourages, and motivating the in-and-out investments that negatively affected its capability on widening the local production base of the Palestinian economy.

After that, the role of public expenses in increasing the comprehendible Palestinian economy analyzed through studying the aims and directions of public expenses of the Palestinian authority. In addition, the study showed that the policy of public expenses the Palestinian authority followed was suitable for increasing the comprehendible capability. Whereas expenditure of the infrastructure removed various obstacles before the investment, and the volume of capital formation reached to 37.7% of the local income. Moreover, in spite of this the Palestinian authority remained limited in the field of public expenditure because of the limits imposed by the temporary stage agreements from one side and measured of occupation of the other.

7. **(Al-Jafarr, and Al-Ardah, 2002)**

"السياسات التجارية و المالية الفلسطينية و تأثيرها على العجز في الميزان التجاري و العجز في الموازنة"
"The Impact of Palestinian Trade and Fiscal Policies on Trade and Budget Deficits"

The Palestinian National Authority has relied heavily on tariff revenues to finance its expenditures.. This means that tariff revenues are the main source of current expenditures, which then reutilized to finance imports, of which 90% originate from or via Israel. In the absence of a Palestinian developmental vision or appropriate trade and fiscal policies for the reform of structural distortions and imbalances inherited from prolonged Israeli occupation, trade and budget deficits have increased considerably and dependency on Israel has deepened. Moreover, public expenditure policies have encouraged an increase in imports, thus contributing to further dependency between trade and public finance. Consequently, the trade and budget deficit have closely interlinked during the transitional period. In addition, the reliance of the Palestinian economy on external income resources has widened the gap between Palestinian aggregate supply and demand. The contribution of GDP to disposable national income is below 80%. This study aims to identify and analyze the factors determining trade and budget deficits as well as the reciprocal relationship between them. It anticipated that the empirical results of the study will assist Palestinian policy and decision makers in the formulation of fiscal and trade policies and structural reforms to reduce the distortions in the Palestinian economy, especially the widening gap between savings and investments, through effective

supply policies and increased exports. The study also provides recommendations to reduce the trade deficit and increase public revenues mainly through the management of public expenditures to reduce the budget deficit and stimulate real growth in GDP.

1.11.2 Regional Studies:

8. (Merza, Alawin, and Bashayreh, 2012)

"The Relationship between Current Account and Government Budget Balance: The Case of Kuwait"

The aim of this study is to examine the twin deficits hypothesis for Kuwait for the quarterly period (1993:4 - 2010:4). The twin deficit hypothesis states that an increase in the budget deficit will cause a similar increase in current account deficit. To analyze the relationship between the two variables, the paper tests the stationary of the two variables, estimates the Cointegration regression (the Johansen Cointegration test), applies the VAR model, estimates the IRF, and tests for existence and the direction of causality. The causality test shows that the direction of causality goes from current account to budget balance. The other direction not confirmed for this study. In addition, the results of this paper find a negative long-run relationship between current account and budget balance that is an increase in current account causes a decrease in the government budget surplus or an increase in budget deficit. This finding fits the Kuwaiti economy; since an improvement in the current account driven primarily by the improvement in the trade balance will cause the central government to spend more than it receive in revenue causing a decrease in government budget surplus or an increase in government budget deficit. Therefore, this paper reached to a conclusion that the twin deficit hypothesis not confirmed for the Kuwaiti case.

The researchers conducted simple regression approach between the current account and public budget deficit, after make necessary tests for time series data (unit root test, cointegration test … etc).

9. (Zamanzadeh, and Mehrara, 2011)

"Testing Twin Deficits Hypothesis in Iran"

Twin deficits hypothesis is one of the most debatable economic issues in developed and developing countries in the world during past 20 years. According to this

matter, a current account deficit of the countries is caused by government's budget deficits phenomenon. and the most suitable way to solve this problem, and stabilize internal and external deficits is to reduce the government's budget deficit (by decreasing government expenditure or increasing taxes).In this paper, by applying statistical data related to 1959-2007 and Cointegration technique in vector error correction model (VECM) the effect of current government budget deficit (government expenditure deducted from taxes) on non-oil current account deficit of Iran has been examined. The results of this study indicates that twin deficits hypothesis (TDH) is accepted against the Ricardian equivalence hypothesis (REH) which shows that the government expenditures and taxes don't affect economic variables such as current account deficits.

The researchers conducted simple regression approach between the current account per gross domestic product (CAD/GDP) and public budget account per gross domestic product (CBD/GDP) , after make necessary tests for time series data (unit root test, cointegration test … etc).

10. (Maitah, and Ali, 2010)

"**Analysis of the Relationship between the Public Budget and Balance of Trade in the Libyan Economy from 2000-2008**"

The subject of the relationship between state budget and trade balance is important as economic subject, not only at the level of developing countries, but also at of advanced ones, too. Such importance emerged clearly, when 1980s witnessed in United States of America a deficit in both state budget and trade balance, which was called at that time as the twin or dual deficit. We can say that the analysis of relationship between state budget and trade balance states the extent of mutual effect between financial and trade policies of any economy, namely; any change in the outcome of either one may affect the other in the same degree. To put in other words, the instruments of financial policy represented by total incomes and total expenditures can affect the trade balance through the movement of exports and imports and vice-versa. One tracing properties and features of Libyan economy may remark its dependence greatly on the public sector in financing developmental projects and making development generally, as well as its dependence on incomes to supply consumer and investment goods. Further, it depends in collecting its incomes of foreign currency on exports of chief source that is crude oil. So, study and analysis of relationship between state budget and trade balance of Libyan economy means to study and analyze relationship of public sector through the state budget, with the external sector expressed as the external trade through trade balance.

11. (Saad, and Kalakech, 2009)

"The Impact of Budget Deficits on Money Demand: Evidence from Lebanon"

This paper mainly examines the effect of the budget deficits on money demand in Lebanon. The findings indicate that a long-run relationship exists between the real narrow money demand and GDP, government spending, interest rate, and consumer price index. However, budget deficits have no impact on money demand at long run, which is in line with the Ricardian view. The vector error correction model shows that 52% of the disequilibrium is adjusted each year. The coefficient of budget deficits is statistically significant and positive in the short run, which is in line with the Keynesian Neoclassical point of view. However, the results show that the consumer price index not significantly related to read money demand in the short run, and more importantly, the real GDP impacts adversely the real money demand during the period. This can attribute to the crowding-out effect. The empirical analysis of researcher showed that budget deficits have a positive effect on money demand in the short- run, but there they have no impact on real money demand at long run.

The researchers use the following model:

$$LnRM\ 1_t = \alpha_0 + \beta_1\ LnRGDP\ _t + \beta_2\ LnGDP\ _t + \beta_3\ LnRGE\ _t + \beta_4\ R_t + \beta_5\ CPI\ _t + \varepsilon_t$$

Where Ln is natural logarithm, RM1 is the real money demand, RGDP is the real GDP, RGE is the real government expenditure, R is the deposit interest rate, CPI is the consumer price index, and ε is a white noise disturbance term.

12. (Samimi, Fakhrehosseini, and Azizi, 2009)

"Keynesian Approach versus Monetary Approach: the Iranian Balance of Payments"

There are two competing theories of balance of payments: the Keynesian and the monetary theories. Each of the two approaches provides distinct explanations on how the determinants of the balance of payments could lead to equilibrium and disequilibrium of the balance of payments account and both theories rank differently the importance of real/merchandise account and monetary/official reserve transactions balance account of the balance of payments. The paper aims to examine the two theories on Iranian balance of payments based on two tests: test of correctness of signs of regressors and test of speed adjustment. The results show

that signs of regressors of the Trade Balance equation don't support the Keynesian and Monetary view while signs of regressors of the Official Reserve Transactions Balance (ORTB) equation support both Keynesian and Monetary views. It also found that the Official Reserve Transactions Balance dominates the Trade Balance (TB) in terms of quickness of adjustment, so the Official Reserve Transactions Balance is an autonomous account and the Trade Balance is an accommodating account.

13. (Mdanat, and Shotar, 2009)

"Budget Deficit and Jordan's Current Account Deficit: An Empirical Study 1977-2008"

In this research, the researchers attempted to investigate the current account deficit and its relationship to some macroeconomic variables. Using variables such as those adopted in the traditional income/expenditure model, the results indicate that those variables explain, in an acceptable way, the current account imbalances. The current account deficit linked to budget deficit, interest rates, income, terms of trade and government spending. It also recommended caution in dealing with interest rates, as it could have adverse effects of the current account and the Jordanian economy in general. This is because the appreciation of dinar against the dollar, at the same time a fixed exchange rate of the dinar against the U.S. dollar, and with the small size of the Jordanian economy, this may lead to an inflow of capital from abroad. Which will raise the cost of deposits in the banking system and hence the cost of reserves compared to neighboring countries. This is in addition to the sudden exit of those capitals would negatively affect the dinar exchange rate and to the emergence of not required speculation. The researchers use an econometric model as follows:

$$RCA_t = \alpha_0 + \beta_1 RGOVE_t + \beta_2 TT_t + \beta_3 R\,\mathrm{int}_t + \beta_4 RBSG_t + \beta_5 RGDP_t$$

Where: RCA: current account deficit/surplus, RGOVE: government expenditures, TT: trade condition (unit price of import/unit price of export), Rint: interest rate measured by discount rate, RBSG: public budget deficit/surplus after grants and aid, and RGDP: Income represented by gross domestic product.

14. (Neaime, 2008)

"Twin Deficits in Lebanon: A Time Series Analysis "

This paper examines empirically using time series econometric tests the relationship between current account and budget deficits in the developing small open economy

of Lebanon. The empirical results support the existence of a uni-directional causal relationship in the short run between the budget and current account deficits, indicating that rising fiscal deficits have started to put even more strain on the current account deficits in Lebanon. To avoid a future depreciation of the exchange rate and perhaps a fiscal and currency crisis, the Lebanese government will have timely introduce fiscal adjustment measures to curb the negative implications of its rising budget deficits and public debt. Lebanese policy makers would need to move on several fronts to tackle the twin deficit problems. First, to stimulate national saving by reducing the budget deficit and reducing domestic interest rates, and increasing the rate of private saving; Second to introduce timely needed fiscal adjustment measures, enhance the tax collection system and actively fight corruption; and Third to tackle the future implications that may emanate from an expected depreciation of the exchange rate.

The researcher uses two models to detect the nature of relation between public budget and current account (who is dependent or independent). Therefore he conducted two simple regression approach between the current account and public budget deficit, after make necessary tests for time series data (unit root test, cointegration test … etc) and the models as follows:

$$BD_t = \alpha_0 + \beta_1 CAD_t + \varepsilon_t$$
$$CAD_t = \alpha_0 + \beta_1 BD_t + \varepsilon_t$$

Where: BD: public budget deficit/surplus, CAD: current account deficit/surplus

15. (Marinheiro, 2006)

"Ricardian Equivalence, Twin Deficits, and the Feldstein-Horioka puzzle in Egypt"

This paper analyzed the validity of the twin deficit hypothesis for Egypt. If the twin deficit hypothesis were valid, the appropriate policy prescription to correct a current account deficit would be a tax increase. However, such a policy prescription would be completely ineffective if Ricardian equivalence were a valid description of reality. Hence, the researcher started by empirically testing the validity of the Ricardian equivalence hypothesis. The empirical results rejected the validity of this hypothesis for Egypt: there is at most partial equivalence, with private consumption offsetting less than half of a tax-for-debt-swap for a given expenditure path. This means that a decrease (or increase) in taxation for a given amount of expenditure has an impact on private consumption, enabling the government to stabilize the

business cycle through the variation in the deficit, and opening the scope for a twin deficit. Hence, the results obtained by estimating this model reinforce the rejection of the twin deficit hypothesis obtained by the Granger-causality tests. However, so, if it combined the rejection of Ricardian equivalence with a very high degree of financial integration it would have expected the emergence of a twin deficit. The strong rejection of this hypothesis is indeed a puzzle that deserves further research.

The researcher conducts two consumption models as follows:

$$C_t = \alpha_0 + \beta_1 Y_t - \beta_2 BDEF_t + \beta_3 G_t + \beta_4 GB_t + \beta_5 W_t + \bar{\beta} X_t + \varepsilon_t$$

$$C_t = \alpha_0 + \beta_1 (Y_t - TX_t) + \beta_2 BDEF_t + \beta_3 W_t + \beta_4 GB_t + \varepsilon_t$$

Where C denotes real consumption per capita, Y: Income, BDEF: government budget deficit, TX: tax revenues, G: public consumption, GB: end of period government debt, W: private wealth, and X: vector of other exogenous variables.

16. (Hashemzadeh, and Wilson, 2006)

"The Dynamics of Current Account and Budget Deficits in Selected Countries if the Middle East and North Africa"

The study find there is a correlation between the two deficits is both complex and ambiguous. The researchers attempt to emphasize is that the dynamic relationship between the two deficits is subject to change depending on the underlying tax system, trade patterns and barriers, the exchange rate and a complex host of internal and international forces that help to shape a country's economic status in the global setting. Many researchers have invoked the Ricardian equivalence hypothesis to argue that budget deficits mainly result from tax cuts that tend to reduce both public revenues and public savings. While these tax cuts have the effect of reducing public savings and enlarging the budget deficit, they increase private savings by an equivalent amount. Proponents of this view argue that alterations in the composition of public financing, (i.e. debt versus taxes) have no effect on real interest rates, aggregate demand and private spending. This paper investigates the topic using data from an "under-researched" region of the world consisting of Egypt, Iran, Jordan, Kuwait, Morocco, Oman, Syria, Turkey and Yemen.

The researchers conducted simple regression approach between the current account and public budget deficit, after make necessary tests for time series data (unit root test, cointegration test … etc). The model as follows:

$$CAB_t = \alpha_0 + \beta_1 GBB_t + \varepsilon_t$$

Where: CAB: current account balance, GBB: government budget balance.

17. (Bader, 2006)

"The Effect of the Twin Deficits on the Foreign Debt in Jordan: An Econometrical Study"

This study aims to investigate the effect of the Twin Deficits, i.e., deficit of government budget, and deficit in current account, on the foreign debt in Jordan during the period 1977 – 2004. A four variables cointegration analysis with the variables: outstanding foreign debt, budget deficit, current account balance presented by its index, and gross fixed capital formation exploited. Dickey-Fuller and Phillips-Perron Unit Root Tests used to examine the integration order of the variables. Furthermore, Johanson Cointegration test is also used. Moreover, to consolidate the results; the dynamic relationships among variables is examined by applying the variance decomposition of foreign debt. The results of the study were found to be compatible with previous studies in this domain indicate that the three independent variables contribute to about the half of the accumulated foreign debt of Jordan. However, the largest impact among these three variables found to be for the budget deficit, followed by the current account deficit, then by the gross fixed capital formation.

The researcher adopted a multiple regression model as follows:

$$FD_t = \alpha_0 + \beta_1 BD_t + \beta_2 CAI_t + \beta_3 GFCF_t + \varepsilon_t$$

Where FD: outstanding foreign debt, BD: budget deficit, CAI: current account index, GFCF: gross fixed capital formation.

18. (Munshed, 2005)

"Analysis and Measurement the Twin Deficit Phenomenon in Egypt, Tunisia and Morocco for The Period (1975 - 2000)"

The main aim of this study is to test the twin deficit phenomenon and the Ricardian equivalence hypothesis in Egypt, Tunisia and Morocco for the period (1975-2000). The results show us that the monetary policy dependent on the Fiscal policy in Egypt, and the budget deficit have an inflationary effect, in contrary to Tunisia and

Morocco, and there is a negative effect of budget deficit on private consumption in Egypt according to Feldstein approach and which meet to Ricardian equivalence in Egypt, in contrary to, in Tunisia and Morocco. Moreover, the results tell us the Crowding-out effect for some Fiscal variables in these countries, and Crowding-in effect for Trade liberalization on private investment in Tunisia and Morocco. Fourth; testing of causality relationship between budget deficit and current account deficit, using Augmented Dickey-Fuller (ADF) test, Cointegration test, Engel-Granger approach for error correction model, and Granger causality test, we find that non-Cointegration of time series of variables in Tunisia, and Cointegration of time series of variables in Egypt and Morocco. Moreover, satisfying the Ricardian equivalence in Egypt and Tunisia, and satisfying the twin deficit in Morocco according to the bi-directional causality relationship between budget deficit and current account deficit.

The researcher conducted two simple regression approach between the current account and public budget deficit, after make necessary tests for time series data (unit root test, cointegration test … etc) and the models as follows:

$$BD_t = \alpha_0 + \beta_1 CAD_t + \varepsilon_t$$
$$CAD_t = \alpha_0 + \beta_1 BD_t + \varepsilon_t$$

Where: BD: public budget deficit/surplus, CAD: current account deficit/surplus

19. (Kswani, 2001)

"Budget and Current Account Deficits In Saudi Arabia"

This paper examines the relationship between budget deficit and current account deficits in the Saudi economy. Annual data covering the period 1970-1999 are used. The paper discusses the theoretical basis of the twin deficit. The Ricardian equivalence argues the absence of any relationship between the deficits, while the Keynesian proposition affirms that budget deficit led to current account deficit. Econometric investigations reveal that budget and current account deficits are cointegrated. The application of the ECM and the Johansen cointegration confirms a short and long run relationship among the deficits. But, Granger causality test asserts that current account deficit causes budget deficit and budget deficit causes trade deficit. Therefore, in oil economy, neither the Ricardian equivalence nor the Keynesian proposition is valid. The two deficits are positively linked, but there is a bi- direction causality between current account deficit and budget deficit.

The researcher aims to determine the direction of relationship between the twin deficit (CD and BD). Therefore he conducted two simple regression approach between the current account and public budget deficit, after make necessary tests for time series data (unit root test, cointegration test … etc) and the models as follows:

$$BD_t = \alpha_0 + \beta_1 CD_t + \varepsilon_t$$
$$CD_t = \alpha_0 + \beta_1 BD_t + \varepsilon_t$$

Where BD = lnT-lnG = ln(T/G), CD = lnX-lnM = ln(X/M), BD: public budget deficit/surplus, CD: current account deficit/surplus, T: government revenues, G government expenditures, X: exports, M: imports.

1.11.3 International Studies:

20. (**Saeed, and Arshad Khan, 2012**)

"The Feldstein-Horioka Puzzle and Twin Deficits in Pakistan"

The objective of this paper was to find any evidence any evidence of Feldstein-Horioka (F-H) puzzle in the presence of Twin deficits for Pakistan. The estimated empirical results showed no evidence in favor of the Feldstein-Horioka puzzle for Pakistan. This is because economy of Pakistan not perfectly integrated into the world economy. Moreover, the degree of international capital mobility has never been perfect. Despite these factors, the domestic investment in Pakistan (particularly in the public sector) has never depended on domestic saving or internal borrowing only. Foreign assistance has always played an important role in financing the national development programs. Thus, the historical relationship between domestic investment and saving is very poor in Pakistan. As such, the empirical results do support the validity of twin deficit hypothesis but reject the F-H puzzle in case of Pakistan.

The researcher use multiple regression to detect the relation between the current account (represented by trade account = exports X – imports M), and the public budget (represented by government revenues T – government expenditures G), also he add other control variable which is the total investment (INV). Therefore the model was as follows:

$$(X - M)_t = \alpha_0 + \beta_1 (T - G)_t + \beta_1 INV_t + \varepsilon_t$$

21. (**Magazzino, 2012**)

"Fiscal Policy, Consumption and Current Account in the European Countries"

This paper explores the relationship between fiscal deficit, trade deficit and private consumption in European countries in the year 1970-2010. The aim of the study is to test empirically the validity and rationale of the Keynesian proposition (conventional view or Twin Deficits hypothesis) and Ricardian Equivalence hypothesis, as well as to analyze the relationship between fiscal policy and private consumption. The empirical findings of this study show mixed results. Where the static panel data estimates suggest that a one per cent in fiscal deficit/GDP ratio tends to deteriorate the current account/GDP ratio of 0.21 per cent, although it increase the private consumption of 0.21 per cent. Furthermore, the dynamic estimates largely depend on the estimator chosen, since the Generalized Method of Moment model Different (GMM-Dif) estimates shows a significant effect of fiscal deficit both on trade balance and on private consumption, in line with trade deficit hypothesis; on the contrary, GMM-Sys estimator suggest that these effects are irrelevant, supporting Ricardian Equivalence hypothesis. With regard to the former estimates, the researcher observed that each euro rise in fiscal deficit is associated, on average, with a 22-cent decline in the current account, while the estimated rise in private consumption in smaller (11 cent). Finally, Granger causality test show mixed results.

The researcher uses the panel data for the studied countries to estimate two models to test both approach (Keynesian proposition and Ricardian Equivalence hypothesis), and the models was as follows:

$$CA_{i,t} = \alpha_0 + \beta_1 Deficit_{i,t} + \beta_2 GC_{i,t} + \beta_3 Debt_{i,t} + \beta_4 YG_{i,t} + \beta_5 PopG_{i,t}$$

$$C_{i,t} = \alpha_0 + \beta_1 Deficit_{i,t} + \beta_2 GC_{i,t} + \beta_3 Debt_{i,t} + \beta_4 YG_{i,t} + \beta_5 PopG_{i,t}$$

Where, $CA_{i,t}$: a measure of current account balance for country i ($i = 1,\ldots,n$) at time t ($t = 1,\ldots,T$), $C_{i,t}$: the private consumption, $Deficit_{i,t}$: the fiscal deficit, $GC_{i,t}$: the Government consumption, $Debt_{i,t}$: the public debt, $YG_{i,t}$: the income growth, and $PopG_{i,t}$: the population growth.

22. (Rauf, and Qayyum Khan, 2011)

"An Empirical Study to Find the Relationship between Trade Deficit and Budget Deficit in Pakistan"

In this paper an attempt has been made to investigate the relationship between trade deficit and budget deficit in case of Pakistan. Annual data has been used for the period from 1980 to 2009. In addition, causality between the two has been checked via Granger Causality test to find that which variable is responsible for causing the other. While for simple regression, Ordinary Least Square (OLS) technique used in the study. The result of the study showed that in case of Pakistan the budget deficit mainly caused by trade deficit and causality run from trade deficit to budget deficit. Therefore, for the authorities that deal with the fiscal discipline of Pakistan it suggested in light of this study that to curb budget deficit and trade deficit must minimized.

The researchers use two models to detect bidirectional relation between public budget and current account (who is dependent or independent). Therefore he conducted two simple regression approach between the current account and public budget deficit, after make necessary tests for time series data (unit root test, cointegration test … etc) and the models as follows:

$$dY_t = \alpha_0 + \beta_1 dX_t + \varepsilon_t$$
$$dX_t = \alpha_0 + \beta_1 dY_t + \varepsilon_t$$

Where: Y: budget deficit, X: trade deficit

23. (Abbas, Bouhga-Hagbe, Fatás, Mauro, and Velloso, 2011)

"Fiscal Policy and the Current Account"

This paper examines the relationship between fiscal policy and the current account, drawing on a larger sample of advanced and emerging economies "The researchers begin their empirical analysis with panel regressions on 88 non-oil exporting economies spanning the period 1970-2007. The distinction between advanced (30 countries) and emerging and low-income countries (58) is as per the IMF Fiscal Monitor (April 2011)" than in previous studies and using a variety of statistical methods: panel regressions, an analysis of large fiscal and external adjustments, and vector auto-regressions. On average, a strengthening in the fiscal balance by 1 percentage point of GDP is associated with a current account improvement of 0.3-0.4 percentage point of GDP. This association appears stronger in emerging and low-income countries, when the exchange rate is flexible; when the economies are more open, when output is above potential or initial debt levels are above 90 percent of GDP, and when using methods robust to endogeneity issues.

24. (Bluedorn, and Leigh, 2011)

"Revisiting the Twin Deficits Hypothesis: The Effect of Fiscal Consolidation on the Current Account"

This paper investigates the effect of fiscal consolidation on the current account. The researchers examine contemporaneous policy documents, including Budget Speeches, Budgets, and IMF and The Organisation for Economic Co-operation and Development (OECD) reports for sample includes 17 OECD countries over the period 1978-2009. The countries are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, the Netherlands, Portugal, Spain, Sweden, the United Kingdom and the United States, to identify changes in fiscal policy motivated primarily by the desire to reduce the budget deficit, and not by a response to the short-term economic outlook. Estimation results based on this measure of fiscal policy changes suggest that a 1 percent of GDP fiscal consolidation raises the current account balance-to-GDP ratio by about 0.6 percentage points, supporting the twin deficits hypothesis. This effect is substantially larger than that obtained using standard measures of the fiscal policy stance, such as the change in the cyclically adjusted primary balance.

The researchers use the below mention model for testing how changes in the fiscal balance affect the current account balance:

$$\Delta CA_t = \alpha_0 + \beta_1 \Delta F_t + \varepsilon_t$$

Where, CA_t is the current account balance and F_t is the fiscal balance

25. (Agrawal, 2011)

"India in Twin Deficit Club: Implications and Issues"

This analytical study shows how twin deficits have emerged as a risk for Indian economy. In India the twin deficits have been persistent and were responsible for the 1991 crisis. The deficits have again widened post the recent crisis leading to questions on the future trajectory of the Indian economy. Within the twin deficits, high fiscal deficits remain a major concern for most economists. However, as India is an emerging economy, current account deficits remain a concern as well as the researchers have seen in numerous developing economies' crisis in the past. Hence, twin deficits remain a major risk for Indian economy going ahead. For instance in India's case, high fiscal deficit leads to problems of inflation management which

could slow the growth going forward. The inclusive growth agenda also implies government needs to aggressively spend on education, healthcare and infrastructure. With persistent fiscal deficits, this spending would be unlikely or may just push fiscal deficits higher. This would further lead to problems associated with rising fiscal deficits – inflation, crowding out of private sector, higher interest rates etc. The widening current account deficit will put pressure on the government to get foreign savings to bridge the deficit. The large capital flows in turn pose monetary management issues for the central bank. Overall, policymakers need to take care and work towards reducing these twin deficits.

26. (Gabrisch, 2011)

"On the Twin Deficits Hypothesis and the Import Propensity in Transition Countries"

This article uses co-integration and related techniques to test for a long-run causal relationship between the fiscal and external deficits of three post-transition countries in Central and Eastern Europe (Czech Republic, Hungary and Poland). In addition, an import propensity model is tested by applying OLS and GMM. All the results reject the Twin Deficits Hypothesis. Instead, the results demonstrate that specific transition factors such as a high import intensity of exports and net capital inflows affect the trade balance, so the political conclusions seem to be clear: a reduction of the fiscal deficits in the post-transition countries would not contribute to a major decline of external imbalances. Rather, structural/industry policies should have a strong emphasis on the production structures in the economy and support the inclusion of domestic intermediary goods into export activities. Monetary policy should consider the real exchange rate. Further research should use more firm-level data in demonstrating the import intensity of exports.

The researcher uses the following model:

$$(x - m)_t = \alpha_0 + \beta_1 s_t^p + \beta_2 (t - g)_t + \beta_3 invt_t + \varepsilon_t$$

Where, (x-m): reflect the trade account balance for country per income (Y), sp: the private saving per income, (t-g): the fiscal deficit per income, and invt: the Government consumption.

27. (Altintas and Taban, 2011)

"Twin Deficit Problem and Feldstein-Horioka Hypothesis in Turkey: ARDL Bound Testing Approach and Investigation of Causality"

The purpose of this study is to investigate the twin deficit problem for the Turkish economy using bounds testing approach known as ARDL (autoregressive distributed lag) to cointegration method and Toda and Yamamoto (1995) Granger causality test. The study covers the annual data from 1974 to 2010. The cointegration test results suggest that the variables are moving together in the long run. The positive value on the budget deficit coefficient implies that Turkey has a twin deficit problem. The presence of twin deficit has also been supported by the Toda-Yamamota causality test results. As expected, the negative and less than 1 investment coefficient indicates Feldstein-Horioka hypothesis holds. Therefore, the hypothesis of no causality between the current account deficit and budget deficit rejected. On the other hand, unidirectional causality relationship running from the investment to the budget deficit and the current account deficit to the investment obtained. Thus, these results confirmed the fact that when the taxation revenues are not enough to cover the public expenditures, the public investment expenditures can cause the budget deficit. Further, it indicates that Turkey could not well integrated into the international capital markets with the model revealing that one fifth of the investments are financed through foreign savings.

In order to test the twin deficit and Feldstein-Horioka hypothesis, the following model adopted:

$$CA_t = \alpha_0 + \beta_1 BD_t + \beta_2 I_t + \varepsilon_t$$

Where, CA: the ratio of current account deficit to GDP, BD: the ratio of budget deficit to GDP, I: the ratio of investments to the GDP.

28. (Ganchev, 2010)

"The Twin Deficit Hypothesis: The Case of Bulgaria"

This paper studied the theoretical underpinnings of the twin deficit hypothesis and tested various interpretations of this hypothesis on a sample of Bulgarian data. The Granger causality tests confirm that fiscal deficit has a significant impact on current account deficit, as postulated by the twin deficit hypothesis and the New Cambridge School. In the short run, however, the results of VAR analysis show that higher fiscal surpluses are associated with higher current account deficits, which is contrary to the twin deficit hypothesis. In the long run, according to the results of a VEC model, fiscal deficits seem to lead to additional private sector and current account deficits. This is possible only when foreign saving actively affects the domestic economy, facilitating the financing of both public and private sector

deficits. This result supports the so-called structural gap hypothesis on internal and external equilibrium. The VEC analysis allows us to reject the strong form of the twin deficit hypothesis as well as the Ricardian equivalence view for the Bulgarian data. Nevertheless, at long run the researchers can expect some positive correlation between fiscal and current account deficits, as postulated by the twin deficit hypothesis. These findings differ from earlier results in the literature, which mainly validated the twin deficit hypothesis for countries in Central and Eastern Europe. At the same time, the present paper confirms the negative correlation between fiscal and current account deficits.

29. (Lau, Abu-Mansor and Puah, 2010)

"Revival of the Twin Deficits in Asian Crisis affected Countries"

This paper revisits the twin deficits argument in the Asian crisis-affected countries. The researchers also include data from the 1997 crisis to examine the disparities in the empirical regularities governing the two deficits in these countries. Empirical results suggest that causality runs from budget deficit to current account deficit for Malaysia, the Philippines (pre-crisis) and Thailand, which fits well with the Keynesian view. For Indonesia and Korea, the causality runs in the opposite direction while a bi-directional causality exists for the Philippines in the post-crisis era. As these countries are at a crossroad in the aftermath of the 1997 crisis, managing these deficits are indeed important policy options in promoting macroeconomic stability and sustainability in the region.

The researchers conducted simple regression approach between the current account and public budget deficit, after make necessary tests for time series data (unit root test, cointegration test … etc). The model as follows:

$$CAD_t = \alpha_0 + \beta_1 BD_t + \varepsilon_t$$

Where: CAD: current account balance, BD: government budget balance

30. (Lau, and Tang, 2009)

"Twin deficits in Cambodia: Are there Reasons for Concern? An Empirical Study"

This study aimed to empirically, examine the well-documented hypothesis in the open macroeconomics literature – twin deficits phenomenon for a transition

economy in South East Asia, Cambodia. By using quarterly data 1996Q1 to 2006Q2, the results of time series econometrics tests (i.e. cointegration tests, causality tests, and so on) for the two candidate variables, namely Government budget balance (GB), and current account balance (CAB), answered an empirical research question "Twin deficits in Cambodia: are there reasons for concern?". The twin deficit is reasons for concern in Cambodia in the short run, but not at long run. Clearly, the causality approach tells that the budget deficits do cause external deficits and vice versa, while the two macroeconomics variables are moving together in the long run (cointegration) with the speed of adjustment of 1.8 years. Perhaps, the mirror relationship implies that the fiscal and trade policies in Cambodia are not sustainable. Further implication is that one simply cannot rely on cutting down the BD by rising up the national savings in an attempt to reduce the CAD. In this sense, GB is not a fully controlled policy (exogenous) variable. The Cambodian authorities should pay close attention to this phenomenon.

31. (Nickel, and Vansteenkiste, 2008)

"Fiscal Policies, the Current Account and Ricardian Equivalence"

This paper analyses the empirical relationship between fiscal policy and the current account of the balance of payments and considers how Ricardian equivalence changes this relationship. To do so, then estimate a dynamic panel threshold model for 22 industrialized countries in which the relationship between the current account and the government balance allowed to alter according to the government debt to GDP ratio. The results show that countries with debt to GDP ratios up to 90% the relationship between the government balance and the current account is positive, i.e. an increase in the fiscal deficit leads to a higher current account deficit. For very high debt countries, this relationship however turns negative but insignificant, suggesting that a rise in the fiscal deficit does not result in a rise in the current account deficit. Implicitly this result suggests that households in very high debt countries tend to become Ricardian. Estimating the same model for the 11 largest euro area countries shows that the relationship between the government balance and the current account turns statistically insignificant when the debt to GDP ratio exceeds 80%.

The researchers use the following model after adjust the variables on lag before:

$$Y_t = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \varepsilon_t$$

Where, Y: Current account/GDP, X1: Change in terms of trade, X2: Relative income, X3: Output gap, X4: Investment/GDP ratio, X5: Openness, X6: Change in real exchange rate, X7: Productivity change, X8: Dependency ratio.

32. (Chowdhury and Saleh, 2007)

"Testing the Keynesian Proposition of Twin Deficits in the Presence of Trade Liberalisation: Evidence from Sri Lanka"

This paper examines the long run and short-run relationships between the current account deficits, budget deficit, savings and investment gap and trade openness in Sri Lanka using the Autoregressive Distributive Lagged (ARDL) approach. The time series properties of the variables, in the presence of endogenous structural breaks, was previously analyzed using Perron's (1997) Additive Outlier (AO) and Innovational Outlier (IO) models. The empirical analysis supports the Keynesian view that a link exists between the current account, budget deficit and savings and investment gap. And found that trade openness has a positive effect on the current account deficit, but is statistically insignificant, and offer some strategies to stabilize the budget deficit and current account deficits in Sri Lanka.

The econometric model adopted by researchers is:

$$CA_t = \alpha_0 + \beta_1 SI_t + \beta_2 BD_t + \beta_3 OPEN_t + \varepsilon_t$$

Where, CA: the current account balance (X-M); SI: the savings and investment balance (S-I), BD: the budget balance (T-G), OPEN: the trade openness ((X-M)/Y), Y: income, X: exports, M: imports, S: aggregate saving, I: aggregate investment, T: government revenues, and G: government expenditures.

33. (Flaschel, Gong, Proano, and Semmler, 2006)

"Twin Deficits and Infation Dynamics in a Mundell-Fleming-Tobin Framework"

In this paper the researchers consider a small open economy of the Mundell-Fleming-Tobin type. And they study its accumulation laws of government and foreign debt (or surpluses) and couple these dynamics with a standard Phillips curve approach for such an economy. The resulting dynamical system and the equilibrium relationships on which it is based are rather complex and allow for a variety of monetary and exchange rate regimes and stability results. Thr researchers study in this paper in particular the case of an interest and exchange rate peg and a regime with perfectly flexible exchange rates and given money supply. In both case

researchers get stable adjustment processes of the considered twin deficits or surpluses only under very restrictive assumptions on the behavioral equations of the model and various type of instability results otherwise, to be investigated in more detail in future research. The researchers formulate following models:

$C_1 = C_1(Y_p, W_p, \rho, \eta)$: Consumption demand for the domestic good
$C_2 = C_2(Y_p, W_p, \rho, \eta)$: Consumption demand for the foreign good
$C = C_1(Y_p, W_p, \rho, \eta) + C_2(Y_p, W_p, \rho, \eta)$: Total consumption
$I = I(Y, \rho)$: Investment demand, for domestic goods solely

Where, Y_p: disposable income of households, W_p: wealth of the private sector, ρ: domestic interest rate, η: real exchange rate, I: investment demand, and Y: disposable income of households and government.

34. (Egwaikhide, 1997)

"Effects of budget deficits on the current account balance in Nigeria: A simulation exercise"

This paper examines the effect of budget deficit on the current account balance in Nigeria, covering the period from 1973 to 1993. This is motivated by the fact that the magnitude of government has increased with amazing rapidity since the early 1 980s. Simultaneously, the current account balance recorded deficits, to the extent that there is a high correspondence between these variables. A Macro-econometric model that captures the salient interrelationships between government budgetary developments, credit creation and the current account balance is constructed. Quantitative evidence suggests that budget policy affects the current account balance in Nigeria. In particular, simulation experiments show that budget deficit, engendered by increased expenditure, leads to a deterioration of the current account, whether it financed through bank credit or external borrowing. It argued that budget discipline is necessary for the achievement of external balance in Nigeria.

1.11.4 Previous Studies Summary:

The Previous studies show that there is variation in the results of testing hypotheses that examine the nature of the relationship between the budget deficit and the current account. It is noticeable that researcher did not find local studies discuss the relationship between twin deficit directly, but most of local studies discussed fiscal policies that affect the public budget in the Palestinian territories, or imports and therefore the trade balance, the largest component in the current account. the study

of (Rajab, 2011) showed the ineffectiveness of fiscal policy to deal with inflation in the Palestinian territories, and that affects strongly on the trade balance, as indicated by (Hodhod, 2010) that financial leakage of the Palestinian authority's treasury and its relationship with the indirect imports which increases the gap deficit in the trade balance. Also other studies confirmed on the important role of the revenues to cover the deficit of PNA budget. whether those revenue was taxes (Khatib, 2006), or revenue resulting from external financing (Abu Muatafa, 2009), and also that study showed that most of external financing depend on political objectives, which are often directed to current expenditure, and are not used in the investment projects. Also other studies confirmed on the role played by fiscal policy in economic development in the Palestinian territories, (Mosiemee, 2006) and (Othman, 2004).

The regional and international studies, found here discussed the relation directly, and results of those studies varied depending on country conducted the study, and by the time of study, and that because of the different nature of the structure of the economies of those countries, and the different economic policies in those countries. It noted in some countries that there is a relationship from one direction between the budget deficit, and current account. Therefore, some countries have a direct positive relation between the budget deficit and the current account deficit, and the direction of the relationship from budget deficit to the current account, such as county like Iran (Zamanzadeh, and Mehrara, 2011), or the economy like Jordan (Mdanat, and Shotar, 2009), or Lebanon (Neaime, 2008), and this prove the Keynesian proposition hypothesis. In other countries the relation is negative, but in the same direction, which mean that every increase in the budget deficit reduces the current account deficit (increasing in budget deficit increase the current account), this mean that increasing in budget deficit has positive effect on current account. Such as the study which conducted on 88 non-oil countries (Advanced, emerging and low-income countries), (Abbas, Bouhga-Hagbe, Fatás, Mauro, and Velloso, 2011). While some other studies have shown that the relationship is also in one direction, but this time the contrary, as the current account is affecting the budget deficit, and not vice versa, and this does not matching Keynesian proposition. For example it found in Kuwait that increasing in the budget deficit is caused by a decreasing of trade account deficit (the largest component in the current account), (Merza, Alawin, and Bashayreh, 2012), and so do in Pakistan (Rauf, and Qayyum Khan, 2011).

There are several studies conducted in other several countries, or group of countries, showed that there is a causal relationship between both the budget deficit and the current account. It means that any change in one of those accounts will cause the change in the other account, such as in Libya (Maitah, and Ali, 2010), Saudi Arabia (Kswani, 2001), India, United States (Agrawal, 2011), and several European

countries (Magazzino, 2012). This denies both hypothesis, Ricardian Equivalence (Which show that there is no relationship between both the budget deficit and the current account), and Keynesian proposition. Finally, there are countries such as Egypt (Marinheiro, 2006), confirmed the Ricardian Equivalence hypothesis, it mean there is no impact to any of the budget deficit on the current account or vice versa.

Researcher find many benefits from studding previous studies, in terms of the study of the econometrics models used in those studies, also those studies helped researcher in determining the variables of the study and determine the structure of the search. In addition to link, the various results of those studies with the researcher study results.

1.11.5 The Distinction between this Study and other Previous Studies:

From reviewing of these previous studies, it noted that several aspects distinguish this study from previous studies, and can summarize in the following points:

1. The researcher noted that there is lacks of local studies discuss the direct relationship between the budget deficit in the Palestinian territories and the current account. Most studies have focused on factors that influences on both accounts separately, such as the factors affect the public budget, such as fiscal policies that include revenue and tax policy, and public government spending policies, or external aids. In addition, other studies discussed policies that affect the balance of trade, or the movement of exports and imports.

2. This study discusses the relationship between the budget deficit and the current account in the Palestinian economy, which has privacy from the rest of the economies in the world, due to dependence of Israeli economy. The Palestinian economy depends on international aid to cover permanent deficit in the public budget, as that Authorities in the Palestinian territories, actually do not have freedom of movement decision crossings and ports, to control the movement of exports and imports.

Chapter Two

Twin Deficit Hypothesis: Theoretical Study

2.1 Introduction:

The relationship between fiscal policy and the current account has long attracted interest among economists and policymakers alike, from various angles. For many countries where current account imbalances are especially large, a relevant question has been raised which is, to which extent fiscal adjustment can contribute to resolving external imbalances?

Since more than three decades, it was appears the phenomenon of concurrence of public budget and current account deficits, and still so far in many countries in the world, either developed, or developing countries, then it called the phenomenon of twin deficits.

In order to study and analyze this phenomenon in the Palestinian territories, identify the causality relationship between public fiscal deficit and current account deficit, and analyze the economic impact of these deficits. It was necessary to provide a literature view for this study, which shows various important economics schools thought for budget and current account deficits, and mention to the economic literature for the links between these two deficits.

2.2 Public Budget Deficit in Theory:

2.2.1 Public Finance and Public Budget, definition and concept:

The **Public Finance** defined by Classics as "A science which looking for the means by which the government gets the public revenues to cover public expenditures and the distribution of the burden resulting on individuals" (Abdel-Hamid, p.15, 2005). This definition confirmed on the principle of balance between ordinary public expenditures and revenues. On other words the balance of the public budget. However, the neutral public finance did not continued and could not keep up with new economic developments, without provide effective solutions to fix the problems that will occur in the economic, that will reflect in changing the role of the government from minimum role of the government to intervened government (Misra, p.3, 1997). Therefore, it was necessary to reflect this development on the science of public finances. to become, "The science that studies public revenues, expenditures, budget, and used to satisfy the needs of the community to achieve the goals emanated from economic, social and political philosophy which adopted by the government and this known by fiscal policy" (Khatib and Shamia, p.16, 2007). In addition, the public finance can defined in the most general terms as being concerned with the manner in which public services provided (Bennett, p.1, 1980).

The Budget is generally an annual financial plan that describes in detail the estimated revenues, proposed expenditures, and disbursements under various aspects (Misra, op cit, p.18). Public Budget is considered as legislative, accounting, financial, and political document, reflecting the idea of forecasting of the overall revenues and expenses during the next period, and it is often a one year, which represents by numbers reflecting the administrative, social, and economics activities of the government (Abed Al-Wahed, p.1198, 2000). To facilitate annual decision making on expenditures, government have developed **budget system**, which provide for systematic presentation of recommendation for expenditures by the executive to the legislative branch. A budget may therefore defined as a financial plan that serve as the basis for expenditures decision making and subsequent control of the expenditure (Due and Friedlander, p.149, 1981).

The previous definition of public budget can conclude that, the budget include two main components; expenditures and Revenues, and these components differ from country to other depending up on the policies of the government, and the economic approach adopted by the government (Capitalism, Socialism, Islamic). The researcher will consider the definition of the International Monetary Fund (IMF) in the ***Government Finance Statistics (GFS)–Compilation Guide for Developing Countries*** for the public revenue and expenditure:

Revenue: "*Revenue is an increase in net worth resulting from a transaction. The GFS classifies revenue in four major categories: taxes, social contributions, grants, and other revenue (*see annex-1*). Each of the major categories further sub-divided into other categories. Taxes are defined as compulsory transfers to government, in cash or in-kind, made by institutional units to government units. Taxes also include any collections of fees out of all proportion to the cost or distribution of a government service provided to the payer. Social contributions can be either compulsory or voluntary payments to government units made by employees, employers on behalf of their employees, self-employed, or non-employed persons on their own behalf, which secure entitlement to social benefits for the contributors, their dependents, or their survivors. Grants defined as voluntary transfers received by a government unit from another government unit either (domestic or foreign) or from an international organization. Other revenue includes, among other, property income, sales of goods and services, and miscellaneous revenues (other transactions that increase net worth)".* (IMF, GFS p.36, 2011).

Expense: "Expense *is a decrease in net worth resulting from a transaction. Expense transactions classified in two ways in the GFS system, one based on an economic classification (*see annex-2*) and the other on a functional classification (*see annex-

3*). When supplying - goods and services to the community, a government unit may produce the goods and services itself and distribute them, purchase them from a third party and distribute them, or transfer cash to households so they can purchase the goods and services directly. The economic classification identifies the type of expense incurred for these activities, while the functional classification provides information on the purpose for which an expense incurred. The GFS classifies expense in eight major economic categories: compensation of employees, use of goods and services, consumption of fixed capital, interest, subsidies, grants, social benefits, and other expense. Each of these major categories is further subdivided into other categories"***.** (Ibid, p.43).

The difference between the public budget and final account is the **public budget** considers as future planning for estimated revenues and expenditures for the next year, but the **final account** is the financial statements of revenues and expenditures that made up at the end of an accounting period (Ajjam and Soud, p.68, 2004).

2.2.2 Public Budget Deficit in Classical Thought:

Classical school emphasized the idea of a balance of Public budget, so it called for respect for the rule, and not out of it at all. That is why the case of fiscal balance reflects the proper use of public funds by the government, and thus good performance of government functions, as well as the efficiency of financial management (Al-Wady and Azzam, p.21, 2007). The principle of free economics support means the idea of balance for Public Budget. Therefore, the government should not intervene in economic activities, and maximizing the role of individuals. As a result, it concluded that the public finance based on (Abed Al-Wahed, p. 30, 2000):

1. Public budget balance principle
2. Reducing of the public revenues and expenditures to minimum
3. The public expenditure should cover from taxes, especially consumption taxes and not prefers the loans and issuing new money

It intended to neutralize the public finance, which aims to cover the revenue of the public expenditure without achieving other social goals. The concept of balance public budget developed through the classical economists continuously, where, Adam Smith and David Haume had strong opposition to Public budget deficit, But Thomas Maltus in England, and Alexander Hamiltone have taken moderate positions (Herber, p. 411, 1967). The economists of classical thought called to necessity of balance of public budget based on the following arguments:

1. Governmental borrowing from private sector lead to obstruction of the economics developments, where decrease the ability of private capital institution to acquire capital goods (Mankiw, p. 569, 2012).
2. The government deficit spending allows the socially expansion of public sector at the expenses of private sector (Screpanti and Zamagni, p. 247, 2005).
3. The government deficit spending should lead to inflation, while the fiscal deficit through the increasing of spending case imbalance, where, aggregate demand increase over than aggregate supply. This will produce inflation by increasing the prices, which forced the government to increase the public spending again to match the increasing in prices. Then the economy enters in spiral inflation case (Dornbusch and Fischer, p. 524, 1994).

The arguments of classical thought regarding the strong defense of budget balance principle have many criticisms such as (Al-Wady and Azzam, p.22, 2007):

1. The classics liken the government finance as a individuals finance, because of their assumption, that borrowing country may subjected to financial collapse, and they consider the ability of government to find and create new resources for revenues to some extent, to cover some of its debts, or to face its growing expenditures.
2. Financial balance may achieve when preparing of the budget draft and it may not achieved during the implementation. Then fiscal year finished and the final accounts show the case of either deficit or surplus, because of the presence of balance through budget preparation may be due to assess the volume of operational expenses at less than its real value, or by over-estimate revenues, and this causes a false balance.
3. The balance of public budget or not, is not the main factor of inflation, where there are other factors lead to inflation, such as inelasticity of production system, especially when the economic reach to full employment point. This means that inflation does not result only from financing the budget deficit through borrowing.
4. The classic have a neutral view for public budget based on there is no relation between it and the economics activities, but in real, it is different. Whereas the developed capitalism economies use the fiscal policy (public budget consider as a tool for such policy) to reduce the effects of problems faced the economics, such as injustice of income distribution, optimal resources allocation, and economics instability. Therefore, the budget have strong link with economics activities, and it cannot separated.

2.2.3 Public Budget Deficit in Keynesian Thought:

Governments remain committed to the principle of balance of the public budget, until the beginning of the twentieth century by the First World War, the increasing of military spending and the decline in global economic activity, and lower government revenues. This led to forced governments not committed to the principle of quantitative financial balance, and go to the budget deficit, which requires the use of foreign loans to cover the deficit. This followed by a global economic crisis for the period (1929-1932), where the Great Depression and unemployment exceeded 25% of employment in the United States of America (Mankiw, p. 744, 2012). This recession produce a big gap in the body of classical theory. Therefore, it became not necessary to have a budget balance to achieve the overall economics equilibrium, after the economic crisis has revealed clearly the disability of the market mechanism to work to restore economic balance automatically (Dornbusch and Fischer, p. 443, 1994).

Keynes attributed the recession of capitalism economies at that time to insufficient effective demand, and especially to demand-deficient of investment to allow the productive factors to work in full capacity. Based on Keynesian theory, the factors affect the level of production, then the level of employment are four factors (Al-Fares, p.26, 1997):

1. Marginal propensity to consume
2. Marginal efficiency of capital
3. Amount on money in circulation
4. Liquidity preference level

Keynes has concluded that the problem of unemployment caused by a large deficiency in the market mechanism system that prevents the removal of the contradiction between supply and demand for labor. The government spending guarantees to compensate the shortage of investment rates, and then create the effective demand can achieve the level of full employment. Therefore, Keynes completely rejected the invisible hand, and proved that the transformation processes in capitalist society and structural adjustments does not performed automatically, and there is no definite trend towards equilibrium, which achieves full employment (Al-Fares, p.26, 1997).

Keynesian theory showed that unemployment in capitalist economies may continue for a long time, and treatment of this unemployment requires government intervention in economic activity in order to compensate the deficient of effective demand in the private sector. The intervention of government in this case, by the

increase of public expenditure and (or) reducing taxes collected from individuals, increase aggregate demand, which it leads to increased production in economic projects. It also means increasing the aggregate supply, by the impact of the multipliers [7] that indicate that increased spending on government purchases lead to a greater increase in national income. Moreover, the change in taxes leads to a change in income in the opposite direction, but it is less than the equivalent change of government spending. Therefore, the equal change in both government spending and the tax will not have neutral impact in the level of national income, and this so-called (Havelmo-Gelting) hypothesis of budget balanced (Musgrave, p.47, 1985).

Keynesian thought has emphasized the need for government intervention in economic activity, and focus on the use of instruments of fiscal policy as the best policies to deal with crises and cyclical fluctuations in the capitalist system. This led to neglect the principle of narrow literal sense of budget balance, and resort to the principle of general economic equilibrium, even at the expense of systematic and intentional deficit in the budget (Abed Al-Wahed, p.1314, 2000).

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[7] Government spending Multiplier (M_G) and Tax Multiplier (M_T), can be determined after selecting the equilibrium level of income from Simple Keynesian Model, by substituting of behavioral equations in the general equilibrium condition as follows:

$$Y = C + I + G$$

Where: (Y) National Income, (C) Private consumption, (I) Private Investment, (G) Government spending, and the consumption in a linear function of disposable income (Y_d).

$$C = a + bY_d$$

Where: (a) autonomous consumption, (b) marginal propensity to consume ($0 < b < 1$). While disposable income can also be defined as:

$$Y_d = Y - T + R$$

Where: (T) Taxes, (R) Transfer Payments, Therefore, it can rewrite the consumption function as follows:

$$C = a + bY - bT + bR = Y - (I + G)$$

And that the equilibrium level of national income is:

$$Y = \frac{a - bT + bR + I + G}{1 - b}$$

So, the Government Spending Multiplier is:

$$M_G = \frac{dY}{dG} = \frac{1}{1 - b}$$

And while the sign of M_G is positive ($0<b<1$), therefore its value will be greater than one ($M_{G>}>1$),

While M_T is:

$$M_T = \frac{dY}{dT} = \frac{-b}{1 - b}$$

And from the negative sign, inferred that the increase of in Tax has negative effect on National Income (Y), and where ($0<b<1$), so the absolute value of Tax Multiplier is less than Government spending Multiplier (Khalil, p.295-307, 1994).

2.2.4 Public Budget Deficit in Monetary Thought

The government intervention in economic activity consider as a major reasons that led to the emergence of neoclassical thought and monetarist thought represents one of the main branches of neoclassical thought. The economists of monetarist school believed that government intervention led to many economic problems such as the growing of fiscal deficit, inflation, unemployment, emergence the problem of **stagflation**,[8] growing trade deficit, and low rates of economic growth. Then it appeared in that thought the ideas of economic freedom and the minimum government intervention in economic activities, whereas the invisible hand would create compatibility and harmony between individual interests, and then work to achieve the general economic equilibrium (Al-Qurashi, p.191, 2008).

The Monetarist emphasize in their analysis that the problem in public budget deficit lies in the presence of sustainable excess demand in a national economy. Moreover, the monetarists attack the Keynesian policies that performed in the period after Second World War to achieve the welfare state. They also called for the need to adhere to the implementation of the privatization by which to reduce the role of government or increasing the role of the private sector in management and ownership of the property. Because the private sector is more efficient to manage economic enterprises efficiently, also private sector have autonomy, flexibility, and fast decisions with regard to issues of production, employment, level of profits, innovations of technology, determine wages, prices, and the system of incentives (kregel, p.43, 2003).

To reduce the fiscal deficit to the lowest possible levels, the monetarists reject the expansion of public spending, and even called for the need to reduce government expenditures, especially social spending, reduce government employment, and public works projects. This reflected in the implementation of IMF to **moving target strategy** in negotiations with borrowing countries. This strategy aims to fix the fiscal deficit, by (5%) of the Gross Domestic Product (GDP). Then, if the government achieves this objective, the IMF will reduce the target to (3.5%) in subsequent lending negotiations, or in the Loan Agreement. The arguments of IMF that the spending criteria used by the government in the agreement are inflationary criteria, and after this goal is achieved the IMF ask again to reduced the fiscal deficit (1.5%) of GDP , and so on down to the lowest levels (Chossudovsky, p.51-

[8] The 1970s was a period of high rates of inflation along with increasing rates of unemployment in many countries, giving birth to the new label, “stagflation.” (Ahiakpor, p.168, 2003)

52, 2003). The Monetarists justify what they see from the negative economic results from the growing of fiscal deficit, which is:

1. The growing fiscal deficit, would lead to a continuous increase in the money supply, which affect the general equilibrium, this play a high role in the increasing inflation problem (Abu-Sharar, p. 214, 2010).
2. When the government borrows from domestic banks, interest rate in that country goes up because an increase in demand for loans, hence pushing up the prices. Because the interest rate of the central bank subsequently influences the interest rates of commercial or private banks, this would discourage private borrowing, and then discourage the domestic investment. This called crowding out effect (Alessandro, p.426, 2005).
3. The financing of public expenditure programs based on the issuance of government bond leads to an increase in total consumption. Assuming full utilization of economic resources, real GDP will remain constant at its level, so the high current consumption will include a reduction equal to the other expenditures, one of them the net exports, and so leaving a negative impact on the balance of current account.

Table (2.1) Summary for the main differences between Classic, Keynesian, and Monetarist thought of public budget deficit

Classic	Keynesian	Monetarist
The government should not intervene in economic activities, and maximizing the role of individuals	Emphasized the need for government intervention in economic activity	Government intervention led to many economic problems and implementation of the privatization by which to reduce the role of government or increasing the role of the private sector
Invisible hand would create compatibility and harmony between individual interests, and then work to achieve the general economic equilibrium	The government spending guarantees to compensate the shortage of investment rates, and then create the effective demand can achieve the level of full employment	Invisible hand would create compatibility and harmony between individual interests, and then work to achieve the general economic equilibrium
Fiscal balance reflects the proper use of public funds by the government, and thus good performance of government functions	Fiscal policy as the best policies to deal with crises and cyclical fluctuations in the capitalist system	The problem in public budget deficit lies in the presence of sustainable excess demand in a national economy

Source: Researcher summary from paragraphs 2.2.2 to 2.2.4

2.3 Current Account Deficit in Theory:

2.3.1 Balance of Payments, definition and concept:

When trade occurs between the Nations, many types of financial transactions recorded on a summary called the balance of payments. The definition of the **Balance of Payments** is "*a statistical statement that summarizes transactions between residents*[9] *and nonresidents during a period. It consists of the goods and services account, the primary income account, the secondary income account, the capital account, and the financial account*" (IMF, p.9, 2009). Under the double-entry[10] accounting system that underlies the balance of payments, each transaction recorded as consisting of two entries and the sum of the credit entries and the sum of the debit entries is the same. Nations keep record of their balance of payments over the course of a 1-year period. An international transaction is an exchange of goods, services, or assets between residents of one country and those of another (Carbaugh, p.343, 2011). The balance of payments consists of two major categories: the current account and the capital account, and financial account (See table 2.1, p.41). The following brief definitions of each account:

2.3.1.1 Current Account (CA):

The current account shows flows of goods, services, primary income, and secondary income between residents and nonresidents. The current account is an important grouping of accounts within the balance of payments (IMF, p.9, 2009). The current account balance knows the balance of these accounts. The current account balance shows the difference between the sum of exports and income receivable and the sum of imports and income payable (exports and imports refer to both goods and services, while income refers to both primary and secondary income). The value of the current account balance equals the saving-investment gap for the economy.

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[9] It is an economic concept and it does not based on nationality or legal criteria)although it may be similar to concepts of residence). An individual said to be resident within the economic territory of a country when such individual maintains a center of economic interest in that territory - that is, when this individual engages, or intends to engage, in economic activities or transactions on a significant scale either indefinitely or over a long period, usually interpreted as one year. The rule excludes students, medical patients abroad, and foreign diplomats and international organizations other than country's residents where such institutions exist (Palestinian Central Bureau of Statistics "PCBS", p.44, 2010).

[10] The arrangement of international transactions into a balance-of-payments account requires that each transaction entered as a credit or a debit. A credit transaction is one that results in a receipt of a payment from foreigners. A debit transaction is one that leads to a payment to foreigners (Robert Carbaugh, op cit, p.320).

2.3.1.2 Capital account (KA):

The capital account shows credit and debit entries for non-produced non-financial assets and capital transfers between residents and nonresidents. It records acquisitions and disposals of non-produced non-financial assets, such as land sold to embassies and sales of leases and licenses, as well as capital transfers, that is, the provision of resources for capital purposes by one party without anything of economic value being supplied as a direct return to that party (Ibid, p.9).

2.3.1.3 Financial Account (FA):

The financial account shows net acquisition and disposal of financial assets and liabilities (Ibid, p.9). Financial account transactions appear in the balance of payments and, because of their effect on the stock of assets and liabilities in the integrated International Investment Position[11] statement.

[11] The international investment position (IIP) is a statistical statement that shows at a point in time the value and composition of (Ibid, p.119):

a. Financial assets of residents of an economy that are claims on nonresidents and gold bullion held as reserve assets, and
b. Liabilities of residents of an economy to nonresidents

Table (2.2): Balance of payments structure and components (IMF).

Current Account	**Goods and Services**	**Goods**	General merchandise	
			Goods for processing	
			Repairs on goods	
			Goods procured in ports by carriers	
			Non-monetary gold	
		Services	Transportation	
			Travel	
			Communications services	
			Construction services	
			Insurance services	
			Financial services	
			Computer and information services	
			Royalties and license fees	
			Other business services	
			Personal, cultural, and recreational services	
			Government services not included elsewhere	
	Income		Compensation of employees	
			Investment Income	Direct investment
				Portfolio investment
				Other investment
	Current Transfer		General government	
			Other Sectors	Worker remittances
				Other transfers
Capital and Financial Account	**Capital Account**		Capital transfers	General government
				Other sectors
			Acquisition/disposal of non-produced, non-financial assets	
	Financial Account		Direct investment	Abroad
				In reporting economy
			Portfolio investment	Assets
				Liabilities
			Other investment	Assets
				Liabilities
			Reserve assets	Monetary gold
				Special drawing rights
				Reserve position in the IMF
				Foreign exchange
				Other claims

Source: Wang, Peijie (2009), "***The Economics of Foreign Exchange and Global Finance***", 2nd Edition, Springer, P.66.

2.3.2 Component of Current Account

The current account (CA) of the balance of payments refers to the monetary value of international flows associated with transactions in goods and services, investment income, and unilateral transfers. (Carbaugh, p.346, 2011). Trade in goods, services, income, and current transfers give rise to the current account balance that is the sum of all credits and debits under those four headings (Ingham, p.140, 2004). The CA was included a three sub accounts as mentioned in the balance of payments Manual 1993, which prepared by IMF, and the accounts are *Trade Account, Income Account, and Current Transfer Account* (refer to table 2.2). But in the 6th edition (2009) of Balance of Payments and International Investment Position Manual for IMF, there are some littlie changes in naming the main parts of CA, so the names of Trade, Income, and Current Transfer Account respectively are *Good and Services, Primary Income, and Secondary Account*.

2.3.2.1 Trade Account (Goods and Services Account):

The goods and services account shows transactions in items that are outcomes of production activities. The focus of this account is the point at which goods and services exchanged between a resident and a nonresident.

Goods *are physical, produced items over which ownership rights can established and whose economic ownership can be passed from one institutional unit to another by engaging in transactions* (IMF, p.149, 2009). They may used to satisfy the needs, wants of households or the community, or used to produce other goods or services. The production of a good can separated from its subsequent sale or resale. Goods separate from services. Moreover, there are some main types of goods such as (Ibid, p.151-159)[12]:

1. General merchandise covers most movable goods that residents export to, or import from, nonresidents.
2. Goods for processing covers exports of goods crossing the frontier for processing abroad and re-import of the goods, which are valued on a gross basis before and after processing.
3. Repairs on goods covers repair activity on goods provided to or received from nonresidents on ships, aircraft, etc. The repairs are valued at the prices (fees paid or received) of the repairs and not at the gross values of the goods before and after repairs are made.

[12] For more information refer to the Balance of Payments and International Investment Position Manual 6th edition (IMF), Chapter 10 "Goods and Services Account" , Section B. Goods.

4. Non-monetary gold covers exports and imports of all gold not held as reserve assets (monetary gold) by the authorities. Non-monetary gold is treated the same as any other commodity and, when feasible, is subdivided into gold held as a store of value and other (industrial) gold.

Services *are the result of a production activity that changes the conditions of the consuming units, or facilitates the exchange of products or financial assets. Services are not generally separate items over which ownership rights can established and cannot generally be separated from their production* (IMF, p.149, 2009). There are some main types of services (Ibid, p.161-182)[13]:

Transportation (Sea transport, Air transport, Passenger, Freight , and others), Travel, Communications services, Construction services, Insurance services, Financial services, Computer and information services, Royalties and license fees, Other business services, Miscellaneous business, professional, and technical services, Personal, cultural, and recreational services, Audiovisual and related services, Other personal, cultural, and recreational services, Government services, and others.

2.3.2.2 Income Account:

Income covers two types of transactions between residents and nonresidents, and the types as the following (Ibid, p. 183-191)[14]:

1. *Compensation of employees* presents remuneration in return for the labor input to the production process contributed by an individual in an-employee relationship with the enterprise. In the international accounts, compensation of employees is recorded when the employer (the producing unit) and the employee are resident in different economies. For the economy where the producing units are resident, compensation of employees is the total remuneration, in cash or in kind, payable by resident enterprises to nonresident employees in return for work done by the latter during the accounting period. For the economy where the individuals are resident, it is the total remuneration, in cash or in kind, receivable by them from nonresident enterprises in return for work done during the accounting period

[13] For more information refer to the Balance of Payments and International Investment Position Manual 6th edition (IMF), Chapter 10 "Goods and Services Account", Section C. Services.

[14] For more information refer to the Balance of Payments and International Investment Position Manual 6th edition (IMF), Chapter 11 "Primary Income Account", Section B. Types of Primary Income.

2. Investment income presents receipts and payments on external financial assets and liabilities. Included in the latter are receipts and payments on direct investment, portfolio investment, other investment, and receipts on reserve assets. Investment income consists of direct investment income, portfolio investment income, and other investment income. The direct investment component is divided into income on equity (dividends, branch profits, and reinvested earnings) and income on debt (interest); portfolio investment income is divided into income on equity (dividends) and income on debt (interest); other investment income covers interest earned on other capital (loans, etc.)

2.3.2.3 Current Transfer Account:

A current transfer is an entry that corresponds to the provision of a good, service, financial asset, or other non-produced asset by an institutional unit to another institutional unit when there is no corresponding return of an item of economic value (IMF, p. 207, 2009). Current transfers consist of all transfers that are not transfers of capital. Current transfers directly affect the level of disposable income and should influence the consumption of goods or services. That is, current transfers reduce the income and consumption possibilities of the donor and increase the income and consumption possibilities of the recipient (IMF, p. 49, 1993). Current transfers include those of general government (e.g., current international cooperation between different governments, payments of current taxes on income and wealth, etc.), and other transfers (e.g., workers' remittances, and claims on non-life insurance) (Ibid, p. 44)[15].

2.3.3 Current Account Deficit in Classical Thought:

The classical theory of international trade appeared in the late eighteenth and early nineteenth centuries as a reaction to the Mercantilism though, which represents the imposition of restrictions on trade in order to obtain the largest amount of gold, which is the measure of wealth of the country at that time. Then the classics came to call the free trade, pointing out that the wealth of the country not measured only with its gold, but also with its real wealth represented in land, houses, production goods, and consumption, indicating that free trade is the way to increase the country's wealth and power (Khalil, p.147, 1994).

[15] For more information, refer to the Balance of Payments and International Investment Position Manual 6th edition (IMF), Chapter 12 "Secondary Income Account", Section C. Types of Current Transfer.

There are some theories submitted by classics, such as the **Absolute advantages** theory for Adam Smith (1776), this theory explain that with free trade, nations could concentrate their production on the goods that could have cheap price (Carbaugh, p.32, 2011). David Ricardo (1817) developed other theory, which is the **Comparative Advantages** theory. Ricardo developed a principle to show that mutually beneficial trade can occur whether or not countries have any absolute advantage (Ibid, p.34), but Ricardo did not explain how the actual terms of trade would be determined in international trade. Another classical economist, John Stuart Mill (1818), filled this gap. Mill's theory knows the **Theory of Reciprocal Demand** (Ibid, p.43). The classical school claimed that the that the international balance is a already automatically adjusted, and if there is imbalance in the balance of payments, it should return to equilibrium automatically, without the need for government intervention, depending on two types of automatic factors, price adjustment and , an exchange rate adjustment:

2.3.3.1 Price Adjustment:

If the monetary system of a country operates according to the gold standard, the international freedom of movement of gold, and the consequent relative fixed exchange rate. Also assuming a deficit in current account balance, which means the aggregate demand for foreign currency, is higher than the supply of this currency, and thus will come out of gold. Therefore, the decrease in stock from gold will decrease the domestic prices, according to the quantity theory of money, and this will increase the exports and decrease the imports, and then moving the current account to balance automatically, without government intervention (Husted, and Melvin, p. 435, 2007).

2.3.3.2 Exchange Rate Adjustment:

The change in the exchange rate can contribute to restore the balance of payments by adjusting the domestic and foreign prices, which allow balancing between exports and imports. So, if a country is use note money system, and its imports was decreased, and (or) decreased its exports, in other words, increased demand for foreign currencies and the decreased for the national currency. In addition, if the monetary authorities use floating exchange rate system for the national currency and without taken any action to fix it will lead to the devaluation of national currency. This makes imported goods more expensive for citizens, so the imports will decreased, and the national goods become cheap for the foreigners, then increasing in external demand and growing exports. The increasing of exports and decreasing of imports will reduce the deficit (Krugman, Obstfeld, and Melitz, p.424, 2011).

2.3.3.3 The elasticity approach:

The elasticity's approach examines how changing relative prices of domestic goods and foreign goods resulting from a change in the exchange rate will affect the balance of trade of a country.

Currency depreciation affects a country's balance of trade through changes in the relative prices of goods and services internationally. A trade-deficit nation may be able to reverse its imbalance by lowering its relative prices, so that exports increase and imports decrease. The nation can lower its relative prices by permitting its exchange rate to depreciate in a free market or by formally devaluing its currency under a system of fixed exchange rates (Carbaugh, p.448, 2011).

The ultimate outcome of currency depreciation depends on the price elasticity of demand for a nation's imports and the price elasticity of demand for its exports. Recall that elasticity of demand refers to the responsiveness of buyers to changes in price. It indicates the percentage change in the quantity demanded stemming from a one percent change in price. Mathematically, elasticity is the ratio of the percentage change in the quantity demanded to the percentage change in price. This ratio can symbolize as follows:

$$\text{Elasticity } (\varepsilon_{\text{d}}) = \frac{\Delta \text{Q}}{Q} \div \frac{\Delta P}{P} = \frac{\%\Delta \text{Q}}{\%\Delta \text{P}}$$

Similarly, we can compute a price elasticity of supply:

The elasticity coefficient stated numerically, without regard to the algebraic sign. If the preceding ratio exceeds one, a given percentage change in price results in a larger percentage change in quantity demanded; this referred to as relatively elastic demand. If the ratio is less than one, demand said to be relatively inelastic, because the percentage change in quantity demanded is less than the percentage change in price. The general rule that determines the actual outcome is the so-called **Marshall-Lerner condition**. The Marshall-Lerner condition states (Krugman, Obstfeld, and Melitz, p.448, 2011):

1. Depreciation will improve the trade balance if the currency-depreciating nation's demand elasticity for imports plus the foreign demand elasticity for the nation's exports exceeds one.

2. If the sum of the demand elasticity is less than one, depreciation will worsen the trade balance.
3. The trade balance will neither helped nor hurt if the sum of the demand elasticity equals one.

The Marshall- Lerner condition may stated in terms of the currency of either the nation undergoing depreciation or its trading partner

2.3.4 Current Account Deficit in Keynesian Thought:

2.3.4.1 Income Adjustment:

According to the Keynesian approach, the income consider as an automatic tool to adjust the imbalance in the balance of payments of the country. The post-Keynesian, (who came after Keynes) delivers the way, in which adjust the balance of payments, with the changes of income and employment, through their analysis. This way based on assumed fixed interest and exchange rates, although the economy is working below the level of full employment, and elasticity of production units to current prices, and changes in income taken into account the changes in real income (Carbaugh, p.438, 2011).

According to the Keynesian model, economic equilibrium condition in open economy determined by equivalence of injections to the national income, which represented by investments, government spending, and exports, with internal leakage. So, it is not important to achieve the equilibrium in the private, government sector, or the external balance, whereas, any deficit in one of the three sectors will balanced by a surplus in another sector. Then any increase in national income can achieved through an increase in investment or government spending or exports, or all of them together. On the contrary, a decline in one or all of these elements causes a decline in national income.

2.3.4.2 Absorption Adjustment:

According to the elasticities approach, currency depreciation offers a price incentive to reduce imports and increase exports, but even if elasticity conditions are favorable. The trade balance of home country's may actually improve depend on how the economy reacts to the depreciation. The absorption approach provides insights into this question by considering the impact of depreciation on the spending behavior of the domestic economy and the influence of domestic spending on the trade balance. The absorption approach starts with the idea that the value of total domestic output (Y) equals the level of total spending. Total

spending consists of consumption (C), investment (I), government expenditures (G), and net exports (X-M). This relation can write as follows (Husted, and Melvin, p. 421, 2007):

$$Y \equiv C + I + G + (X - M)$$

The absorption approach then consolidates C+I+G into a single term A, which is referred to as *absorption*, and designates net exports (X-M) as B. Total domestic output thus equals the sum of absorption plus net exports.

$$Y \equiv A + B$$

This can rewrite as follows:

$$B \equiv Y - A$$

This expression suggests that the balance of trade (B) equals to the difference between total domestic output (Y) and the level of absorption (A). If national output exceeds domestic absorption, the economy's trade balance will be positive. Conversely, a negative trade balance suggests that an economy is spending beyond its ability to produce (Ibid, p. 422). The absorption approach predicts that currency depreciation will improve an economy's trade balance only if national output rises relative to absorption. This relation means that a country must increase its total output, reduce its absorption, or do some combination of the two. The following examples illustrate these possibilities. Assume that an economy faces unemployment as well as a trade deficit. With the economy operating below maximum capacity, the price incentives of depreciation would tend to direct idle resources into the production of goods for export, in addition to diverting spending away from imports to domestically produced substitutes. The impact of the depreciation is thus to expand domestic output as well as to improve the trade balance. It is no wonder that policymakers tend to view currency depreciation as an effective tool when an economy faces unemployment with a trade deficit (Husted, and Melvin, p.422, 2007).

2.3.5 Current Account Deficit in Monetary Thought:

The monetary approach shows that imbalances in balance of payment are a result of monetary phenomenon. Whereas, this imbalance is a result of the imbalance between supply and demand of money, and the deficit is the result of increased in domestic supply of money on domestic demand, and that exceed money will be

spent abroad to buy goods and services and foreign assets. Therefore, the correction comes through monetary policy (Abed Al-Qader, p.144, 2011). Monetary approach emphasis on that real income (y), price level (p), and interest rates (r) are the determinants of demand for money (Md). In addition, that the demand for money is a stable function for these three variables [$M_d = f(y, p, r)$], (Darby, p.4, 1977):

The relationship between (M_d) and each of (y) and (p) is a positive, but with (r) is a negative. And concerning money supply (Ms) in the country is assumed to equal the summation of domestic credit (D) and reserves of foreign currencies (R) multiplied by money creation multiplier (μ), [$M_s = \mu(D + R)$].

Assuming a small and open economy depends a fixed exchange rate; when the expansion of the monetary authorities in the creation of domestic credit as part of the monetary base, thereby increasing the money supply faster than the growth of demand for money. This will lead to increased demand for goods and services, including imported, meaning an increasing of imports from abroad and then current account will be in deficit. In the case of increasing, the demand for money in line with economic growth, assuming a constant overall level of prices and interest rates, without being offset by a similar increase in money supply. The monetary approach represent the theoretical framework for economic structural adjustment policies of economic adjustment programs, which requires implementation of the International Monetary Fund (IMF) in borrowing countries to treat the inflation and balance of payments problems. Moreover, that the basic features can summarize as follows (Ali, p.756-761, 2002):

1. Control the amount of money, in order to limit the inflation and to address existing economic imbalance, and this requires a reduction of government spending and deficit reduction in the government budget, in this regard the (IMF) suggests the following policies and procedures:

    - Determine the upper limits of the credits for the government and the public sector,
    - Reduce government spending (current and investment),
    - Cancellation government subsidies on prices of basic goods,
    - Reduce the size of the public sector, and decrease government commitment to employ the graduates to ease the burden on the government budget,
    - Increase taxes on goods and services,
    - Raise interest rates

2. Reduce the exchange rate of national currency to a level close to the black market rate, through the establishment of Commercial market of foreign exchange.
3. Liberalization of foreign trade: remove administrative and economic barriers to exports and imports, and work to end the bilateral trade agreements and the trend towards a multilateral system of external payments.
4. Encourage private investment: both domestic and foreign, and that by removing barriers to private investors and the granting of tax benefits to them and follow the procedures for privatization.
5. Release the credit in the interior: prevent the government intervention in identifying the credits, and giving the chance to economic institutions to play a role in market economy and free competition.

Table (2.3): Summary for the main differences between Classic, Keynesian, and Monetarist thought on current account deficit

Classic	Keynesian	Monetarist
Call the free trade, indicating that free trade is the way to increase the country's wealth and power	Economic equilibrium condition in open economy determined by equivalence of injections to the national income, which represented by investments, government spending, and exports, with internal leakage	imbalance is a result of the imbalance between supply and demand of money, and the deficit is the result of increased in domestic supply of money on domestic demand, and that exceed money will be spent abroad to buy goods and services and foreign assets
The international balance is a already automatically adjusted, without the need for government intervention, depending on two types of automatic factors, price adjustment and , an exchange rate adjustment	The absorption approach predicts that currency depreciation will improve an economy's trade balance only if national output rises relative to absorption. This relation means that a country must increase its total output, reduce its absorption, or do some combination of the two	Monetary approach emphasis on that real income (y), price level (p), and interest rates (r) are the determinants of demand for money
The change in the exchange rate can contribute to restore the balance of payments by adjusting the domestic and foreign prices	The income consider as an automatic tool to adjust the imbalance in the balance of payments of the country	Increasing the money supply faster than the growth of demand for money. This will lead to increased demand for goods and services, including imported, meaning an increasing of imports from abroad and then current account will be in deficit

Source: Researcher summary from paragraphs 2.3.3 to 2.3.5

2.4 Theoretical Basis for the Twin Deficit Hypothesis:

2.4.1 The link between Budget and Current Account balance in National Accounts:

To clarify the relationship between fiscal deficits and the balance of trade, it is helpful to begin with some national income accounting identities (IMF, p. 222-223, 2009).

$$GDP = y = C + I + G + x - m = C + S + T \qquad (1)$$

Where (y) the Gross Domestic Product "GDP", (C) Aggregate consumption of private sector, (I) Investment expenditure, (G) Government expenditure, (x) Exports from goods and services, (m) Imports from goods and services, (S) Private saving, (T) Government revenues from taxes.

The Gross National Product "GNP" (Y) determines as the following equation (2):

$$GNP = Y = GDP + TR_{net} \qquad (2)$$

Where (TR_{net}) the net income from external factor,

$$TR_{net} = TR_{in} - TR_{out} \qquad (3)$$

$$X = x + TR_{in}$$

$$M = m + TR_{out} \qquad (4)$$

Where (X) net inflow to the economic by exports "x" from goods and services, and income from external production units from the foreign " TR_{in} ", (M) net outflow from the economic by imports "m" from goods and services, and income from internal production units to the foreign " TR_{out}",

The Current Account Balance (CAB) identified as the following:

$$CAB = X - M + TR_{net} \qquad (5)$$

For the purpose of simplification, it is often assumed that such transfers the net income from external production do not have a large size in the current account. However, when the external debts for the concerned country are a large and debt service payments are high, the value of net income from external production will be

large and negative. The current account shows the size and trend of international loans. When the imports are more than exports, the (CAB) is in deficit, which financed by borrowing from abroad and the borrowing either by the government or by the private sector. Therefore, when the current account in deficit situation this will increase the net debt by the amount of such deficit.

According to the identical equation of the National income in open economy, the National Income (Y) equal (IMF, p. 223, 2009):

$$Y = C + G + I + CAB \qquad (6)$$

Moreover, as defined in the Standard National Accounts (SNA) use of the income account:

$$S = Y - C - G \qquad (7)$$

By substituting the equation (6) in equation (7), the national saving (S) in open economy at general equilibrium condition (Aggregate Supply = Aggregate Demand) is:

$$S = I + CAB \qquad (8)$$

It should distinguish between saving decisions in the private and government, as the following (Ibid, p.224):

$$S = S_p + S_g \qquad (9)$$

Where (S_g) the government saving, and (S_p) the private saving "that part of income after cut of the taxes not spent for consumption, and it equal:

$$S_p = Y - T - C \qquad (10)$$

While the government saving (S_g) define as the difference between the government revenues (T), and government expenditure (G), Which takes the form of government procurement, and government transfers (R), so:

$$S_g = T - G - R \qquad (11)$$

From the National Saving definition:

$$S_p = I + CAB - S_g \qquad (12)$$

Or,

$$S_p = I + CAB - (T - G - R) \qquad (13)$$

By re-arrange the equation (13)

$$CAB = (S_p - I) + (T - G - R) \qquad (14)$$

The Current Account Balance (CAB) = - ***Current Account Deficit (CAD)***, and the term of $(S_p - I)$ represent the Private Saving Balance (PSB) = - ***Private Saving Deficit (SD)***, and Finally the term of $(T - G - R)$ represent the Government Budget Balance = - ***Government Budget Deficit (BD)***, then the equation (14) can be showed at the following formula:

$$CAD = SD + BD \qquad (15)$$

The public budget deficit measures the ability of the government for borrowing to finance its expenditures, where the private saving can take three forms:

1. Investment at domestic capital (I)
2. Procurements from the foreigners (CAD)
3. Debits resulting from government expenditures (BD)

The meditation of the equation (15) can noted two extremely different situations. First: the assumption of that the difference between savings and private investment stable over time, so, the changes in the government budget deficit will be transferred completely to the current account, and thus the twin deficit hypothesis will be concreted. The second case known as the Ricardian Equivalence Hypothesis, which assumes that the change in the public budget deficit will fully compensated by the change in private savings. However, the economic reality may be more complicated than those two cases. Verification of the conditions to which the phenomenon of twin deficits must be given to meditate the channels through which government financial deficit will be economically effective (Dornbusch and Fischer, p. 317, 1994).

2.4.2 Twin Deficit Hypothesis:

According to Keynesian proposition, the public budget deficit can affect private savings, private investment, and current account balance. The final impact of the budget deficit on these three variables depends partially on how to finance the deficit, where the possible ways of financing the fiscal deficit at the inadequacy of taxes to meet the increased government spending is (Vyshnyak, p. 7, 2000):

1. Increasing money supply and collect seigniorage "Monetization".
2. Domestic borrowing
3. External borrowing

By Testing the above three methods to finance the fiscal deficit, It should highlight on the different types of macroeconomic imbalances that can cause deficit in the economy.

2.4.2.1 Increasing money supply and collect seigniorage[16] "Monetization":

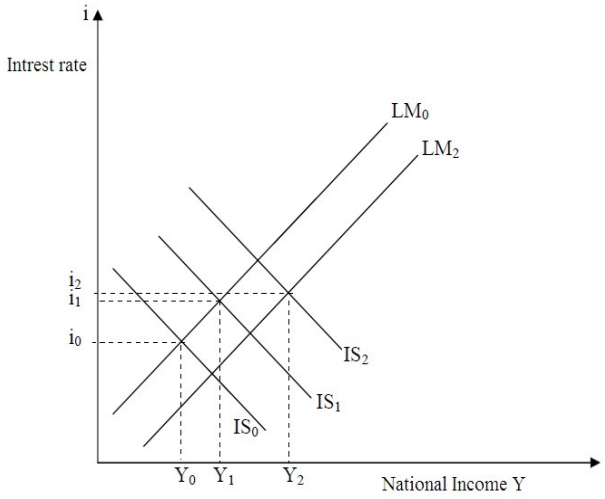
The mean of the new money supply is to create an additional amount of money without coverage from sales of goods or services. This money used in financing of public expenditure, when those expenditures excess public revenues of what obtained by the financial authorities. This approach called Deficit Financing, or inflationary financing. It follows the issuance of new money that is not covered, rises of prices and cause inflationary pressures vary in its effects according to flexibility of production system of the country. Due to the negative effects of inflation on the savings, the effectiveness of this method of financing the budget deficit decreased whenever the economy subjected to inflationary pressures (Bakry, P. 445, 1988).

By using Keynesian model (IS-LM), noted that the public expenditures (G) lead to shift the IS curve from IS_o to IS_1, as show in Figure (2.1). When finance this increasing in government expenditures by issuing new money notes. The monetary balance and wealth will increase, so the consumption (C) should increase, and then the IS_1 should shift to IS_2, because of investment (I) increasing. This lead to increasing of aggregate demand for the money, less than the increasing of money supply, and shift the LM from LM_o to LM_2, so the income raises from Y_1 to Y_2 (Edgmand, p. 280-282, 1988). Thus, whenever the government spending raised (both current and investment spending), and

[16] Seigniorage is the difference between the value of money and the cost to produce and distribute it (Huber, and Robertson, p. 2, 2000)

financed again by issuing new money, so the expansion in money liquidity will lead the individuals to replace the domestic financial assets by internal, external property, or foreign financial assets. Thus, up growth of the phenomenon of Dollarisation[17], through increasing the demand for foreign currencies. So, if the government continued in financing the fiscal deficit by issuing new money this will as replace problem by another, such as replacing the Unemployment by Inflation (Carbaugh, p. 489, 2011).

Figure (2.1): The effect of increasing of government spending, which financed by issuing new money.



Source: Edgmand, Micheal (1988), "***Macroeconomics: Theory and Policy***", 2nd Edition, Translated by Mohamed Mansour, Dar Al Marekh Publisher, P. 281.

2.4.2.2 Domestic Borrowing:

The domestic borrowing for financing the budget deficit may take two forms as follows:

a. Domestic borrowing from Commercial banks:

When government has used this method to finance the public budget deficit, if commercial banks are able to meet the demand of government borrowing, will

[17] The term Dollarisation has used to denote diverse set of related phenomena. Thus, while official Dollarisation refers to the case in which the foreign currency given (usually exclusive) legal tender status, unofficial Dollarisation is broadly used to indicate the use of a foreign currency alongside the national currency when the former is not legal tender (Yeyati, p. 2, 2005).

have increased incomes, increase deposits, and the expansion of the ability of commercial banks to grant credit. This leads to increased money supply and total domestic liquidity, which increases the size of spending and aggregate demand, both investment and consumption. In the case of insufficient reserves to commercial banks, the government may impose the reduction of credit to the private sector. This is leading to instant pressure working to remove the expansionary impact of the increase in government spending, as these commercial banks may resort to the Central Bank to help them. Therefore, the result is similar to the situation that the government gets the credit from the Central Bank (Al Fares, P. 134, 1997).

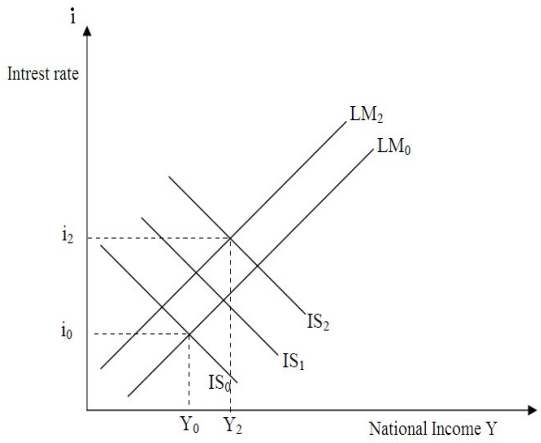
b. Domestic borrowing from individuals:

The importance of this type of borrowing, as a way of financing the fiscal deficit the government, as it allows the merge of financial resources in the economic cycle as these recourses were not participate in such economic. This is consistent with the Keynesian theory of effective demand, which clearly showed there are many resources go to hoarding as a result of shortage of demand, which is sufficient to accommodate these resources in case of invest it. When the Government Issue bonds and sell them to individuals to finance the public budget deficit, will lead to increased wealth of individuals, this increases will take the form of bonds. Then an increasing of consumption as represented in the figure (2.2), by shifting the IS_o curve to IS_2, and with increasing of wealth, so the demand for money will increase (for exchange purpose) without equivalent increasing in money supply. Therefore, the LM_o curve will shift to the left to LM_2, and then the interest rate will increase, which affect negatively on private investment, because of the average profit in these projects will lower than the interest rate. Therefore, the increasing of interest rate will remove partially the effect of expository fiscal policy, because of the crowding out effect[18], and this happened in developing countries with limited financial resources of private sector (Edgmand, p. 283, 1988).

However, if the economy integrated with international capital markets, the government domestic borrowing will push the private sector to borrow from abroad. In this case, the public borrowing combination between domestic and foreign resources has no significant impact on private investment (Wesner, p. 25, 1985).

[18] Crowding out refers to private consumption or investment spending decreasing as result of increased government expenditures and the subsequent budget deficits. The source of the decline in private spending is higher interest rates caused by budget deficits (Carbaugh, p. 501, 2011).

Figure (2.2): The effect of increasing of government spending, which financed by issuing bonds.



Source: Edgmand, Micheal (1988), "***Macroeconomics: Theory and Policy***", 2nd Edition, Translated by Mohamed Mansour, Dar Al Marekh Publisher, P. 284.

2.4.2.3 External Borrowing:

To understand the impact of external loans on the economy when used as a way to finance fiscal deficit it should analyze the effects of financing public budget deficit through external borrowing in a small open economy with a different foreign exchange regimes and different degrees of movement of international capital.

It is useful to look to the budget deficit and its implications in the Mundell-Fleming Model, which submitted in the sixties by Robert Mundell the Laureate of Nobel in Economics in 1999, and Marcus Fleming. The main purpose of this model is to determine the general balance in the economy and the response of equilibrium income to the macroeconomic policy, depending on the Keynesian model (IS-LM). While, in an open economy, which takes into account the instant changes in each of goods and services (IS), money (LM), and the foreign exchange market (FE) together, and is the general equilibrium of the economy in this model chart at the intersection point for the curves of these markets (Obstfeld, p. 2-6, 2001).

This model assumes that capital flows are moving faster than trade flows in a small open economy characterized by free movement of international capital, because international investors compare the differences in interest rates across

countries to looking for the benefit from the possible profits. Therefore, differences in interest rates between the two countries generate large flows of capital until these differences in interest rates toward to decline. On the contrary, the trade flows respond slowly to economic changes. Therefore, the main assumption of this model is that the interest rate at home is equal to the level in the global economy, except in cases that show the control on the movement of international capital.

The fact refers to the unequal rates at the international level because of expectations of exchange rate movement. Moreover, assumption of Mundell-Fleming on the interest rate may not be realistic, especially in developing countries, because of political risk, and macroeconomic instability, as well as restrictions on the movement of international capital. Here it will study the effects of the government budget deficit in a small open economy at the cases of the fixed exchange rate, or floating exchange rate, taking into consideration the degree of response (elasticity) of international capital to changes at interest rates.

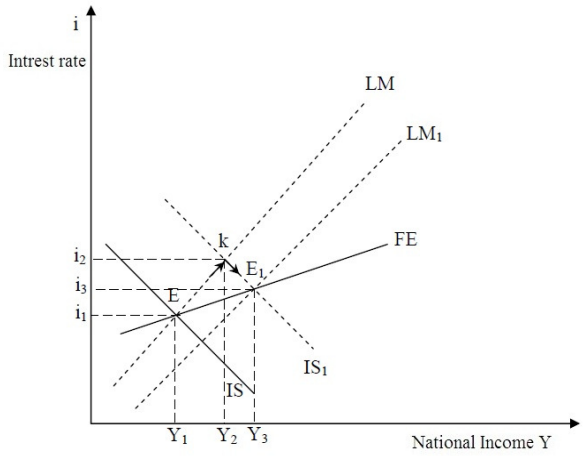
a. Budged Deficit and Fixed Exchange Rates:

In a small closed economy; if monetary authorities follow fixed exchange rates system, when the lack of foreign exchange reserves and insufficient domestic capital to cover the increased investments, then financing of large fiscal deficit requires increased government borrowing from abroad. Therefore, the interest rate will rise, and this rise in interest rate will attract international capital flows, and that improving the status of the capital account of the country concerned. On the other hand, the increase in government spending, increase the aggregate demand, and when there are some domestic resources required for expansion in production, this would lead to increase in real GDP. However, some of this increase in government spending will directed to the imports, which will affect negatively on the current account. In addition, the increase in aggregate demand may cause intense pressure to raise prices after a short period, leading to the loss of that country some of its competitiveness in international markets, and be another reason for the deterioration of the current account (Pugel, and Lindert, p. 502, 2000).

If the flow of international capital has high elasticity to changes in interest rate, so, this capital inflow will be higher at higher interest rate, which increases the supply of foreign currencies and moving the balance of payments to surplus in the short term (through a surplus in capital account, due to the flow capital to the domestic). Figure (2.3) illustrates the effects of fiscal expansion in the case of the fixed exchange rate, with higher elasticity in the flow of international

capital makes the curve (FE) have small decline. At the primary equilibrium at the point E, which intersect the three curves IS, LM, and FE. The expansionary fiscal policy and a budget deficit leads to the shift the IS curve to the right at IS_1, so intersect with curve LM at the point K at high interest rates with higher level of real GDP. Point K is located to the left side of the curve FE, indicating that the existence of a surplus in the balance of payments (Husted, and Melvin, p. 528, 2007).

Figure (2.3): Public Budget Deficit at fixed exchange rate, and *high elasticity* for the flow of international capital.



Source: Thomas A. Pugel, and Peter H. Lindert (2000), "***International Economics***", 11th Edition, McGraw-Hill Publisher, P. 503.

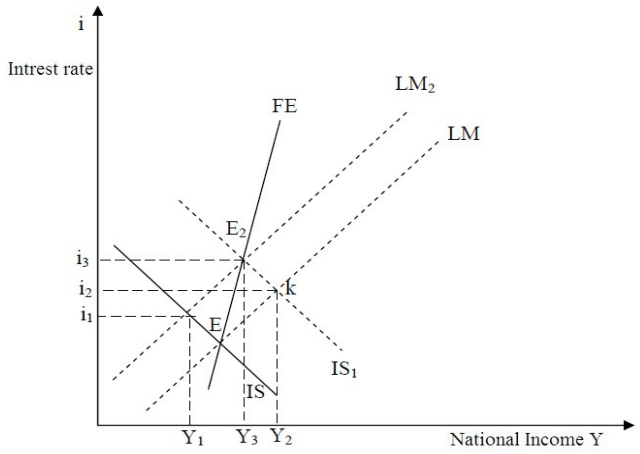
In the absence of a Sterilization[19] by monetary authorities, this will lead to expansion in domestic money supply, then the LM curve will shift downward to the right until it reaches at the position LM1, and the economy will be stable at point E1 that achieve full utilization. In this case, the fiscal policy has more influencing at increasing the GDP, than monetary policy, and this is one of the important results of the Mundell – Fleming model (Carbaugh, p. 502, 2011).

Under these conditions, the result to finance the fiscal deficit by borrowing, represented in equivalence of domestic interest rate with the level of international interest rate, and the increasing aggregate demand and decline in the current account. In the case of low elasticity of international capital flows to

[19] Sterilization is any open-market purchase or sale of domestic assets that has the effect of canceling or offsetting the monetary effects of balance-of payments disequilibrium. In the case of a payments deficit, an open-market purchase of domestic assets produces this effect; that is, it returns the money supply to the level prevailing before the payments disequilibrium. Although central banks widely practice sterilization, payments deficits still significantly complicate the management of a domestic monetary policy. (Dunn, and Mutti, p. 372, 2005).

interest rate changes, the FE curve is relatively steep, as in Figure (2.4). Point E represents the primary point of equilibrium, and assuming an increase in government spending equal to what it is in the previous case, this leads to the shift the IS curve to the right at IS_1 and intersects with LM curve at the point k. Therefore, the level of GDP goes up to Y_2 due to increased aggregate demand, and rising interest rates to i_2 because of increasing in government borrowing. In addition, for the increasing in aggregate demand the imports will increased, which affects negatively on current account, and shall in a deficit (as the point k is located beneath the curve FE).

Figure (2.4): Public Budget Deficit at fixed exchange rate, and *low elasticity* for the flow of international capital (Pugel, and Lindert, p. 503, 2000).



Source: Thomas A. Pugel, and Peter H. Lindert (2000), "***International Economics***", 11th Edition, McGraw-Hill Publisher, P. 503.

Regarding to the fixed exchange rate, the central bank will lose some of the reserves of foreign currencies in the process of defending the exchange rate, and decrease the domestic money supply will move the curve LM to the LM_2 at the new equilibrium point at E_2, where declining GDP from Y_2 to Y_3 and rising interest rates to i_3.

Therefore, it can say, in the case of fixed exchange rate and restrict the movement of international capital, that any increase in budget deficits lead to higher domestic interest rate and crowd out of private investment, Whenever the country' loss its credit rating, the foreign capital migrate from the country, leading to higher interest rate than previously. In this case, fiscal policy loses some of its ability to increase real GDP.

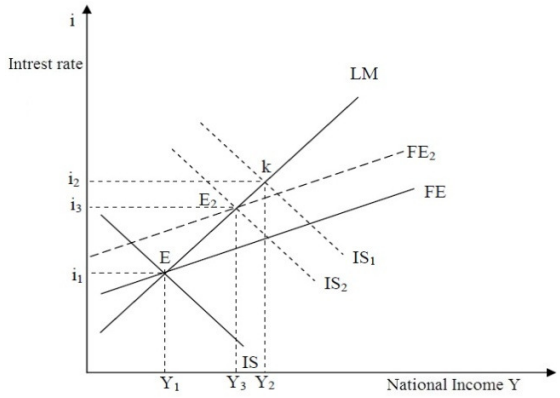
b. Budged Deficit and Floating Exchange Rates:

At the case of floating exchange rate, the fiscal policy is working in a more complex, since it affects the prices of exchange rate in both directions. In general, as mentioned previously the fiscal expansion leads to higher interest rates as the government borrowed more. This will rise in interest rates to attract foreign capital, at least temporarily. Through increased government spending, output, and income as result of fiscal deficits, the imports will raise and current account will declined. So in the case of floating exchange rate, fiscal deficit will affect the exchange rate of domestic currency in opposite directions, in another aspect, that the high interest rate and increase capital flows to the inside will appreciate the domestic currency. On other side, the high level of aggregate demand and growing imports will depreciate the domestic currency exchange rate. That conduct of the exchange rate in any of these two trends will be depending on the speed and size of international capital flows, and on the strength and impact of the expansion in aggregate demand (Pugel, and Lindert, p. 533, 2000).

The effects of fiscal expansion can illustrated in the case of floating exchange rate, using the Mundell – Fleming model through the graphic representation of each of the r goods and services market (IS), the money market (LM), and the foreign exchange market (FE). That distinguishes between two possible cases in terms of the direction of current account balance to surplus or deficit. In addition, in each case the economy begins equilibrium at the point E, which intersects the three curves (IS-LM-FE).

Figure (2.5) illustrate the trend towards surplus because of the significant impact of capital flows to inside country, the surplus in current account balance shown IS_1-LM intersection to the left of the primary position of curve FE, this leading to increase the exchange rate. However, the high exchange rate is part of the mechanism that generates the current account deficit, by reducing the profitability at the reciprocal goods, and help in transforming resources into Non-reciprocal goods. Therefore, the export industry will face difficulties, and the demand for imports will increase. Then shifting of curves IS_1 and FE to the left, and intersect with curve LM at the point E_2, which recedes GDP from Y_2 to Y_3, due to the international crowding out effect, which reduces the intention to expansion of fiscal policy (Pugel, and Lindert, p. 535, 2000).

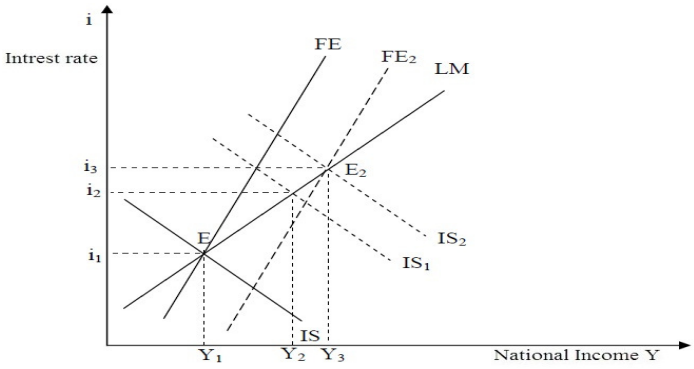
Figure (2.5): Public Budget Deficit at floating exchange rate, and *high elasticity* for the flow of international capital.



Source: Thomas A. Pugel, and Peter H. Lindert (2000), "***International Economics***", 11th Edition, McGraw-Hill Publisher, P. 534.

Figure (2.6) shows the trend of the current account deficit caused by the high effect of aggregate demand, where the elasticity is very low to international capital flows, and then the curves IS_1-LM intersect at the right of the primary curve FE. As result for such deficit in the balance of payments, the domestic currency depreciated. This would lead to an enhancement in the current account until the economy reaches to new equilibrium position in the long run, and GDP will expand again from Y_2 to Y_3, this will happen after shifting the IS1 and FE curves to the right, to intersect with LM curve at point E_2 (Ibid, p. 535).

Figure (2.6): Public Budget Deficit at floating exchange rate, and *low elasticity* for the flow of international capital.



Source: Thomas A. Pugel, and Peter H. Lindert (2000), "***International Economics***", 11th Edition, McGraw-Hill Publisher, P. 534.

From the above, we find that the financing of fiscal deficit in the small open economy affects the exchange rate or interest rate, or both, depending on the degree of movement of international capital and the exchange rate regime. In the case of the fixed exchange rate, the financing of fiscal deficits lead to higher interest rate and increase capital flows to country in the short run, and in line with the free movement of international capital. On the other hand, the fiscal deficit will rise to the level of aggregate demand and real GDP, and then (after the short run) increase in the price level. Therefore, these economic changes in this direction will lead to the deficit in current account.

In the case of floating exchange rate, financing the fiscal deficit leads appreciate the domestic currency after the rise in interest rates and the increasing of international capital flows in the short run. On other side, the fiscal deficit will rise to the level of aggregate demand and GDP, then increase the prices level. These economic changes will turn the current account deficit and depreciation of exchange rate of domestic currency at long run.

2.4.3 Ricardian Equivalence Proposition:

Long ago, the question was of how government funds its public expenditure, the answer was there are two basic tools for the government revenues. The tools are either through the imposition of taxes on current generations or through the issuance of public debt as government bonds, where the government pays the principals of debts and the interest rate of bonds in the future. Then the question became about the macroeconomic results for those both different tools, and which of them is preferred over the other according to economic criteria.

In 1974, Robert Barro raised the following question: Are the government bonds perceived as net wealth by private sector, or not? The answer was No. He concluded that there is equivalence between the impact of issuing government bonds and taxes. Moreover, shifting from tool to another has no real changes on the economy. It later knows a Ricardian Equivalence Proposition[20] (Barro, P. 39, 1989).

[20] The term of Ricardian equivalence theorem introduced to macroeconomists by James Buchanan (1976). After Gerald O'Driscoll (1977) documented Ricardo's reservations about this result, some economists have referred to the equivalence finding as being non-Ricardian, but, David Ricardo (1951) was the first to articulate this theory. Therefore, the attribution of the equivalence theorem to Ricardo is appropriate even if he had doubts about some of the theorem's assumptions (Barro, P. 39, 1989)

Robert Barro depends on number of theoretical hypothesis, which consider basic requirements achieve the Ricardian Equivalence, summarized as follows[21]:

1. Interdependence of Successive Generations: The families, and social interdependence among individuals, make an economical interdependence between successive generations, reflected by the existence of legacy and inheritance from parents to children.
2. Infinite Horizons in Consumption Planning: The consumer behavior characterized by the rational and farsighted to the future, where the time dimension of the individual is unlimited in the planning of consumption and at the same level of government planning. In spite of the limited period of human life, but the seriousness of parents and their love for their children make, them organize their consumption spending as if their lives forever. Therefore, the government financing for public budget deficit by issuing government bonds does not motivate the individuals to increase their consumption due to lower taxes for the time being, but will motivate them to increase their savings by buying government bonds and keep them with the interest rate of it as a wealth for children.
3. The perfection of capital markets: The individuals borrow and lend at the same interest rate available to the government, with no restrictions on borrowing.
4. Taxes specified: The taxes are constant and must be paid by individuals as a lump sum at the end of the period. Thus, it not linked to income levels, and has no role in the redistribution of resources between rich families and poor families.
5. Government funds debt service payments on public debt through collection of taxes in subsequent periods, i.e., the government debt for the current period whose burden will fall on individuals in the future (third generation).
6. There is no case for uncertainty about taxes and income in the future.
7. Full expectation by individuals that issuing government debt now includes raising taxes in the future

The Ricardian equivalence claims the absence of any relationship between the current trade deficit and the budget deficit. This approach reveals that the budget

21 Summarized depending on the following resources:

- Robert J. Barro, "Are Government Bonds Net Wealth?", Journal of Political Economy, Volume. 82, No. 6, 1974, P. 1095-1117.
- B. Douglas Bernhiem, " A Neoclassical Perspective on Budegt Deficits", Journal of Economic Perspectives, Volume. 3, No; 2, 1989, P. 63.
- Bennett T. McCallum, Are Bond – Financed Deficits Inflationary? A Ricardian Analysis", Journal of Political Economy, Volume. 92, No; 1, 1984, P 123-135.

deficit is a result of a tax cut that will have no effect on the national savings. Tax cut reduces public revenues and public saving. The decrease of the public saving enlarges the budget deficit. However, the decrease of the public saving will match by an equal increase in the private savings. So, the domestic savings will not affect. That is because people will rationally presume that decreased tax (the budget deficit) will have to pay for in the future. Therefore, they will increase savings to pay for future increased burden. People know that taxes will go again to pay for the budget deficit so they save the extra money and they use it to pay for the future tax increases. The tax has simply delayed, not actually taken away. If this were perfectly true, then the budget deficit would have no impact on anything because it would not change national savings. The Ricardian equivalence reveals that the tax cut is a temporary procedure. The decrease of the public savings will compensated for by an equal increase of private savings. The national saving will not affected. Therefore, the budget deficit has no effect on the current trade deficit (Al-Kswani, p. 8, 2001).

When the national saving does not change, the real interest rates do not tend to rise in a closed economy to maintain a balance between desired national savings and investment demand. Thus, there is no impact on private investment, and there is no burden of public debt because of rational of consumers and farsighted for the future. In addition, the same in an open economy, there is no impact on the current account as long as the private savings will raise more and more, which meets the need to borrow from abroad. However, the Ricardian Equivalence Hypothesis implies that the budget deficit does not cause the current account deficit.

However, the looking closely to reality for economical and political situation of developing countries, including Arab counties, it make unlikely to achieve such hypothesis at the level of the Arab countries for the following reasons:

1. It is often the time dimension of planning in the public sector is longer than in the private sector, both in borrowing or spending.
2. Due to the poverty situation prevailing in most developing countries and many of its citizens, characterized by high marginal propensity to consume, so the lower taxes are likely to lead to increased consumption
3. Difficulties for individuals to borrowing depending on the income in the future, and variation of interest rates because of imperfect and undeveloped of the capital markets in developing countries
4. The case of the uncertainty of income and taxes in the future one of the important criticism faced Ricardian equivalence hypothesis, especially at the level of developing countries because of lack of political stability and confusion of economic policies.

2.5 Summary:

The above literature review shows different approaches adopted to treat the deficit in both public budget and current account, but it should note that approaches can be fit for all economies, and cannot used for the certain economy for any time. Therefore, the proper solution should take in consideration every single detail for the economy. Thus, the prescription of economic adjustment programs for many countries (especially developing countries) adopted by the International Monetary Fund despite of its monetary theoretical base, but it includes a combination of procedures and structural monetary and fiscal policies aimed at reducing aggregate demand. The reducing in aggregate demand can lead to negative economical and social impacts on the economy. Therefore, the prescriptions offered to solve the chronic deficit in public budget and current account should take in consideration the real need of the country, taking into account the social and economic aspects.

Chapter Three

Public Budget in the Palestinian Territories

3.1 Introduction:

The study of Palestinian economy considered one of the difficult studies, where the modern specialized references dealing with this topic (in the West Bank and the Gaza Strip) are almost very rare. Moreover, the economy of Gaza Strip and West Bank considered as emerging economies, which, face different obstacles and challenges, where there is deterioration in economic conditions such as the rapid increasing of unemployment rates, widespread of poverty, the small size of the market, and the destruction of Palestinian infrastructure by the policy of Israeli occupation. In addition to the siege imposed on the export of Palestinian products, making the Palestinian market to be consumer market for Israeli products, therefore, all of those conditions and policies have a strong impact in reducing the ability of private sector to carrying out his pioneering role in the economic (Naqeeb, p.1, 2003).

The Palestinian economy was not subject to evolution, since the British Mandate (1917), and till the establishment of the PNA to any national policy oriented its path and determine growth rates according to the objectives of national economic. Once the PNA coming in 1994, it has worked to manage all affairs of the Palestinian people and Palestinian economy. However, with the absence of control of economic policy such as trade, monetary, and fiscal policies, spread of corruption, failure of the implementation of the Oslo agreements, the continuation of the Israeli aggression (Al-Zaytouna Center for Studies and Consultations, p.2, 2006). Moreover, the division between the West Bank and the Gaza Strip has led to the deterioration of the Palestinian economy dramatically.

3.2 Overview of Palestinian Economics Performance:

Palestinian territories faced significant development during the first period of the transitional phase that extended from the second half of 1994 until the first half of 1996. Then the economic situation began deteriorating as result of the unstable political situation, this deterioration continued until the second phase extended until the end of 1998, which face significant economic decline because of the frequent closures and declining international aids, resulting in reducing per capita GNP. Some studies have estimated the value of the direct economic losses and indirect caused by closures during the transitional phase at about 2,800 million U.S dollars during the years 1993-1996. In 1999, the economic reports have indicated that most of the macroeconomic indicators reflected a significant improvement in this year compared with year 1998 (Al-Zaytouna Center for Studies and Consultations, p.2, 2006)

The years 2001 and 2002, faced a significant decline in economic activity, because of Israeli practices, which accompanied the AL-AQSA INTIFADA, which culminated in the reoccupation of the West Bank and Gaza. The economic situation stopped declining at the end of 2003 until 2005, recorded high growth rates, and it expected to continue that growth until the economic activity recovers, which it had in 1999. but what, after happened is that the year 2006 faced a sharp decline, due to the stopped of Israel to transfer the PNA dues from tax revenue (clearance taxes), which lead to denial of public sector employees from receiving their monthly salaries for several months. In addition to the international boycott that prevented banks from transferring the Arab and international aids to the Palestinian Ministry of Finance (PMF) (MAS, Economic and Social Monitor, Volume 8, p.2, 2007). The economic recovery continued in the West Bank and Gaza (WBG) in 2010, with real GDP growth estimated at 9 percent in 2010. However, the recovery cannot sustain without a further continuing of Gaza's siege and of restrictions on movement and access in the West Bank (Kanaan, and others, P.3, 2011).

Real GDP growth in the West Bank and Gaza projected to decline to 5 percent in the first of 2013, far below recent growth rates, with a continuing downward trend in subsequent years. Underlying this outlook is the economic impact of virtually unchanged controls on internal movement in the West Bank, the persistence of obstacles to export and import in the West Bank and the virtual closure of Gaza, and, to a lesser extent, fiscal retrenchment. While the WBG's global economic linkages are limited by the Israeli trade restrictions, the regional downturn and rise in political turmoil further dampens the economic outlook (IMF, p.3, 2013)[22].

[22] International Monetary Fund "IMF", Recent Experience and Prospects of the Economy of the West Bank and Gaza: Staff Report Prepared For the Meeting of the Ad Hoc Liaison Committee.

3.2.1 Palestinian Economic Indicators:

There is a group of indicators by which to determine the performance of the Palestinian economy, such as the size of the gross domestic product, per capita gross domestic product, unemployment, public debt, etc. Table (3.1) shows some of those indicators.

Table (3.1): Growth of some economic indicators for Palestinian Territories (1996-2012)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012#
Nominal GDP (million U.S $)* **	3365.5	3701.6	3944.3	4178.5	4194.7	3897.2	3432.6	3840.9	4198.4	4634.4	4619.1	5182.4	6247.3	6719.6	8330.6	8768.6	9207.1
Real GDP (million U.S $)*	3286	3701.6	4147.9	4534.9	4146.7	3810.8	3301.4	3800.5	4198.4	4559.5	4322.3	4554.1	4878.3	5239.3	5754.3	6,421.4	6742.5
Growth Rate of GDP %		12.6	12.1	9.3	-8.6	-8.1	-13.4	15.1	10.5	8.6	-5.2	5.4	7.1	7.4	9.8	11.6	5.0
Real GDP per Capita (U.S $)**	1350.6	1454.2	1577.1	1648.8	1460.1	1303.5	1097.2	1227.3	1317.0	1387.2	1275.4	1303.2	1356.3	1415.2	1502.1	1636.2	1717
Growth Rate of GDP per Capita %		7.7	8.5	4.5	-11.4	-10.7	-15.8	11.9	7.3	5.3	-8.1	2.2	4.1	4.3	6.1	8.9	4.9
Unemployment rate %***	23.8	20.3	14.4	11.8	14.1	25.2	31.3	25.6	26.8	23.5	23.6	21.5	26	24.5	23.73	20.9	24.3
Public Debt (million U.S $)***	-	-	-	391.5	863	872.6	749.1	849.7	1002.2	1196.9	1092	1451.4	1557.4	1736.3	1887.4	2212.9	2203.2
Public Debt/Nominal GDP (%)	-	-	-	9.4	20.6	22.4	21.8	22.1	23.9	25.8	23.6	28.0	24.9	25.8	22.7	25.2	23.9

Source: Collected data from following sources:

- * Palestinian Central Bureau of Statistics, Major National Accounts Variables for the Years 1994-2011 at Constant Prices: 2004 is the Base Year http://www.pcbs.gov.ps/Portals/_Rainbow/Documents/MajorConstantE1994-2011.htm
- ** Palestinian Central Bureau of Statistics, Per Capita Indicators for the Years 1994-2011 at Constant Prices: 2004 is the Base Year. http://www.pcbs.gov.ps/Portals/_Rainbow/Documents/PercapitConstantE1994-2011.htm
- *** Palestinian Monetary Authority (2012), Table (1), the Main Indictors of Palestinian Economy.
- # All data for 2012 was from Palestine Economic Policy Research Institute (MAS), 2013, "Economic and Social Monitor, Volume 31, p.11, & 22.

3.2.1.1 Palestinian Gross Domestic Production (GDP):

The Gross Domestic Product (GDP) consider one of the most important indicators of economic growth[23], which reflects the nature and progress productive activity in

[23] Growth means that the steady increase in gross domestic product or national income. But the development mean a comprehensive transform in the economic structure of society raises the standard of living of the individual, and devotes the process of production, distribution and preservation of the environment, and works

the year when compared to previous years, and then judge the economic performance this year, and the extent of progress or decline, in addition to know how much to achieve economic goals.

The Palestinian economy has achieved growth rates during the period 1994-1999, as the growth rate of real GDP was 11.3% per year during the years 1996-1999. This period was came after the Oslo Agreement, and the arrival of the Palestinian National Authority, and seemed economy heading towards more sustainable growth in mid of 1999. And that positive outlook continued until September 2000, the economic performance during 2000 faced a turning point in the Palestinian territories, it has seen the beginning of the AL-AQSA INTIFADA, and the expansion of the Israeli policy of closure. It is noticeable through the table (3.1), the GDP in 2000 decreased by 8.6% compared with 1999, and output has continued to retreat in the subsequent year (2001), for up to 3301.4 million U.S. dollars (Al-Zaytouna Center for Studies and Consultations, p.2, 2005).

The economic indicators pointed to continued deterioration in the Palestinian economy through years 2003, and 2004. Where GDP in the rest of the West Bank and Gaza Strip in 2002 were 3301 million U.S. dollars, equivalent to a 27.1% decline compared with the year 1999. In 2003, the financial reform came as a result of pressure from donor countries, which led to a rise in GDP of up to 4559.9 million financial reform (approximately the same output for the year 1999) (MAS, Round Table Discussion (2), p. 10, 2012).

By the year 2006, and the success of HAMAS in parliamentary elections, the outside international world imposes a strong economic siege on the Palestinian territories. This led to a decline in most indicators of the Palestinian economy. It noted through the data in the table (3.1), the GDP achieved a rise between 2007 and 2012, at a rate of 7.7% per year. GDP reached in 2012 to 6.7425 million U.S dollars at constant prices. and the biggest part of it was for the West Bank, about 74.2% of GDP in the Palestinian Territories in 2011, while the 25.8% of the Gaza Strip for the same year[24], and due to the great disparity in the numbers of the population, the size of the workforce, land area, natural resources, and political situations ….etc (Saleh, p.335, 2011)[25]

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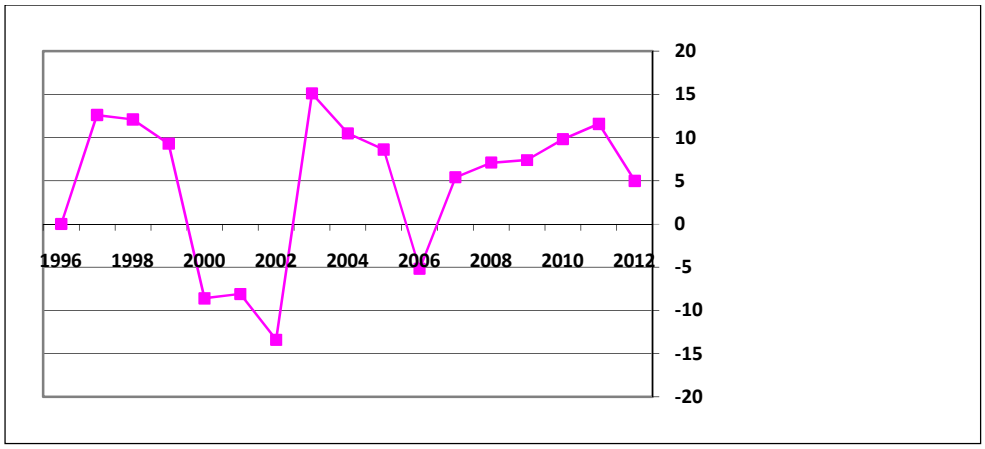
to reduce disparities between the classes of society, and securing a sufficient income, and health care and education for every citizen (Nakeep, p.2, 2003).

[24] Palestinian Central Bureau of Statistics, Major National Accounts Variables for the Years 1994-2011 at Constant Prices: 2004 is the Base Year
http://www.pcbs.gov.ps/Portals/_Rainbow/Documents/MajorConstantE1994-2011.htm

[25] The Palestinian Strategic Report 2010, Al-Zaytouna Center for Studies and Consultations, Beirut, Lebanon (2011).

Figure (3.1): Growth of the GDP for PNA (1996-2012)



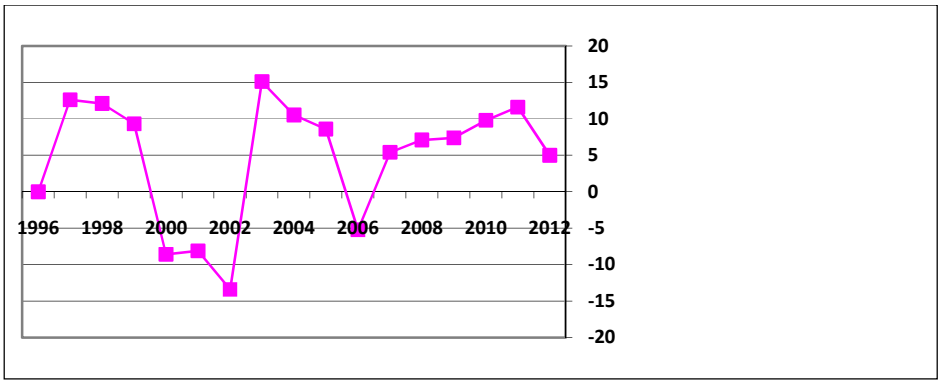
Source: Designed by researcher depending on data of table 3.1. (Page 72)

3.2.1.2 Palestinian GDP per capita:

The measure of GDP per capita is one of the most indicators used widespread, which reflect the average per capita output or GDP, because of ease to account and use, and the possibility of comparing it with local and international level. Nevertheless, it does not reflect the realty of distribution of income among citizens, and then it just guiding indicator (Saleh, p.338, 2011).

The analysis of the data in the table (3.1) shows; the rate of growth of GDP per capita continued to decreasing grows from 1996 until 1999.Then it followed by AL-AQSA INTIFADA. Moreover, because of frequent Israeli closures and reduced the amount of aids and external support, the GDP per capita declined from the year 1999 to the year 2000 by 11.4%. The lowest GDP per capita was in 2002 (1097.2 U.S. dollars per year), then it followed by declining growth from year 2003 to 2005, and it was in a period of financial reform of institutions for the PNA. This was as result of pressure of donor countries and international institutions, but in the year 2006 (HAMAS success in parliamentary elections), the GDP per capita was significantly reduces compared with previous year, and this was because of the sanctions of the outside communities to the government of Palestinian Territories. But in the year 2007 (the year the division, between Gaza government led by HAMAS and West Bank government in Ramallah), the PNA returned to pay salaries to employees regularly, which led to increasing GDP per capita, due to the increasing of GDP. Then the growth of GDP per capita was increasing from the year 2007 until 2011, and reach to around 1717 U.S. dollars per year in 2012.

Figure (3.2): Growth of the GDP per capita for PNA (1996-2012)



Source: Designed by researcher depending on data of table 3.1. (Page 72)

3.2.1.3 Unemployment:

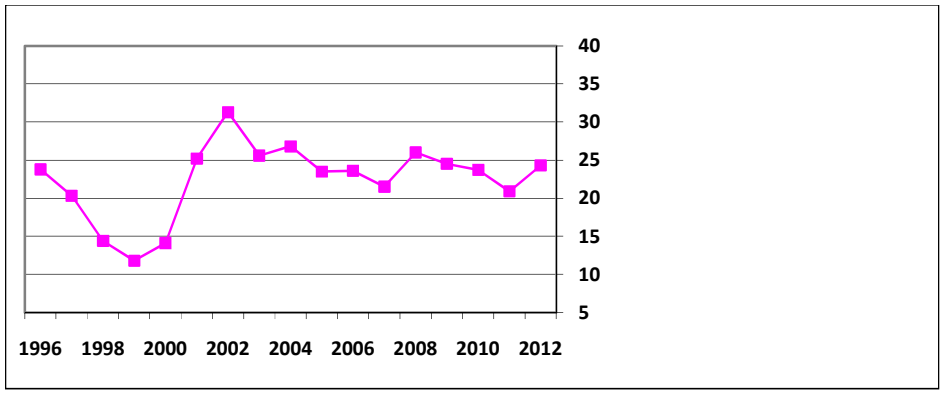
Rising of the unemployment rate in Palestinian Territories has negative impact on public budget. Increasing the unemployment rate decreases the public revenues from taxes and other revenues such as customs. This also increases the transfer payment paid by the government to decrease the sharp rising of unemployment.

Unemployment in Gaza rose from 30.3% in 2005 to almost 35% in 2006, while unemployment in the West Bank fell slightly from 20.3 to 18.6% over the same period. The overall unemployment rate increased from 21.6% in 2007 to 26.0% in 2008, moreover, the human development report 2009/2010 which published by United Nation Development Program (UNDP) showed a sharp increase from 29.7% to 40.6% in the Gaza Strip and a rise from 17.7% to 19.0% in the West Bank (UNDP, p.36, 2010). Then the unemployment rate decreased from 24.5% in 2009 to 23.7% in 2010 in Palestinian territories (It decreased from 38.6% to 37.8% in Gaza Strip and from 17.8 .to 17.2% in the West Bank) (PCBC, Palestine in Figures 2011, P.19, 2011).

The unemployment has increased from 20.9% in 2011 to 24.3% in 2012. The unemployment increased to 18% in the fourth quarter of 2012 from 17% in 2010 and 2011 at West Bank, but in Gaza, it increased to 32% in the fourth quarter of 2012, from 30% in 2010 and 2011 (IMF, p.7, 2013).[26]

[26] International Monetary Fund "IMF", Recent Experience and Prospects of the Economy of the West Bank and Gaza: Staff Report Prepared For the Meeting of the Ad Hoc Liaison Committee

Figure (3.3): Unemployment rates for PNA (1996-2012)



Source: Designed by researcher depending on data of table 3.1. (Page 72)

3.2.1.4 Public Dept:

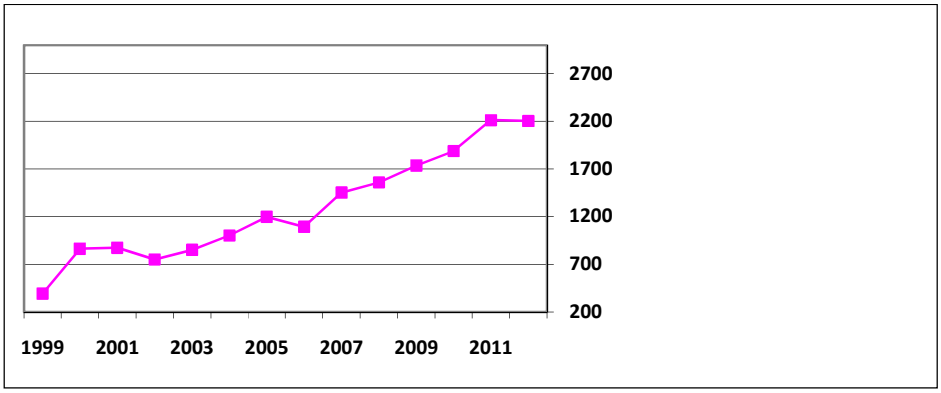
Public debt is defined that the outstanding balance (unpaid) for direct government obligations and indirect, and the impact of the government to pay them to cover its obligations. Moreover, debts classified in terms of maturity date into four types: First short-term payable within one year, the second medium-term payable in 3-2 years, the third a long-term period for entitlement to thirty years, and the fourth debt type have no maturity period, and the government remains committed to pay interest forever. In addition, the debts can classify by sources to internal and external. Internal debt is consequent on the government to pay for individuals, companies and institutions in local currency. The external debt is consequent on the government to foreign individuals, institutions, companies, and governments are paying dues in foreign currencies. Debt can also be divided in terms of the interest thereof, to external debts are offered by governments or international institutions, interest rates are set on a commercial basis, and its donors requests providing guarantees of the debtor countries. There is also a supportive external debt; these debts do not require a lot of guarantees, and nominal interest rates. Some countries or international institutions in most cases, provide second types of loans within certain goals and conditions (MAS, Monetary Review, p.1, 2005)

So far, despite the significant growth in the size of Palestinian public debt starting from AL-AQSA INTIFADA (2000-2002) and until the year 2012, Palestinian public debt did not exceed the red lines adopted by most countries. Since the PNA came in 1994 and until the end of the year 1999, the external public debt remained within the limits of 391.5 million U.S. dollars. During this period, remained PNA relies on spending from its own resources, and what the donors offer for financial support, especially in the fields of infrastructure, and capacity building of

Palestinian institutions. Because of the destructive policies pursued by the Israeli occupation during period (2000-2012), PNA resorted to external and internal borrowing to increase the Palestinian budget revenues, to meet contingent liabilities, in order to mitigate the effects of these policies (MAS, Monetary Review, p.7, 2005).

Analysis of public debt in the table (3.1) shows that public debt doubled from 391.5 million U.S. dollars in 1999, to 862.97 million U.S dollars in the year 2000 (the beginning of AL-AQSA INTIFADA). Moreover, the public debt remains raises until the year 2010, to 2212.9 million U.S. dollars. An average annual increase 9.7% for the period from 2000-2011, but it began to decline in the third quarter of 2012, compared to the second quarter (from 2,339.4 million U.S. dollars in the second quarter in 2012, to 2,203.3 million U.S. dollars at the end of the third quarter, a rate of decline of 5.8%) (MAS, Economic and Social Monitor, Volume 31, p.22, 2013)

Figure (3.4): Growth of the Public Debt for PNA (1999-2012)



Sesource: Designed by researcher depending on data of table 3.1. (Page 72)

3.2.2 Closures, Division, and Economic Restrictions:

The policy of the Israeli **closure** is not new, as used by Israel since the occupation of the Palestinian territories in 1967. Moreover, it has been intensified closure policy gradually in the late eighties and early nineties at the beginning of first intifada. Then the Palestinian economy has passed since September 2000 a real crisis as result to closure. In addition to the extensive destruction to various felids of economic and social community, this led to declining rates of growth and employment in the Palestinian economy. This decline represented in output, trade, and high unemployment rates, which led to increasing rates of poverty (Khafaja, p. 65, 2013).

The Palestinian economy was passed through a difficult period and very critical from 2007 to 2012. This period was through Palestinian political **division**. These consequences came as a direct result of several factors. First factor was in success of Hamas in parliamentary elections in January2006. Secondly was the division between Gaza and West Bank in middle of 2007. Finally the Israel was imposed a severe economic siege in the Gaza Strip, since that date (June 2007), and has been through two Israeli wars launched on Gaza, first in December 2008-January 2009 (22 days), and the second after almost four years at November 2012 (8 days). Those wars led to severe losses in human and all other life aspects. Therefore, political division had more impact that is negative in Gaza Strip than in West Bank.

The economic situation goes in Gaza and the West Bank in two contradictory ways, and this is reflected in the great changes that have taken place in the economic structure of the two Palestinian areas, and in the way in which manage the economic, and in the economic and social effects resulting from these transformations. Generally it can said, that the main aspects of the difference between the West Bank and the Gaza Strip lies in three key areas. first, the way in which the economic can be managed in the two areas, secondly, the type and nature of the prevailing economic activity, sources of income generation and work opportunities, thirdly, how unequal which affected the economy of two areas during that period, as reflected in the data and statistics. Moreover, the siege imposed on the Gaza Strip had large negative economic effects. According to international statistics, the 88% of Gaza's population has become very dependent on food aid provided by international organizations (Samhoury, p.6, 2011).

As unemployment rose to more than 40%, were also the productive sectors of the private sector in the Gaza Strip affected by a major negative, due to closure of the crossings for commercial movement of imports and exports, therefore the stop of exports led to close more than 90% of private sector enterprises in Gaza. On the other side, the economic development in the West Bank affected in three main factors. First, the unprecedented financial and technical support submitted to the government which led by Dr. Salam Fayyad. Second factor is the focus of the Palestinian government on financial reform, and building public institutions in preparation for Palestinian statehood. Third is partial easing of Israeli restrictions on freedom of movement for individuals and goods in the West Bank. The impact of these factors on the economic situation was positive, where the economic growth rates reach to 6% in 2008, 6.3% in 2009, and 10.4% in 2011, but it fell to 5% at the end of 2012 (Samhoury, p.8-16, 2011)

Because of Israel economic and financial siege and closing the crossings, the Palestinian investment sector (especially in Gaza) has suffered; a setback resulted in many negative effects, including (Palestinian Centre for Human Rights, p. 21-22, 2007):

- Domestic capitals escaped to neighboring countries to search for stable political and economic environment.
- Escape many of the foreign companies operating in the area of investment in Palestine.
- Cancelling of Palestinian, Arab, and foreign investment, was under final preparation.
- Stop work to expand the industrial free zones and many of the investment projects.

3.3 Palestinian Public Budget:

Fiscal policy plays an important role in determining the economic developments in any country, and direct role in the government's fiscal position. As noted in economic literatures to the close link between the role of the country in economic activity and size of the levels of revenues and public expenditures. Therefore, to determine the size of this role of the Government in the Palestinian territories, the researcher will analyze developments that occurred in size and main components of public revenues and expenditures.

3.3.1 Palestinian Public Expenditures:

The government of any society has usual activities to its citizens to cover the services that benefiting greatest portion of the population, these public services are indivisible, which mean, there is no substitute for government to perform this role in the areas of its regular activities (Hyman, p.4, 2011).

The success of government in achieving its economic function depends on how to collect public revenues sufficiently, without exhausts of citizens. The government may have in certain cases to borrowing from domestic or international financial institutions, or resort to more monetary issuance of the national currency. However, those policies may have negative effect and risks on inflation, and those risks vary according to the degree of exceeded those standards. The Palestinian economy have very special situation, because it did not allow for the PNA to issue national currency until now, so it increase the dependence on the Israeli economy, and then they are deprived of the benefit of the proceeds received by any country when the central bank issuance currency of the national currency. Many efforts performed through the preparation to convert the Palestinian Monetary Authority (PMA) to the national central bank, with full powers, including the issuance of the national currency as one of the options that wanted (PMA, Annual Report 2009, p.3, 2010)

In this situation, the donor countries committed since the signing of the agreement of principles in Oslo in 1993 to provide financial support to the establishment of a Palestinian state and bear all the financial responsibilities. Knowing this support referred to being assigned years ago to cover the deficit in the public budget. Therefore, the support of donor countries has become a prominent feature of the Palestinian financial situation (Saleh, p.345, 2011)

3.3.1.1 Public Expenditures Growth:

The government resort to public spending, as a main fiscal tool to achieve multiple objectives of the community, to satisfy the needs of public, and represents all that the government spends on goods, services, and transfer payments that do not take against which goods and services in the same period spent by the Government. Spending reflects the degree of the development of the government, and the size of its role in the economic activity and effectiveness in the management of the national economy (Wady, p.93, 2000).

Many studies in the development on the Arab and foreign countries clarify to the growing role of government in economic activity. The major expansion of government spending is to meet the demands of economic and social development. This also shows in government expenditures in the Palestinian territories, where following table (3.2) shows the size of the increasing of government spending in current values during the period (1996-2012).

Table (3.2): Growth of Public Sector of Palestinian Territories (1996-2012)[27]

Annual Growth Rates	Indicator %
Annual growth rate of nominal Public expenditures	12.26
Annual growth rate of consumer price index (2004 base	4.6
Annual growth rate of population	2.96
Real growth rate of Public expenditures	6.9
Real growth rate of Public expenditures per capita	4.21
Nominal GDP growth rate	7.47
Nominal growth of GDP per capita	3.88
Real GDP growth rate	5.18
Real growth of GDP per capita	1.65

Source: The researcher's works depend on data of table 3.1 (Page 72)

The above table (3.2) shows the nominal annual growth rate in public expenditures in Palestinian Territories is increasing by 12.26%. But actually when take in consideration the annual growth rate of consumer price index (CPI), which reach to 4.6% per year, we find that real annual growth rate in public expenditures approximately 6.9%. In addition when take annual growth rate of population in

[27] The values in table (4.1) was calculated by calculating the average of annual growth for these indicators, and the annual growth from year to year calculated by using the formula {100*(previous year-current year)/previous year}.

consideration, the real growth rate of public expenditures per capita 4.31%, will be lower than the real annual growth rate in public expenditures.

Table (3.3): Public Expenditures in Palestinian Territories (1995-2012)

	Year					
Public expenditures (Million U.S Dollars)	**1995***	**1996***	**1997***	**1998***	**1999***	**2000***
	635.1	927.59	1185.2	1212.7	1194.3	1668
	2001*	**2002***	**2003****	**2004****	**2005****	**2006****
	1435	1246	1635	1528	2281	1707
	2007***	**2008*****	**2009*****	**2010*****	**2011*****	**2012#**
	2877	3463	3106	3258.3	3245.1	3,258.1

Source: Collected data from following reports:

- * PMA, Department of Research & Monetary Policy, "Seventh Annual Reports 2002", p. 5, 2003.
- ** PMA, Department of Research & Monetary Policy, "Eleventh Annual Reports 2006", p. 6, 2007.
- *** PMA, "Revenues, Expenditures and Financing Sources of PNA Fiscal Operations (Cash Basis)", 2012
- # Palestine Economic Policy Research Institute –MAS, "Economic and Social Monitor, Volume 32", p. 24, 2013

The available data of the Palestinian budget shows the fluctuating of public expenditures between growth and decline during periods of political experienced by the Palestinian territories. The data show a significant high rate of growth in public expenditure during the years (1994-2000), and that period was called the establishment phase, where expenditure growth rate was in that period (16.73%) per year.

The PNA was successful in that period to control spending and the deficit, but the political situation (AL-AQSA INTIFADA) in the period (2000-2002), the Palestinian territories passed harsh conditions and economic siege, where government spending fell during that period to more than (13.7%) per year compared with previous period. Then, it followed by the period (2003-2005) which called financial reform period, because of financial, political crisis, and, the pressure from donor countries. The most important features of the reform are the establishment of the consolidated account. Moreover, classify the PNA wealth and reduce its activity in investment, as well as make limit for public employment, also the return of clearance funds helped in reforming. In addition, the promises of donor countries providing aid (including aid to support spending developmental), and the continuous increase in spending lead to the high proportion of public spending to GDP in 2005 to 49% (double the percentage in 1999). Immediately after that period (after the success of Hamas in parliamentary elections in early 2006), the clearing transfers was disrupted, tax collection fell, and the local banks

reduced their exposure to government debt (Fear of sanctions and legal prosecution abroad) during the period (2006 - 2007). To meet this strict constraint on liquidity, the government then reduced its spending, and the government employees get only about 40% of their salaries (in average), and was also reduced spending on non-wage (MAS, p.8-10, 2012)[28].

During the period (2008-2012), public expenditures of the PNA increased year after year. However, this increasing was slightly, despite the increase in revenue by 18%, and due in low external current budgetary support from 1.76 billion U.S dollars in 2008 to 814.3 million U.S dollars in 2011 (from 62.3% to 29% of current expenditure). This reflected the decline in the budget deficit before grants (from 1683 million dollars in 2008 to 1068.21 billion in 2011, this mean a decrease of 36.5% (PMA, p.2, 2012)[29].

Adolph Wagner[30] showed that there a positive relationship between public spending and economic growth. Where economic growth achieved in a given country, this achieved will lead to expansion in public government activities, and this called Wagner's law. Therefore, the indicator used in measurement is that the increase of government spending will increase the aggregate output, because of growth of real income per capita. In addition, Wagner explained that development in government spending and the growth of the public sector in the long term as a natural result of urbanization and economic development that has accompanied an increase in the number of population and the complexity of the requirements of life, and both require increased government activity. Also economic growth means at the same time there is a greater division in the work, increase of large enterprises, and the complexity of the economic relations between individuals, all of which will lead to increased government activity (Halicioglu, p.129-131, 2003).

3.3.1.2 Economical Classification of Public Expenditures:

Government spending classified according to government finance statistics released from the IMF to two types of classifications, economic classification and functional classification. Moreover, according to the first classification the total government spending divided to major components, which are current expenditure, capital expenditure, and net lending. In addition, current expenditure economically classified as wages and salaries, spending on goods and services, interest payments, support and transfer payments (see annex-2, P. 174). The

[28] Palestine Economic Policy Research Institute (MAS) (2012), "Round Table Discussion (2): The Palestinian National Authority's Budget, 2012".
[29] PMA (2012), "Table (1): The main Indicators of Palestinian Economy", p.2.
[30] Adolf Heinrich Gotthelf Wagner (1835-1917), German political economist

second classification is the functional classification, which divides government spending according to the functions, expending on health, spending on social security and welfare, and spending on housing, etc (see annex-3, P. 175).

3.3.1.3 Main Components of Public Expenditures Growth:

The PNA public spending can classified economically to its major components; those components are current expenditure, capital expenditure, and net lending[31]. The distinction between capital expenditures and current expenditures, that capital expenditure are an extraordinary expenses (non-periodic), contribute to increase the production capacity of the country, because it represents a direct production expenses. But the current expenditures, considered as periodic expenses because it continues expenses and necessary for the functioning of the country public utilities, and do not contribute to increase the production capacity or the national wealth of the country, and it represents the consumption expenses and not productive. However, there are conservative about this distinction, because of the interference between many types of current expenditures and capital expenditures.

Current expenditures can be productive indirectly, such as public spending on education and health, which leads to increase human capital. On contrary, there are some unproductive capital expenditures similar to those expenditure does not necessarily entail the creation of new wealth, such as maintenance expenses in public, they are characterized by the periodicity and relative stability, also it would not contribute to increase production capacity, but maintained by the rapid depreciation (Al-Fares, p. 56, 1997). Table (3.4); show the public expenditures growth through different political and economical stages undergone by the Palestinian economy (1995-2012).

3.3.1.3.1 Current Expenditures:

Current expenditures refer to expenditures allocated to non-productive activity, including health, education, social security, and the expenses of the government apparatus, and economic management (Shamia, and Al-Khatieb, p. 86, 1997). Table (3.4) shows the current expenditure accounts about 77.1% of public spending in the Palestinian territories during the period (1995-2012). In addition, it shows the increase in the current expenditure of the Palestinian National Authority since 1995 and until 2005, this was during the establishment phase, and the AL-AQSA INTIFADA periods. where the current expenditure was funded from current revenues in the period 1995-1999, but after the events of

[31] Palestinian Ministry of Finance, Department of Public Budget, Draft public budget 2012

AL-AQSA INTIFADA (2000-2002), in spite of a decline in domestic revenue significantly, but the current expenditure was financed by international aids (The international aids financed the current expenditures by 468 million U.S. dollars, compared with 54 million U.S. dollars in 2000). In addition, the period 2003-2005 faced an increase public employment (146 thousand employees by the end of 2005, compared with 98 thousand employees in 1998) (MAS, p.8-10, 2012).

Table (3.4): Percentage of components of Public Expenditures (1995-2012)

Type of Expenditure	1995-1999*	2000-2002*	2003-2005#	2006-2007#	2008-2012#	1995-2012#
Current Expenditures	74.51%	78.31%	78.19%	66.07%	82.75%	77.11%
Capital Expenditures	25.48%	24.01%	12.24%	13.61%	7.77%	16.36%
Net lending	0%	0%	12.96%	20.31%	8.26%	6.53%

Source: Collected data from following reports:

- * PMA, Department of Research & Monetary Policy, "Seventh Annual Reports 2002", p.5, 2003.
- # Palestine Economic Policy Research Institute (MAS) (2012), "Round Table Discussion (2): The Palestinian National Authority's Budget, 2012", p. 19.

The current expenditure fell significantly in the period (2006-2007). This was the period that followed the success of Hamas in parliamentary elections in early 2006, where current expenditures decreased by 12% from the previous period. The public employs only get 40% of their salaries as average and it reduced the non-wage spending significantly (refer to section 3.3.1.1, paragraph.5). However, the current expenditure in the period (2008-2012) faced a larger increase than in any of the previous periods, due to the increase of current revenues, where it increased by 722 million U.S in 2006, to 2498 million U.S in 2012.

The current expenditures include three major components; wages and salaries, operational expenses, and transfer expenses, as mentioned below:

1. Wages and Salaries of PNA:

Wages and salaries mean those expenses paid by government to its employees as result of physical or intellectual efforts (Shamia, and Al-Khatieb, p. 84, 1997).

Table (3.5): The growth of wages and salaries for PNA (1996-2012)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Public Expenditures (million U.S $)	**927.6**	**1185.2**	**1212.7**	**1194.3**	**1668**	**1435**	**1246**	**1635**	**1528**	**2281**	**1707**	**2877**	**3463**	**3106**	**3258.3**	**3245.1**	**3258.1**
Current Expenditures (million U.S $)	709.6	789.9	818.8	927.0	1199.0	1095.0	994.0	1067.0	1371.0	1650.0	1050.0	2032.0	2826.0	2565.0	2719.7	2810.7	3047.1
Wage and Salaries (million U.S $)	**308.3**	**334.0**	**347.3**	**554.3**	**717.0**	**694.2**	**623.2**	**608.2**	**870.6**	**1001.6**	**658.4**	**1369.6**	**1726.7**	**1336.4**	**1544.8**	**1672.4**	**1557.7**
Wage and Salaries/ Current Expenditures (%)	43.5	38.8	41.4	59.8	59.8	63.4	62.7	57.0	63.5	60.7	62.7	67.4	61.1	52.1	56.8	59.5	51.1
Wage and Salaries / Public Expenditures (%)	33.2	28.1	28.6	46.4	43.0	48.4	50.0	37.2	57.0	43.9	38.6	47.6	49.9	43.0	47.4	51.5	47.8

Sources: Collected data from following reports:

- Data for1996-2002 from PMA, Department of Research & Monetary Policy, "Seventh Annual Reports 2002", p.5, 2003
- Data for 2003 up to 2011 from PMA, "Revenues, Expenditures and Financing Sources of PNA Fiscal Operations (Cash Basis)", 2012 http://www.pma.ps/Portals/1/Users/002/02/2/Time%20Series%20Data%20New/Public_Finance/revenues_expenditures_and%20financing_sources_of_pna_fiscal_operations_00-12.xls.
- Data for 2012 from Palestine Economic Policy Research Institute –MAS, "Economic and Social Monitor, Volume 32", p. 24, 2013

The table (3.5) shows the Salaries and wages expenditures; they have the largest share of current expenditure, as a share of current expenditure during the years of the study (1996-2012) approximately 57%, and about 44% of public spending. While in the year 2012, the spending on Salaries and wages was approximately 58.55% of the current expenditure, and 50.2% of public expenditure. This percentage is high when compared to some Arab countries, for example in Jordan the salaries and wages is about 15.78% of the current expenditures, and about 13.7% of public spending during the year 2012[32], while in Egypt the wages and Salaries is about 28.22% from current expenditure, and 25.5% of public spending during the same period[33].

The salaries and wages was about 77.77% of local revenues during the study period, (excluding the period of 2001-2003)[34].

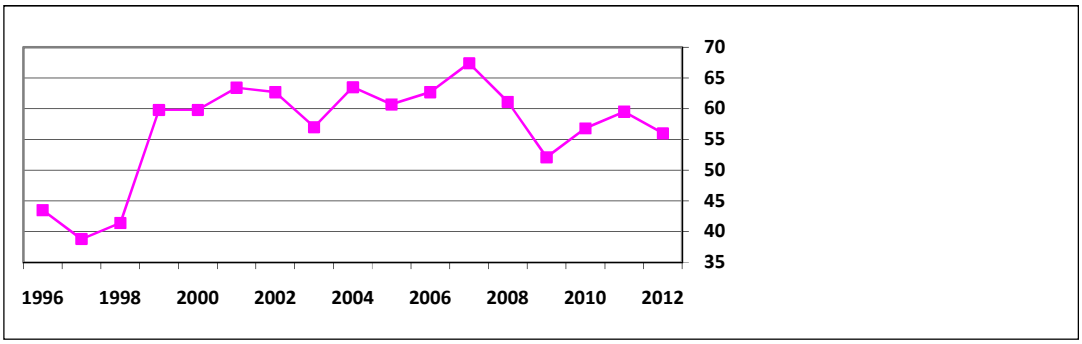
[32] General Government Finance Bulletin (2012), Ministry of Finance of Hashemite Kingdom of Jordan (2013), p. 24.

[33] General Budget: Final Account-Fiscal Year 2011/2012, Ministry of Finance of Arab republic of Egypt (2012), p. 8.

[34] The salaries and wages exceeded the current revenue, and amounted on average during that period 190%, almost double the current revenue, and that was because of the circumstances of AL-AQSA INTIFADA, where revenues dropped significantly, (refer to section 3.3.1.1, p.80).

Data in the table (3.5) shows also that public spending on the item of Wages and Salaries in 1996 amounted to 401.3 million U.S. dollars and this spending has been growing until the year 2005, where total wages and salaries of about 1001 million U.S. dollars, this mean a growth rate of 10.5% annually. This growth is return to that period which was at the beginning of the establishment of several Palestinian public institutions, and the need to public employment in many institutions. In addition, the unemployment rates rose due to unstable political and economic conditions experienced by the Palestinian Authority areas. PNA forced to increase employment in its civil and military in order to reduce the unemployment. Moreover, PNA used employment in the public sector in order to facilitate the return of Palestinian in the broad, especially through employing at the military sector (Othman, p.101, 2004). It is worth to mention that employment in this large way led to burdening the public budget, and this led to criticism from many international institutions, such as the International Monetary Fund, because of economic reasons, where as pay salaries and wages will be at the expenses of infrastructure projects (Hilal, Mousa, And Jounson, p.44, 2003).

Figure (3.5): Ratio of wages and salaries for PNA to Current Expenditures (1996-2012)



Source: Designed by researcher depending on data of table 3.5. (Page 86)

During Al-AQSA INTIFADA (2001-2003), the PNA had increasing spending and public employing to reach up to 124 thousand employees in 2002, due to social pressures and stop the movement of worker in Israel. Then the PNA found itself forced to increase spending, so the expenditures on wages and Salaries in that period was about 62% of current expenditures, and 47.1% of public expenditure, but with the end of the year 2005, the public employment was 146 thousand employees, also the wages bill during this period had two severe increases. One of them at the end of 2003, where PNA was applied the law civil service, so it combined with increases resulting from backlog from year 1998. The other increase was at the end of 2005, where 31 thousands new employees increased the number of employees. This led to increasing of wages bill from 623

million U.S. dollars at the end of 2002 to 1001 million U.S. dollars at the end of 2005. While at the beginning of 2006 after the success of Hamas in the parliamentary elections, the revenues dropped significantly, because of the sanctions imposed (see section 3.3.1.1, paragraph 5), then the government reduced its spending at all levels, and public employees get only about 40 % of their salaries (MAS, Round Table Discussion (2), p.9-10, 2012).

Table (3.6) shows public spending and public employment is very high, as the proportion of current expenditure of the GDP, about 50%, and reaching 170 thousands public employees in the West Bank and Gaza Strip in 2010. Moreover, total wage bill of 1.7 billion dollars annually, or 58% of the total current expenditure in the budget, and this rate is very high, while the ratio of wages and salaries to the current expenditure in Arab world only 38% (MAS, Economic and Social Monitor, Volume 26, p.23, 2011).

Table (3.6): Public Employment and wages in Palestinian Territories

Year	Numbers of Employees (Thousands)	Wages and Salaries (M. U.S $)	Share from Labor Force%	Wages and Salaries/Current spending
Civil Administration[35]	22			
2000	115	678	19%	56%
2006	166	1190	24%	83%
2010	170[36]	1560	22%	58%

Source: Economic and Social Monitor: Volume 26, Palestine Economic Policy Research Institute (MAS), p. 22, (2011)

2. Transfer Expenditures of PNA:

Transfer expenditure means those expenses paid by the government to its citizens free of charge, such as social security, unemployment benefits, social assistance, retirement and compensation (PMA, p. 53, 2008).

Table (3.7) shows the trend of increasing of transfer expenditures since 1996. Where those expenses recorded approximately U.S. $ 92.2 million (13% of current spending), and reached the largest values in the years from 2008-2010. This is a period of heightened Israeli siege on the Palestinian territories, especially in the Gaza Strip. Moreover, this growth attributed to increase transfer expenditures that paid for the unemployed and the poor. The PNA was pay

[35] Civil administration of the Israeli occupation.
[36] The number 170 thousands include the employees of government of Gaza (23 thousands), and 146 thousands of government in Ramallah.

regularity the payment of transfer expenditure allocations (social safety system, and social assistance for needy), which increased with the rise of poverty and unemployment (PMA, p. 30, 2008).

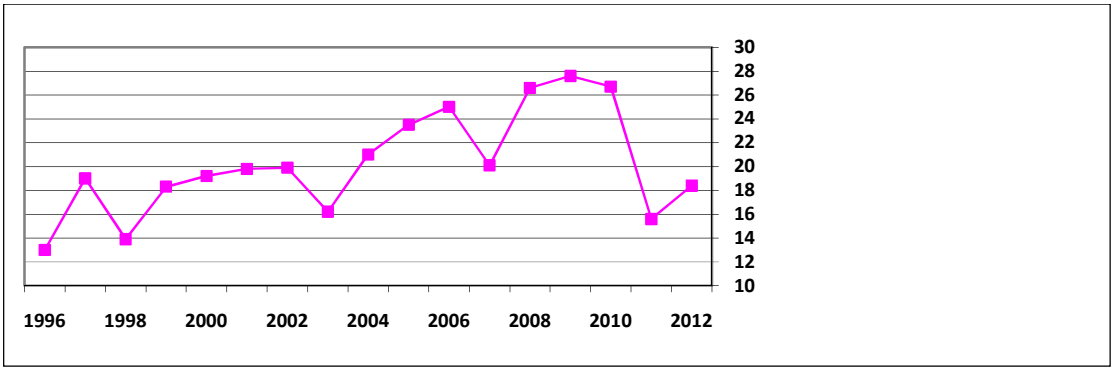
Table (3.7): The growth of transfer expenditures for PNA (1996-2012)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Current Expenditures (million U.S $)	709.6	789.9	818.8	927.0	1199.0	1095.0	994.0	1067.0	1371.0	1650.0	1050.0	2032.0	2826.0	2565.0	2719.7	2810.7	3047.1
Transfer Expenditures (million U.S $)	**92.2**	**164**	**116.7**	**169.6**	**230.2**	**216.8**	**197.8**	**172.9**	**287.9**	**387.8**	**262.5**	**408.4**	**751.7**	**707.9**	**726.2**	**438.5**	**522.6**
Transfer Expenditures / Current Expenditures (%)	13	19	13.9	18.3	19.2	19.8	19.9	16.2	21	23.5	25	20.1	26.6	27.6	26.7	15.6	17.2

Sources: same sources of table 3.5 (page 86)

These ratios exceed the percentages recorded in developing countries, which amounted to 12.6% in 1986-1887 and reasons for increases in the share of transfer expenditures of current expenditures is the sharp rise in unemployment and poverty among Palestinian citizens as a result of the Israeli siege on the Palestinian National Authority areas. This comes in line with what stated in the letter of the general budget of the PNA during different years and objective in dealing with the difficult living conditions of the citizens, especially in the social level and reconstruction (Othman, p.102, 2004).

Figure (3.6): Ratio of transfer expenditures for PNA to Current Expenditures (1996-2012)



Source: Designed by researcher depending on data of table 3.7 (Page 89)

3. Operational Expenditures of PNA:

Operating expenditures are that expenses spend by the state on goods and services required by the administrative units of government to achieve its objectives. It include payments that are spent in travel on official business, and

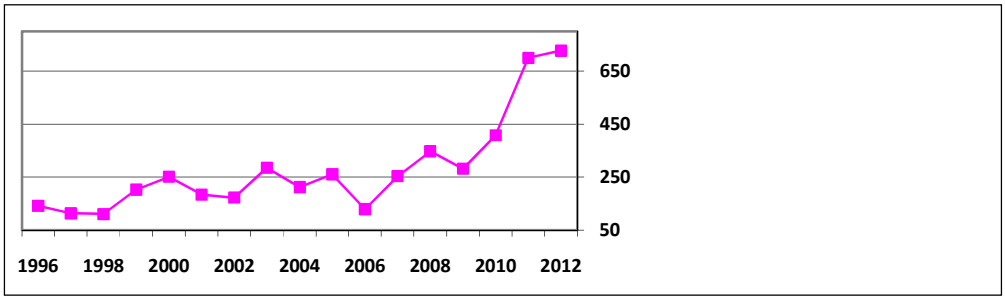
rents, water and electricity charges, expenses of mail and telegraph, telephone expenses, fuel, stationery, publications, office supplies and expenses, repairs and maintenance supplies and materials, consumed supplies for consumer, and transport expenses, etc (Abu-Mustafa, p. 98, 2009).

Table (3.8): The growth of operational expenditures for PNA (1996-2012)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Current Expenditures (million U.S $)	709.6	789.9	818.8	927.0	1199.0	1095.0	994.0	1067.0	1371.0	1650.0	1050.0	2032.0	2826.0	2565.0	2719.7	2810.7	2841.1
Operational Expenditures (million U.S $)	**142.2**	**113.8**	**111.0**	**203.0**	**251.8**	**184.0**	**173.0**	**286.0**	**212.5**	**260.7**	**129.2**	**254.0**	**347.6**	**282.2**	**408.0**	**699.9**	**727.4**
Operational Expenditures / Current Expenditures (%)	20	13.2	13.2	21.9	21	16.8	17.4	26.8	15.5	15.8	12.3	12.5	12.3	11	15	24.9	25.6

- Sources: same sources of table 3.5 (page 86)

Figure (3.7): Growth of operational expenditures for PNA to Current Expenditures (1996-2012)



Source: Designed by researcher depending on data of table 3.8. (Page 90)

Data in Table 3.8 shows the fluctuation of operating expenses since 1996-2012. Regarding to its share of current expenditure remains and it consider relatively low compared to the transfer expenses, or wages and salaries. The reason for that is the height of the components of spending on wages and salaries and transfer expenses during that period, but still those expenses grow on an annual basis, due to prices inflation in the Palestinian territories, and the growth of the public institutions, where the rate of growth of these expenditures annually approximately 18%.

3.3.1.3.2 Capital Expenditures:

The Capital expenditures include public expenditure spent by the government to expand production capacity, such as infrastructure such as roads, transport, energy and water, in addition to non-physical infrastructure include institutional

and legal infrastructure, which is working to create favorable investment climate for private sector work (Draz, and Hejazy, p.12, 1998).

Table (3.9) shows the amount of increasing of capital expenditures, and the high proportion of capital expenditure from public expenditures in the period between 1996 and 1999, compared to the years followed that period and until 2012. Where it began 218 million U.S. dollars in 1996, and rose to 469 million U.S. dollars at the end of 2000. The biggest rise was in 1998, reaching 520 million U.S. dollars and it was of 38% of public expenditure. The reason for this is that period was the beginning of the establishment of the institutions of the Palestinian National Authority, and most of support and grants allocated for the reconstruction and development projects (MAS, Round Table Discussion (2), p.8, 2012)

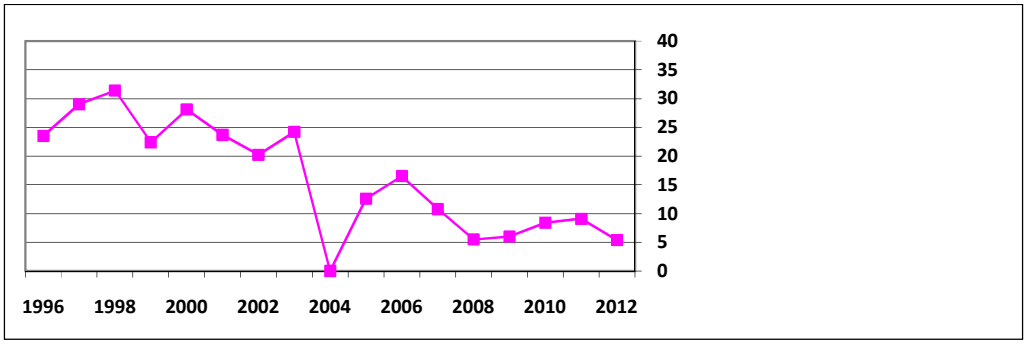
Table (3.9): The growth of operational expenditures for PNA (1996-2012)

	1996	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
Public Expenditures (million U.S $)	927.59	1113.1	1193.5	1194.3	1668.0	1435.0	1246.0	1635.0	1528.0	2281.0	1707.0	2877.0	3463.0	3106.0	3258.3	3245.2	3135.8
Capital Expenditures (million U.S $)	**218**	**323.2**	**374.7**	**267.3**	**469.0**	**340.0**	**252.0**	**395.0**	**0**	**287.0**	**281.0**	**310.0**	**190.0**	**186.0**	**275.1**	**294.5**	**169.3**
Capital Expenditures/ Public Expenditures (%)	23.5	29.04	31.4	22.4	28.1	23.7	20.2	24.2	0	12.6	16.5	10.8	5.5	6.0	8.4	9.1	5.4

Sources: same sources of table 3.5(page 86)

Because of the AL-AQSA INTIFADA in 2000, the size of grants and aids varied in followed years, and the grants was provided to support the public budget and not for capital expenditures. The rate of decline is approximately 4.8% per year during the years from 2000 to 2012, and the lowest value of those expenses was in 2009, reaching nearly 185.9 million U.S dollars. Also, despite of doubling capital expenditures in the year 2010 (275.1 million U.S. dollars) compared on previous year (2009), but it remained lower than the target in the public budget (670 million U.S. dollars). This attributed mainly to the lack of resources of the Palestinian National Authority, in addition to Israeli restrictions on freedom of movement and on imports of raw materials for development projects and the complexities related to import procedures for such materials, and this cause obstruction and cancellation of many development projects (Khafaja, p.88, 2013).

Figure (3.8): Growth of capital expenditures for PNA to Current Expenditures (1996-2012)



Source: Designed by researcher depending on data of table 3.9. (Page 91)

3.3.1.3.3 Net Lending:

Net lending is the money paid by the Palestinian National Authority directly to the electricity company in Gaza, for the payment of benefits arising from the Electricity Distribution Company-Gaza as result with subscribers to pay of electricity bill. in addition to the money paid by the authority indirectly (deducted from PNA dues to Israel) for the benefit of the Israeli national electricity company, and to pay dues arising from the local government bodies in the West Bank (MAS, Economic and Social Monitor, Volume 1, p.20, 2004)

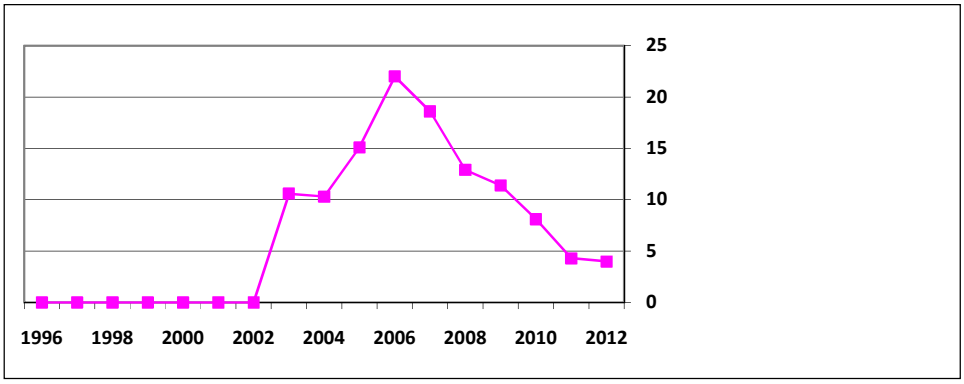
Palestinian National Authority has begun to include this item in the public budget since 2003. Net lending one of the main aspects make more spending pressure on the PNA public budget. Regarding the validity of financial performance, especially the spending on this item beyond what was estimated in the draft public budget of about 131.6%, to reach 344 million U.S dollars in 2005 (15.1% of public spending). Net lending spending continued to rise during the year 2006 to reach the maximum value for net lending spending (about 22% of public spending). It seemed then to fall through the period (2007-2012) by rate of 21.8% annually as a percentage of public spending, to reach in 2012, about 4.4% of public spending. While this item is not an economic policy based deliberate targets, the Palestinian government has worked on reducing its increase, and codified through collection of utility bills by local councils, and the adoption of a number of stimulus policies to encourage these bodies to pay dues (Khafaja, p.87, 2013).

Table (3.10): The growth of net lending for PNA (1996-2012)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Public Expenditures (million U.S $)	927.59	1113.1	1193.5	1194.3	1668.0	1435.0	1246.0	1635.0	1528.0	2281.0	1707.0	2877.0	3463.0	3106.0	3258.3	3245.2	3135.8
Net Lending (million U.S $)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**173.0**	**157.0**	**344.0**	**376.0**	**535.0**	**447.0**	**355.0**	**263.5**	**139.9**	**125.4**
Net Lending/Public Expenditures (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	10.3	15.1	22.0	18.6	12.9	11.4	8.1	4.3	4.0

Sources: same sources of table 3.5 (page 86)

Figure (3.9): Growth of net lending for PNA to Current Expenditures (1996-2012)



Source: Designed by researcher depending on data of table 3.10 (Page 93)

3.3.2 Palestinian Public Revenues:

After the signing of the Declaration of Principles between the Palestinian Liberation Organization (PLO) and Israel, in the year 1994, the PNA concentrated its efforts on taxes and customs duties to collect the public revenues to finance its expenditures. This comes mostly from foreign trade with Israel. This led to loss of the balance between public revenues from local collection and public revenues from taxes and customs duties, which accounted for more than 70% of the total revenues of the Palestinian National Authority (El-Jafari, and Al-Ardah, p. 15, 2002). In the following explanation of the components of Palestinian Authority public revenues, and review its development during the period from 1996 to 2012.

3.3.2.1 Economical Classification of Public Revenues:

Public revenues in the Palestinian budget divided into two types. **First type is called local public revenues (Total Net Revenues)**, and include the collection of tax revenues, which include income tax, profits, customs, and Value Added Tax

(VAT). Part of these revenues[37] are transferred to the Palestinian government according to the Paris Economic Convention in 1994 by Israeli side, which known as clearing revenues (Abed Al-Razzaq, p. 25, 2002). Local revenues also include non-tax revenues, such as the various ministries revenues from stamps, service fees, fines, crossings fees, licenses and other types from fees. **Second type is External revenues** such as, grants, donation, and soft loans (Abu-Mustafa, p. 95, 2009).

3.3.2.2 Public Revenues Growth:

The Analysis of the data in the tables 3.11, and 3.12 show the growth of total public revenues during the study period (1996-2012). The average percentage of growth during this period was 10.3% per year. The largest growth rate of those revenues was for taxes and clearance revenues, where the rate of their growth together 20.1%. While the external support to the budget revenues grew at rate of 14.5% per year, and it is worth to mention that, the current revenues have grown at greater rate during those years than external support to the budget revenues. It has reached an average of 20.1%. Also should note that the total public revenues amounted to 36.9% of GDP (Current Revenues were 21.7% of GDP, while external support to the budget revenues were 15.2% of GDP) during the study period. It is also that current revenues accounted for the largest proportion of total public revenues and has reached 59.5% of total public revenues (tax and clearance revenues accounted about 51.3% of total public revenues), while the external support to the budget revenues were 40.5% of total public revenues. It also shows that the amount of coverage of current revenues for current expenditures during the study period was 74.2%, which were 26.1% coverage of the current expenditures from external support to the budget revenues.

After the signing of the Declaration of Principles, an international conference in 1993, where the donors promised with 2.4 billion U.S dollars to finance the reconstruction program (1994-1999), then it raised later to 3.4 billion U.S dollars. It implicitly understood that these funds would be going for development spending, and PNA will finance gradually the current public budget from domestic resources, and the financing of current expenditure was from current revenues. it is noted also that there was a balance in the current budget during the period from 1996-1999, but there was a surplus in the current budget in year 1998. The PNA was managed to raise income tax, and indirect tax, although significantly bias of PNA to indirect taxes (representing 80% of current revenues, compared to 50% in

[37] Taxes collected on the Palestinians' behalf by Israel and passed on to the PA. These include taxes on goods shipped from Israel to the West Bank and Gaza

the Arab countries, and 30% in Israel, during that period))(MAS, Round Table "2" , p.8, 2012).

The conditions later changed during AL-AQSA INTIFADA (2000-2002). The Israeli siege on the Palestinian Territories, Had largely impact on the Palestinian economy in general, and particularly on current revenues. That is where current revenues had fallen sharply, especially when Israel stop the transferring of Clearance Revenues (Israel transfer only 16% of dues during the years 2001 and 2002), as shown in table (3.11). In addition, there was a significant increase in international aid allocated for current spending. Where the current expenditures support was about 64.8% of the total external support to the budget (Grants and donations) through period (2001-2002), compared with 9.8% during the period (1996-2000).

Table (3.11): The growth Public Revenues for PNA (1996-2012)

		1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
1	**Total Public Revenues and Grants (million U.S $)**	**978.4**	**1087.9**	**1106.5**	**1136.2**	**1449**	**1122**	**987**	**1367**	**1403**	**2006**	**1741**	**2938**	**3757.8**	**2950.4**	**3204**	**3160**	**3270.1**
1.1	**Current Revenues (million U.S $)**	**653.4**	**795.7**	**868.42**	**901.2**	**939**	**273**	**290**	**747**	**1050**	**1370**	**722**	**1616**	**1779.7**	**1548.6**	**1927.7**	**2177**	**2360.7**
1.1.1	Gross Domestic Revenues (million U.S $)	292.8	326.57	324.47	601.95	352	275	223	291	337	476	378	324	759	585.1	744.8	701.6	729.1
1.1.1.1	Tax Revenues	207.18	210	227.63	482.85	241	183	141	167	191	231	221	202	272.8	301.5	474.3	482.3	480.1
1.1.1.2	Non-Tax Revenues	85.62	116.5	96.84	119.1	111	92	82	124	146	245	157	122	486.2	283.6	270.5	219.2	249
1.1.2	Gross Clearance Revenues (million U.S $)	351.25	469.14	543.68	299.25	587	0	72	475	713	894	344	1318	1137	1090	1259.2	1488.9	1687.3
1.1.3	Tax Refund (million U.S $)	0	0	0	0	0	2	5	16	0	0	0	26	116.3	126.5	76.3	13.5	55.7
1.2	**External Support to Budget (Grants and Donations) (million U.S $)**	**325**	**292.2**	**238.1**	**235**	**510**	**849**	**697**	**620**	**353**	**636**	**1019**	**1322**	**1978.1**	**1401.8**	**1277**	**983.3**	**909.4**
1.2.1	Current Expenditures Support (million U.S $)	83.5	33.7	2.3	0	54	531	468	261	353	349	738	1012	1763.1	1355	1146.5	814.3	776.3
1.2.2	Development Support (million U.S $)	241.5	258.5	235.8	235	456	318	229	359	0	287	281	310	215	46.8	130.5	169	133.1

Sources: same sources of table 3.5 (page 86)

Notes:

- Total Public Revenues = Current Revenues + External Support to the Budget.
- Current revenues = Gross Domestic revenues + Gross Clearance revenues – Tax Refund
- Gross Domestic revenues = Tax Revenues + Non-Tax Revenues.
- External Support to the Budget = Current Expenditures Support + Development Support.

Table (3.12): Economic Indicators for Public Revenues in PNA (1996-2012)

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Average
Total Public Revenues /Nominal GDP (%)	29.1	29.4	28.1	27.2	34.5	28.8	28.8	35.6	33.4	43.3	37.7	56.7	60.2	43.9	38.5	36.0	35.5	**36.9**
Current Revenues/Nominal GDP (%)	19.4	21.5	22.0	21.6	22.4	7.0	8.4	19.4	25.0	29.6	15.6	31.2	28.5	23.0	23.1	24.8	25.6	**21.7**
External Support to the Budget/Nominal GDP (%)	9.7	7.9	6.0	5.6	12.2	21.8	20.3	16.1	8.4	13.7	22.1	25.5	31.7	20.9	15.3	11.2	9.9	**15.2**
Current Revenues/Total Public Revenues (%)	66.8	73.1	78.5	79.3	64.8	24.3	29.4	54.6	74.8	68.3	41.5	55.0	47.4	52.5	60.2	68.9	72.2	**59.5**
Tax and Gross Clearance revenues/ Total Public Revenues (%)	57.1	62.4	69.7	68.8	57.1	16.3	21.6	47.0	64.4	56.1	32.5	51.7	37.5	47.2	54.1	62.4	66.3	**51.3**
External Support to Budget/Total Public Revenues (%)	33.2	26.9	21.5	20.7	35.2	75.7	70.6	45.4	25.2	31.7	58.5	45.0	52.6	47.5	39.9	31.1	27.8	**40.5**
Current Revenues/ Current Expenditures (%)	92.1	100.7	106.1	97.2	78.3	24.9	29.2	70.0	76.6	83.0	68.8	79.5	63.0	60.4	70.9	77.5	83.1	**74.2**
Growth rate of Total Public Revenues (%)		11.2	1.7	2.7	27.5	-22.6	-12.0	38.5	2.6	43.0	-13.2	68.8	27.9	-21.5	8.6	-1.4	3.5	**10.3**
Growth rate of Current Revenues (%)		21.8	9.1	3.8	4.2	-70.9	6.2	157.6	40.6	30.5	-47.3	123.8	10.1	-13.0	24.5	12.9	8.4	**20.1**
Growth rate of Tax and Gross Clearance revenues (%)		21.6	13.6	1.4	5.9	-77.9	16.4	201.4	40.8	24.4	-49.8	169.0	-7.3	-1.3	24.6	13.7	10.0	**25.4**
Growth rate of External Support to Budget (%)		-10.1	-18.5	-1.3	117.0	66.5	-17.9	-11.0	-43.1	80.2	60.2	29.7	49.6	-29.1	-8.9	-23.0	-7.5	**14.5**

Source: Researcher's calculations depending on data of table 3.11 (Page. 95)

When the financial reform came in June 2002, as result of the pressure of the financial crisis, the first priority for the public budget plan was to repay outstanding debt, and pay part of the debt to local banks because of its impact on the local economy. Moreover, which helped the success of the reform, the start of paying clearance revenues, and pledged donor countries providing aid, where the clearance revenues in 2003 about 475 million U.S. dollars (415 million U.S. dollars to repay the money is outstanding, and 65 million U.S. dollars to re-pay high expensive loans). However, this situation does not continued for long period, where it followed the success of Hamas in the parliamentary elections in 2006, and followed by division between the West Bank and Gaza Strip in the 2007, so Israel stressed siege on the Palestinian Territories, especially Gaza Strip. Israel stopped clearance revenues transfers (it was received only 40% of revenues dues from clearance during the year 2006, it was 344 million U.S. dollars). On other side, the external support to the budget raised in 2006, despite the change in the funding channels. Where the aid allocated to support the current expenditure was about 738 million U.S. dollars (420 million U.S. dollars of aid from Arab countries) more than double the value of aid to support the current expenditures in year 2005 (349 million U.S. dollars).

Total public revenues increased in 2008 to 3758 million U.S. dollars, and it were the highest total public revenues passed on the PNA during the study period (1996-2012), and the external support to budget contributed significantly at increasing the total public revenues. The value allocated to support the current spending in budget was 1978 million U.S. dollars (1763 million U.S. dollars allocated for current expenditure in the budget). Generally, Continuation of the PNA in fiscal consolidation in 2008, and the activation of tax revenue since 2007, led to improve the current revenues (increased from 1616 million U.S. dollars in 2007 to 2295 million U.S. dollars in 2012, or a growth rate of 7.5% per year). and led to a decline in the contribution of external support to budget from 1978 million U.S. dollars in 2008 to 983 million U.S. dollars in 2011 (Saleh, p.347, 2011).

3.3.3 Palestinian Public Budget Deficit:

3.3.3.1 Growth of Palestinian Public Budget deficit (1996-2012):

Palestinian public budget has suffered from the current budget deficit during the study period (1996-2012), and noting the growth of this deficit during those years. Through study, the period from 1996-1999 it noted that, the current deficit began 56.2 million dollars, and increased during the subsequent year (1997) and the deficit reached 66.3 million dollars. But soon that the current budget recorded a surplus in 1998 of 30.4 million dollars, due to the improvement achieved by the

management of public revenue to increase domestic revenues, and clearance revenues from Israel. In addition, one of the reasons that contributed to the reduction of the current deficit refusal of some donor countries allocate any resources to support the current budget, starting from the year 1998 (Abed Al-Razzaq, p. 29, 2002). In terms of the total budget deficit before grants and aid in the same period (1996-1999), it recorded its highest level in 1997, reaching 389.5 million U.S dollars, and then taken to decline until the year 1999 and reached 293.1 million dollars (reduced 14.88% compared with year 1998). It noted also that the total deficit of the budget before grants relatively large compared with the current deficit of the budget, because the authority relied entirely on international aid to finance capital spending, and the capital expenditure is almost represents a total deficit of budget before grants during above-mentioned period (El-Jafari, and Al-Ardah, p. 24, 2002).

AL-AQSA INTIFADA in 2000 had devastating effects began to appear on the Palestinian economy in early 2001, the table (4.13) shows; the reducing of domestic revenues significantly in 2001 and 2002, with rates of 71%, 69%, respectively, compared to 2000. This decline due to stopping of Israel transfer of entitlements of clearance revenues for PNA, and the inability of domestic taxes. In addition to increasing the number of unemployment, which led to lower income tax, and did not stop at this point, but the need to spend on relief programs, support the injured, and the families of the martyrs and victims were increased. All of this had to contribute to the increase the current deficit of the budget of up to 822 and 704 million U.S dollars in 2001 and 2002, respectively, this mean an average increase of 216% and 170.7%, respectively, compared to 2000. The authority has funded this current deficit from grants and aid, so the total deficit of budget before grants and aid was amounted about 29.8% of GDP, and is the highest rate for this indicator during the study period (Abu Zaiter, p. 113, 2012)

In 2003, the beginning of financial reform phase, the current deficit of the budget declined, because of increased domestic revenues. However, the deficit is remained greater than the deficits in the period from 1996 up to 1999, due to expansion in government spending. The decline in the current deficit of the budget continued in reducing in the following year (2004), and then the decline in the current deficit reduction followed by a reduction in total budget deficit before grants and aid, where the last equals with the current deficit (478 million dollars) in the same year. Capital expenditure faced significant lack, this was a result of reducing the external budget support, where this support amounted to 353 million dollars, while in 2003, about 620 million dollars (in 2004 was 43% of 2003).

Table (3.13): Palestinian Public Budget Deficit/Surplus in Cash Basis (1996-2012)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Net Revenues and Grants (million U.S($	978.4	1087.9	1106.5	1136.2	1449	1122	987	1367	1403	2006	1741	2938	3757.8	2950.4	3204	3160	3270.1
Total Net Revenues (Current Revenues) (million $ U.S(	653.4	795.7	868.42	901.2	939	273	290	747	1050	1370	722	1616	1779.7	1548.6	1927.7	2177	2360.7
External Support to Budget (Grants and Donations) (million U.S($	325	292.2	238.1	235	510	849	697	620	353	636	1019	1322	1978.1	1401.8	1277	983.3	909.4
Public Expenditures	927.6	1185.2	1212.7	1194.3	1668	1435	1246	1635	1528	2281	1707	2877	3463	3106	3258.3	3245.1	3135.8
Current Expenditures and Net Lending	709.6	862	838	927	1199	1095	994	1240	1528	1994	1426	2567	3273	2920	2983.2	2950.6	2966.5
Capital Expenditures	218	323.2	374.7	267.3	469	340	252	395	0	287	281	310	190	186	275.1	294.5	169.3
Budget Current Deficit/Surplus	-56.2	-66.3	30.42	-25.8	-260	-822	-704	-493	-478	-624	-704	-951	-1493.3	-1371.4	-1055.5	-773.6	-605.8
Growth of Current Deficit/Surplus (%)		18.0	-145.9	-184.8	907.8	216.2	-14.4	-30.0	-3.0	30.5	12.8	35.1	57.0	-8.2	-23.0	-26.7	-21.7
Total Deficit/Surplus Before grants and aid	-274.2	-389.5	-344.3	-293.1	-729.0	-1162.0	-956.0	-888.0	-478.0	-911.0	-985.0	-1261.0	-1683.3	-1557.4	-1330.6	-1068.1	-775.1
Growth of Total Deficit/Surplus Before grants and aid (%)		42.0	-11.6	-14.9	148.7	59.4	-17.7	-7.1	-46.2	90.6	8.1	28.0	33.5	-7.5	-14.6	-19.7	-27.4
Total Deficit/Surplus After grants and aid	50.8	-97.3	-106.2	-58.1	-219.0	-313.0	-259.0	-268.0	-125.0	-275.0	34.0	61.0	294.8	-155.6	-54.3	-85.1	134.3
Growth of Total Deficit/Surplus After grants and aid (%)		-291.5	9.1	-45.3	276.9	42.9	-17.3	3.5	-53.4	120.0	-112.4	79.4	383.3	-152.8	-65.1	56.7	-257.8
Total Deficit/Surplus Before grants and aid/Nominal GDP %	8.1	10.5	8.7	7.0	17.4	29.8	27.9	23.1	11.4	19.7	21.3	24.3	26.9	23.2	16.0	12.2	8.4

Source: Researcher's work depending on data of tables 3.1, 3.5, 3.9, 3.10, and 3.11

After the success of HAMAS in the legislative elections in early 2006, Israel stopped paying dues of clearance and also the donor countries stopped to deal with the PNA government, which led to the aggravation of the financial problem, making the total deficit before grants and aid in the year 2007 about 1261 million

dollars. In addition, this is the largest deficit of the budget for the PNA since its arrival in 1994. This deficit was about 24.3% of GDP. The financial siege on the West Bank in that period was cancelled, and the grants and aid increased and the survival of the siege on Gaza Strip. In spite of this improvement, the current expenditure increased by a very large amount, reaching to 2567 million dollars, while in the previous year (2006), the size of current spending was 1426 million dollars, this mean an increasing in 2007 by 80% than in 2006 (MAS, Economic and Social Monitor, Volume 12, p.5, 2008).

However, it is different when talking about the deficit after grants and aid. The deficit has decreased after grants and aid from 275 million dollars in 2005, to 34 and 61 million dollars in 2006 and 2007 respectively. Moreover, attributed to the increase of external support in each of the years 2006 and 2007, from 636 million dollars in 2005, to 1019 million dollars in 2006, i.e. an increase of 60.2% from 2005, and amounted to 1322 million dollars in 2007, i.e. an increase of 107.8% from the 2005. With the beginning of 2008, the developments in both public revenues and expenditures showed the success of the government's attempts to improve achievement potential, increase revenues and exceeded the target in the budget. At the other side the government's attempts failed to control, spending and prevention exceeded the ceilings set in the budget, which caused a rise in the budget deficit, to reach 1493 million dollars, or the equivalent of about 23% of GDP, compared with 18.3% in the past year (2007).

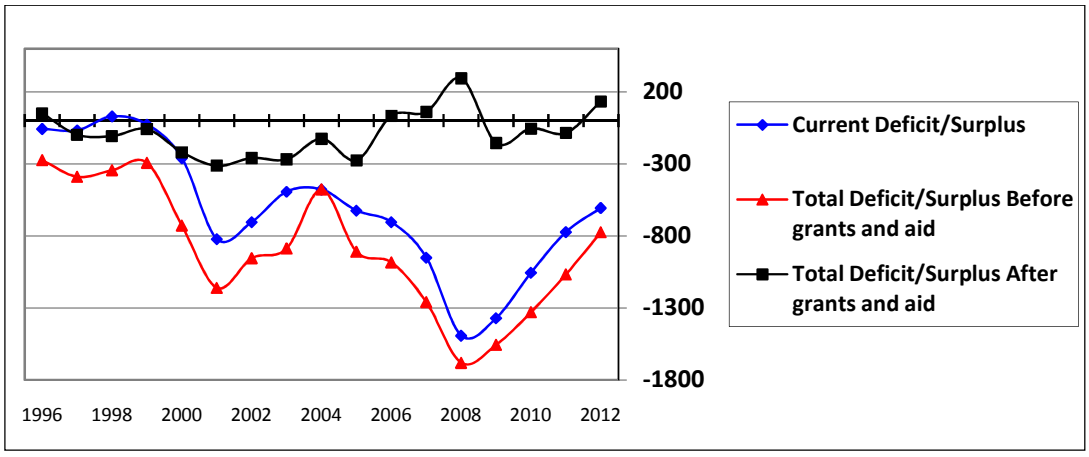
With the generous increase in external support, the government was able to reduce the deficit and turn it into a surplus equivalent to 4.2% of GDP, after total revenues (Domestic and foreign) in 2008 exceeded total expenditure by about 295 million U.S dollars. Used to reduce part of its debt to the banks operating in the Palestinian territories by about 227 million dollars (of which about $ 30 million paid already for the banks, and the amount of 197 million dollars returned as income from the Palestinian Investment Fund to repay the debt of the PNA included under net financing from local banks). Those debts taken in reducing from 483 million dollars in 2006, to 422 million dollars in 2007, then returned to increased to arrive at the end of 2008 to about 534 million dollars (PMA, Annual Report 2008, p. 56-58, 2009).

Regarding the budget of the year 2009, the structural imbalances of revenues remained continued, especially most of this revenue source is the indirect taxes on goods and services at the expense of income and wealth taxes, and more than two-thirds of the revenues depend on the clearance revenues. While expenditures characterized by the large share for current expenditure, due to high wages and salaries bill. The current budget deficit has low percentage of GDP because of a

decline in net lending rather than current expenditures. Moreover, the PNA adopted a plan for recovery and reconstruction of Gaza program[38] (program to support the current budget that plan by allocating 1450 million dollars). Where aggravate the estimated current deficit in 2009 a result of financing the growing emergency needs of Gaza Strip, but in Indeed reached 1.37 billion dollars, as result of the aggression and siege witnessed by the Strip (Saleh, p.350, 2011).

The years 2010-2012 shows a rise in net domestic revenues from 1.54 billion dollars in 2009 to 2.36 billion dollars in the year 2012 (an increase of 15.3% per year). In addition, public spending reduced during that period for minor proportions, and this contributed to reduce the current budget deficit from 1.3714 billion dollars in 2009, to 605.8 million dollars in the year 2012 (reduced by 23.8% annually). In spite of this improvement, foreign aid for supporting budget is still very important in finance current expenditures. Nevertheless, deficit in total budget is still, even after grants and aid; this financial gap has closed by borrowing from local banks and through increased domestic arrears (MAS, Round Table Discussion (2), p. 11, 2012).

Figure (3.10): Growth of Public Budget Deficits for PNA (1996-2012)



Source: Designed by researcher depending on data of table 3.13. (Page 99)

[38] The aggression launched by Israel on the Gaza Strip in December 2008, led to severe losses in people and material, fell thousands of martyrs and wounded, and exceeded the initial estimates of material losses two billion dollars. In order to support the Palestinian economy and the reconstruction of the Gaza Strip, Egypt hosted an international conference in early March 2009, with the participation of 75 countries, under the auspices of Egypt, France, Italy, the United Nations and the League of Arab States. The PNA provided for this conference proposed plan (Plan of the PNA for Early Recovery and Reconstruction of Gaza in 2010), which included programs estimated the cost at about 2.8 billion dollars to early revive of the economy in Gaza Strip in order of priority. Also for the reconstruction of what destroyed during the aggression on Gaza. In addition to a request for financing the budget current deficit in the PNA's budget for 2009, this expected to worsen due to increased commitments for the PNA to provide for the emergency needs of the population in the devastating Gaza Strip (PMA, Annual Report 2008, p. 58, 2009).

3.3.3.2 Analysis of the Palestinian Budget Deficits on Accrual and Cash Basis:

The traditional concept of financial balance can measured according to the Cash basis or Accrual basis. In the first case (cash basis), the fiscal balance is equal to the difference between the spending cash flows of government spending and fiscal revenues for the government through the fiscal year. In the second case (accrual basis), the fiscal balance reflects the income accumulated and spending flows, regardless of whether they include cash payments or not. Therefore, these accrued expenses or revenues will reflected in higher fiscal balances of the government when measured in accordance with the accrual basis compared with cash basis (Jacobs, and Schoeman, p. 6, 2000). The above definition shows that the difference between the calculations of two methods is the time of recording flow[39].

Regarding the Palestinian government finance, Cash basis means the actual expenses paid during the financial year and revenues that actually received during that year, regardless of whether such expenses and revenues refer to the same financial year or previous financial year or later. The Accrual basis means expenditures and revenues that belong to a particular year, regardless of whether they are paid or not. In other words, there are financial commitments on the government during the year, but these commitments not paid or collected cash until end of year, but this means there is an obligation on the government to be paid / collected (MAS, Round Table Discussion (2), p. 12, 2012). The accrual basis reflects the financial situation of the PNA more accurate than the cash basis. When analyzing the deficit before grants and aid in the budget of the PNA in terms of cash basis and accrual basis for the period between 2008 and 2011. It noted that the deficit on the accrual basis is often larger than the deficit on a cash basis during those years. Except in the year 2008 as the value of the current deficit on the accrual basis is 1120 million dollars, while the value on the cash basis of about 1493 million dollars, a difference of $ 373 million dollars. Moreover, such difference called **Net Accumulation of Arrears[40]**.

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[39] Several options can used to determine the time of recording of a flow. On a cash basis, a flow recorded when the associated cash inflow or outflow takes place, and nonmonetary flows usually not recorded. On an accrual basis, a flow recorded in principle when economic value created, transformed, exchanged, transferred, or extinguished. In practice, a flow can only be recorded when information about the event taking place becomes available. Other bases, such as due for payment basis and commitment basis, would record flows at some point between the cash and the accrual basis. Both the cash and the accrual basis of recording provide useful information for fiscal analysis and the GFSM 2001 recommends that both be used (IMF, GFS p.19, 2011).

[40] Net accumulation of arrears = liabilities due for the PNA minus arrears owed by the PNA. This represents the difference between the balance of the current deficit in accordance to cash basis and the balance of the current deficit in accordance to accrual basis. On the other hand, this item represents the liquidity of the PNA, whereby a lower value indicates improved liquidity status and vice versa (MAS, Economic and Social Monitor, Volume 27, p.18, 2012).

The reason why deficit on an accrual basis lower than the deficit on cash basis, is that the PNA has to pay employees' salaries arrears that have accumulated in the year 2006 and the first half of the year 2007. Whereas the government starts to implement, the Palestinian reform, and development plan on medium-term (2008-2010). This cause a decrease in government arrears, which led to reduce of budget current deficit on accrual basis, but on the other side, those financial flows caused to increase the budget current deficit on a cash basis (MAS, Economic and Social Monitor, Volume 15, p.21, 2009).

The analysis of public budget during the years 2009-2010 shows, contrary to what was the case in 2008, where the net accumulation of arrears of the PNA increased. Whereas the current deficit on the accrual was greater than on a cash basis, the deficit on an accrual basis raised by 13.8% from the deficit on a cash basis in 2009, and in the following year (2010) decreased the difference between two basis and reached 6.4%, this due to the low value of the net accumulation arrears. Soon this difference expanded significantly in 2011. Reaching the difference between the current deficit on accrual basis and on cash basis to 38.7%, and this was due to the high amount of net accumulation of arrears 495.1 million dollars, including 438.6 million dollars as arrears expenses, 92.8 million dollars tax refund arrears, and tax (-36.3 million dollars) non-tax refunds (MAS, Round Table Discussion (2), p. 14, 2012).

So when looking at the table (3.14), it shows that the deficit on a cash basis decreased from year to year (1493 million dollars in 2008, to 783.1 million dollars in 2011), at the rate of 19.1% annually from 2008 to 2011. However, when analyzing the deficit on the accrual basis, which Gives a more accurate perception of the financial situation of the PNA, shows that the budget current deficit increased in 2009 than in 2008, also it rose of 1075 million dollars in the year 2010, to 12782 million dollars in the year 2011 (an increase of 19%).

Net accumulation of arrears still (including of arrears receivables for the public pension and of the obligations outstanding contributions to the pension fund in accordance with the provisions of the law of public pension) to burden the PNA. This demonstrates the accumulation of arrears on the size of the difficulties experienced by the PNA to fill the funding gap by relying solely on domestic revenuers only without resorting to urgent additional support from international donors. It should note that arrears of wages and non-wage component considered the most important in arrears owed to the PNA.

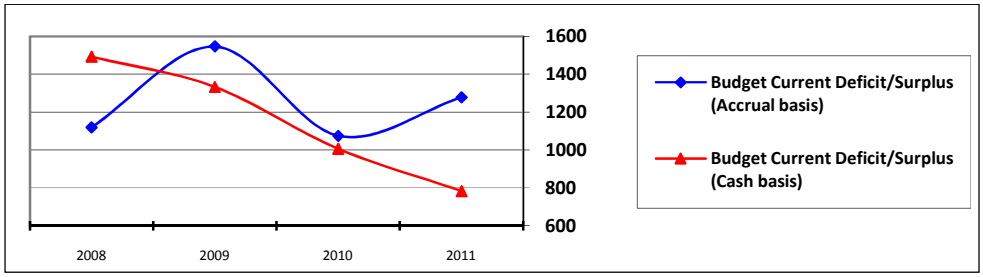
Where these arrears is affect negatively on public budget performance. Delay the disbursement of funds pledged, especially due to the private sector leads to raise the cost of implementation of procurement contracts, construction and other contracts. The government with the private sector later may enter into that as accumulating also delay penalties, and limit overall capacity of the PNA to reduce its public debt (PMA, Public Finance sustainability report, First half of 2012, p.17, 2012).

Table (3.14): Palestinian Public Budget 2008-2011 (Accrual and Cash Basis)

		2008	2009	2010	2011
1	**Total Net Revenues (Current Revenues)**	**1765**	**1553**	**1803**	**2045.0**
1.1	Gross Domestic Revenues	569	759	697	738.0
1.2	Gross Clearance Revenues	1122	1072	1178	1423.2
1.3	Tax Refund	-116	-88	-71	-116.2
2	**Current Expenditures, and Net Lending**	**2886**	**3101**	**2878**	**3323.2**
2.1	Wages and salaries	1453	1426	1509	1782.4
2.2	Non-wage expenses	985	1311	1148	1400.8
2.3	Net lending	447	364	221	139.9
4	**Budget Current Deficit/Surplus (Accrual basis)**	**1120**	**1547**	**1075**	**1278.2**
5	**Budget Current Deficit/Surplus (Cash basis)**	**1493**	**1333**	**1006**	**783.1**
6	**Capital Expenditures**	**215**	**389**	**421**	**370.1**
7	**Total Deficit/Surplus Before Financing (Accrual basis)**	**1335**	**1936**	**1496**	**1648.3**
8	**Total Deficit/Surplus After Financing (Cash basis)**	**1708**	**1721**	**1427**	**1153.2**
9	**Financing**	**1708**	**1721**	**1427**	**1153.2**
9.1	Current Expenditures Support	1763	1317	1072	814.2
9.2	Development Support	215	389	327	169.0
9.3	Bank Financing	-227	171	79	94.4
9.4	Net accumulation of arrears	-373	216	69	495.1
9.5	Clearance Revenues (Accrual basis)	-15	0	0	-65.6
9.6	The remaining balance	344	-371	-120	-353.9
10	**Financial Gap**	**0**	**0**	**0**	**0**

Source: Palestine Economic Policy Research Institute (MAS) (2012), "Round Table Discussion (2): The Palestinian National Authority's Budget, 2012", p. 12-16.

Figure (3.11): Growth of Budget Current Deficit on Accrual and Cash Basis for PNA (2008-2011)



Source: Designed by researcher depending on data of table 3.14. (Page 104)

3.3.3.3 The Impact of the Lack of Palestinian National currency on Public Budget:

International orientation approach to rely on available domestic sources to borrow, and reduce borrowing from international markets, require public debt tools can used by government a collect of national savings to finance their long-term investment spending, and at the same time provide them with a source of financing liquidity deficit caused incompatibility of the timing of government revenue and expenditure. However, the absence of currency Palestinian National Authority prevent of the use of the domestic market as available resource with the appropriate cost to finance economic development, where the local government borrowing in currently traded currencies impose extra costs represented by possibility of a difference of one currency borrowing and revenue (Abu Ras, p. 5, 1998)

The absence of a national currency from which to determine the revenue and public expenditure, and the use of different currencies so, cost mobilized heavily on the financial authority during the preparation of the public budget of the country, for this, the Palestinian Ministry of Finance and other ministries facing the problem of preparing periodical budgets. Whereas expenditure and revenue estimated by more than one currency depending on the nature of the source of revenue or expenditure. However, the extreme fluctuation in the exchange rates of these currencies presents these estimates for error on the one hand, and the inability to meet the estimated requirements for these institutions because of the different levels of prices, on the other hand.

For this, the instability of the exchange rates of these currencies traded in Palestine and especially Israeli Shekel, in light of the rapid increase in expenditure and slow increase in revenues leads to the difficulty of preparing periodic reports for the

purposes of control and follow-up. As well as the difficulty of making, the final account and thus lead to large losses in the budget. The decline in currencies traded in the Palestinian territories has a significant impact on the Palestinian economy in the absence of local currency. Because it has most important reason of the high rate of inflation in Palestine, reduction of the real value of deposits and debt, especially Israeli shekel deposits, reduction of Palestinian employment revenues coming from Israel, reduction of real domestic revenues of PNA[41], the high cost of currency exchange, and an increase of the Palestinian trade deficit (Miqdad, p.94-96, 2007)

3.4 Summary:

The Palestinian government in the past years takes a series of steps aimed to reduce dependence on foreign aid and grants and increased reliance on own resources to finance current spending. The result was that exceeded the share of domestic taxes to cover current spending two-thirds after it was equal with grants in 2008. It has accompanied by a decline in the public budget current balance deficit as a percentage of GDP to a third of what it was in 2008. Here, the Palestinian government is actually in the course of corrective action. However, there is still limited in the use of local funding for even short-term due to the existence of a set of challenges can summarized as follows:

- The Israeli side controls the mechanisms and times of clearing revenue collection (the most important component of local revenues components).
- The need for external support and grants still exist during the period of correction until now. Because of the obtained from grants and aid is still a major funder of the budget, which is to now make up almost one-third of public revenues and also cover about one-third of current spending for the Palestinian Authority. In addition, the lack of control of the Palestinian Authority in its transfer linked to the political factors, in addition the flow of these grants in different currencies for major public spending currency (New Israeli Shekel), causing losses caused by the fluctuation of the exchange rate of foreign currencies.
- The presence of structural imbalances on the expenditure side represented by the salary bill that exceeds more than half of current spending, and its growth is higher than the target budget. In addition to the burden that the

[41] Clearance revenues collected in NIS, and therefore the nominal value of the item calculated in dollars significantly affected by fluctuations in the exchange rate of the dollar against the shekel. When considering the developments on the clearance revenues collected in NIS, the rise is higher (up to about 11%) (MAS, Economic and Social Monitor, Volume 27, p.14, 2012)

current retirement program on the treasury regarding the transfers of the government's share of contributions and obligate the Treasury of all financial obligations to certain segments of the veterans retired and retirees of the Palestinian Liberation Organization.

- Accumulation of arrears on the Palestinian Authority (especially the private sector and the public pension, and increasing the size of the public debt that grows outside the scope of the draft budget forecasts) demonstrates the difficulties faced by the Palestinian Authority to bridge the funding gap. It can achieve by relying solely on domestic taxes alone, without resorting to urgent additional support from international donors.
- The overall weakness of the structure of the economy because of the occupation (especially the role of the private sector), result a negative effects on growth and inflation when the government to take steps to raise the level of direct or indirect taxes. This limits the government ability to maneuver in order to achieve essential change on public finance performance.

Chapter Four

Palestinian Current Account

4.1 Introduction:

The preparation of the balance of payments takes most attention of central banks in most countries. It considered one of the most important tools that measure the performance of the national economy with the external world and shows the position of the external debt of the country, including the development status of payments of country, the degree of dependence on foreign aid, and the nature of the economic relationship between country and rest of world. So, it will addressed in this chapter to one of the components of the balance of payments, which is the current account in the Palestinian economy, where some elements of this account contain essential inputs in national income, in addition to being an important factor in determining the economy's foreign relations.

There is an interference relationship between fiscal policy and policies, which affect the current account. The most important policy is the trade policies. It noted that it was relying on customs duties and taxes on imports to finance the Treasury due to the low cost of collection. The procedures and mechanisms contained in the Paris Agreement in Item VI, shows how the tax departments in the PNA and Israel to conduct clearing and settlement of export and import bills, where Israel transferred the net VAT, and other taxes to the PNA (El-Jafari, and Al-Ardah, p. 33, 2002).

In addition, it will be talk on the fact that the fiscal policies taken into consideration the protection of Palestinians producer, and well-being of the Palestinians consumer in the West Bank and the Gaza Strip. The imports increased to meet domestic demand for final consumer goods, and increased the proportion of spending on the imports to consumption spending.

4.2 Palestinian Current Account:

The Palestinian territories suffered from a permanent deficit in the current account during the study period (1996-2012), but this deficit fluctuated between highs and lows during that period, and the reason is certainly due to a change in one of the main components of the current account (Trade Balance, balance of income and current transfers). When analyzing the data contained in the table (5.1), it noted that the current account deficit witnessed since the beginning of the study period (1996), where the deficit reached to 1131.2 million U.S dollars, and the deficit continued to increase to 1284.6 million U.S dollars in the year 1999 (increasing at a rate of 4.4% per year). The current account deficit accounted for 31.8% of GDP during the period 1996-1999.

Soon this deficit fell in 2000, as the deficit fell to 990.3 million dollars (23% reduction of the deficit in the year 1999). One of the most important reasons for this deficit drops is a decline in the deficit in the trade balance, in addition to the increase of surplus of current transfers account, where the amount of such transfers is 638.6 million U.S dollars compared to 373.5 U.S dollars million in the year 1999. The current account deficit continued to decline until it reached to 436.4 million U.S dollars in 2002 (decline by 56.3% from the year 2001), so the current account deficit form about 12.7% of GDP. The main reason is the decline in deficit of balance of trade (21.8% reduction from the year 2001), and the reason is due to significantly decline in good imports (decreased by 24.8% in 2002 compared to 2001). In addition, increasing in surplus of the current transfers account contributed to this decrease in the current account deficit.

In the period 2003-2005 (the period of financial reform), the current account deficit rose up to 1516 million U.S dollars in 2004 (an increase of 65.7% from the year 2003, due to the large increase in the trade deficit. Nevertheless, the current account deficit significantly reduced by average rate of 6% per year from 2006-2012. It is worth mentioning that the reason for the decline in the current account deficit is a significant increase in the current transfers account. The current account record a surplus in 2008 for the first time in the Palestinian territories by 764.4 million U.S dollars, and the main reason for this is the large increase in the of current transfers, where current transfers in the year 2008 increased by 1.05 billion compared with year 2007 (it was 3.4199 billion dollars in 2008). However, in the period 2011-2012, the current account deficit increased by a very large up to 2814.8 million dollars in the year 2012. This is a highest deficit ever witnessed in the Palestinian territories during the study period and due to the increase in the trade deficit significantly, in addition to a decline in the surplus of income and current transfers' accounts.

Table (4.1): Growth of Current Account Components in Palestinian Territories (1996-2012)

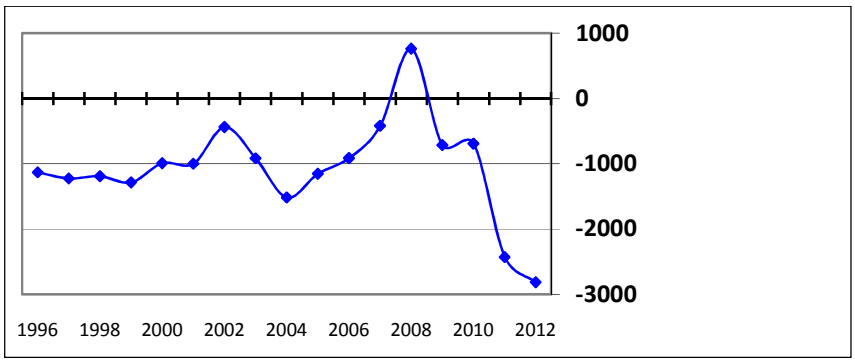
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
CURRENT ACCOUNT	**-1131.2**	**-1223.3**	**-1190.2**	**-1284.6**	**-990.3**	**-997.9**	**-436.4**	**-915.1**	**-1516**	**-1152.2**	**-912.9**	**-417.3**	**764.4**	**-712.5**	**-690.9**	**-2429.6**	**-2814.8**
Trade Account	**-2217.3**	**-2344.1**	**-2265.7**	**-2411.9**	**-2257.1**	**-2494.1**	**-1949.6**	**-2066.2**	**-2696.7**	**-2901.2**	**-3095.4**	**-3551.3**	**-3574.7**	**-3856.2**	**-3964.9**	**-4924.4**	**-5266.5**
Goods	**-2073.6**	**-2122.6**	**-1981.2**	**-2148.2**	**-2181.9**	**-1999.4**	**-1473.1**	**-1751.9**	**-2335.8**	**-2680**	**-2795**	**-3178.2**	**-3234.4**	**-3504.4**	**-3652.8**	**-4663.4**	**-4884**
Exports	514.7	594.5	528.8	527.4	539.5	394.8	327.4	368	400.7	434.7	450.4	646.5	668.4	631.3	666.1	1524.9	1249.6
Imports	2588.4	2717.2	2510	2675.6	2721.5	2394.2	1800.5	2119.9	2736.5	3114.7	3245.4	3824.7	3902.8	4135.7	4318.9	6188.3	6133.6
Services	**-143.7**	**-221.5**	**-284.5**	**-263.7**	**-75.2**	**-494.7**	**-476.5**	**-314.3**	**-360.9**	**-221.2**	**-300.4**	**-373.1**	**-340.3**	**-351.8**	**-312.1**	**-261**	**-382.5**
Exports	293.1	281.5	165.9	203	472.9	180.1	196.9	259	240.4	282.4	259.9	369.5	496.1	579.3	830.7	686.9	649
Imports	436.8	503.1	450.4	466.7	548.2	674.8	673.3	573.3	601.3	503.7	560.3	742.6	836.4	931.1	1142.8	948.1	1058.2
Income	**578**	**651.2**	**718.7**	**753.8**	**628.3**	**523**	**417.1**	**480.4**	**446.5**	**574.2**	**691.9**	**765.7**	**919.2**	**876.2**	**1098.1**	**1148.9**	**1072.4**
Receipts	**598.2**	**683.4**	**748.2**	**775.6**	**670.7**	**541.7**	**428.2**	**482.6**	**478.7**	**609.4**	**700.5**	**773.6**	**922.6**	**955.9**	**1213.2**	**1207.6**	**1174.1**
Compensation of employees	491	560.9	681.7	705.9	581.1	400	337.2	427.7	421.4	486.7	579.2	598.5	746.2	831.1	1077.4	1117.4	1051.2
Investment income	107.2	122.4	66.5	69.7	89.6	141.7	91	54.9	57.3	122.6	121.3	175.1	176.4	124.7	135.8	90.2	122.8
Payments	**20.2**	**32.2**	**29.5**	**21.8**	**42.4**	**18.6**	**11.1**	**2.2**	**32.2**	**35.2**	**8.6**	**7.9**	**3.4**	**79.7**	**115.1**	**58.7**	**101.7**
Current transfers	**508.2**	**469.7**	**356.8**	**373.5**	**638.6**	**973.2**	**1096.1**	**670.7**	**734.2**	**1174.8**	**1490.6**	**2368.3**	**3419.9**	**2267.5**	**2175.9**	**1346.7**	**1379.4**
Inflows	**598.3**	**591.4**	**433.7**	**458.8**	**761.4**	**1076.6**	**1195.6**	**923.9**	**895.3**	**1299.4**	**1623**	**2505.5**	**3572.8**	**2502**	**2476.5**	**1616.8**	**1649.6**
General government	336.9	260.9	189.5	236.1	243.5	329.8	419.4	667.1	535.6	957.8	1101.4	1053	1977.8	1484.3	1214.2	727.5	520.2
To the private sector	261.4	330.5	244.2	222.7	517.9	746.8	776.2	256.8	359.8	341.6	521.6	1452.4	1595	1017.7	1262.3	889.3	1126.4
Outflows	**90.1**	**121.7**	**76.8**	**85.3**	**122.7**	**103.4**	**99.5**	**253.2**	**161.2**	**124.5**	**132.4**	**137.2**	**152.9**	**234.5**	**300.6**	**270.1**	**270.2**

Source: Collected data depending on the following sources:

- Data for years 2011-2012: Palestinian Central Bureau Statistics, "The Preliminary Results of the Quarterly Balance of Payments in the Palestinian Territory, by Quarter for the Years 2011, 2012", http://www.pcbs.gov.ps/Portals/_Rainbow/Documents/HTML-BopTabl-Q4-2012-eng.htm.
- Data for years 2000-2010: Palestinian Central Bureau Statistics, "Palestinian Balance of Payments in Palestinian Territory 2000- 2011", http://www.pcbs.gov.ps/Portals/_Rainbow/Documents/e-BOP-time-2011.htm.
- Data for years 1998-1999: Palestinian Central Bureau Statistics (2004), "Balance of Payments 1998-2002, Preliminary Results", p. 53-54.
- Data for years 1996-1997: Palestine Monetary Authority, "Balance of payments 1995-2011", http://www.pma.ps/images/stories/Statistics/Time_Series_Data/Balance_of_Payment/balance%20of%20payments.xls

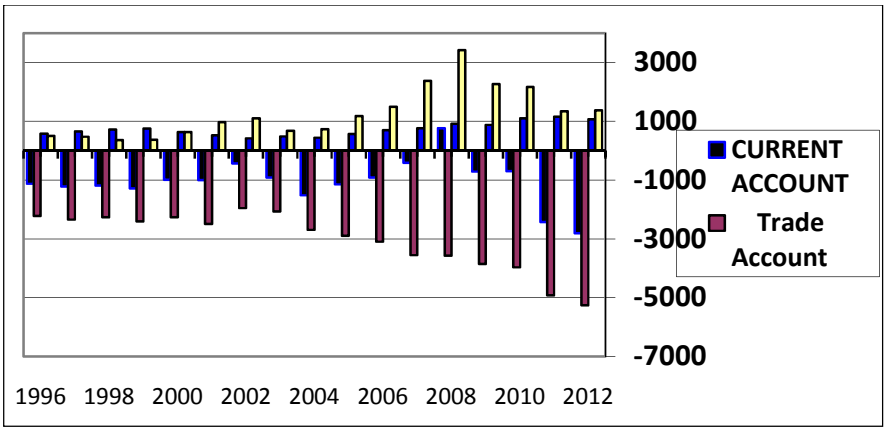
When analyzing the current account deficit it should look for the main causes of this deficit, and research the ways of treatment, whether to take specific policies if possible, or resort to the implementation of the reform program. In addition, it must clarify the mechanism and restructuring of financing of current account. The following is an explanation of sub-accounts for the current account:

Figure (4.1): The Growth of Current Account Deficit in Palestinian Territories (1996-2012)



Source: Designed by researcher depending on data of table 4.1. (Page 111)

Figure (4.2): The Main Components of Current Account in Palestinian Territories (1996-2012)



Source: Designed by researcher depending on data of table 4.1. (Page 111)

4.2.1 Trade Balance:

After the signing of various economics agreements, particularly the Paris Agreement, economic in April 1994 and thus became the Paris Agreement, it was the economic general framework to organize the relations of Palestinian trade with the outside world. Through this period increased adoption of the Palestinian economy to the outside world in general and Israel in particular, and there has no positive development on the overall performance of macroeconomic indicators in the Palestinian territories. The economic and trade relations between the two parties (PNA and Israel) is still severe imbalance and unequal tend for the benefit of Israel, in spite of the full realization of the presence of many of limitations and constraints

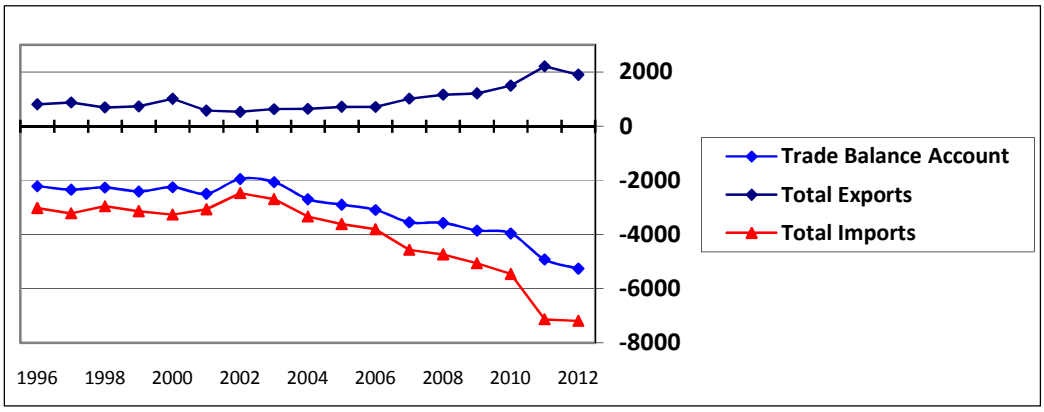
contained in the economic Protocol. As the powers granted under the Economic Protocol to the PNA to manage the economic activity in the West Bank and Gaza Strip are still limited, in addition to many restrictions and trade barriers contained in Protocol, which were not formally defined in the year 1994 (Zuarob, p.11, 2005).

It known that West Bank and Gaza Strip rely heavily on imported goods (Consumption goods and goods used as inputs for production). The total imports have reached to nearly 87% of GDP in 1997, and reached 88% in 2007. However, Israel was the country of origin of the most part of these imports (75%) either the remaining portion of these imports was from countries have signed free trade agreements with Israel, like the United States and the European Union mainly. The Palestinian export performance was weak, as largest total exports not exceed more than 24% of GDP during the period study (1996-2012). While the geographical distribution of Palestinian exports was unilateral larger than imports (the Israeli market received 95% of these exports). While the Arab countries share of exports was about 3% (most Palestinian imports coming from Arab countries, come from Jordan, Egypt) (PMA, Annual Report 1998, p.18, 1999)

Table (4.1) shows that deficit in the trade balance is the main cause of the current account deficit (balances, goods and services). The trade deficit was growing during the study period (1996-2012) by an annual rate of 6.2%. Trade balance scored its biggest deficit in the year 2012, amounted to 5266.5 million dollars (57.2% of GDP), and lower trade deficit was in the year 2002, amounted to 1949.6 million dollars. The deficit in the balance of trade accounts for 59.5% of GDP during the years of the study. The main cause of the trade deficit is a large deficit in the balance of goods trade, where the average deficit of goods trade balance during the study period accounted for 89.3% of the total trade deficit. While services trade balance was 10.7% of the total trade deficit. It also should note that the total exports during that period have grown at a greater rate (8.2% annually) than total import growth (6.2% per year).

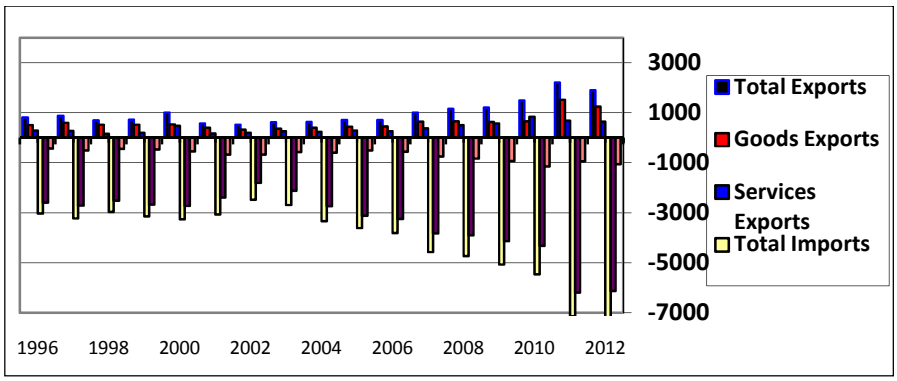
The percentage of exports during the study period was 17.4% of GDP, and it is a very low value, and this shows how weak of exports in contributing to the growth of the Palestinian economy. Moreover, exports accounted for 24% of imports during that period. In addition, imports accounted for about 73% of GDP. The total Trade size (Exports + Imports) grew by rate 6.4% per year, and it amounted about 97.1% of GDP through study period.

Figure (4.3): The Growth of Trade Balance in Palestinian Territories (1996-2012)



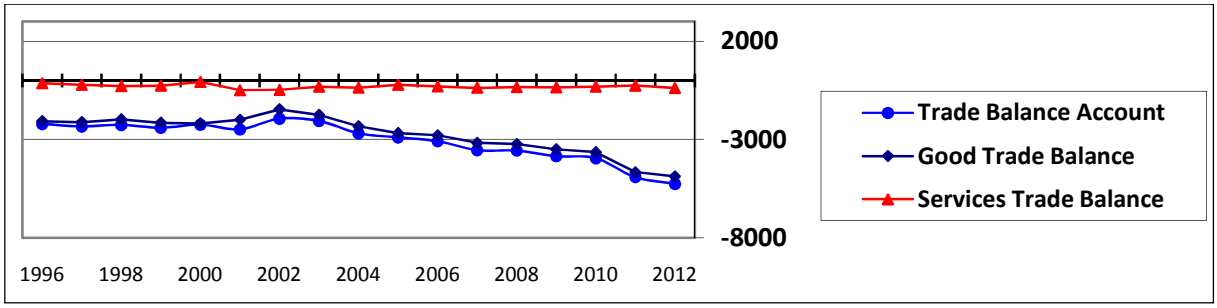
Source: Designed by researcher depending on data of table 4.1. (Page 111)

Figure (4.4): The components of Trade Balance in Palestinian Territories (1996-2012)



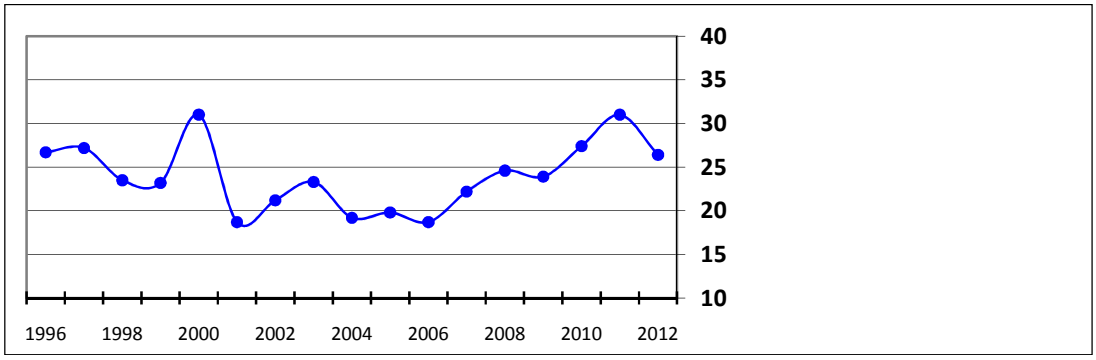
Source: Designed by researcher depending on data of table 4.1. (Page 111)

Figure (4.5): Comparison of Trade Balances (Total, Goods, and Services) in Palestinian Territories (1996-2012)



Source: Designed by researcher depending on data of table 4.1. (Page 111)

Figure (4.6): Coverage of Exports to Imports at Palestinian Territories (1996-2012)



Source: Designed by researcher depending on data of table 4.1. (Page 111)

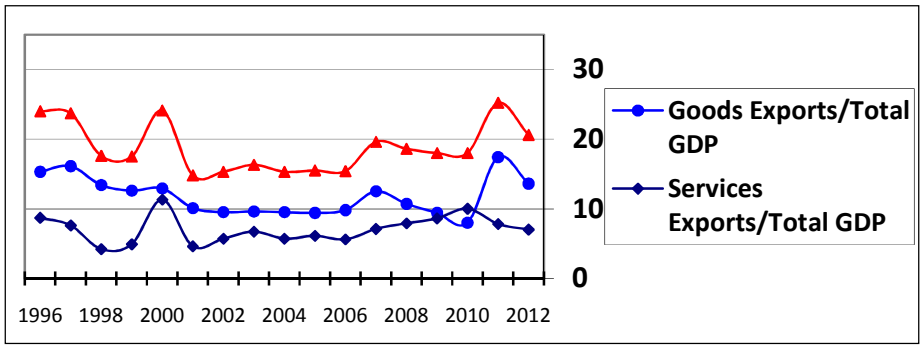
The following is a breakdown of the balances of goods and services:

4.2.1.1 Good Trade Balance:

Deficit in the goods trade balance was the major reason for the current account deficit in the Palestinian territories. When talking about the goods trade balance during the study period (1996-2012), the researcher found the following indicators and statistics:

- The Goods trade deficit almost was about 89.3% of the total trade deficit. This deficit grew during those years at an annual rate of 6.4%. Moreover, the average percentage of the goods trade deficit of about 46% of GDP during this period.
- Goods exports amounted to about 62.5% of total exports, and those exports grew at 9.6% per annum. In addition, goods exports accounted for about 11.7% of GDP. Goods exports covered about 18% of goods imports, and covered about 14.9% of total imports.
- The largest proportion of the total imports was for goods imports, which amounted approximately 82.6% (equal to the annual growth rate of 6.6%). These imports accounted for 64.8% of GDP.

Figure (4.7): Percentage of Exports from GDP (Total, Goods, and Services) in Palestinian Territories (1996-2012)



Source: Designed by researcher depending on data of table 4.1. (Page 111)

4.2.1.2 Services Trade Balance:

The second reason for the deficit of current account in Palestinian territories is the deficit on services trade balance. The services trade balance during the study period (1996-2012) has the following characteristics:

- The services trade deficit almost was about 10.7% of the total trade deficit. Moreover, the average percentage of the services trade deficit of about 6.4% of GDP during this period.
- Services exports amounted to about 35.4% of total exports, and those exports grew at 12.8% per annum. In addition, goods exports accounted for about 7% of GDP. Services exports covered about 53.6% of services imports, and covered about 9.1% of total imports (the coverage of services exports to imports is higher than the coverage of goods exports to goods imports).
- The services imports amounted about 17.4% from total imports, and the services imports has an annual growth rate of 13.5%). These imports accounted for 13.5% of GDP.

4.2.2 Income:

Income account achieved a surplus throughout the years of the study, with growth rate of 5.1% per year. The income account amounted about 14.3% of GDP, and 12.5% of gross national income (GNI). When looking at the components of this account, it notes the following:

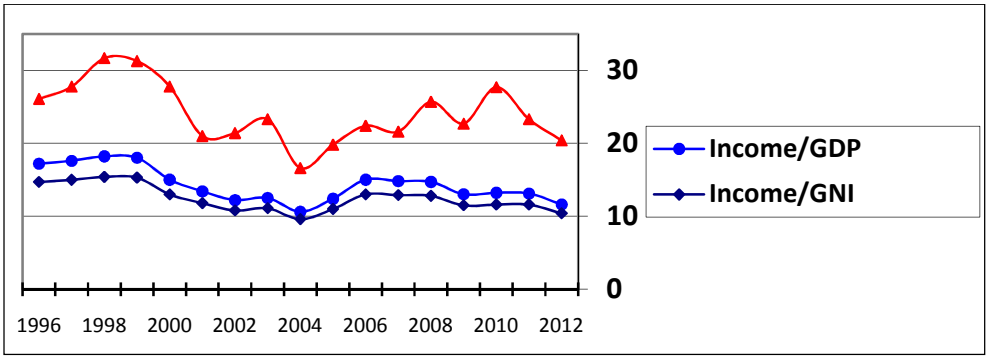
- The bulk of income account comes from the compensation of employees item, which reflected Palestinian employment inside Israel significantly

(compensation of employees in Israel, was about 89% of the net compensation of employees), where the compensation of employees item record annual growth by 6.3%, and the form of approximately 84.8% inflows of income item. In addition, it has about 12.6% of GDP.

- The second part of the inflows item in income account is the income of foreign investment. The investment income grew at 8.1% per annum. This item share about 15.2% of the inflows of income item, and the rate of GDP to about 2.3%.

Income account has a great importance in the Palestinian trade balance, which is suffering from the accumulated deficit, and based upon the income account financed the deficit in the balance of trade at an average 24.1% during the study period per year. Palestinian territories was adopted during the previous years to the policy of exporting labor to the Israeli labor market as one of the few available alternatives to provide a source of income on the one hand, and to alleviate the problem of unemployment on the other. However, the experience of the past years has proven ineffectiveness of this policy as a source of income[42]. The importance of compensation of employees in Israel retreated with the decline in employees numbers. It also proved the effectiveness of this policy in alleviating the problem of unemployment, because of Israeli procedures and restrictions.

Figure (4.8): Percentage of Income Account from GDP, GNI, and Total Trade Deficit in Palestinian Territories (1996-2012)



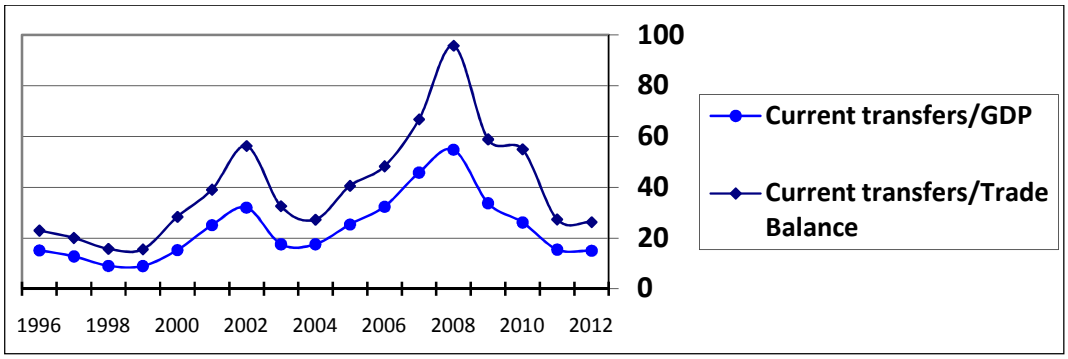
Source: Designed by researcher depending on data of table 4.1. (Page 111)

[42] Palestinian territories witnessed a significant decline over the past years, especially after the year 2000, against the backdrop of the siege, closures and restrictions imposed by the Israeli occupation on the freedom of Palestinian labor movement. With the decline witnessed in the number of this labor category, the importance of remittances declined. It also the relative fluctuation in the number of Palestinian workers allowed to enter and work in the Israeli market make a fluctuation in the value of these transfers from year to year. In addition the fluctuation of the exchange rate of the Israeli shekel against the U.S. dollar (PMA, Annual Report 2011, p. 52, 2012)

4.2.3 Current Transfers:

Current transfers have an importance role for the Palestinian economy, both at the level of the public, or the private sector alike, the importance of these transfers should for only for the private sector for any economy, including the Palestinian economy. The importance of this item in the balance of payments, because of it is an important funder of the trade deficit. Such transfers financed about 39.7% of the trade account deficit during the years of the study (1996-2012). Moreover, it accounted for 23.6% of GDP during the same period, was the biggest current transfers' value in 2008, and amounted to 3419.9 million dollars. The large increase in current transfers leads to a surplus in the current account balance for the first time, for up to 764.4 million dollars. Then the transfers account retreat in subsequent years, because of a general trend by donors began in 2007, serving to reduce current transfers for budget support, and turn it towards the capital transfers for central government (PMA, Annual Report 2011, p.53, 2012).

Figure (4.9): Percentage of Current Transfers Account from GDP and Total Trade Deficit in Palestinian Territories (1996-2012)



Source: Designed by researcher depending on data of table 4.1. (Page 111)

4.3 Investment in The Palestinian Territories:

The PNA is facing a number of challenges in the economic sector one of which is the improvement of investment environment to spur the private sector to increase investment. To this end, there is a need for more to overcome the obstacles of investment particularly the Israeli restrictions and the political instability in the areas. There is a need for a clearer economic vision by the PNA. The PNA also needs to enhance the public institutions, improve their services. In addition, there is a need to pass relevant laws and the setting up of bylaws to implement them, reinforce independence of the judiciary, and transparency of executed measures as well as the rule of law (Makhoul, MAS, p.7, 2002).

Despite the ongoing peace process, Israeli settlements continued to expand and Palestinian violence increased. The cycle of violence and Israeli closures ultimately resulted in a second INTIFADAH, which led to a dramatic fall in domestic investment and the loss of most of what little foreign investment that had entered. The recovery of the Palestinian private sector faces two critical issues. First is the Israeli closures regime. This policy, which broadly consists of comprehensive restrictions on the movement of people and goods within the West Bank, highly constricted movement of goods across the border with Israel, and a near total separation of economic and social interaction between the territories of Gaza and the West Bank, has resulted in a highly fragmented Palestinian economy. The closures have made it nearly impossible for Palestinian enterprises to meet delivery schedules and have dramatically raised costs, effectively excluding most Palestinian producers from the world economy (World Bank, Report No. 39109 – GZ, p.5, 2007)

The World Bank publishes annually a report for measuring business regulation called Doing business. The last version in doing business 2014[43], this report sheds light on how easy or difficult it is for a local entrepreneur to open and run a small to medium-size business when complying with relevant regulations. It measures and tracks changes in regulations affecting 11 areas in the life cycle of a business: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, resolving insolvency and employing workers.

[43] Doing Business 2014 is the 11th in a series of annual reports investigating the regulations that enhance business activity and those that constrain it. Doing Business presents quantitative indicators on business regulations and the protection of property rights that can compared across 189 economies (from Afghanistan to Zimbabwe) and over time. The ranking of countries as contained in the report of the World Bank, come reflected the economic conditions in each country since 7/2012 until 7/2013, based on data obtained by the Bank in the 189 countries listed in the report (World Bank, Doing Business 2014, p. 5, 2013)

Despite the improvement of Palestine rank 7 steps in a report for year of 2013 in the Doing Business 2014 than it was last year, but the results did not come promising for the Palestinian economy, those who support it, and investors and businessmen. The report shows that West Bank and Gaza have a rank 138 out of 189 countries covered at the report. This rank is better the rank in 2013 report that was 145.

The first criteria is easy to start a business, where the West Bank and Gaza Strip have a rank of 143, which means the difficulties facing the investments and new projects, either in the investment environment or the laws governing the investment. However, the situation is better than it was last year, where it stood at rank of 182. Dealing with construction permits showed that West Bank and Gaza came in ranked 131 globally, because of large number of bureaucratic procedures faced by the authorities at this criterion, and the other reasons linked, with the approval or rejection of Israel in the granting of licenses in certain areas in the West Bank. In addition, Israel has full control over the areas "C" While divisive role in the existence of this standard in the box late in the report.

With regard to easily obtain facilities for getting electricity, the West Bank and Gaza came in ranked 87, while ranked 122 in the process of registering property for the company or facility, and came in ranked 166 in ease of getting credit for companies or enterprises. Despite the fact that the volume of loans and credit facilities provided by banks to the Palestinians of approximately 3 billion U.S. dollars, except that a large percentage of them go in favor of auto loans, consumer loans, which exceeded one billion dollars, about 630 billion dollars of real estate loans. Despite of the amount of loans and credit facilities provided by banks to the Palestinians of approximately 3 billion U.S. dollars, but the large percentage of them go purchase cars and consumer loans, which exceeded one billion U.S dollars, and about 630 million U.S dollars for real estate loans.

The ranking of the West Bank and Gaza were 80 in protecting investors, and ranked 62 in the collection of paying taxes from these facilities, and ranked 123 in trading across borders, while in enforcing contracts were 88, while West Bank and Gaza have the last rank (189) in ranked the last 189 in resolving insolvency. The employing workers indicators are not included in this year's aggregate ease of doing business ranking[44].

[44] For more information see annex-4, P. 183

Table 4.2: Doing business indicators for West Bank and Gaza for 2013 and 2014

Topics	DB 2014 Rank	DB 2013 Rank	Change in Rank
Starting a Business ✔[45]	143	182	↑ **39**
Dealing with Construction Permits	131	124	↓ **-7**
Getting Electricity	87	84	↓ **-3**
Registering Property	122	117	↓ **-5**
Getting Credit	165	162	↓ **-3**
Protecting Investors	80	80	No change
Paying Taxes	62	64	↑ **2**
Trading Across Borders	123	116	↓ **-7**
Enforcing Contracts	88	88	No change
Resolving Insolvency	189	189	No change

Source: Ease of Doing Business in West Bank and Gaza, Doing Business 2014 (October 2013), World Bank, retrieved at 15, December 2013.
http://www.doingbusiness.org/data/exploreeconomies/west-bank-and-gaza/

The Singapore retained the top of the list of the best places in the world for doing business for the eighth consecutive year, according to the annual report issued by the World Bank, where, this country suffer until the sixties of the last century from a sharp downturn in the economy. Regarding Israel, it ranked 35 globally, which leave behind all Arab countries except the United Arab Emirates, which ranked 23, and Saudi Arabia ranked 26 globally. Israel has occupied 38 ranking in Doing Business 2013, but the economic stimulus steps, and the recovery of economic growth during the first and second quarters of this year (2013), and the decline of some economies make the rank of Israel become better for this year (Abed Allah, Al Quds.com Newspaper, 30 October, 2013).

The researcher will use the gross capital information as a reprehensive for investment in Palestinian territories, where gross capital formation in building will represent the private investment and gross capital domestic in non-building will represent the public investment in Palestinian Territories. The the Gross capital formation can divide into three components: gross fixed capital formation, change in inventory, and net acquisitions of valuables. Henceforth, gross capital formation

[45] ✔=Doing Business reform making it easier to do business. ✗=Doing Business reform making it more difficult to do business.

(or investment) can defined as the total value of the three aforementioned components. It measured at purchase price (Palestinian Central Bureau of Statistics, Glossary of Statistical Terms Used in PCBS, p.44, 2012).

Table 4.3: Growth of Gross Capital Formation components in Palestinian Territories, at constant prices (1996-2012)

Item	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012[46]
Gross Capital Formation	**1,037.9**	**1,173.4**	**1,368.6**	**1,857.4**	**1,386.7**	**992.3**	**841.7**	**1,063.0**	**1,022.3**	**1,265.7**	**1,347.2**	**1,122.9**	**1,060.5**	**1,137.3**	**1,090.5**	**1,066.8**	**1,074.0**
Growth of Gross Capital Formation		**13.0%**	**16.6%**	**35.7%**	**-25.3%**	**-28.4%**	**-15.1%**	**26.2%**	**-3.8%**	**23.8%**	**6.4%**	**-16.6%**	**-5.5%**	**7.2%**	**-4.1%**	**-2.1%**	**0.67%**
Gross Fixed Capital Formation	980.2	1,091.9	1,279.8	1,713.5	1,351.5	972.5	813.6	1,028.7	982.4	1,247.9	1,322.9	1,097.1	1,026.1	1,118.4	1,021.7	1,287.1	1,353.0
- Buildings (Private Investment)	665.2	746.3	850.3	1,084.5	832.3	570.5	421.1	544.4	620	691.9	492.4	502.7	766	813.1	706.6	1,050.8	1,120.8
Growth of Private Investment		12.2%	13.9%	27.5%	-23.2%	-31.4%	-26.2%	29.3%	13.9%	11.6%	-28.8%	2.1%	52.4%	6.1%	-13.1%	48.7%	6.6%
- Non-buildings (Public Investment)	315	345.6	429.5	629	519.2	402	392.5	484.3	362.4	556	830.5	594.4	260.1	305.3	315.1	236.3	232.2
Growth of Public Investment		9.7%	24.3%	46.4%	-17.4%	-22.6%	-2.3%	23.4%	-25.2%	53.4%	49.4%	-28.4%	-56.2%	17.4%	3.2%	-25.0%	-1.7%

Resource: collected data from the following resources:

- The data of the years 1996-2011 from Palestinian Central Bureau of Statistics (2012), "*Gross Domestic Product by Expenditure for the Years 1994-2011 at Constant Prices: 2004 is the Base Year*", Retrieved 15/12/2013 http://www.pcbs.gov.ps/Portals/_Rainbow/Documents/EXPconstant%2094-11E.htm
- The data of the year 2012 from: Palestinian Central Bureau of Statistics (2013), "Gross *Domestic Product by Expenditure and region for the quarters of the years 2011-2013 at current prices*", Retrieved 15/12/2013 http://www.pcbs.gov.ps/Portals/_Rainbow/Documents/GDP-EXPCur2011-2013E.htm

The above-mentioned table (4.3), show the high growth of the investment during the establishment period (1994-1999) for Palestinian National Authority (PNA), where private investment grow about 19.9% per year from a year 1996 to 1999, while the government investment had larger growth rate At the same period (26.8%). After AL-AQSA INTIFADA at 2000 until 2004; the investment decline significantly. In 2005, the investment had an improvement through the period of reforming of PNA institutions. The public investment record high growth in 2009 compared. This was because the PNA perform many infrastructure projects. These projects have notable impact on private investment in 2011.

[46] The data on year 2012 in current prices, so the researcher divides the value by consumer price index of the year 2012

4.4 Summary:

Sustained economic growth widely recognized, as a key part of the Palestinian state building project will depend upon the establishment of a dynamic, private sector led economy. While the Palestinian Authority (PA) has had considerable success in building the institutions of a future state, it has made less progress in developing a sustainable economic base. With the advent of the second Intifada, West Bank and Gaza suffered a severe economic contraction and by the end of 2006, real per-capita GDP was 23 percent below its peak in 1999.

Despite the easing of some restrictions, most of the constraints on movement of people and access to resources have remained in place, constraining investment and productivity growth. Consequently, most of the recent economic growth can attributed to the large inflow of aid, which has funded government expenditures. This has skewed the economy towards the public sector and non-tradable. The PA has become increasingly dependent upon this donor assistance to fund its basic operations. This not only leaves it vulnerable to reductions in aid, but also means that the PA has few resources to devote to long-term development issues.

Palestine is a small and open economy. Therefore, its future development will depend upon increasing trade, particularly in exporting higher value added products. Increasing trade depends upon efficient trade facilitation beginning with the adoption of an appropriate trade policy. It is important that the PA decide what type of policy it expects a future state to adopt. This will help the guide the institution building agenda, allow the private sector to plan and support the negotiators as they discuss the parameters of a future political solution. To be competitive, the Palestinian private sector must raise productivity and shift towards high value added goods and services to support the relatively high wages. This in turn requires enterprises to increase investment and improve their internal capabilities. However, investment remains relatively low.

Chapter Five

Econometrics Analysis for the effect of Public Budget Deficit on Current Account

5.1 Introduction:

This chapter aims to review the study methodology, and econometrics methods that have been adapted in the estimation of the study model, which examines the impact of a group of independent variables (Consumer Price Index, Private Investment, Government current revenues, Government current expenditure and net lending, Government Investment, Grants and aid, and Government Current Revenues. In addition the dummy variable represent the political situation) on the dependent variables, which represented by the current account and trade account. Each variable will be in separate model.

For any time series data, it is necessary to check that whether the data is stationary or not. In case of non-stationary data, the estimated results are called spurious results and leads to wrong conclusions. Therefore, to avoid the spurious regression it should applied stationary test for time series data such as unit root test by Augmented Dickey fuller (ADF), test for checking the stationary of time series data. In addition, it used Johnasen Approach for cointegration test. Then it used Ordinary Least Square (OLS), to estimate the relationship between the above mentioned economics variables at long term.

5.2 Methodology and study procedures:

5.2.1 Econometric Model Variables:

The study model will be applied by using quarterly time series data to the Palestinian territories for the period (1996-2012), and the data related to several economic variables, which is part of the public budget components such as revenues, expenses and aid, another refers to the level of prices, and other reflect the political situation. These variables have described as follows:

5.2.1.1 Dependent Variable (Current Account) Data:

The researcher will consider two dependent variables as follows:

1. Current account (CA): The data for current account of the Palestinian territories taken from Palestinian Central Bureau of Statistics (PCBS) as annual data for the period 1996-2010, and quarterly for 2011 and 2012.

Then the researcher converted the annual data for period 1996-2010 to quarter data by using Eviews software[47].

2. Trade Account: The data for trade account taken as quarter data from source (PCBS).

5.2.1.2 Independent Variables:

- Consumer Price Index (CPI) is a statistical tool used to measure the average changes in the prices of goods and services that households consume between two different periods one called the base period and the other is the comparison period[48]. The data for the Palestinian territories were available on a quarterly basis from the source sources (Palestinian Central Bureau of Statistics) for the period from (1996 to 2012).

- Private Investment (IP)[49] data for the Palestinian territories were available on a annual basis from the source sources (PCBS) for the period from (1996 to 2012), so it converted to quarter data using the same method for converting current account.

- Government Investment (IG) data for the Palestinian territories were available on a annual basis from the source sources (PCBS) for the period from (1996 to 2012), so it converted to quarter data using the same method for converting current account.

- The data for the group of variables related to the public budget (Total Budget Deficit/Surplus after Grants and Aid[50], Government Current Expenditure and Net Lending[51], Government Current Revenues, and Aid[52]) is available on a quarterly basis from the source (Ministry of Finance-Palestinian National Authority) for the period from (2006 to 2012). While it is available on annual basis form year of 1996 up to 2005. Therefore, it converted into quarterly data using Eviews.

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[47] The researcher converted the annual data to quarter data using Eviews by method of Local quadratic with sum.

[48] Palestinian Central Bureau of Statistics (2012), "***Glossary of Statistical Terms Used in PCBS***", Palestinian Central Bureau of Statistics, Ramallah – Palestine.

[49] Investment" shall be defined as actual monetary investment of capital (fixed capital assets) by an investor in an Enterprise, whether a newly created or an existing enterprise (Palestinian Investment Promotion Agency, p. 6, 1998).

[50] Refer to chapter 4. Paragraph 4.3.3.1 for definition

[51] Refer to chapter 4. Paragraph 4.3.1.3.1, and 4.3.1.3.3 for definition

[52] Refer to chapter 4. Paragraph 4.3.2.1.Regarding the government current revenues and Aid definitions

- Political Situation (PS) is dummy variable represent the situations which have impact of economic situation and the performance of public sector, such as AL-AQSA INTIFADA, division between the West Bank and Gaza Strip in the 2007, two wars on Gaza Strip on 2008-2009, and 2012. Therefore, this variable will have value of one at unstable political situation, and zero if the situation is stable.

5.2.1.3 Data sources:

The study used time series data (quarter data) for the Palestinian economy. The data starts from the first quarter of 1996, to fourth quarter of 2012, with 68 total observations and it has collected from the official publications of the Palestinian Central Bureau of Statistics, and Palestinian Monetary Authority (current account, consumer price index, private investment). In addition to the fiscal data (current government expenditures, government investment, government revenues, and international aid) was collected from Palestinian Ministry of Finance - Ramallah.

5.2.1.4 An Econometrics Models:

1. The models of dependent variable the Current Account (CA):

$$CA_t = \alpha_0 + \beta_1 CPI_t + \beta_2 AID_t + \beta_3 CR_t + \beta_4 CENL_t + \beta_5 IG_t + \beta_6 IP_t + \beta_7 PS_t + \varepsilon_t \quad \text{...Equ. 1}$$

$$CA_t = \alpha_0 + \beta_1 CPI_t + \beta_2 TBDF_t + \beta_3 IG_t + \beta_4 IP_t + \beta_5 PS_t + \varepsilon_t \quad \text{...Equ. 2}$$

2. The models of dependent variable the Trade Account (TA):

$$TA_t = \alpha_0 + \beta_1 CPI_t + \beta_2 AID_t + \beta_3 CR_t + \beta_4 CENL_t + \beta_5 IG_t + \beta_6 IP_t + \beta_7 PS_t + \varepsilon_t \quad \text{...Equ. 3}$$

$$TA_t = \alpha_0 + \beta_1 CPI_t + \beta_2 TBDF_t + \beta_3 IG_t + \beta_4 IP_t + \beta_5 PS_t + \varepsilon_t \quad \text{...Equ. 4}$$

Where:

- **TBDF**: Total Budget Deficit/Surplus after Grants and Aid (Numeric variable)
- **CPI**: Consumer Price Index (Numeric variable)
- **AID**: External support to public budget (Numeric variable)
- **CR**: Government Current Revenues (Numeric variable)

- **CENL**: Government Current Expenditure and Net Lending (Numeric variable)
- **IG**: Government Investment (Numeric variable)
- **IP**: Private Investment (Numeric variable)
- **PS**: Political Situation "Represent 1 in unstable political situation, and 0 if the situation is stable" (Dummy variable)
- **ε:** Random error
- **t:** Number of Observation (t = 1, 2, 3, …, 68)
- **α_0:** Constant term

5.3 Econometrics Approach and Methodology:

The researcher adopted an econometric approach for estimating the relationship between the independent variables that mentioned previously and the dependent variable (current account). Therefore, to estimate a suitable model can rely upon in estimating future results, several methods have used to time-series analysis. These methods are as follows:

5.3.1 Data Frequency Conversion Method:

The frequency of a time series determines the time frequency covered by each observation. It is possible to derive a new time series from an existing one so that each observation in the new series covers a longer period. Transforming the frequency of a time series involves combining the observations into groups corresponding to the longer period, and for each group calculating one value that represents all observations in the group. There are three types of frequency conversion: high frequency to low frequency conversion, low frequency to high frequency conversion, and frequency conversion between a dated and undated data (QMS, p.118, 2009). The research will conduct the second method (low frequency to high frequency conversion), because there are some of variables have full quarterly data time series such as consumer price index, others have quarter data for some of study years such as government expenditures, revenues, international aids, and others have only annual data such as private investment. Therefore, the researches use the Eviews[53] (version 7.1) software to make such conversion.

Eviews also provides a number of different interpolation methods for dealing with the case where the series brought into the work file has a lower frequency than the work file. Since observing a series at a lower frequency provides

[53] Refer to section 6.3.6

fundamentally less information than observing the same series at a higher frequency, it is generally not possible to recover the high frequency series from the low frequency data. Consequently, the results from Eviews' interpolation methods should considered suggestive rather than providing the true values of the underlying series. Eviews supports the following interpolation methods (Ibid, p.119):

- Constant: Constant with sum or average matched to the source data.
- Quadratic: Local quadratic with sum or average matched to the source data.
- Linear: Linear with last observation matched to the source data.
- Cubic: Cubic spline with last observation matched to the source data.
- No conversion: Do not allow up conversion.

5.3.2 Stationary Test:

Time series should be stationary; to ensure getting correct model can help in forecasting at future. Also if there is nonstationary this will make spurious result, because of high coefficient of determination R^2 and high significant value may combined with serial correlation, where certain conditions affect all the variables to make it have the same trend despite the lack of real relation between the variables (Atieh, p 643, 2005). Therefore, the time series may be stationary or nonstationary. Stationary series characterized by a kind of statistical equilibrium around a constant mean level as well as a constant dispersion around the mean level. A series said to be stationary if it has a fixed mean and constant variance through time, also it should have a constant autocovariance structure (Yaffee, and McGee, p.32, 2000).

There are objective tests that may be conducted to whether the a series is stationary, and one of the most method used to check stationary is a Unit Roots tests, and there are many method to unit roots test as follows (Greene, p.611-647, 2003):

1. Autocorrelation Function.
2. Dickey Fuller (DF) Test.
3. Augmented Dickey Fuller (ADF) Test.
4. Philips Perron (PP) Test.
5. Long Memory Model.

In this study the research will conduct ADF to test the stationary of time series, where this test considers one of the most tests used at economical studies for testing unit roots.

5.3.3 Cointegration Test:

Cointegration is known as association between two or more time series, where the long term relation between variables will be significant if the error term (ε_t) stationary at zero level [$\varepsilon_t \sim I(0)$] and does not have unit root. It means the fluctuations in one series lead to cancel the fluctuations in the other. Therefore, if it takes ratio for both values it should be constant; this means the data of both series may nonstationary, if each of those data took separately. But it will be stationary if all of those series take together (Atieh, p 670, 2005). Therefore if the residuals are stationary then it could conduct OLS method to estimate the equation and the results will be correct and not spurious regression. There are many tests that are used in the detection of Cointegration, such as:

1. Engle Ganger (EG) test
2. Cointegration Regression Durbin Watson (CRDW)
3. Johansen cointegration test

EG, and CRDW tests used for simple models (one independent variable, and other dependent variable), while Johansen cointegration test is more comprehensive test, which can be used for multivariate models, through determining the Maximum likehood, and trace (Al-abdaly, p.78, 2007).

5.3.4 Ordinary Least Square (OLS) Method:

The Ordinary Least Square (OLS) method is the most popular estimation technique due to the relative simplicity of implementation, bulk of available theoretical knowledge about the properties of the LS estimates, and many satisfactory practical results. The OLS technique consists in the minimization of the sum of squared deviation. Geometrically, it means that a curve of a specified functional form is drawn on the plane in such a way that the sum of squared vertical distances from experimental data points to this curve is minimized, in other words; minimize the sum of squared residuals (Smirnov, and Bezruchko, p. 186, 2006).

The classical assumptions must be met in order for OLS estimators to be the best available. Therefore, the classical assumptions are (Studenmund, p. 85, 2010):

1. The regression model is linear, is correctly specified, and has an Additive error term
2. The error term has a zero population mean
3. All explanatory variables are uncorrelated with the error term
4. Observations of the error term are uncorrelated with each other (no serial correlation)
5. The error term has a constant variance (no heteroskedasticity)
6. No explanatory variable is a perfect linear function of any other explanatory variable(s) (no perfect multicollinearity)
7. The error term is normally distributed (this assumption is optional but usually is invoked).

5.4 Estimated Econometric model:

5.4.1 Unit Root test results using ADF:

The integration order of variables determines the appropriate approach of estimation. If all variables integrated at the same order, it is possible for those variables to be cointegrated, and the Ordinary Least square (OLS) approach can applied. Otherwise the result of OLS could be misleading (spurious regression), and other approach of estimation should be considered. To determine the order of integration of variables the researcher has conducted Augmented Dickey-Fuller (ADF) to test unit root.

Table (5.1): Unit root test by using Augmented Dickey Fuller (ADF) test.

Variables	Augmented Dickey-Fuller test		
	P-value		
	Level	1st Difference	2nd Difference
CA	0.7133	0.0000	0.0213
TA	0.9962	0.0570	0.0000
TBDF	0.5446	0.0216	0.0000
CPI	0.9690	0.0000	0.0000
CR	0.5455	0.0000	0.0000
CENL	0.7925	0.0000	0.0000
AID	0.5113	0.0000	0.0000
IP	0.2065	0.0849	0.0000
IG	0.0463	0.0275	0.0000

Source: Output from Eviews (7.1)

The table 5.1 shows that all variables were nonstationary at its level, except (IG), so after make the same test for the variables at the first difference. The results show that all variables become stationary at the first difference, at Sig level 5%, except (IP), and (TA) still nonstationary. Finally, all the variables were stationary at second level, this mean that all variables in studied time series are integrated of second order [$Y_t \sim I(2)$] and this consider good indicator for adopting cointegration test between the variables time series.

Notes: All independent and dependent variables represented by the second difference ($\Delta^2 Z$) in the estimated equation, where as[54]:

$$Z = \Delta^2 Z = (Z_t - Z_{t-1}) - (Z_{t-1} - Z_{t-2}) = (Z_t - 2Z_{t-1} + Z_{t-2})$$

For example:

$$CA = \Delta^2 CA = (CA_t - CA_{t-1}) - (A_{t-1} - CA_{t-2}) = (CA_t - 2CA_{t-1} + CA_{t-2})$$

5.4.2 Johansen Cointegration Test:

The researcher need to check if all variables are cointegrated for each model, i.e., if a linear combination of these variables are stationary, the regression on the levels of these variables would be meaningful then it will not miss any valuable long-term information. Johansen Cointegration test adopted, which its test assumption is linear deterministic trend in the data for the purposes of this analysis. The results of this test displayed in table (5.2).

Regarding the results for equation no. 1, Table 5.2 shows the rejection of the null hypothesis of no cointegration at 5% significance level, and shows there are at least five integrating equations at the 0.05 level.

The same procedure taken for the variables of equations 2, and it shows the rejection of the null hypothesis of no cointegration at 5% significance level, and shows there are at least two integrating equations at the 0.05 level.

The data of equation 3 shows the rejection of the null hypothesis of no cointegration at 5% significance level, and shows there are at least four integrating equations at the 0.05 level.

The data of equation 4 shows the rejection of the null hypothesis of no cointegration at 5% significance level, and shows there is at least one integrating equations at the 0.05 level.

[54] Rob J Hyndman, and George Athanasopoulos (2012, May), "***Forecasting: principles and practice***" (Chapter. 8: ARIMA models » 8.1 Stationarity and differencing), Retrieved December 02, 2013, from https://www.otexts.org/fpp/8/1

Table (5.2): Cointegration test by using Johansen Technique

Equation #	Hypothesized No. of Cointegration Equations	P- value at Sig Level = 5%, of Trace	P- value at Sig Level = 5%, of Max. Eigenvalue
Equation 1	None	0.0000	0.0000
	At most 1	0.0000	0.0000
	At most 2	0.0000	0.0004
	At most 3	0.0000	0.0070
	At most 4	0.0000	0.0018
	At most 5	0.0038	0.1269
	At most 6	0.0082	0.0613
	At most 7	0.0093	0.0093
Equation 2	None	0.0000	0.0000
	At most 1	0.0000	0.0001
	At most 2	0.0069	0.2121
	At most 3	0.0157	0.2408
	At most 4	0.0189	0.1070
	At most 5	0.0133	0.0133
Equation 3	None	0.0000	0.0000
	At most 1	0.0000	0.0000
	At most 2	0.0000	0.0007
	At most 3	0.0000	0.0015
	At most 4	0.0037	0.4189
	At most 5	0.0028	0.1507
	At most 6	0.0044	0.0265
Equation 4	None	0.0000	0.0001
	At most 1	0.0146	0.5482
	At most 2	0.0141	0.5754
	At most 3	0.0079	0.1800
	At most 4	0.0122	0.0591

Source: Output from Eviews (7.1)

5.4.3 Estimation of The Models:

Based on previous results for stationary, and cointegration tests, it was conducted a preliminary estimate of the results, using OLS method. After consider the second difference of the variables (based on unit root test), and then estimate regression equation describes the relationship of the independent variables, and the dependent variable, which represented one time by the trade account (TA), and other time with current account (CA) in the Palestinian territories.

5.4.3.1 Current Account (CA) Dependent Variable:

The researcher at this section will estimate two main equations describing the relation between the current account (CA) and other independent variables. **First** equation will consider the main components of the public budget such as government current revenues (CR), current expenditures and net lending (CENL), and aid (AID), in addition, to other controlling variables[55] such as government, and private investment (IG, and IP respectively). **Second** equation will consider the total budget deficit/surplus after grants and aid (TBDF), and other above-mentioned controlling variables (IG, & IP).

The main goal of this procedure is to determine the degree of influence of components of public budget (CR, CENL, or AID) in current account, to enable the policy maker adopting proper policy to avoid the deficit in current account.

5.4.3.1.1 Estimation of Equation no. 1 (CA, CPI, AID, CR, CENL, IG, IP, & PS):

Table 5.3, shows, the variables (CPI), (CR), and dummy variable, which represents the political situation (PS), are not statistically significant, because their P-Value higher are than 0.05, while the variables of (AID), (CENL), (IG), and (IP) are statically significant. Moreover, the adjusted R^2 (0.4641) shows that the independent variables in the model explain 46.41% of the changes in the dependent variable (CA), and the percent of 53.59 % for changing in CA are explained by other variables are not included in the model. It also shows that there is no problem of autocorrelations (DW= 2.015).

Table (5.3): Results of coefficients at first estimation by use OLS method for Equation # 1

[55] Control variables help researchers account for spurious relationships; they measure the impact of any given variable beyond the effects of other variables (Sweet, and Martin, p. 163, 2011)

Dependant Variable: CA				
Variables	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	1.682373	17.68690	0.095120	0.9245
CPI	2.195869	9.922822	0.221295	0.8256
AID	0.244715	0.078319	3.124599	0.0028
CR	-0.089210	0.137890	-0.646961	0.5202
CENL	-0.217354	0.098763	-2.200764	0.0317
IG	3.218837	1.127183	2.855648	0.0060
IP	-5.925683	1.076296	-5.505624	0.0000
PS	-7.230306	25.93272	-0.278810	0.7814
R^2=0.5218, Adjusted R^2=0.4641, Durbin-Watson stat=2.0158, Prob.(F-statistic)= 0.00000				

Source: Output from Eviews (7.1)

To get acceptable results and model the researcher will omit some non-statistically significant variables. However, the omission of variable will be gradually, because omission one of non-significant variable may improve the other significancy of other non-significant. Dummy variable PS (political situation) has deleted in the beginning and then estimate the regression, but the other two variables, CPI, and CR are still non-statistically significant.

Finally, three non-statistically significant variables were eliminated CPI, CR, and PS, and then estimated the model again, and the results were as shown in Table 5.4.

The results of the regression in table 5.4 shows, The adjusted coefficient of determination (Adj. R^2) equal (0.4863) which is higher form Adj. R2 on primary estimated equation by 2.2% , which indicates that variables has been omitted are actually not statistically significant , and negatively affect the quality of the model . Showing the adjusted coefficient of determination in this model, that the independent variables [(AID), (CENL), (IG), and (IP)], explain about 48.63 % of the change in the dependent variable [(CA) in Palestinian Territories]. Moreover, the other 51.37 % explained by other variables are not included in the model. In addition, the model shows that all independent variables included in the model are statistically significant at the level of significance 1 % (P-Value < 0.01).

Table (5.4): Results of coefficients estimated after omitted non-significant variables for Equation # 1

Dependant Variable: CA				
Variables	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	-1.613702	12.55414	-0.128539	0.8981
AID	0.255567	0.074959	3.409426	0.0012
CENL	-0.240883	0.089462	-2.692579	0.0091
IG	3.108033	1.091884	2.846485	0.0060
IP	-6.150633	0.991225	-6.205084	0.0000
R2=0.5179, Adjusted R2=0.4863, Durbin-Watson stat=2.0753, Prob.(F-statistic)= 0.00000				

Source: Output from Eviews (7.1)

The values of absolute t-test in table 5.4 clarify the degree of effect of each independent variable on current account. Whereas the largest absolute t-test value means the largest variable have effect on dependent variable (CA), so, it noted that (IP) has the largest effect on the current account, because it has the largest absolute t-test value (6.205). Then it followed by (AID) which has t-test value (3.409), after aid, the (IG) came with t-test value (2.846). Finally the (CENL) has the lowest effect on CA (the t-test value is 2.692)

Therefore the researcher conducts three simple regression equations between the dependent variable (CA) and the other non-significant independent variables (CPI, CR, and PS), to check the relation between each of independent variable and current account.

Table (5.5): Results of Estimation Simple Regressions between CA and other Independent Variables

Dependant Variable: CA					
Variables	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**	**Adj. R^2**
CPI	13.31162	12.78945	1.040828	0.3019	0.0018
CR	-0.315706	0.155946	-2.024450	0.0471	0.0455
PS	-13.94571	35.31544	-0.394890	0.6942	-0.0131

Source: Output from Eviews (7.1)

The above-mentioned table (5.5) shows that CPI and Ps are still insignificant on current account at 5% level when performed simple regression. However, it noted that CR becomes significant with current account.

5.4.3.1.2 Check The Classical Assumptions for Residuals:

Using OLS approach in estimation need to adopt some statistical tests to make sure that model can rely on forecasting and estimation. Therefore, before starting the explanation of the results of the model, and the find the impact of the independent variables on the dependent variable, it should conduct those tests as follows:

1. **The regression model is linear, is correctly specified, and has an Additive error term:**

   The graph at annex-5 shows that regression model linear in coefficients, where the result fluctuated on straight line.

2. **The error term has a zero population mean:**

   To achieve the second classical assumption in order for OLS estimator to be the best available, and because of the specific value of the error term for each observation is determined purely by chance, so for best model the mean of error term should be approximately zero. There are many ways can test this assumption.

   After generating the residual of the equation no. 1, the researcher used the Eviews to test this assumption through descriptive statistics test, then select simple hypothesis test. This test to be performed, the user should determine the mean of residuals (-8.61E-16), and the variance (from the command "Histograms and stats").

   The P-value for such test was 1.0 (largest value), which mean rejection of null hypothesis (the error term has no zero population mean), and accept the alternative hypothesis that indicates error term has zero population mean

3. **All explanatory variables are uncorrelated with the error term**

   Test that indicates all explanatory variables are uncorrelated with the error term can perform by using tool provided by Eviews, which is covariance test. By applying covariance test for the independent variables with error term, the researcher found the P-Value for the test is the maximum (P-value = 1.000), this lead to reject null hypothesis (the explanatory variables are correlated with error term), and accept the alternative hypothesis, which indicates that all explanatory variables are uncorrelated with the error term.

4. **No serial correlation:**

This classical assumption means that the observations of the error term are uncorrelated with each other. To ensure that there is no serial correlation (autocorrelation) problem, the researcher relies on Durbin-Watson stat ≈ 2 (2.0753), as mentioned on table 6.4. On other way the (DW) value at the model is higher than the d_U (1.73) at 5% sig. level, and lower than 4- d_U = (2.27) [$4 - d_U > d > d_U$]; therefore the null hypothesis not rejected. This mean there is no serial correlation problem (Studenmund, p. 326-327, 2010).

5. **No Perfect Multicollinearity:**

This classical assumption means that No explanatory variable is a perfect linear function of any other explanatory variable(s). One of the most common methods to check such assumption is to adopt coefficients diagnostic test by using Variance Inflation Factors (VIF) method. The VIF is a method of detecting the severity of multicollinearity by looking at the extent to which a given independent variables (explanatory) can be explained by all the other independent variables in the equation. There is a VIF for each independent variable in an equation (Studenmund, p. 257, 2010). The VIF for β_i can calculated as follows:

$$VIF(\widehat{\beta_i}) = \frac{1}{1 - R_i^2}$$

Where R_i^2 is the coefficient of determination (unadjusted R^2) of the auxiliary regression in step one. While there in no table of formal critical values, a common rule of thumb is that if VIF (β_i) > 5, the multicollinearity is severe (Ibid, p.258). The results of VIF for coefficients of independent variables can extracted from Eviews, as mentioned at table 5.6:

Table (5.6): Results of Variance Inflation Factor (VIF) for Estimated Coefficients

Variable	VIF
AID	1.50
CENL	1.47
IG	1.05
IP	1.08

Source: Output from Eviews (7.1)

The table 5.6 shows the value of VIF for each independent variable coefficient. All values are lower than the five. This means that there is no multicollinearity problem in the estimated model. This lead to, estimated variables coefficients are unbiased, the model estimates have reasonable variance and standard errors, and the computed t-score will not fall (see values in table 5.4).

6. No Heteroskedasticity:

This classical assumption means that error term has a constant variance. Heteroskedasticity causes the OLS estimates of the SE to be biased, leading to unreliable hypothesis testing. Typically, the bias in the SE estimate is negative, meaning that OLS underestimates the standard errors (and thus overestimates the t-scores). The researcher will conduct White test using Eviews. The results as follows:

i. Obs*R-squared = 5.435, this calculated value is lower critical value in Chi-Square Probabilities table which is 7.815 (Obs*R-squared < Critical value) at 5% sig. level.
ii. P-value of Chi-Square is 0.245.

The results shown above mean it should accept the null hypothesis which state that the error term has constant variance (no heteroskedasticity).

7. The error term is normally distributed:

The high number of observations (68 observations), can indicate that the error term is normally distributed.

After the completion of all needed test to ensure that estimated econometric model can be relied on forecasting and make future estimation for dependent variable[56], which is the Current Account in Palestinian Territories. Therefore, using the information in table 5.4, the model will be as follows:

$$CA = -1.614 + 0.256\,AID - 0.241\,CENL + 3.108\,IG - 6.151\,IP \quad \text{Equ. 1-1}$$

1. The independent variable Aid (AID) has a positive relationship with the dependent variable Current Account (CA). Therefore, an *increase in aid (AID) by* ***one million U.S dollars****, this will increase the current account (CA) by* ***256 thousands U.S dollars***, when all other independent variables (CENL, IG, and IP) remain constant.

2. The independent variable Government Current Expenditures and Net Lending (CENL) has a negative relationship with the dependent variable Current Account (CA). Therefore, an *increase in government current expenditures and net lending (CENL) by* ***one million U.S dollars****, this will decrease the current account (CA) by* ***241 thousands U.S dollars***, when all other independent variables (AID, IG, and IP) remain constant.

3. The independent variable Government Investment (IG) has a positive relationship with the dependent variable Current Account (CA). Therefore, an *increase in government investment (IG) by* ***one million U.S dollars****, this will increase the current account (CA) by* ***3.108 million U.S dollars***, when all other independent variables (AID, CENL, and IP) remain constant.

4. The independent variable Private Investment (IP) has a negative relationship with the dependent variable Current Account (CA). Therefore, an *increase in private investment (IG) by* ***one million U.S dollars****, this will decrease the current account (CA) by* ***6.151 million U.S dollars***, when all other independent variables (AID, CENL, and IG) remain constant.

5.4.3.1.3 Estimation of Equation no. 2 (CA, TBDF, IG, & IP):

The researcher in this section will estimate the equation for the current account (CA), with budget data after grants and aid, in addition to other control variables (IG, & IP). In addition, the omitted variable from the

[56] The estimated data for all variables (dependent and independent) was in Million U.S.A Dollars.

previous model will also omit here in estimated equation no. 2 because it is not significant either in multiple regression or in simple regression with CA. Therefore, the regression result listed below in table 5.7.

Table (5.7): Results of coefficients estimated for Equation # 2

Dependant Variable: CA				
Variables	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	-3.529026	12.13927	-0.290711	0.7722
TBDF	3.085815	0.752275	4.101977	0.0001
IG	4.642861	1.130046	4.108558	0.0001
IP	-5.995730	0.952476	-6.294885	0.0000
R2=0.5424, Adjusted R2=0.5202, Durbin-Watson stat=1.9396, Prob.(F-statistic)= 0.00000				

Source: Output from Eviews (7.1)

The results of the regression in table 5.7 shows, The adjusted coefficient of determination (Adj. R^2) equal (0.5202) which is higher form Adj. R2 on estimated equation # 1 by 3.4% , this because there are other variable included in TBDF, such as (CE), which is not include in previous model. Adjusted coefficient of determination shows that the independent variables (TBDF, IG, & IP), explain about 52.02 % of the change in the dependent variable [(CA) in Palestinian Territories]. While, the other 47.98 % explained by other variables not included in the model. In addition, the model shows that all independent variables included in the model are statistically significant at the level of significance of 5% and 1 % (P-Value < 0.01).

Before starting the explanation of the results of the model, and finding the impact of the independent variables on the dependent variable, it should conduct those tests for classical assumption (the same procedure conducted in paragraph 5.4.3.1.2). Therefore, the results listed at below table (5.8)

Table (5.8): Results of classical assumption tests for Equation # 2

Assumption	Result
The regression model is linear, is correctly specified, and has an Additive error term	The graph at annex-5, show the linearity pattern for the model independent variables.
The error term has a zero population mean	The error term has a zero population mean is (**-2.58E-15**) which is very small and near to zero, and by using the same procedure for equation no. 1. P-value was 1.0
All explanatory variables are uncorrelated with the error term	Covariance test for the error term with explanatory variables (AID, CENL, IG, and IP), shows P-value = 1.000 for each explanatory variable with error term. This mean rejection of null hypothesis (all explanatory variables are correlated with the error term), and accept the alternated hypothesis, that All explanatory variables are uncorrelated with the error term.
No serial correlation	Durbin-Watson stat is about 2 (**1.9396**), which mean no serial correlation problem.
No Perfect Multicollinearity	The variance inflation factor coefficient diagnostic shows that all VIF of coefficient are lower than 5 (**TBDF = 1.261, IG = 1.206, and IP = 1.067**), which mean there is no multicollinearity problem in the estimated model
No Heteroskedasticity	Using White test for heteroskedasticity, show **P-value of Chi-Square is 0.194**. this mean acceptance of null hypothesis which state that the error term has constant variance (no heteroskedasticity)
The error term is normally distributed	The high number of observations (68 observations), can indicate that the error term is normally distributed

Source: Output from Eviews (7.1)

After the completion of all needed test to ensure that estimated econometric model can be relied on forecasting and make future estimation for dependent variable, which is the Current Account in Palestinian Territories. Therefore, using the information in table 5.7, the model will be as follows:

$$\boldsymbol{CA = -3.529 + 3.086\,TBDF + 4.643\,IG - 5.996\,IP} \quad \text{Equ. 2}$$

1. The independent variable Total Budget Deficit/Surplus after Grants and Aid (TBDF) has a positive relationship with the dependent variable Current Account (CA). Therefore, *an increase in total Budget Deficit/Surplus after Grants and Aid (TBDF) by* ***one million U.S dollars****, this will increase the current account (CA) by* ***3.086 million U.S dollars***, when all other independent variables (IG and IP) remain constant.

2. The independent variable Government Investment (IG) has a positive relationship with the dependent variable Current Account (CA). Therefore, an *increase in government investment (IG) by* ***one million U.S***

dollars**, this will increase the current account (CA) by **4.643 million U.S dollars, when all other independent variables (TBDF and IP) remain constant.

3. The independent variable Private Investment (IP) has a negative relationship with the dependent variable Current Account (CA). Therefore, an *increase in private investment (IG) by **one million U.S dollars**, this will decrease the current account (CA) by **5.996 million U.S dollars***, when all other independent variables (TBDF and IG) remain constant.

5.4.3.1.4 Summary of the results of equations when current account (CA) is a dependent variable:

The results of regression of CA as dependent variable (equation 1 & 2), show, that public budget account has a significant effect on Palestinian current account. Whereas the increasing of public budget deficit lead to increasing the deficit in Palestinian current account.

Both estimated equation show the positive relationship between the Palestinian public budget account and current account. However, the equation 1 shows the degree of effect of components of public budget. The (CR) were insignificant, and it has negative coefficient value. This means the lack of effect of public revenues on current account. While the public current expenditures and net lending has a significant effect on current account. **This lead to CENL considered best tool rather than CR in affecting the Palestinian current account.**

The coefficients the control variables IG and IP, not changed so much in both models and there signs also not change. In addition, t-test value for both variables was high, compared to other variables. **This means the importance of the amount and type of investment on affecting the current account.**

5.4.3.2 Trade Account (TA) Dependent Variable:

The researcher adopted the same procedures in estimating the relation between dependent variable (TA) and other independent variables.

5.4.3.2.1 Estimation of Equation no. 3 (TA, CPI, AID, CR, CENL, IG, IP & PS):

Table 5.9, shows, those variables (CPI), (CR), (CENL), (AID), and dummy variable, which represent the political situation (PS), are not statistically significant at 5% sig. level. While, (IG), and (IP) are only variables have significant P-value at 5% sig. level.

Table (5.9): Results of coefficients at first estimation by use OLS method for Equation # 3

Dependant Variable: TA				
Variables	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	-0.632580	2.489480	-0.254101	0.8003
CPI	-0.081805	1.396665	-0.058572	0.9535
AID	0.001354	0.011024	0.122807	0.9027
CR	-0.006877	0.019408	-0.354342	0.7244
CENL	-0.008575	0.013901	-0.616842	0.5398
IG	0.680746	0.158654	4.290752	0.0001
IP	-1.676019	0.151492	-11.06343	0.0000
PS	0.936727	3.650103	0.256630	0.7984
R^2=0.7279, Adjusted R^2=0.6951, Durbin-Watson stat=2.5201, Prob.(F-statistic)= 0.00000				

Source: Output from Eviews (7.1)

After eliminating the non-significant variables (CPI, AID, CR, CENL, and PS), the model will include only the controlling variables IG, and IP. This means that components of public budget have no significant relationship with trade account (TA). Therefore, the regression results will be as shown at table 5.10

Table (5.10): Results of coefficients estimated after omitted non-significant variables for Equation # 3

Dependant Variable: TA				
Variables	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	-0.181421	12.13927	-0.103877	0.9176
IG	0.651224	1.130046	4.355466	0.0000
IP	-1.682535	0.952476	-12.55557	0.0000
R2=0.7232, Adjusted R2=0.7145, Durbin-Watson stat=2.5216, Prob.(F-statistic)= 0.00000				

Source: Output from Eviews (7.1)

Before conclude the final formula for equation 3, researcher conducted assumption test for the model. Same procedures (for eq.1 and eq.2) was adopted, and the summary of those test mentioned at table 5.11

Table (5.11): Results of classical assumption tests for Equation # 3

Assumption	Result
The regression model is linear, is correctly specified, and has an Additive error term	The graph at annex-5, show the linearity pattern for the model independent variables.
The error term has a zero population mean	The error term has a zero population mean is (**3.62E-16**) which is very small and near to zero, and by using the same procedure for equation no. 1. P-value was 1.0
All explanatory variables are uncorrelated with the error term	Covariance test for the error term with explanatory variables (IG, and IP), shows P-value = 1.000 for each explanatory variable with error term. This mean rejection of null hypothesis (all explanatory variables are correlated with the error term), and accept the alternated hypothesis, that All explanatory variables are uncorrelated with the error term.
No serial correlation	Durbin-Watson stat is about 2 (**1.9396**), which mean no serial correlation problem.
No Perfect Multicollinearity	The variance inflation factor coefficient diagnostic shows that all VIF of coefficient are lower than 5 (**IG = 1. 019, and IP = 1.020**), which mean there is no multicollinearity problem in the estimated model
No Heteroskedasticity	Using White test for heteroskedasticity, show **P-value of Chi-Square is 0.463**. this mean acceptance of null hypothesis which state that the error term has constant variance (no heteroskedasticity)
The error term is normally distributed	The high number of observations (68 observations), can indicate that the error term is normally distributed

Source: Output from Eviews (7.1)

Based on the date of table 5.10; the equation 3 for regression between dependent variable (TA) and other independent variable will be as follows:

$$\boldsymbol{CA = -0.633 + 0.680\, IG - 1.676\, IP} \quad \text{Equ. 3}$$

1. The independent variable Government Investment (IG) has a positive relationship with the dependent variable Trade Account (TA). Therefore, an *increase in government investment (IG) by* ***one million U.S dollars****, this will increase the trade account (TA) by* ***680 thousands U.S dollars***, when all other independent variable (IP) remain constant.

2. The independent variable Private Investment (IP) has a negative relationship with the dependent variable Trade Account (TA). Therefore, an *increase in private investment (IG) by* ***one million U.S dollars****, this*

*will decrease the trade account (CA) by **1.676 million U.S dollars***, when all other independent variable (IG) remain constant

Researcher conducts five simple regression equations between the dependent variable (TA) and each of independent variables (CPI, AID, CR, CENL, and PS), to check the relationship between each of independent variable and trade account.

Table (5.12): Results of Estimation Simple Regression between TA and other insignificant Independent Variables

Dependant Variable: TA					
Variables	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**	**Adj. R^2**
CPI	2.581108	2.384937	1.082254	0.2832	0.002628
AID	0.022849	0.015801	1.446031	0.1530	0.016508
CR	-0.050611	0.029343	-1.724817	0.0894[57]	0.029489
CENL	0.006021	0.019359	0.311014	0.7568	-0.014092
PS	-0.768664	6.597284	-0.116515	0.9076	-0.015410

Source: Output from Eviews (7.1)

The above-mentioned table (5.12) shows the only variable that has significant statistical value is (CR) when perform simple regression with dependent variable (TA).

5.4.3.2.2 Estimation of Equation no. 4 (TA, TBDF, IG, & IP):

The researcher in this section will estimate the equation for the (TA), with (TBDF), in addition to other control variables (IG, & IP). The omitted variable from the previous model will also omit here in estimated equation no. 4 because it is not significant. Therefore, the regression result listed below in table 5.13.

Table (5.13): Results of coefficients estimated for Equation # 4

Dependant Variable: TA				
Variables	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	-0.428966	1.480984	-0.289649	0.7731
TBDF	0.465355	0.091777	5.070489	0.0000
IG	0.926577	0.137865	6.720900	0.0000
IP	-1.557914	0.116202	-13.40700	0.0000
R2=0.8044, Adjusted R2=0.7949, Durbin-Watson stat=2.51623, Prob.(F-statistic)= 0.00000				

Source: Output from Eviews (7.1)

[57] Two side P-value test. The value should divide by two, so the P-value test for CR is 0.0447.

The above-mentioned table shows that all estimated coefficient are statically significant. The adj. R^2 means that variables TBDF, IG, and IP explain about 79.49% of changes in trade account (which considered high adj. R^2).

Before starting the explanation of the results of the model, the researcher conducts tests for classical assumption (the same procedure conducted in paragraph 5.4.3.1.2). The results listed at below table (5.14)

Table (5.14): Results of classical assumption tests for Equation # 4

Assumption	Result
The regression model is linear, is correctly specified, and has an Additive error term	The graph at annex-5, show the linearity pattern for the model independent variables.
The error term has a zero population mean	The error term has a zero population mean is (**-6.73e-16**) which is very small and near to zero, and by using the same procedure for equation no. 1. P-value was 1.0.
All explanatory variables are uncorrelated with the error term	Covariance test for the error term with explanatory variables (IG, and IP), shows P-value = 1.000 for each explanatory variable with error term. This mean rejection of null hypothesis (all explanatory variables are correlated with the error term), and accept the alternated hypothesis, that All explanatory variables are uncorrelated with the error term.
No serial correlation	Durbin-Watson stat is about 2 (**2.5162**), which mean no serial correlation problem.
No Perfect Multicollinearity	The variance inflation factor coefficient diagnostic shows that all VIF of coefficient are lower than 5 (**TBDF = 1.2611, IG = 1. 2063, and IP = 1.0674**), which mean there is no multicollinearity problem in the estimated model
No Heteroskedasticity	Using White test for heteroskedasticity, show **P-value of Chi-Square is 0.761**. this mean acceptance of null hypothesis which state that the error term has constant variance (no heteroskedasticity)
The error term is normally distributed	The high number of observations (68 observations), can indicate that the error term is normally distributed

Source: Output from Eviews (7.1)

Based on the information in table 5.13, the model will be as follows:

$$\boldsymbol{TA = -0.429 + 0.465\,TBDF + 0.926\,IG - 1.558\,IP} \quad \text{Equ. 4}$$

3. The independent variable Total Budget Deficit/Surplus after Grants and Aid (TBDF) has a positive relationship with the dependent variable Trade Account (CA). Therefore, *an increase in total Budget Deficit/Surplus after Grants and Aid (TBDF) by* ***one million U.S dollars****, this will*

*increase the trade account (TA) by **465 thousands U.S dollars***, when all other independent variables (IG and IP) remain constant.

4. The independent variable Government Investment (IG) has a positive relationship with the dependent variable Trade Account (TA). Therefore, an *increase in government investment (IG) by **one million U.S dollars**, this will increase the trade account (TA) by **926 thousands U.S dollars***, when all other independent variables (TBDF and IP) remain constant.

5. The independent variable Private Investment (IP) has a negative relationship with the dependent variable Trade Account (TA). Therefore, an *increase in private investment (IG) by **one million U.S dollars**, this will decrease the trade account (CA) by **1.558 million U.S dollars***, when all other independent variables (TBDF and IG) remain constant.

5.4.3.2.3 Summary of the results of equations when trade account (TA) is a dependent variable:

The results of regression of TA as dependent variable (equation 3 & 4), show, that public budget account has a significant effect on Palestinian trade account. So the increasing of public budget deficit leads to an increasing the deficit in Palestinian trade account.

The equation 3 shows that all public budget components have insignificant value). However, the results of regression model no. 4 show different result, where the public budget account has significant value of trade account. This may happened because there are problems with the data from the source as mentioned before at paragraph 5.4.

The coefficients of the control variables IG and IP are not changed so much in both models and there signs also not change. In addition, t-test value for both variables was high, compared to other variables.

5.4.3.3 Summary of Regression Models of Current and Trade Accounts:

The regressions models for the dependent variable current account (CA) show some differences and some similarities compared with regressions model for trade account (TA) as a dependent variables. Therefore, the researcher classifies the independent variables through comparison to three groups (table 5.15). The groups as follows:

1. **Group 1:** Variables have the **same** coefficient signs (positive or negative), and have **same** condition of significancy (the independent variables may be significant or not significant on both current and trade accounts) such as TBDF, CR, IG, and IP.
2. **Group 2:** Variables have the **same** coefficient signs (positive or negative), and have **different** condition of significancy (the variable has significant on one of the dependent variable and not significant on other dependent variable) such as AID and CENL.
3. **Group 3:** Variables have the **different** coefficient signs (one positive and other negative), and have **same** condition of significancy (significant or not significant on both dependent variables; current and trade accounts) such as CPI and PS.

Table (5.15): Impact of independent variables on Current and Trade Accounts

Group No.	Variables	Current Account (CA)			Trade Account (TA)		
		Coefficient	Prob.	Table No.	Coefficient	Prob.	Table No.
Group 1	TBDF	3.085815	0.0001	5.7	0.465355	0.0000	5.13
	CR	-0.089210	0.5202	5.3	-0.006877	0.7244	5.9
	IG	3.218837	0.0060	5.3	0.680746	0.0001	5.9
	IP	-5.925683	0.0000	5.3	-1.676019	0.0000	5.9
Group 2	CENL	-0.217354	0.0317	5.3	-0.008575	0.5398	5.9
	AID	0.244715	0.0028	5.3	0.001354	0.9027	5.9
Group 3	PS	-7.230306	0.7814	5.3	0.936727	0.7984	5.9
	CPI	2.195869	0.8256	5.3	-0.081805	0.9535	5.9

Source: Collected data from tables 5.3, 5.7, 5.9, and 5.13

Table 5.15 the different influence of independent variables listed in above table, either on current account or trade account. The **TBDF** consider from first group, because it shows significant P-value on both CA and TA, it have the same coefficient positive sign. This means that the deficit in public budget after grants and aid will cause deficit in both current account and trade account. In other words, the increase on TBDF by one million U.S dollar will cause an increase in current account by 3.085 million U.S dollar, and cause an increase in trade account by 465.355 thousands U.S dollars. This also support the main effect of public budget on both current and trade account. This is **consistent** with the first hypothesis that states, "***There is a significant relationship between the current account and public budget account in the Palestinian Territories***". *This also* ***mimics*** *for trade account*.

The government current revenues (**CR**) shows negative influence on current and trade accounts, but the coefficients of CR are insignificant on both CA and TA. This may because of problem in data, or the CR have not strong influence on studied accounts (CA & TA). This reflected on the values of coefficients of CR, where both coefficients show the low effect of CR (increase in government current revenues (CR) cause a decrease in CA about 89.21 thousands U.S dollars, or decrease in trade account by 6.8 thousands U.S dollars). Based on the coefficient insignificant condition of CR; the results of government current revenues (CR) **contradict** (not consistent) with fourth hypothesis that state, "***There is a significant relationship between consumer price index (CPI) and current account***". *This also* ***mimics*** *for trade account*

The investment (Private (**IP**) and government (**IG**)) has the largest effect and significancy on the current and trade account. However, the government investment has different coefficient sign compared with private investment. The IG has positive relation with CA and TA. It meant that increase in government investment cause positive influence on current and trade accounts. While IP has significant, negative impact on current and trade accounts. This can be explaining by the nature of private investment, which is oriented for consumption of foreign goods obtained by imports. This is **consistent** with the sixth and seventh hypothesis that states, ***"There is a significant relationship between government and private investment (IP) and current account deficit***". *This also* ***mimics*** *for trade account*

Current expenditures and net lending (**CENL**) consider from group two, where it have the same coefficient sign in both model (CA and TA), but it significant on CA model and insignificant on TA model. CENL has negative impact on both accounts (current and trade). While increases in CENL by million U.S dollars cause reduction in current account by 217.35 thousands U.S dollars, and cause little decrease in trade account, (8.57 Thousands U.S dollars). This is **consistent** with the fifth hypothesis that states, "***There is a significant relationship between government current expenditure (CENL) and current account*** ". *This is* ***not mimics*** *for trade account*.

The grants and aid (AID) has significant impact on current account but has not significant influence on trade accounts. It can note from the p-value of each model and the value of coefficients. An increase in AID by one million U.S dollars leads to increase in current account by 244.71 thousands U.S dollars, while a very little increases in trade account (1.35 thousand U.S dollars). This is **consistent** with the third hypothesis that states, "***There is a significant***

relationship between grant and aid (AID) and current account". *This is* ***not mimics*** *for trade account*.

The consumer price index (CPI) also consider from group 3 variables. However, it has opposite direction on affecting the dependent variables (CA and TA) compared with PS. Whereas increasing in CPI by one unit causes an increase in current account by 2.195 million U.S dollars, but it causes also decrease in trade account by 81.8 thousands U.S dollars. However, it should note that CPI has insignificant coefficient value on both dependent variables (CA & TA). Based on the coefficient insignificant condition of CR; the results of consumer price index (CPI) **contradict** (not consistent) with fourth hypothesis that state, "***There is a significant relationship between consumer price index (CPI) and current account***". *This also* ***mimics*** *for trade account*

The political situation (PS) in Palestinian territories considers one of the group tree variables. It shows insignificant coefficient p-value on current and trade accounts. However, it noted that PS has negative influence on current account (through bad political situation the current account decreased by 7.23 million U.S dollars). On contrary PS has positive impact on trade account (through bad political situation the trade account increased by 936.72 thousands U.S dollars). Based on the coefficient insignificant condition of CR; the results of political situation (PS) **contradict** (not consistent) with fourth hypothesis that state, "***There is a significant relationship between political situation (PS) and current account***". *This also* ***mimics*** *for trade account*

Chapter Six

Conclusions and Recommendations

6.1 Introduction:

The research study used the descriptive and econometrics analysis, to study the impact of the public budget deficit on the current account in the Palestinian Territories. Where, it was analyzed the components of the public budget (expenses and revenues) using descriptive analysis and study the effects of each of these components and their behavior during the study period. The study then performed statistic analysis (econometric) to determine the effect of both the public budget and its components in the current account. The study has found the results through econometrics analysis consistent and support results of descriptive analysis. The results summarized as follows:

6.2 Conclusions:

This study examined the effects of public budget deficit on the current account balance in Palestinian Territories during the period 1996 through 2012. Evidence from historical data reveals that the Palestinian National Authority faces a fiscal budget deficit and this deficit has strong correlation with both current and trade balances. This was concluding from both descriptive and econometric analysis as follows:

6.2.1 Conclusions of Descriptive Analysis:

1. The average growth of nominal government spending is 12.26% per year during the study period. However, the average real growth rate for this spending did not exceed 6.9% per year. While the average growth rate of government spending per capita was 4.21% annually.

2. Government capital spending suffered a significant decline during the years of the study. Part of this is due to unstable political and economical situation witnessed by the Palestinian territories (AL-AQSA INTIFADA, the division, in addition to the wars on Gaza in 2008 and 2012). It has turned part of this spending to cover wages and salaries, and another part to the current transfers and subsidies. It is noticeable that the government capital expenditures were growing significantly during the establishment period (1994 to 1999).

3. Current revenues was depends highly on clearance revenues (taxes on imports), the average clearance revenues was about 56.55% of the current revenues, while domestic revenues (tax and non-tax revenues) accounted for 43.45% of the value

of current revenues during study period. The heavy reliance on the clearance revenues (It is delivered to the PNA by Israel) to finance the public budget; make those revenues tool used by Israel for disruption in the Palestinian revenues structure.

4. At the beginning of the AL-AQSA INTIFADA in 2000, the foreign aid reached to 510 million U.S. dollars (75.7% of government revenues), compared to the previous year where the total aid to support budget was 235 million dollars. In addition, the aid allocated to support public budget reached to 1.978 billion dollars in the year 2008. However, it clearly noted that supports dropped significantly at the stable situations, for example; at the beginning of the economic reform period (2004) to the Palestinian National Authority institutions, the external support to budget was 353 million U.S. dollars.

5. The Palestinian economy has not seen any surplus in the public current budget during the study period. However, the deficit was lower in the years from 1994 to 1999, the deficit amounted to 25.8 million U.S. $ in the year 1999. Soon the deficit significantly increased rapidly. This high increase was because of the expansion in the number of government sector employees. In addition to the government was returns large amount of arrears dues for the employees.

6. In spite of the large deficit in the government current budget in the year, 2008, but the external support to public budget was large and generous, which is reaching nearly 2 billion U.S. dollars. This converts the deficit in current budget to a surplus in total public budget after grants and aid. The amount of the surplus amounted to about 295 million U.S. dollars. Moreover, it was the only year during the study period, which saw the total Palestinian budget surplus.

7. The public budget on an accrual basis saw a bigger value of deficit than the deficit on a cash basis, the reason for this is to increase of net accumulation of arrears. The value of the deficit on an accrual basis considered the true measure that shows the financial situation of the government.

8. The lack of Palestinian national currency contributed in significant limitation in monetary policies may taken by the Palestinian Authority to reduce the public deficit. In addition, it denied the PNA to take advantage of issuing money (seigniorage).

9. The amount of the deficit in the trade account much larger than the current account deficit, and the reason for the decline in the current account deficit in the Palestinian territories is the current transfers' item, which represents the

international aid, grants, and donation, insomuch the current account recorded a surplus in 2008 by 764.4 million U.S. dollars, because of the large increase in current transfers to the Palestinian National Authority, which a net current transfer amounted about 3.42 billion U.S. dollars.

10. Fiscal and trade policies adopted by the Palestinian territories during the study period lead to deepen both the deficit in the public budget of the Palestinian National Authority and the trade account (the largest component of the current account). Whereas the public spending did not directed to serve economic growth, but it was sometimes justified by the worse political and economic conditions witnessed by the Palestinian territories during that period, which began in 2000 by AL-AQSA INTIFADA and ended with the Israeli war on Gaza in 2012.

11. Excessive reliance on worker remittances revenues of Palestinian workers in Israel has led to increased economic dependence on Israeli economy policies. This make the Palestinian economy is highly susceptible to shocks and external economic volatility of, and this is what observed during the AL-AQSA INTIFADA.

12. The main cause of trade account deficit is the continuing weakness of the Palestinian productive base. Where the goods exports amounted to 11.75% of GDP, and total exports (goods and services) does not exceed 18.8% of GDP during the study period.

13. The low capital spending leads to shortage and weaknesses on infrastructure and government development projects, so this discourages the private investment in productive projects. Therefore, the private investment transfers to the projects depend on imports, which harm the trade deficit in Palestinian territories.

6.2.2 Conclusions of Econometrics Analysis:

1. Augmented Dickey Fuller (ADF) test shows that the all variables involved at the study have a unit root. This means that the time series of the variable are nonstationary. Performing second difference for the variables make it all integrated at second order [$Y_t \sim I(2)$]. In addition, Johansen Cointegration test shows the short and long run relationship among the variables included in econometric models.

2. The econometric study shows that independent variables represented by total budget deficit/surplus after grants and aid, government investment, and private

investment have statically significant at 5% level on both dependent variables represented by current account and trade account.

3. The independent variables represented by external support to public budget and government current expenditures, and net lending was significant on current account and insignificant on trade account at 5% level.

4. The variables government current revenues, consumer price index, and dummy variable (Political situations) were insignificant at 5% level on both current and trade accounts.

5. The total budget deficit/surplus after grants and aid (TBDF) has positive relationship with both current and trade accounts (increasing the deficit of TBDT cause increase in deficits of current and trade account). The econometric study shows; an increase in total Budget Deficit/Surplus after Grants and Aid (TBDF) by one million U.S dollars, this will increase the current account (CA) [this mean reduce the deficit of CA] by 3.086 million U.S dollars, or an increase the trade account (TA) by 465 thousands U.S dollars when all other independent variables remain constant. This result was consistent with (Al-Jafarr, and Al-Ardah, 2002) in Palestinian territories, and (Mdanat, and Shotar, 2009) in Jordan, but the studies of (Rauf, and Qayyum Khan, 2011) in Pakistan, (Merza, Alawin, and Bashayreh, 2012) in Kuwait, show the direction of relationship between two deficit start from current account [this mean that current account at those countries independent variable, and the public budget is the dependent variable]. While the study of (Marinheiro, 2006) in Egypt show there is no relation between two deficits.

6. The government investment (IG) has positive coefficient sign. This means an increasing of government investment reduce the deficits of current and trade accounts. The econometric study shows; an increase in government investment (IG) by one million U.S dollars, this will increase the current account (CA) by 3.218 million U.S dollars, or an increase the trade account (TA) by 680.7 thousands U.S dollars when all other independent variables remain constant. This result is consistent in significancy with ((Altintas and Taban, 2011) in turkey) in turkey, but the coefficient sign was different because public investment cause the public budget to be in deficit. However the government usually invests on projects make economics externalities, such as infrastructures projects (roads, water and sewage networks, electricity, education, health, and other projects does not make by private sector). The study of (Abu Muatafa, 2009) in Palestinian territories through studying the effect of external financing

to the public budget, shows that capital spending has insignificant with budget deficit.

7. The private investment (IP) has the largest effect on current and trade accounts, and it has negative coefficient sign at the estimated model. This means an increasing in private investment leads to high increase in deficits of current and trade accounts. The econometric study shows; an increase in private investment (IP) by one million U.S dollars, this will increase deficit in current account (CA) by 5.925 million U.S dollars, or increase the deficit of trade account (TA) by 1.676 million U.S dollars when all other independent variables remain constant. The result of this study was consistent with (Munshed, 2005) for the Egypt, Tunisia, and Morocco, and (Saeed, and Arshad Khan, 2012) in Pakistan, and (Altintas and Taban, 2011) in Turkey. The situation in Palestine differ, this appear by the coefficient sign of private investment at an econometric study. This happened as result of the nature of private investment at Palestinian territories, where most of Palestinian producers for food industry, Pharmaceutical Industry, shoes, clothes, and other industries transform to an importer for those types of products either from Israel or through Israel, especially Southeast Asian Nations.

8. The government current revenues (CR) shows insignificant value at 5% level at both multivariate models with CA and TA, but it has significant value when adopted simple regression. This may because of accuracy of data collected from related authorities (ministry of finance). However, it is worth to mention that CR has negative coefficient sign, this mean an increase in government current revenues this decrease the trade and current account (increase the deficit at both accounts). The negative sign of CR coefficient can justified that large amount of current revenues come from clearance revenues (56.55% of current revenues) and clearance revenues are the taxes on goods shipped from Israel to the West Bank and Gaza, which the increase on clearance revenues result of increasing the imports.

9. Government current expenditures and net lending (CENL) has significant coefficient value only on current account, and it has negative coefficient. Therefore, the increase of government current spending and net lending leads to decreasing of the current account (increase the amount of current account deficit) in Palestinian territories, where an increase in government current expenditures and net lending (CENL) by one million U.S dollars, this will decrease the current account (CA) by 241 thousands U.S dollars. The increasing if government spending consider expansionary fiscal policy, and this policy leads to an increase in income, increasing income make the households tend to

import more, so the trade account (major component of current account) become in deficit. Especially most of households spending in Palestinian territories directed to consumption.

10. The external support to public budget (AID) in Palestinian territories has significant value at 5% level on current account, but insignificant on trade account. This is normal result where those external supports consider part of current transfer (one on the main components of current account), and already the increase of net current transfer account leads to increase the current account (decrease the current account deficit). The econometric study shows that an increase in aid (AID) by one million U.S dollars, this will increase the current account (CA) by 256 thousands U.S dollars.

11. The dummy variable represented by political situations (PS) has insignificant impact on current account. However, the sign of PS coefficient shows the negative impact of bad political situation on current account. This means increases in the current account deficit by 7.23 million U.S dollars (worse political situation can affect the income balance in current account, because it depends of remittances of worker from Israel, and lower the income of investment).

12. The consumer price index (CPI) also has insignificant statistic value on both, current account and trade account this was consistent with (Samimi, Fakhrehosseini, and Azizi, 2009) study, but the study of (Saad, and Kalakech, 2009), shows significant relationship between trade account and consumer price index, and the sign of coefficient was negative.

13. The estimated econometric model (equation 2) for the current account shows that independent variables represented by public budget deficit/ surplus after external support and grants, government investment, and private investment explain about 52 % of changes in current account, and the rest explained by other variables not involved at the estimated model. However, those independent variables explain about 79.5% of changes in trade account (equation 4).

14. The estimated model for the component of public budget and current account (equation 1) shows that only external support to the public budget (AID), and government current expenditures and net lending (CENL) have significant effect on current account, but the government current revenues has insignificant value. This confirms the important role of government spending in decreasing the deficit in current account, rather than government revenues.

6.3 Recommendations:

Depending on the results that reached in this study, by descriptive and econometrics analysis, the researcher concludes a set of recommendations that may help to reduce the deficit in each of the public budget and trade and current accounts. In addition to a set suggested topics for researchers in this field:

1. Rationalize of current spending, because public spending has important role in influencing the public budget. This fiscal policy can adopt in Palestinian territories because of its greater impact than revenue on decreasing the current and trade account deficits.

2. Distribute the public current revenues between current spending and capital (investment) spending, in order to increase the proportion of capital spending to public expenditures. In other words, the PNA should increase the share of development expending.

3. Increase the amount of revenue allocated to the capital spending; thereby increases in public spending leads to increase in the gross domestic product.

4. Increase the efficiency of the tax system, attempts to reduce tax evasion, and reduce the gap between actual current revenues and expected collected revenues from the domestic taxes and customs revenues (Clearance).

5. Stimulate the demand for labor by the private sector, to reduce the burdens on the public sector, because it affects the budget deficit by increasing the wage and salary bill.

6. Prepare comprehensive development plan for the infrastructure in the Palestinian territories, and start to implement using current revenue as much as possible, and reduce dependence on external support.

7. Utilize the external support to the budget as much as possible only in development projects, and reduce the amounts of aid allocated for relief projects.

8. Donors should review the external support allocated for Palestinian territories and direct this support to development projects. Whereas it is increase the efficiency of the Palestinian economy.

9. Influence on the import prices, by raising value added taxes rates and the purchase tax on goods that can be produced locally, such as food, agricultural, clothes, shoes, wooden, plastic industries, and other industries.

10. Provide the necessary support for local production by reducing value added taxes rates on domestic products, and increasing of government subsidies if possible.

11. Government procurement system should adopt procurement of domestic goods strategy, and support domestic production through the issuance of Government Procurement Law.

12. Stimulate the private sector to direct its investment to projects that perform import substitution and increased exports strategies, through the provision a group of facilities for private investment who works on expanding the base of domestic production, and develops of competitiveness of the export industries sector.

13. Direct a part of public capital spending to support the productive projects of private sector.

14. Follow-up private projects and make sure to perform the quality control system to ensure that projects can market locally and to ensure it can be competitive externally. In addition, ensure the sustainability of private sector projects by working on development of domestic industries, according to total quality management criteria.

15. Palestinian National Authority should co-operate with financial institution to encourage household to increase private saving.

16. Suggested topics for researchers:

    a. The impact of public capital spending on private investment in the Palestinian territories
    b. The role of domestics revenues on economic growth in the Palestinian territories
    c. The impact of infrastructure projects on the trade balance in the Palestinian territories
    d. The role of government spending on export development in the Palestinian territories
    e. The impact of private investment on Palestinian external trade.

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150. Online, Open Access Textbooks web site https://www.otexts.org/

ANNEXES

Annex-1: Classification of Revenue

1 Revenue			
11	**Taxes**	**12**	**Social contributions**
111	**Taxes on income, profits, and capital gains**	**121**	**Social security contributions**
1111	Payable by individuals	1211	Employee contributions
1112	Payable by corporations and other enterprises	1212	Employer contributions
1113	Unallocable	1213	Self-employed or nonemployed contributions
112	**Taxes on payroll and workforce**	1214	Unallocable contributions
113	**Taxes on property**	**122**	**Other social contributions**
1131	Recurrent taxes on immovable property	1221	Employee contributions
1132	Recurrent taxes on net wealth	1222	Employer contributions
1133	Estate, inheritance, and gift taxes	1223	Imputed contributions
1134	Taxes on financial and capital transactions	**13**	**Grants**
1135	Other nonrecurrent taxes on property	**131**	**From foreign governments**
1136	Other recurrent taxes on property	1311	Current
114	**Taxes on goods and services**	1312	Capital
1141	General taxes on goods and services	**132**	**From international organizations**
11411	Value-added taxes	1321	Current
11412	Sales taxes	1322	Capital
11413	Turnover and other general taxes on goods and services	**133**	**From other general government units**
1142	Excises	1331	Current
1143	Profits of fiscal monopolies	1332	Capital
1144	Taxes on specific services	**14**	**Other revenue**
1145	Taxes on use of goods and on permission to use goods or perform activities	**141**	**Property income**
11451	Motor vehicle taxes	1411	Interest
11452	Other taxes on use of goods and on permission to use goods or perform activities	1412	Dividends
1146	Other taxes on goods and services	1413	Withdrawals from income of quasicorporations
115	**Taxes on international trade and transactions**	1414	Property income attributed to insurance Policyholders
1151	Customs and other import duties	1415	Rent
1152	Taxes on exports	**142**	**Sales of goods and services**
1153	Profits of export or import monopolies	1421	Sales by market establishments
1154	Exchange profits	1422	Administrative fees
1155	Exchange taxes	1423	Incidental sales by nonmarket establishments
1156	Other taxes on international trade and transactions	1424	Imputed sales of goods and services
116	**Other taxes**	**143**	**Fines, penalties, and forfeits**
1161	Payable solely by business	**144**	**Voluntary transfers other than grants**
1162	Payable by other than business or unidentifiable	1441	Current
		1442	Capital
		145	**Miscellaneous and unidentified revenue**

Resource: International Monetary Fund (2011), "*Government Finance Statistics (GFS)–Compilation Guide for Developing Countries*", p. 37.

Annex-2: Economic Classification of Expense

2 Expense			
21	**Compensation of employees**	**27**	**Social benefits**
211	**Wages and salaries**	**271**	**Social security benefits**
2111	Wages and salaries in cash	2711	Social security benefits in cash
2112	Wages and salaries in-kind	2712	Social security benefits in-kind
212	**Social contributions**	**272**	**Social assistance benefits**
2121	Actual social contributions	2721	Social assistance benefits in cash
2122	Imputed social contributions	2722	Social assistance benefits in-kind
		273	**Employer social benefits**
		2731	Employer social benefits in cash
22	**Use of goods and services**	2732	Employer social benefits in-kind
23	**Consumption of fixed capital**	**28**	**Other expense**
		281	**Property expense other than interest**
24	**Interest**	2811	Dividends (public corporations only)
241	**To nonresidents**	2812	Withdrawals from income of quasi-corporations (public corporations only)
242	**To residents other than general government**	2813	Property expense attributed to insurance policyholders
243	**To other general government units**	2814	Rent
		282	**Miscellaneous other expense**
25	**Subsidies**	2821	Current
251	**To public corporations**	2822	Capital
2511	To nonfinancial public corporations		
2512	To financial public corporations		
252	**To private enterprises**		
2521	To nonfinancial private enterprises		
2522	To financial private enterprises		
26	**Grants**		
261	**To foreign governments**		
2611	Current		
2612	Capital		
262	**To international organization**		
2621	Current		
2622	Capital		
263	**To other general government units**		
2631	Current		
2632	Capital		

Resource: International Monetary Fund (2011), "*Government Finance Statistics (GFS)–Compilation Guide for Developing Countries*", p. 44

Annex-3: Classification of Expense by Function of Government

7 Total outlays			
701	**General public services**	**706**	**Housing and community amenities**
7011	Executive and legislative organs, financial and fiscal affairs, external affairs	7061	Housing development
		7062	Community development
7012	Foreign economic aid	7063	Water supply
7013	General services	7064	Street lighting
7014	Basic research	7065	R&D Housing and community amenities
7015	R&D[58] General public services	7066	Housing and community amenities n.e.c.
7016	General public services n.e.c[59].		
7017	Public debt transactions	**707**	**Health**
7018	Transfers of a general character between different levels of government	7071	Medical products, appliances, and equipment
		7072	Outpatient services
		7073	Hospital services
702	**Defense**	7074	Public health services
7021	Military defense	7075	R&D Health
7022	Civil defense	7076	Health n.e.c.
7023	Foreign military aid		
7024	R&D Defense	**801**	**Recreation, culture, and religion**
7025	Defense n.e.c.	8011	Recreational and sporting services
		8012	Cultural services
703	**Public order and safety**	8013	Broadcasting and publishing services
7031	Police services	8014	Religious and other community services
7032	Fire protection services	8015	R&D Recreation, culture, and religion
7033	Law courts	8016	Recreation, culture, and religion n.e.c.
7034	Prisons		
7035	R&D Public order and safety	**709**	**Education**
7036	Public order and safety n.e.c.	7091	Pre-primary and primary education
		7092	Secondary education
704	**Economic affairs**	7093	Postsecondary nontertiary education
7041	General economic, commercial, and labor affairs	7094	Tertiary education
		7095	Education not definable by level
7042	Agriculture, forestry, fishing, and hunting	7096	Subsidiary services to education
7043	Fuel and energy	7097	R&D Education
7044	Mining, manufacturing, and construction	7098	Education n.e.c.
7045	Transport		
7046	Communication	**710**	**Social protection**
7047	Other industries	7101	Sickness and disability
7048	R&D Economic affairs	7102	Old age
7049	Economic affairs n.e.c.	7103	Survivors
		7104	Family and children
705	**Environmental protection**	7105	Unemployment
7051	Waste management	7106	Housing
7052	Waste water management	7107	Social exclusion n.e.c.
7053	Pollution abatement	7108	R&D Social protection
7054	Protection of biodiversity and landscape	7109	Social protection n.e.c.
7055	R&D Environmental protection		
7056	Environmental protection n.e.c.		

Resource: International Monetary Fund (2011), "*Government Finance Statistics (GFS)–Compilation Guide for Developing Countries*", p. 50.

[58] Research and development
[59] Not else ware classified

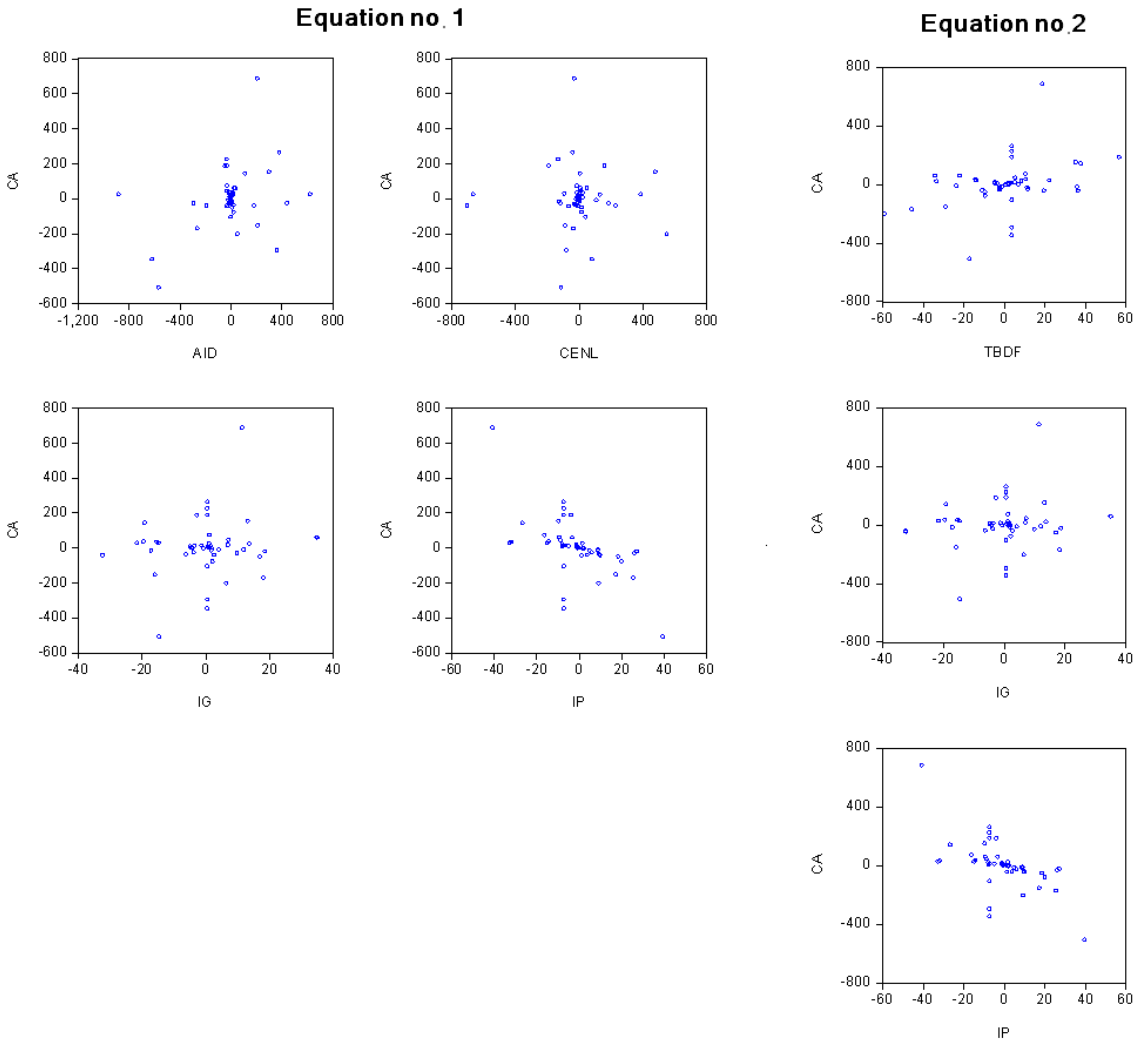
Annex-4: Doing Business Indicator for West Bank and Gaza for 2014

✔ = reform making it easier to do business. ✘ = reform making it more difficult to do business.

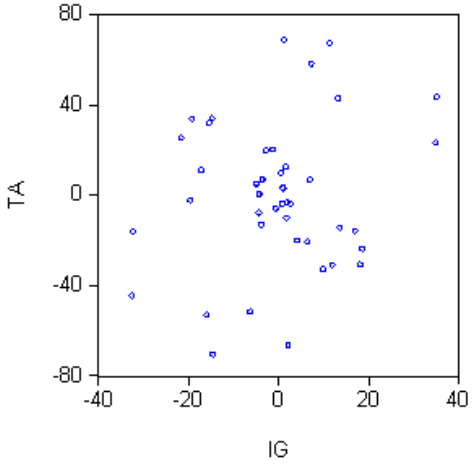
WEST BANK AND GAZA		Middle East & North Africa		GNI per capita (US$)	1,679
Ease of doing business (rank)	**138**	Middle East & North Africa		Population (m)	4.0
✔ **Starting a business** (rank)	143	**Registering property** (rank)	122	**Trading across borders** (rank)	123
Procedures (number)	9	Procedures (number)	8	Documents to export (number)	6
Time (days)	45	Time (days)	56	Time to export (days)	23
Cost (% of income per capita)	85.5	Cost (% of property value)	3.0	Cost to export (US$ per container)	1360
Minimum capital (% of income per capita)	0.0			Documents to import (number)	6
		Getting credit (rank)	165	Time to import (days)	38
Dealing with construction permits (rank)	131	Strength of legal rights index (0–10)	1	Cost to import (US$ per container)	1390
Procedures (number)	18	Depth of credit information index (0–6)	4		
Time (days)	87	Public registry coverage (% of adults)	8.8	**Enforcing contracts** (rank)	88
Cost (% of income per capita)	1,033.9	Private bureau coverage (% of adults)	0.0	Procedures (number)	44
				Time (days)	540
Getting electricity (rank)	87	**Protecting investors** (rank)	80	Cost (% of claim)	21.2
Procedures (number)	5	Extent of disclosure index (0–10)	6		
Time (days)	63	Extent of director liability index (0–10)	5	**Resolving insolvency** (rank)	189
Cost (% of income per capita)	1472.2	Ease of shareholder suits index (0–10)	5	Time (years)	NO PRACTICE
		Strength of investor protection index (0–10)	5.3	Cost (% of estate)	NO PRACTICE
				Recovery rate (cents on the dollar)	0.0
		Paying taxes (rank)	62		
		Payments (number per year)	39		
		Time (hours per year)	170		
		Total tax rate (% of profit)	16.5		

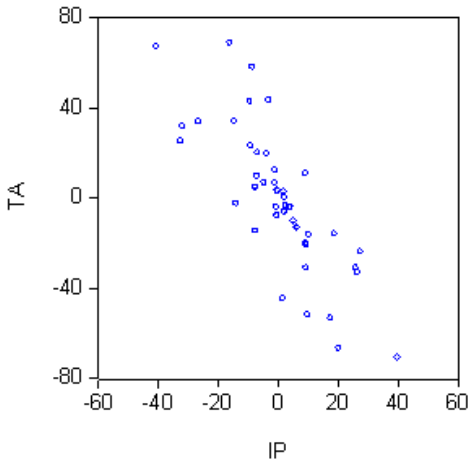
Resource: World Bank, "*Doing Business 2014, Understanding Regulations for Small and Medium-Size Enterprises: Comparing Business Regulations for Domestic Firms in 189 Economies*", A World Bank Group Corporate Flagship, International Bank for Reconstruction and Development, P. 235, 2013.

Annex-5: Graph for testing first assumption, which indicates that regression model is linear



Equation no. 3





Equation no. 4