Determinants and Econometric Estimation of Imports Demand Function in Palestine

Prepared by: Mohammad A. N. Nassr

Supervised by:

Dr. Khalil A. El-Namrouty
Dr. Samir K. Safi

Thesis submitted in partial fulfillment of the requirement for the degree Master of Development Economics

2013/1434
يسرّع الله الّذين آمنوا منهم والّذين أتوا العلم درجات

صدق الله العظيم

[المجادلة: 11]
DEDICATION

I would like to take this opportunity to express my deepest thanks and dedicate this work for my dear father, mother and my dear wife for their continuous support along the way, and for my children Abdulla, Mohamed, Emad and Fayroz. Also I would like to dedicate this thesis to my brothers; Adnan, Abdurahman, Yahia, Omar and Yousof, to my sisters; Fayroz, Mezna and Hanen and for all lovely people that I know.
ACKNOWLEDGMENTS

This work provides a welcome opportunity and chance to acknowledge the help and assistance of the people who with their intellectual insights or constructive criticism helped me to develop this research. First of all, I want to thank God for his infinite godsend. Second, I would like to express my sincere gratitude to my supervisor, Dr. Khalil A. El-Namrouty & Dr. Samir K. Safi for their valuable supervision, never-ending support and encouragement during the whole process of the thesis writing. My sincere gratitude also goes to Dr. Saif Adden Oda for his continuing support and help. I would also like to thank my entire friend for their fully support and recommendations. Last, but not least, I would like to thank all the people who supported me in any way, especially those who support me.
ABSTRACT

This study aims to identify the determination variables on imports demand in Palestine. This occurs via studying the independent variables which affect import demand in Palestine as Gross Domestic Product (GDP), Consumer Price Index (CPI) and Exchange rate (EX)\(^1\).

The researcher followed a descriptive analytic method, which depends on data gathering and analysis; studying period covers the quartile of 1997-2010, data collected from the Palestinian Central bureau of Statistics. SPSS statistical package & Eviews programs are used to analyze the data. The statistical analysis results shows that there is no relationship between import demand in Palestine and exchange rate, This caused by high dependent on trade with Israel represented more than 59.9% in 2011, In addition, to use only one currency which yields that the exchange rate does not affect the foreign trade in Palestine.

The model of demand for Palestinian imports is:

\[
\text{AIM} = 0.0085 + 1.219\Delta\text{GDP} - 0.428\Delta\text{CPI}
\]

This model shows that there is a positive relationship between the demand for imports and GDP and negative relationship with the index of consumer prices, and Non-pressure imports\(^2\) accounted for 0.0085 million dollars. One million dollar increasing in GDP leads to increased demand for Palestinian imports by 1.219 million dollars, Increasing in CPI within 1% will lead to reduced demand for Palestinian imports by 0.428 million dollars.

The study recommends finding outlets for the import and export non-Israeli ports, such as Egypt and Jordan, development and modification of the Paris Convention, which prohibits the Palestinian economy to benefit from foreign trade. Work to raise the competitiveness of the national product.

---

1 Exchange rate shekel on Dollar

2 The necessary imports as necessary food consumer materials, spare parts are needed for the replacement and renovation of existing production capacities, intermediate goods, such as materials, energy and raw materials necessary for the operation of the production sectors, production equipment necessary for the implementation of investment programs
ملخص الدراسة

هدفت الدراسة إلى التعرف على محددات الطلب على الواردات في السلطة الفلسطينية. وتم تحقيق ذلك من خلال دراسة بعض المتغيرات المستقلة التي تؤثر على الطلب على الواردات مثل الناتج المحلي الإجمالي (GDP) ومؤشر أسعار المستهلك (CPI) وسعر الصرف (EX). واتبع الباحث ومنهج التحليلي الذي يعتمد على جمع البيانات وتحليلها، تغطي الدراسة البيانات الربعية للفترة (1997-2010)، وقد اعتمد البحث على بيانات من الجهاز المركزي للإحصاء الفلسطيني. واستخدم الباحث برامج Eviews & SPSS لتحليل البيانات.

وقد اظهرت نتائج التحليل الإحصائي بعدم وجود علاقة بين الطلب على الواردات الفلسطينية وسعر الصرف، ويمكن تقدير ذلك بسبب الاعتماد الكبير على التجارة الإسرائيلية الذي يمثل أكثر من 59.9% في عام 2011 بالإضافة إلى التعامل في عماة واحدة، الأمر الذي أدى إلى نتيجة حتمية وهي أن سعر الصرف لا يؤثر على التجارة الخارجية.

واصبحت معادلة الطلب على الواردات الفلسطينية بالشكل التالي:

$$\Delta IM = 0.0085 + 1.219\Delta GDP - 0.428\Delta CPI$$

من المعادلة السابقة يخلص البحث إلى أن هناك علاقة طردية بين الطلب على الواردات والناتج المحلي الإجمالي وعكسية مع الرقم القياسي لأسعار المستهلك وشكلت الورادات غير القابلة للضغط (0.085 مليار دولار). وآي زيادة في الناتج المحلي الإجمالي يرفع مليون دولار يؤدي إلى زيادة الطلب على الورادات الفلسطينية إلى (1.219 مليار دولار)، كذلك فإن الزيادة في مؤشر أسعار المستهلكين في حدود 1% يؤدي إلى انخفاض الطلب على الورادات الفلسطينية بمقدار (0.428 مليار دولار).

وتوصي الدراسة إلى العمل على إيجاد منافذ أخرى للاستيراد والتصدير، مثل مصر والأردن، والعمل على تطوير وتعديل اتفاقية باريس، التي تحظر على الاقتصاد الفلسطيني من الاستفادة من التجارة الخارجية. العمل ورفع القدرة التنافسية للمستهلك الوطني.

1 سعر صرف الشيكل على الدولار

2 يشمل في الورادات الضرورية كlasses الاستهلاكية الغازية الضرورية. قطع الغيار التي تلزم عمليات إصلاح وتحديث الطائرات الإنتاجية القائمة، السلع الوسيلة، مثل مواد الطاقة والمعدات الخام اللازمة لتشغيل طاقات الإنتاج. المعدات الإنتاجية اللازمة لتنفيذ برامج الاستثمار.
<table>
<thead>
<tr>
<th>Dedication</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgments</td>
<td>III</td>
</tr>
<tr>
<td>Abstract</td>
<td>IV</td>
</tr>
<tr>
<td>Table of contents</td>
<td>VI</td>
</tr>
<tr>
<td>List of Table</td>
<td>VIII</td>
</tr>
<tr>
<td>List of Figure</td>
<td>IX</td>
</tr>
<tr>
<td>List of Abbreviations</td>
<td>X</td>
</tr>
<tr>
<td>Chapter 1: Introduction</td>
<td>1</td>
</tr>
<tr>
<td>1.1.2 Problem statement and justifications</td>
<td>1</td>
</tr>
<tr>
<td>1.1.3 Research objectives</td>
<td>2</td>
</tr>
<tr>
<td>1.1.4 Research Importance</td>
<td>2</td>
</tr>
<tr>
<td>1.1.5 Hypotheses</td>
<td>2</td>
</tr>
<tr>
<td>1.1.6 Variables</td>
<td>3</td>
</tr>
<tr>
<td>1.1.7 Methodology</td>
<td>3</td>
</tr>
<tr>
<td>1.1.8 Data collection</td>
<td>4</td>
</tr>
<tr>
<td>1.2 Literature review</td>
<td>4</td>
</tr>
<tr>
<td>1.3 Summary of the literature review</td>
<td>16</td>
</tr>
<tr>
<td>Chapter 2: Introduction</td>
<td>17</td>
</tr>
<tr>
<td>2.2 Basic open Economy model</td>
<td>18</td>
</tr>
<tr>
<td>2.3 Determinants of import demand</td>
<td>21</td>
</tr>
<tr>
<td>2.3.2 Gross domestic product</td>
<td>22</td>
</tr>
<tr>
<td>2.3.3 Exchange rate systems</td>
<td>26</td>
</tr>
<tr>
<td>2.3.4 Consumer price Index</td>
<td>31</td>
</tr>
</tbody>
</table>
# Table of Contents

<table>
<thead>
<tr>
<th>Chapter 3: Introduction</th>
<th>33</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2 Historical background for the Palestinian Economy</td>
<td>33</td>
</tr>
<tr>
<td>3.3 Palestinian foreign trade</td>
<td>40</td>
</tr>
<tr>
<td>3.4 The transitional period and the Paris economic protocol</td>
<td>47</td>
</tr>
<tr>
<td>3.5 Gaza tunnels</td>
<td>52</td>
</tr>
<tr>
<td>3.6 Conclusion</td>
<td>54</td>
</tr>
<tr>
<td>Chapter 4: Introduction</td>
<td>55</td>
</tr>
<tr>
<td>4.2 The growth of imports In Palestine</td>
<td>56</td>
</tr>
<tr>
<td>4.3 Commodity of imports Classification for Foreign Trade</td>
<td>59</td>
</tr>
<tr>
<td>4.4 Geographical distribution of Palestinian Imports</td>
<td>67</td>
</tr>
<tr>
<td>4.5 Conclusion</td>
<td>72</td>
</tr>
<tr>
<td>Chapter 5 Introduction</td>
<td>73</td>
</tr>
<tr>
<td>5.2 Research techniques</td>
<td>73</td>
</tr>
<tr>
<td>5.3 Methodology for studying Import demand</td>
<td>73</td>
</tr>
<tr>
<td>5.4 Target population</td>
<td>77</td>
</tr>
<tr>
<td>5.5 Econometric methodology</td>
<td>78</td>
</tr>
<tr>
<td>5.6 Data analysis and discussion</td>
<td>79</td>
</tr>
<tr>
<td>5.7 Economic analysis</td>
<td>83</td>
</tr>
<tr>
<td>Chapter 6 Conclusion</td>
<td>86</td>
</tr>
<tr>
<td>6.2 Recommendations</td>
<td>87</td>
</tr>
<tr>
<td>References</td>
<td>89</td>
</tr>
<tr>
<td>Appendix</td>
<td>92</td>
</tr>
<tr>
<td>List of Table</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>3.1 National accounts in Palestine 1968.2009</td>
<td></td>
</tr>
<tr>
<td>3.2 Palestinian foreign trade performance 2004-2009</td>
<td></td>
</tr>
<tr>
<td>3.3 The value of imports and exports compared to GDP and the trade balance 1993-2009</td>
<td></td>
</tr>
<tr>
<td>4.1 Distribution of commodity imports the West Bank</td>
<td></td>
</tr>
<tr>
<td>4.2 Distribution of commodity imports to the Gaza strip</td>
<td></td>
</tr>
<tr>
<td>4.3 Distribution of commodity imports of Palestinian imports</td>
<td></td>
</tr>
<tr>
<td>4.4a the value of major groups SITC code</td>
<td></td>
</tr>
<tr>
<td>4.4b the value of major groups SITC code</td>
<td></td>
</tr>
<tr>
<td>4.5 1 Distribution of commodity imports the Dist WB</td>
<td></td>
</tr>
<tr>
<td>4.6 Distribution of commodity imports to the Gaza strip</td>
<td></td>
</tr>
<tr>
<td>4.7 Palestinian foreign trade with the countries of the world 2010</td>
<td></td>
</tr>
</tbody>
</table>
## List of Figure

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Research Variables</td>
<td>3</td>
</tr>
<tr>
<td>2.1</td>
<td>Demand curve</td>
<td>26</td>
</tr>
<tr>
<td>2.2</td>
<td>Flexible Exchange rate system</td>
<td>32</td>
</tr>
<tr>
<td>2.3</td>
<td>Fixed Exchange rate system</td>
<td>33</td>
</tr>
<tr>
<td>2.4</td>
<td>swan diagram</td>
<td>35</td>
</tr>
<tr>
<td>3.1</td>
<td>Total exports and Imports</td>
<td>45</td>
</tr>
<tr>
<td>3.2</td>
<td>Export coverage of total imports</td>
<td>45</td>
</tr>
<tr>
<td>3.3</td>
<td>The proportion of trade deficit to GDP</td>
<td>47</td>
</tr>
<tr>
<td>5.1</td>
<td>Excess demand and imports</td>
<td>76</td>
</tr>
<tr>
<td>5.2</td>
<td>Histogram of the residuals</td>
<td>81</td>
</tr>
<tr>
<td>5.3</td>
<td>Normal Probability plot</td>
<td>82</td>
</tr>
<tr>
<td>5.4</td>
<td>Jarque-Bera test</td>
<td>82</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
<td></td>
</tr>
<tr>
<td>GDI</td>
<td>Gross Domestic Income</td>
<td></td>
</tr>
<tr>
<td>CPI</td>
<td>Consumer Price Index</td>
<td></td>
</tr>
<tr>
<td>EX</td>
<td>Exchange Rate</td>
<td></td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
<td></td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
<td></td>
</tr>
<tr>
<td>MOP</td>
<td>Ministry of Planning</td>
<td></td>
</tr>
<tr>
<td>PT</td>
<td>Palestinian Trade</td>
<td></td>
</tr>
<tr>
<td>GCC</td>
<td>Gulf Cooperation Council</td>
<td></td>
</tr>
<tr>
<td>PCBS</td>
<td>Palestinian Central Bureau of Statistics</td>
<td></td>
</tr>
<tr>
<td>PLO</td>
<td>Palestinian Liberation Organization</td>
<td></td>
</tr>
<tr>
<td>PNA</td>
<td>Palestinian National Authority</td>
<td></td>
</tr>
<tr>
<td>BOP</td>
<td>Balance Of Payment</td>
<td></td>
</tr>
<tr>
<td>CA</td>
<td>Current Account</td>
<td></td>
</tr>
<tr>
<td>NIPA</td>
<td>National Income and Product Accounts</td>
<td></td>
</tr>
<tr>
<td>WBGS</td>
<td>West Bank and Gaza Strip</td>
<td></td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
<td></td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
<td></td>
</tr>
<tr>
<td>SITC</td>
<td>Standard International Trade Classification</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 1: Study Structure & Literature review

1.1. Study Structure:

1.1.1. Introduction:
In recent years, because of the popularity of globalization, the interdependence among countries at world level has increased. Every country wants to achieve rapid pace of economic development through getting the maximum benefits from international trade and use modern techniques in the productions process. With the implementation of the World Trade Organization (WTO) rules, regulation, and substantial reduction in trade restrictions, international trade expanded at vary fast rate. Imports represent great importance in the economy overall for all countries of the world. There is a direct relationship between imports and economic variables such as investment, consumption and output, imports play an important role in the context of the total balances in the national economy and create the right conditions for growth. (Fathalla, 2006).
Similarly, imports contribute to the growth of GDP components, it promotes the standard of living for individuals through spending on imported goods and services plus it raises the level of domestic investment and increase the estimated productivity of economic sectors through intermediate goods imports. (Abdali, 2007)
International trade has crucial role in the Palestinian national economy, to its central role in economic production, employment, balance of payments, supply of production inputs for the domestic market and consumer goods, the trade sector contributes to(58.8%) of the gross domestic product and employs 18% of the labor force (PCBS,2009).

1.1.2. Problem statement and Justifications:
Palestinian economy suffers from a Permanent current account deficit mainly due to the continuing and growing balance of trade deficit in this context there is an increasing need to identify the variables that affect Palestinian imports demand to determine the policies needed to reduce the chronic deficit in the trade balance, therefor the research problem can be summarized as: What are the main determinants, that affect import demand function and its welfare impact on Palestinian society?
Chapter 1: Study Structure & Literature review

1.1.3. **Research Objectives:**

1- Identifying variables that determine demand for imports in Palestine.
2- Analyzing the behavior of the demand for total imports in Palestine.
3- Estimate Palestinians import demand function.
4- Determine the policies needed by Palestinians to reduce the chronic deficit in the trade balance.

1.1.4. **Research importance:**

The research importance the heavily defect on the trade balance in favor of import in a narrow export base. Limited variety and enlist compared to imports and limited exports cover imports and the possibility of pressure on imports to try to narrow the imbalance and the gap between exports and imports (AL-Jafari, 2000, p 8), also contribute to the study:

1. Stand the impact of imports on the various sectors and what are the factors affecting it.
2. Assess the reality of the Palestinian trade relations for the formulation of policies and options exchange in the future with both Israel and the Arab countries and the countries of the world in the presence of margins in the Paris Economic Protocol provides an opportunity to restore economic interdependence and trade between Palestine and the world.
3. Stand on the size and type of constraints and obstacles faced by foreign trade and development of recommendations and future prospects of foreign trade in Palestine.
4. Shed light on the options trade and the future prospects of the Palestinian economy and economic policies and actions should be taken to change this reality so as to enhance the capabilities of the Palestinian resistance.

1.1.5. **Hypotheses:**

1- There is a positive relationship between gross domestic product and import demand in Palestine.
2- There is negative relationship between exchange rate and demand for imports in Palestine.
3- There is a negative relationship between CPI and demand for imports in Palestine.
1.1.6. Variables:

*Author design

1.1.6.1. Dependant Variable:
Import demand.

1.1.6.2. Independent Variable determinant of import demand:
1- Gross Domestic Product (GDP).
2- Exchange Rate(ER).( shekel on Dollar)
3- Consumer Price Index (CPI).

\[
\text{ID} = \alpha + \beta_1 \cdot \text{GDP} + \beta_2 \cdot \text{ER} + \beta_3 \cdot \text{CPI} + \beta_4 \cdot T + \epsilon
\]

T= time
\(\epsilon = \text{Error term(other determinants)}\)

The suggested signs:
GDP (+)/ ER (-)/ CPI (-)

1.2. Methodology:
There are many approaches that consider with the import demand; every approach has its hypotheses and conclusions. The most important approaches are the imperfect substitute approach and excess demand approach. The imperfect substitute approach assumes that imported goods and services are not substances with the domestic goods and services; the consumer is requested for itself that mean the import demand is to maximize the result of
consumer behavior or producer, the second approach assumes that the import demand is to face excess domestic demand. (Fatthall, 2006)

This research will analyze the behavior of the aggregate import demand function for Palestine in the two approaches using time series techniques, descriptive analysis methodology will be used, and the collected data will be analyzed by SPSS & Eviews.

The study covers the period 1996-2010 (quartile data). The quartile data at 1996\(^1\) constant prices are obtained from the Palestinian Central bureau of Statistics all the data for the three variables.

1.3. **Data Collection:**

1.3.1.1. **Secondary resources:** the researcher has utilized the relevant literature and publications related to the subject of the research. (Reports, Thesis, Conference reports, Governmental, Newspapers, Journals, & Internet)

1.3.1.2. **Primary resources:** Interviewing: An interview has been hold with the Head of the Palestinian Central bureau of Statistics in Gaza & the ministry of national economics.

1.4. **Literature review:**

1.4.1. **Introduction:**

There are multiple previous studies analyze the function demand for imports in the world, it dealt with all economic factors specific that determine import demand and analyze all available data. While the Palestinian territories, according to researcher knowledge there's no many studies on this topic and all that could researcher retrieved studies only three previous studies it focused on the study of foreign trade as a descriptive analysis.

Thus, this research will address a group of Palestinian, Arab and foreign studies discussed the topic they arranged in chronological order:

---

\(^1\) Palestinian Central Bureau of Statistics based on the prices of year 1996 to 2004, it became dependent on the prices of 2004 and there is a conversion rate was obtained from the center, so all prices have been converted for the year 1996.
1.4.2. Locale studies:

1.4.2.1. (Dombrecht and Sarsour, 2011), “(International trade in Palestinian Territory)”.

This paper investigated the main elements explaining the movements of exports and imports of goods both in constant and current prices as well as their deflators; from this analysis some policy conclusions can be derived. The main findings are the following:

Palestinian trade (PT) is confronted with a significantly large deficit on its trade. Furthermore this deficit is on an increasing trend since the mid-nineties. The coverage ratio of exports to imports fluctuates around 20%.

Results based on the estimation of a simple trade model indicate the presence of long run equilibrium relationships between international variables (such as prices and income) as well as of domestic expenditures on the PT trade variables. In fact, PT’s nominal effective exchange rate is embedded in the calculation of the international price indices.

The exchange rate elasticity of total exports in current prices is estimated to 1.45, whereas the same elasticity (for total imports) was estimate to be 0.66. Thus implies that a depreciation of the PT's effective exchange rate by 1% would increase total nominal exports by 1.45% and would increase nominal imports by 0.66% (the net result of volume and price effects). The overall effect of such depreciation on the overall trade balance however would be negative due to the very low coverage ratio of exports to imports. With a coverage ratio of only 20%, a depreciation of the exchange rate by 1% would affect the trade balance negatively with an estimated amount equal to about 0.37% of current total imports. This implies that a strong currency on average with the main trading partners would not hurt the trade balance but on the other hand is not particularly helpful for the export volume which is the main factor from the point of view of economic growth and employment.

1.4.2.2. (Dombrecht and Khalil, 2011), “(Effective exchange rate indices for Palestine)”.

This paper investigated the Effective exchange rate indices, so several observations can be made on the basis of these calculations:

All calculated series including compared to excluding oil and gas are very close to each
other; In recent years Israel accounted for around 70% of total no-oil/non-gas imports in Palestine. This share seems to have been relatively stable since 1998; the nominal effective exchange rate indices for PT are relatively stable. This is because PT trades with predominantly one trade partner with which it shares the same currency; The real effective exchange rate indices show an upward trend since 2003, implying a deteriorating degree of competitiveness on both the domestic and foreign markets. Because no such strong trend is observed in the nominal effective exchange rates, it implies a rising trend in the CPI of PT relative to its main trading partners, expressed in a common currency; There seems to be a close correlation between the computed import weighted cost of imports and the CPI in PT. The only exception is the strong CPI jump to the increase relatively in the import cost in 2008. It suggests that import costs are an imported driver of inflation and should therefore be considered in the inflation analysis.

1.4.2.3. (EL-Jafari, 2000), “(Palestinian & Israeli foreign trade: reality and future prospects)”.

This study concentrates on evaluating potential trade relations between the Palestinian territories of the West Bank and Gaza Strip (WBGS) and Israel during the period 1967-1998. It aims to forecast the future prospects for these relations by the end of the interim period. An analysis of Palestinian-Israeli international trade data was used to determine the factors and policies governing the flow of goods and services between Palestine and Israel. Through the use of estimated trade similarity coefficients, the study was able to determine the actual relative importance of the Palestinian market to Israeli producers. It also determined the degree of available flexibility to the Palestinian economy to diversify Palestinian imports by replacing them with locally produced goods or by imports from countries enjoying a relatively the highest competitive advantage in production and exports. The potential and cost of substitution is a very important factor in formulating policies and choosing appropriate alternatives trade similarity coefficients were also employed to determine the importance of the Palestinian market to Israel in terms of re-exportation. This is done by determining the volume of non-Israeli products imported to the Israeli market and then re-exported to the Palestinian market. The empirical results showed no structural changes in Palestinian international trade
Chapter 1: Study Structure & Literature review

(services and goods) during the three periods in question. This means that Israeli trade policies have remained unchanged towards Palestinian markets in spite of the changes in the political environment governing Palestinian-Israeli relations. The forces of supply and demand and overall economic changes in Israel govern the flow of goods and services to and from Palestinian markets. The statistical results revealed a number of findings that require analysis prior to formulating recommendations for future economic and trade relations between Palestine and Israel in the final status negotiations.

1.4.3. Arabic studies:

1.4.3.1. **(Shamasdini and Moghaddasi, 2010), “An import demand for MENA courtiers (case study for meat, dairy and cereals)”**.

The overall growth performance of the MENA region over both mixed and characterized by higher of volatility compared with other regions in the world. The model developed applied to explore the role of income in explaining the trade of 13 selected MENA countries (Algeria, Egypt, Iran, Israel, Jordan, Kuwait, Lebanon, Malta, Morocco, Oman, Qatar, Saudi Arabia and United Arab Emirates) during 1996-2008 and estimates the impact of the growth in per capita income on the trade of three agrifood1 products using SITC REV.03 database.

The results: There is a positive relationship between distances between trade partners, high quality agrifood products in not closed exporter countries can be the most reason, having an agricultural agreement between the exporter and importer countries has the statistically positive effect in importing of these three agrifood sectors, most of the income elasticities are found elastic.

1.4.3.2. **(Alabdali, 2007), “The demand determinants on the Kingdom of Saudi Arabia in The framework of complete integration And error correction”**.

The study aims to estimate the determinants of the demand for total imports of Saudi Arabia during the period from 1960 - 2005, as part of the concept of co-integration and error correction, and to reach to the main determinants of imports, income, relative prices and foreign reserves.

---

1 Agrifood: The business of producing food agriculturally (as opposed to through hunting, fishing, gathering, and so on); food so produced.
Chapter 1: Study Structure & Literature review

It has been analyzed wicker time series for the variables of this model using several tests to determine the level of integration for each time series and then verification of the integrity of the joint using a variety of tests and especially Bounds analysis procedure, and two approaches to estimate the models of error correction (Engle-Granger two step method), and unrestricted Error correction model; results: Significant impact of income, relative prices and foreign reserves to import demand, a relationship in short and long run between import demand and its determinants, low elasticity of import demand on relative prices and foreign reserves (in the short run and long-run) and high elasticity on income.

1.4.3.3. (Fathalla, 2006), “The import demand economic in Egypt”.

The study aimed to identify factors and policies that affect the volume of imports and all of the installation of the commodity and geographical distribution, and used to study in order to achieve that some standards for concentration of commodity and geographical location and relative importance, as well as the estimation formulas and different forms of demand functions for imports at the aggregate and detailed using six commodity groups. The study covered the period from 1974 to 1998. The study followed in the derivation of demand functions for imports either on the assumption that imports are imperfect substitutes for domestic goods, or the assumption that imports reflects the excess demand in the domestic market. The study concluded that the first approach is appropriate to estimate the imports of all their collections with the exception of commodity group imports of fuel, which showed better results using the hypothesis of excess demand.

Results The average annual growth rate of imports denominated in Egyptian pounds during the period 17.2% while the rate was 6.3% in the same situation evaluated in U.S. dollars. The difference represents a 10.9% average annual rate of devaluation of the pound against the dollar during the period, despite the rise in import prices denominated in Egyptian pounds after a reduction of the exchange rate of the pound. However, this has not led to lower the amount of imports and payments in U.S. dollars, for the lack of flexibility of the domestic demand for imports enough. The explanation is that a large part of imports represents the production requirements of local industries, and the other side is a consumer goods caused by inadequate domestic supply to meet growing demand. And showed the expense of the Gini coefficient of concentration in geographical distribution of imports.
high value of the index from 48.2% in 1974 to 53.4% in 1993, indicating the increasing degree of concentration in the sources of imports in Egypt during the period where more than 60% of imports from Western Europe and the at the expense of contraction imports from Western Europe and North America.

1.4.3.4. (Metwally, 2004), “Determinants of aggregate imports in the GCC countries”.

The aim of this paper is to examine the impact of the fluctuations in oil exports on GCC spending on imports and in particular, to analyze the long-run relationship between the imports of each GCC member and the macroeconomic components of final expenditure (exports, government consumption, investment and private consumption) using Johansen multivariate co-integration analysis.

Results:
1. The downturn in oil prices resulted in a drastic reduction in the growth rates of imports of all the oil producers of the GCC.
2. Changes in GDP exert a strong influence on the demand for imports in GCC countries. However, changes in relative prices do not seem to exert any significant effect on the demand for imports in most of these countries.
3. The import function of the GCC countries is influenced by a partial adjustment mechanism.
4. There is evidence of structural shifts in the GCC import functions.

The intercept of the function was much higher during the boom years.

The demand for imports was highly elastic with respect to GDP in all GCC countries studied (with the exception of Oman) during the last three decades.

1.4.3.5. (W.S. Ho, 2004), “Estimating Macao’s import demand functions”.

As a small open economy and with scarce natural resources, Macao is highly dependent upon external trade activities. Imports, in particular, are of utmost importance as they reflect production and consumption growth in Macao. This paper examines the import demand function of Macao by testing two popular models. The Johansen-Juselius co-integration tests are employed to find out if the relevant economic variables are co-integrated in the long run. It is observed that co-integration relationships
exist in both scenarios (constant and trend; and constant) of the disaggregate model, though
the signs of the estimated coefficients are not perfectly consistent with the theories
expected. The respective parsimonious short-term dynamic error-correction models are
also constructed but none of them shows any ability to correct the long-run disequilibrium.

1.4.3.6. (Khiaat, 2000), “Estimate the demand function for imports in the

Kingdom of Saudi Arabia”.

This study aims to estimate the demand functions of macro and micro groups of quantities
of imported goods and determine the elasticities of these functions and was therefore the
function is used to estimate demand functions quantitative macro and micro groups of
imported goods measured in tons, and using the annual statistics for the period (1969-
1997), and comparing the statistical results for each of my way least squares, and the
greatest way possible for these functions.

The study showed the importance of both domestic and international prices in determining
the quantities of imports, while not shown for each of the income and exchange rates a big
role in determining the imports, and this may be due to the slowing effect of income on
imports (where most of the income Kingdom exporter of petroleum exports).

The results showed that the cross or the degree of flexibility in response of aggregate
demand to changes in domestic prices due to the large and the establishment of industries,
and thus the applicability of the Marshall Lerner conditions on foreign trade of the
Kingdom of Saudi Arabia, which reflects the stability of the exchange rates of the local
currency.

1.4.3.7. (Azoom, 2000), “Estimate the demand function of imports of citrus fruit in
the Kingdom of Saudi Arabia using the application form semi-optimized”.

This study aims to analysis imports of agricultural commodities of foreign trade and to
identify relationships between items citrus "oranges, tangerines, and lemons," as well as the
competitive relationships between the sources of imported oranges, Find and use the
application form semi-optimized almost ideal demand system (AIDS) to estimate the
demand function on imports of citrus fruits, according to the diversity and the separation
between the sources of import & analyze the model-style regression equations separatist
unrelated regression (SUR) seemingly and successive (iterative SUR) with the imposition
Chapter 1: Study Structure & Literature Review

of special demand conditions which added, homogeneity, and uniformity so that the models estimated in accordance with the theory of demand and verify condition.

Results showed that the most important factors affecting the demand of orange is the price, The price elasticity to the demand for oranges flexible terms of prices, while the demand for lemons is subject to factors other than price to the prices of other goods and income, which represents the total spending on imports, either demand for tangerines is a price inelastic. And there is no relationship existing between the oranges and tangerines. As for the impact of expenditure shows that the demands for orange flexible while the demand for each of lemon and tangerine is a flexible and it became clear that imports from Jordan compete with imports from Egypt imports from Lebanon and other countries are not competitive with imports from Jordan. And found that imports of oranges from Jordan and Egypt to compete with imports from Lebanon. Finally, the results showed elasticities spending power consumer preference for imports of oranges from Egypt and Lebanon, while indicating less preference for imports from Jordan.

1.4.3.8. (Al-Kasawani, 1998), “Demand for total imports of Saudi Arabia using the error correcting and mutual complementarily”.

The aim of this study was to analyze the behavior of the application of total imports in Saudi Arabia to recognize the variables set for the aggregate demand of imports, and estimating functions static and dynamic in both the short and long term, and estimate the elasticities of demand for imports, and through the use of two ways: First, the traditional order to design the demand functions static of the total imports in the Kingdom, and the second through modern applied statistical methods to analyze the time series for the period (1970-1994) to determine the degree of stability and integration of the joint. The study showed that non-oil GDP at constant prices and local relative prices of imports with significant effect in the interpretation of the change in demand.

The results showed using the method of Engle and Grange two-stage joint integration, said that the unit root tests to the variables of imports and non-oil output and prices relative not able to accept the hypothesis of stability of time series for the period (1970-1994). The tests indicated error limit with a negative sign and statistically that the moral function variables import demand integrated joint.
1.4.4. International studies:

1.4.4.1. (Hye and Mashkoor, 2010), “Import demand function for Bangladesh: A rolling window analysis”.
The objective is to estimate import demand function of Bangladesh economy by using the time series data of 1980 to 2008. The empirical evidence is provided by using the ADRL approach to co-integration and rolling window regression approach. The ARDL estimation result confirms long run relationship between imports, national income and relative price. The elasticity of national income variable is (0.94) positive and relative price elasticity is (-0.29) negative in the long run. Conversely rolling window based results show that long run elasticities of national income variable is fluctuated in the range of 0.81 to 0.96 and relative price elasticities are varied in the range of 0.13 to -0.51. The findings of this study is guided to the Bangladesh policy makers in this regards to construct effective trade policy for long run by looking the previous per year impact of income and relative prices on imports.

1.4.4.2. (Alam and Ahmed, 2010), “Exchange rate volatility and Pakistan's import demand: An application of autoregressive distribution lag model”.
This study estimated the import demand function for Pakistan on the basis of quarterly time series data covering the period 1982-2008 by employing a more robust and recently-developed estimation method, the ARDL (autoregressive distributed lag) approach popularized by Pesaran (2001). This study may be drawn various significant conclusions from the estimation of aggregate merchandized import demand function. The ARDL analysis to quarterly data, support the proposition that in Pakistan there exist a long run relationship among, import demand, real economic growth, relative price of imports, real effective exchange rate and volatility of real effective exchange rate.
It found that aggregate import demand is positively affected by real gross domestic product suggesting that import demand in Pakistan is growth driven. Further it found that relative price of imports may not decrease the import demand, which is quite obvious for growth driven economy. Pakistan’s imports comprise petroleum products, essential capital goods and machinery.
It found that real depreciation of local currency and volatility of real depreciation has no
effect to decrease import demand in Pakistan. Therefore study concluded that imports demand is insensitive or inelastic to real depreciation and its volatility. The evidence based on short run dynamic tends to indicate that economic growth, relative price of imports, real effective exchange rate and real effective exchange rate volatility Granger cause import demand in the short-run. Finally, the study concludes that change in imports demand is a short run phenomenon for Pakistan.

1.4.4.3. (Constant, 2010), “An Econometric Estimation of Import Demand Function for Cote D’Ivoire”. This study estimated the import demand function for Cote d’Ivoire By employing the recently developed co-integration technique the bounds testing approach to test the long-run relationship between imports, relative import prices, final consumption expenditure, investment expenditure and export expenditure using annual data for the period 1970-2007. We find evidence of a co-integration relationship among the variables in the import demand function when import demand, final consumption expenditure and relative prices are the dependent variable. However based on the model specifications we used import demand as dependent variable. This allows us to examine the long run elasticities but also the short run of Cote d’Ivoire import demand for policy implications. We find that an inelastic and positive relationship exist between the final consumption expenditure, the expenditure on investment and goods and the expenditure on exports. Relative price is also inelastic but negatively impact aggregate demand implying that the import demand is insensitive to increase in domestic levels. Thus the Cote d’Ivoire policymakers have to deal closely with the competitiveness of the relative prices to boost growth and development of the local industries.

1.4.4.4. (Y. Azhdani and others, 2008), “Corn import demand model in Iran: political factors application”.

The specification of corn import has been estimated using the least squares estimators and a conventional set of explanatory variables. The elasticity estimates of corn import flow with respect to their regresses are also reported. Corn import are determined by the corn relative prices, per capita national disposable income, corn domestic product, corn domestic consumption, governmental stock corn in previous year and corn insurance in a
The analysis reveals all variables as significant determinants of import, except per capita national disposable income. In this article, corn supporting price (as relative prices), governmental stock corn and corn insurance has been considered as government politics. According to results, if corn relative prices and stock corn by governments, whichever, increases by 1%, corn import demand decreases by 0.31 and 0.81%, respectively. So, governmental stock corn has more impacts on corn import demand. Therefore, a basic policy proposal for decreasing the corn import demand is to increase stock corn by governments.

1.4.4.5. (Fosu and Magnus, 2008), “Aggregate Import Demand and Expenditure Components in Ghana”.

The behavior of Ghana’s imports during the period 1970-2002 was studied using disaggregated expenditure components of total national income. It used newly developed bounds testing approach to co-integration and estimated an error correction model to separate the short- and long-run elements of the import demand relationship. The study revealed inelastic import demand for all the expenditure components and relative price. In this study it has used the ARDL bounds testing approach to co-integration to examine the relationship between expenditure components, relative price and aggregate import demand in Ghana. It found long-run relationships relation among the variables and used it to estimate both long and short run disaggregated import demand model for Ghana. The study finds that inelastic and positive relationship exists between the three expenditure components and aggregate import demand. Relative price is also inelastic but negatively impact aggregate demand. The short run results fits the current situation in Ghana and for that matter many African countries as these countries are clearly highly dependent on imports especially for consumption and investment goods to make up for short falls in local production.


This paper investigates the behavior of Indian aggregate imports during the period 1971-1995. In their empirical analysis of the aggregate import demand function for India, co-integration and error correction modeling approaches have been used. In the aggregate
import demand function for India, import volume is found to be co-integrated with relative import price and real GDP.

Econometric estimates of the aggregate import-demand functions for India suggest that import-demand is largely explained by real GDP, which relates to the general level of economic activity in the country. The demand for imports appears to be less sensitive to import price changes. This implies that a lowering of import prices through removal of tariff and non-tariff barriers will not lead to a proportionate rise in the flow of imports. This also reflects the noncompetitive nature of India's imports. The result that the quantity of imports is influenced largely by changes in real GDP than import prices is significant, since it reveals the ineffectiveness of exchange rate policy in influencing import demand. Moreover, the low coefficient estimate of the dummy variable shows little effect of import liberalization policy on aggregate import volume.

1.4.4.7. (Chang and others, 2005), “A reexamination of south Korea’s aggregate import demand function: the Bounds test analysis”.

This paper uses a robust estimation method referred to as the unrestricted error correction model - the bounds test analysis to re-analyze the long-term relationships between the demand for imports and it’s determinants for South Korea over the period 1980-2000. Results show that the volume of imports, income, and relative prices are all co-integrated. The estimated long-run (short-run) elasticities of import demand with respect to income and relative price are 1.86 (0.86) and -0.2 (-0.05), respectively. The major implication of our study is that neither monetary nor fiscal policies may be used as instruments to maintain the trade balance in South Korea’s favor during this sample period.

1.4.4.8. (Lim and Kim, 2002), “Economic and political changes and import demand behavior of North Korea”.

This paper studied some aspects of North Korean economy through its import behavior for which data are available from its trading partners. We have found that for North Korean economy some non-market factors are important determinants of the import behavior. Among several results the ones with the following two implications are of particular interests. First, the two communist superpowers were overall stable and the most important suppliers to North Korean economy regardless of the political situation while
Western industrialized countries filled the deficiency, if any, caused by Sino-Soviet dispute. Second, the foreign debts problem had significantly negative impacts on imports from the capitalist countries for most commodity groups, which is true even after the new open door policy initiated by the Joint Venture Law of 1984, implying that the lost credit caused by the accumulated foreign debts damaged the economic relation between North Korea and the capitalist countries and that the relation was not recovered by the new open door policy.

1.5. **Summary of the Literature review:**
Clear from previous studies that here are some studies conducted on the Palestinian foreign trade such studies (Dombrecht and Sarsour, 2011, Dombrecht and Khalil, 2011, EL-Jafari, 2000), while there are studies done on import demand in a number of Arab countries such studies (Shamasdini and Moghaddasi, 2010, Alabdali, 2007, Fathalla, 2006, Metwally, 2004, Khiaat, 2000, Azoom, 2000, Al-Kasawani, 1998), as a third part to study the demand for imports in foreign countries such studies (Hye and Mashkoor, 2010, Alam and Ahmed, 2010, Constant, 2010, Yazhdani and others, 2008, Fosu and Magnus, 2008, Dutta and Ahmed, 2006, Chang and others, 2005, Lim and Kim, 2002), and this study participates with the two studies (Dombrecht and Sarsour, 2011, Dombrecht and Khalil, 2011) of Palestinian foreign trade by testing a many factors such as price and income and the impact of the exchange rate in this paper, the study (EL-Jafari, 2000) was on the assessment of trade relations between the Palestinian territories and Israel during the transitional period, but my longer complementary to those studies in the study of the demand for imports only because of (according to knowledge of researcher) there were not specialized study in imports or exports, this paper participates with most previous studies in the study of aggregate demand for imports, while there are studies examined the demand for commodity imports such as studies (Shamasdini and Moghaddasi, 2010, Yazhdani and others, 2008, Azoom, 2000), and the most previous studies using co-integration and error correction, while I used multiple regression test. And this paper participates with study (Alam and Ahmed, 2010) in the use of quarterly data most previous studies used annual data in the analysis. Finally the benefited from previous studies is identifying a determinant of demand for imports, which have been studied through this study, this study depend on 2010 data while the previous studies did not mention this data.
2.1. INTRODUCTION:

In the context of recent changes and rapid growth at the level of international economic relations under the umbrella of globalization, which has become the hallmark of the international markets and foreign transactions between countries, and the study of economic relations among countries and even regions, an important topic and interesting, especially as we live amid waves of economic events changed rapidly and renewed. Foreign trade grew with the growth of civilizations, and the global market in the mid-nineteenth century as a result of the industrial revolution, and growth of production led to industrial and commercial companies, banks, transport and other institutions (Robinson, 2009. P11).

International economic relations suggest that every country affected by the neighboring countries because of the relations between the two countries, and the success or failure of the nation depends on the strength of its economic relations with other countries. In the context of globalization, the whole world becomes a single entity, and increases the economic integration in the world, and as a result of trade liberalization, liberalization of capital flows between countries, and the ease of transmission work factor, and in the light of countries openness and technical progress in the field of telecommunications, transportation, satellite TV, therefore, we have to study international economic relations, interactions and transactions and the various activities that occur between different countries and economic blocs, as well as the activity of international companies and global economic organizations, and the United Nations Conference on Trade and Development, and the Commission, and the World Trade Organization, and includes the study of economic relations topics of great importance, including a study determinants of demand for imports and what are the theories that speak in the demand for imports, and in this chapter we will discuss the determinants of demand for imports and what are the theories that have fought in this topic (Carbaugh, 2005. P13).

(Thirty years of Israeli occupation of the West Bank and the Gaza Strip (WBGS) have led to a steady deterioration in the political and economic conditions there. During that period, Israel succeeded in restructuring the Palestinian economy in such a way that it became dependent on the Israeli one. This led to a small and feeble Palestinian
Chapter 2 Import demand theories

economy\(^1\), with a limited capacity for job creation and labor force absorption. One-third of the Palestinian labor force depends on the Israeli work market.

This restructuring of the Palestinian economy can also be looked at as forced integration, since a small economy was integrated into a much larger one, causing tremendous economic imbalances, bottlenecks, unfair trade practices and the imposition of regional restrictions. For example, the Palestinians were able to sell their labor regionally, especially in the Gulf area, but not their commodities, because of the total integration of the Palestinian economy into the Israeli one. (http://www.pij.org/details.php?id=905).

2.2. Basic Open Economy Model:

The model will examine how an economy behaves when it is integrated into the global economy. How do changes in international transactions, recorded by the balance of payments, affect domestic output and employment? Without introducing any additional assumptions, it knows that aggregate demand (AD) must be adjusted to include representing net foreign demand (exports, X, minus imports, M) (Mankiw, 1992.p178). So aggregate demand is given by

\[
AD = C + I + G + (X - M)
\]  

(2.1)

Where (C) is aggregate consumption, (I) is aggregate capital investment, (G) is government purchases of goods and services or government spending, and (X - M) is net foreign demand. The economy is in equilibrium when domestic production, Y, equals aggregate demand AD, or:

\[
Y = C + I + G + (X - M)
\]  

(2.2)

To specify the determinants of consumption, by following John Maynard Keynes’s idea that consumption consists of two parts: autonomous consumption, \(C\) and induced consumption. Autonomous consumption refers to the consumption that would take place if current year’s income was zero; of course such consumption is only possible if consumer’s decisions depend on their past savings. Induced consumption is the fraction of disposable income (\(Y_D\)) (defined as income minus net taxes or \(Y - T\)) that is used for consumption. The parameter \(c\) is called the marginal propensity to consume (Case

\(^1\) A small open economy: is an economy that participates in international trade, but is small enough compared to its trading partners that its policies do not alter world prices, interest rates, or incomes. Thus, the countries with small open economies are price takers. This is unlike a large open economy, the actions of which do affect world prices and income.
Chapter 2 Import demand theories

&Fair, 2007. P403). It measures the increase in consumption resulting from a $1 increase in disposable income (so c must be positive and smaller than 1). The Keynesian consumption function can then be written as:

\[ C = \bar{C} + cY_d = \bar{C} + c(Y - T) \]  

(2.3)

in this simple model of the open economy, aggregate capital investment (I), depends negatively on the interest rate (i). Investment in new plants and factories decreases as the present discounted return from any investment project falls with an increase in the cost of borrowing, i:

\[ I = I(i) \]  

(2.4)

To round out domestic demand, it notes that it is common practice to assume that government spending (G), and net taxes (T), are fixed. Changes in either of these two variables will reflect changes in government’s policy. The last component of aggregate demand is the net foreign demand. In the first, simple model, it assumes that exports (X), are exogenous variable, so it determined outside of the model (denoted by a bar above the X). This is a simplifying assumption equivalent to stating that nothing changes in the rest of the world during the time span of the model (Mankiw, 1992. P184).

\[ X = P\bar{X} \]  

(2.5a)

Where P: denotes the domestic price level.

The simplest way to model domestic demand for imports is to assume that imports (M), are an increasing function of national income, just like any other demand. However, it also allow for an autonomous amount of imports, \( \bar{M} \) which may represent government spending or private spending on essential imports. How much imports increase as income rises is determined by the nation’s marginal propensity to import \( (m<1) \). More precisely, the marginal propensity to import is defined as the fraction of a change in income that is spent on additional imports. Autonomous import demand, combining with the component of import demand increasing with income, the domestic import demand function will be written as

\[ M = \bar{M} + mY \]  

(2.5b)

Since imports are purchased abroad, they are measured in units of foreign price (P*) which must be converted into domestic prices by multiplying them by the exchange rate (E) (Case &Fair, 2007. P728). The import demand function in terms of the domestic currency is then given by:
Combining the import and export functions (2.5a, 2.5c), it obtains an explicit expression for the trade balance:

\[ X - M = P\bar{X} - EP^* (\bar{M} + mY) \]  

To further simplify the model, it ignore inflation and assume that prices are fixed: \( P = \bar{P} \) and \( P^* = \bar{P}^* \). Such assumption is motivated by the time span which considering: it focuses here on the short run, where the existence of price rigidities is a widespread belief. It also assumes the absence of capital flows, \( FA = 0 \) greatly simplifying the balance of payments (BoP): the (BoP) thus reduces to \( BoP = CA \). Without capital flows, it can also ignore net income receipts and net unilateral transfers on the current account side and therefore the current account (CA) is approximated by the trade balance (TB), \( BoP = CA; TB \) (Husted & Melvin, 2010, P418). Clearly, this assumption is not realistic. In most modern economies, the financial account is not closed, and exports are not fixed. However, for now, these assumptions will make life easier and allow acquiring an intuitive understanding of the model before relaxing the assumptions one by one to build a more complex model of the open economy.

### 2.2.1. Saving, Investment, and the Balance of Trade:

To analyze the implications of the model on the broad economy, it needs to rearrange some basic macroeconomic equations. Let us start with the following definitions:

National income \( Y \) is equal to disposable income plus net taxes,

\[ Y = Y_D + T \]  

Private saving \( S^p \) is defined as the difference between disposable income and consumption:

\[ S^p = Y_D - C \]  

Government saving \( S^G \) is defined as the difference between net revenues from tax receipts and government spending on goods and services:

\[ S^e = T - G \]  

National saving \( S^N \) is defined as the sum of private and public saving:

\[ S^N = S^p + S^G \]  

It can substitute these definitions into (1) and rearrange terms as follows:

\[ Y = C + I + G + TB \]  

Is rewritten as \( Y - C - G - I = TB \) and replace \( Y \) by \( Y_D + T \) to get

\[ Y_D - C + T - G - I = TB \]  

or \( S^p + S^G - I = TB \)  

(2.11)
finally, obtain an equivalent equilibrium equation for the economy:

\[ S^N - I = TB \]  

(2.12)

By simply rearranging the national income equilibrium equation using standard identities, the model able to highlight the link between the trade balance, national saving, and investment. At first, the result of rearranging may seem surprising. Equation implies that whenever a trade deficit is observed, a country’s investment exceeds its national saving (Husted & Melvin, 2010. P425).

2.3. Determinants of import demand:

2.3.1. DEMAND AND THE DEMAND CURVE

Figure 2.1: Demand curve:

*Author design
A. The demand for a good is the amount people are prepared to buy with their income and at prevailing prices.
B. law of demand states that, ceteris paribus\(^1\), there is a negative relationship between the price of a good and the quantity demanded of it.
C. Law of demand results from two effects:

\(^1\) Ceteris paribus is a Latin phrase meaning that nothing else changes.
The substitution effect: people increase their demand for products with lower relative prices.

D. The income effect: as a product's price falls, the purchasing power of consumers' income increases, which generally motivates people to raise their purchases of goods.

E. The demand curve illustrated above, and shows the quantities of a good demanded at different prices. The negative slope of the demand curve shows that the quantity demanded falls when the price rises. All other factors that affect demand moving along a demand curve, beside prices, are held constant.

F. When there is a change in any factor that affects the demand, other than the price of the good, the entire demand curve shifts. Some of these factors are:

1. Prices of related goods: If the demand for a good rises (falls) when the price of another product rises, the two goods are called substitute (complements).

2. Income: If the demand for a good increases (falls) when consumers' incomes rise, the good is called a normal (inferior) good.

3. Preferences: Preferences are people's tastes for different goods without regard to the prices of the goods.

4. The number of buyers: If the number of potential buyers increases, the demand for the good rises.

5. Expectations: If people think the price of the good will be higher in the future, they increase their current demand for the good to take advantage of the current relatively low price.

F. An increase (or decrease) in demand refers to a shift in the entire demand curve. Whenever there is a change in any factor boosting the demand for a good, aside from the price of the good itself, the demand curve shifts to the right and there has been an increase in demand.

G. An increase (or decrease) in quantity demanded refers to a movement along a demand curve. Thus a fall in the price of the good causes an increase in the quantity demanded of the good (Samuelson & Nordhaus, 2009. P46).

2.3.2. Gross domestic product:

2.3.2.1. Production, Income and Expenditure.

The circular flow of income and expenditure focuses on the simple fact that when firms produce goods and services, they simultaneously generate income by paying for the inputs used in the process of production. This income, net of saving and taxes, flows
back to the firms as expenditure. The question then arises: What will guarantee that all 
the goods and services produced during a year actually get sold without any unplanned 
changes in inventories. 

It is essential to understand why production and (real) income are two sides of the same 
coin. Suppose production stopped. Consumption and other types of expenditure would 
still be possible if there were stocks of goods already in existence. Sales of such goods 
would cause inventories to fall. But where would the purchasing power to buy the 
goods come from? One possibility is for producers to continue to make payments to 
producers of labor services, normally used to produce goods. Such payments might be 
required under the terms of a labor contracts. In any case, the payments do not count as 
income because there is no quid pro quo\(^1\). Such payments are simply transfers to the 
household sector. Firms liquidate assets or go into debt in order to obtain the funds 
needed to make the transfers. The reduction in financial assets (or increase in liabilities) 
corresponds to the fall in the stock of goods on hand. If firms make no such transfers, 
then it is the buyers of goods out of inventories who must sell assets or increase 
liabilities in order to obtain the needed funds. This hypothetical case explains why 
economists identify income with production. If there is no production, there is no 
income, but that does rule out transactions in real and financial assets and liabilities. 
When there is production, aggregate receipts of all firms from the sale of currently 
produced goods and services (GDP) must be accounted for in the National Income and 
Product Accounts. In short, where does the money go? 

The complete list is: depreciation allowances, indirect taxes (such as sales taxes 
collected by firms and transferred to the government) wages and salaries, rent, interest, 
and profit. The sum of the last four is called National Income, or GDP net of 

All six components on the income side of the National Income and Product Accounts 
(NIPA) measure GDP exactly, just as the total expenditure net exports 
\[ C + I + G + X - M \] always measure GDP exactly. The reason for the identity between 
income and expenditure is the existence of two residuals in the NIPA. 
The first residual is the change in inventories, included in capital spending (Investment). 
This inclusion guarantees that expenditure measures GDP. The reason is simple. 

\(^1\) Quid pro quo is a latin phrase that means literally something for something. It is usually used in financial 
terms to indicate a type of agreement.
Suppose sales of goods and services were to exceed what firms produce: 

\[ C + I_p + G + X - M > Y, \]

where the subscript on capital spending signifies “planned” or “intended” capital spending. Alternatively, use \( \bar{I} \equiv I_p \). The inequality means that some goods were sold out of inventory. Therefore, actual investment in the means of production (which includes inventories) is less than planned investment. Add the negative unplanned change in inventories to planned capital spending to obtain actual investment: 

\[ I_A = I_p + \Delta \text{inv}_v. \]

Then we obtain what is recorded in the NIPA, where 

\[ NX = X - M \] is “net exports”, which can be positive or negative:

\[
C + I_p + \Delta \text{inv}_v + G + NX = C + I_A + G + NX \equiv Y
\]

(2.13)

In the opposite case, 

\[ C + I_p + G + X - M < Y. \]

Inventories are rising unexpectedly because planned expenditure on the left is smaller than GDP. As a result actual investment exceeds planned investment. Replace planned with actual on the left side and the above identity holds once again.

The second residual is the statistical error, defined as GDP (inclusive of the first residual) minus Gross Domestic Income (GDI), which is the sum of: depreciation allowances, indirect taxes, wages and salaries, rent, interest, and profit. The error is added to the income side thereby raising income by just the right amount if GDP > GDI and lowering it by just the right amount if GDP < GDI. Note that both residuals are added to something. The change in inventories added to Investment. The statistical error is added to total income. Residuals can be positive or negative numbers. What category of income is the logical place for the statistical error? One can think of retained earnings is the natural place for any residual on the income side simply because retained earnings is what producers are left with after paying all costs net of indirect taxes (mainly sales taxes) handed over to the government. If the statistical error were added to retained earnings, just as the change in inventories is added to capital spending, the resulting adjusted GDI would also be exactly equal to adjusted GDP, as is the case in the NIPA. Note that profit covers three things: corporate taxes paid to the government, dividends paid to households, and retained earnings. Of course, the statistical error is just that—an error. Including it in retained earnings is a convenience for accounting purposes. The actual mistakes made in calculating national income may have occurred anywhere (Samuelson & Nordhaus, 2009. P388).
2.3.2.2. Allocations of income.

Consider now the possible uses of the six components of GDI. Each can be allocated to taxes, consumption, or private sector saving. For example, depreciation is a case of pure saving because the government does not receive it and households do not get to spend it on consumption. Indirect taxes are a case of pure taxation—neither households nor firms get to save or consume these taxes. Wages, salaries, rent, and interest paid by the business sector to the household sector all end up either as taxes or as disposable income and the latter is either consumed or not, i.e. saved. Finally, profit is either paid to the government as corporate tax, saved in the form of retained earnings, or paid out as a dividend to households which, in turn, is taxed, consumed, or saved. In short the whole income side of the NIPA can be accounted for as: $TX + C + S$. There is only one problem. This total is larger than GDP because government transfers were picked up inadvertently in what is measured as consumption, saving, and taxes. Think of the retired people who do not receive current wages, salaries, rent, interest, or dividends. They are consuming, paying taxes and may even be saving. In effect, $TX + C + S$ is larger than GDP. To avoid counting government (and other) transfers that do not correspond to income generated in the process of production, it is necessary to subtract transfers from taxes. Define net tax receipts as $TR = TX - T$. With this correction:

$$GDP \equiv Y \equiv TX - TR + C + S \equiv T + C + S$$

(2.14)

In this identity, $S$ is private saving, namely, business saving (depreciation allowances and retained earnings) plus household or personal saving. In the US, personal saving is a small fraction of personal disposable income. It can even be negative if the household sector overspends its total income. The bulk of private saving is therefore aggregate business saving and most of that is depreciation of “capital consumption allowances” (Krugman & Obstfeld, 2009. P410).

The National Income and Product Accounts yield an important accounting relationship obtained from two identities:

$$Y \equiv C + I + G + NX$$
$$Y \equiv C + S + T$$

(2.15)
Chapter 2 Import demand theories

Now, equate the right sides, cancel consumption, and rewrite:

\[ I + G + NX \equiv S + T \quad (2.16) \]

\[ (I - S) + (G - T) + (EX - IM) \equiv 0 \quad (2.17) \]

Any positive difference in one parenthesis on the left must be offset by at least one negative difference. Any negative difference on the left must be offset by at least one positive difference. For example, if capital spending exceeds private saving, and the government is running a deficit, then imports must exceed exports.

This NIPA identity has two interpretations, one real and the other financial. On the real side, if one sector is absorbing more output than it can pay for, and then some other sector must be absorbing less. Think of GDP as a big “pie” baked once a year. If the private and public sector “eat” more than the whole “pie”, then \( C + I + G > Y = C + S + T \) and so: \( (I - S) + (G - T) > 0 \). The real excess of what we “eat” over what we “bake” must come from the rest of the world: imports must exceed exports so that \( NX \equiv (EX - IM) < 0 \).

On the financial side, sectors that overspend their incomes must borrow, in the above case, both the private and public sectors when investment exceeds saving and government spending on goods and services exceeds net tax revenue. Someone must be lending, namely, the foreign sector buying US assets with the excess of what they earn by selling us goods and services (our imports) over what the buy (our exports) (Dunn & Mutti, 2000. P425).

2.3.3. Exchange Rate Systems:

Exchange rate: is the current market price for which one currency can be exchanged for another.

Exchange rate market: where foreign currency is bought (demand side) and sold (supply side) using the 'home' or 'local' currency, the exchange rate is the price of that home currency. The rate can be expressed as units of foreign currency for a unit of home currency, or units of home currency per unit of foreign currency (Husted & Melvin, 2010. P343).
Chapter 2 Import demand theories

2.3.3.1. Flexible exchange rate system:

If exchange rate is flexible, a change in demand of a currency causes changes to the exchange rate. Based on Figure 2.2, increase of demand for local currency causes exchange rate to increase from Ex. R to new Ex. R.

2.3.3.2. Fixed exchange rate system

If exchange rate is fixed, changes in demand of a currency trigger government intervention to “neutralize” the changes. Based on Figure 2.3, increase of demand for domestic currency is absorbed through an increase of supply of currency. Thus, the exchange rate is kept unchanged at Ex. R. As this intervention required government (usually through central bank) to sell foreign currency it could deplete foreign reserve and trigger currency attack (Dunn & Mutti, 2000. P456).

Fixed exchange rate system: is a promise to keep exchange rate unchanged (fixed), usually through governing the creation of money. Hence, commitment to uphold the promise is utmost important for the credibility, and subsequently the survival of this exchange rate system. The following might affect the credibility of the fixed exchange rate system:

1. Changes in macro environment might cause “adjustment problem”,
2. Conflict of interest could trigger the “(n-1) problem” (Dunn & Mutti, 2000. P477).
Chapter 2 Import demand theories

Figure 2.3: Fixed Exchange Rate System

*Author design

2.3.3.3. Purchasing Power Parity (PPP):

Purchasing power parity (PPP) is a measure of long-term equilibrium exchange rate based on relative price levels of two countries

2.3.3.3.1. Absolute PPP

\[ R = \frac{P}{P^*} \]; Where P = domestic price level, P* = foreign price level

- Inflation leads to increase in exchange rate (depreciation)
- Reflect law of one price, also known as “Big Mac exchange rate”

2.3.3.3.2. Relative PPP

\[ R_1 = \frac{P_1}{P_0} / \left( \frac{P^*_1}{P^*_0} \right) = R_0 \]  \hspace{1cm} (2.18)

- E.g. if domestic inflation increase 50% \([P_1/P_0] = 1.5\], exchange rate increase (domestic currency depreciate) 50% in period 1 as compare to base period.

2.3.3.3.3. Weakness:

(i) Balassa-Samuelson effect: Productivity (and therefore wages) in traded sector of developed nation is higher than developing nation. Wages in non-traded sector tend to equate wages in traded sector, hence causing overall price level higher for developed nation. As a result, PPP tend to predict overvalue exchange rate for developed nation (calculated PPP value is wrongly lower than actual rate).

(ii) Possible factor that can cause deviation from PPP is international commodity market less integrated due to transportation costs, actual or

---

1 Informal way to measure PPP between currencies (Big Mac Hamburger)
threat of trade protection, information costs and limited labor mobility

2.3.3.4. Monetary disturbance:
Example: Increase in domestic money stock; lower domestic interest rate; capital
outflow; depreciation of domestic currency; (move from Point A to Point X). At Point
X, domestic currency is too cheap (undervalue); domestic products more competitive;
foreign demand for domestic product increase; price of domestic product increase;
(moving Point X to a new equilibrium point on the same PPP line, e.g. Point B). Therefore, a monetary disturbance did not change the proportionality between exchange
rate and price level.

2.3.3.5. Monetary Approach
Demand for money (domestic), \( M_d = kPY \)
Demand for money (foreign), \( M_d^* = k^*P^*Y^* \)
In equilibrium, \( M_d = M_s \), therefore,
\[
M_s = kPY \quad ................. (2.19)
\]
\[
M_s^* = k^*P^*Y^* \quad ............. (2.20)
\]
[\( ^* \): represent “foreign”]
Md = quantity demanded of nominal money balances
k = desired ratio of nominal money balances to nominal national income
p = (domestic) price level
Y = real output
Assumption: Domestic and foreign bond are perfect substitute
Dividing equation (2.20) by equation (2.19);
\[
i = i^* + EA - RP \quad (2.21)
\]
Rearrange;
\[
\frac{P}{P^*} = \frac{M_d k^* Y^*}{M_s k Y} \quad (2.22)
\]
As \( R = P/P^* \);
\[
R = \frac{M_d k^* Y^*}{M_s k Y} \quad (2.23)
\]
Generally, k and Y are assumed constant.
Chapter 2 Import demand theories

Thus, under flexible exchange rate, changes in R is subjected to proportionate changes of domestic money supply (M_s) and inversely proportionate to changes in foreign money supply (M_s*).

Note that the monetary approach is dependent to PPP theory \[ R = P / P^* \] and the law of one price. This approach did not consider the role of interest rate (which could be explicitly analyzed using the IRP approach). As for further analysis on fixed exchange rate, component of money supply could further divided into “domestic component of the nation’s monetary base” (D) and “international or foreign component of the nation’s monetary base” (F) \[ M_s = m(D + F) \], which “m” is the money multiplier(Krugman & Obstfeld, 2009: p315).

2.3.3.6. Expenditure-Changing and Expenditure-Switching Policies

(Swan, 1956: p344):

Expenditure-Changing policies include both fiscal and monetary policies, In Swan diagram, this policies move combination points left-right.

Expenditure-Switching policies refer to changes in the exchange rate (devaluation or revaluation). In Swan diagram, this policies move combination points up-down.

Combination of both expenditure-changing & expenditure-switching policies could be needed to achieve internal and external equilibrium (in Swan diagram).

Figure 2.4: Swan diagram — external and internal balance:

*Author design

**Two possible answer: (At Point B)**

- Using expenditure-changing policies, which are expansionary (fiscal/monetary) policies together with expenditure-switching policies
- Expansionary fiscal/monetary policies increase absorption; hence shift Point B to right towards D* absorption level.
2.3.3.7. Fiscal and Monetary Policies under Fixed and Flexible Exchange Rate: (Krugman & Obstfeld, 2009. P394)

Internal balance: Equilibrium point when IS curve cross with LM curve.
External balance: BP curve cross at the internal balance equilibrium point (IS, LM & BP) intersection.

Unemployment: Equilibrium output ($Y_E$) less than full employment output ($Y_F$).

Slope of BP curve reflect capital mobility condition:
- Inelastic capital mobility generally refers to BP curve steeper than LM curve.
- Elastic capital mobility generally refers to BP curve flatter than LM curve.
- Perfect capital mobility generally refers to horizontal BP curve.

2.3.4. Consumer Price Index (CPI):

2.3.4.1. Measurement of the CPI

The CPI measures price change by comparing, through time, the cost of a fixed basket of goods and services. As prices vary over time, the total cost of the basket also changes and thus the CPI measures the change in the cost of this basket. It provides a way to compare what this basket costs at a given period relative to a reference or base period.

The cost of the CPI basket is assigned a value of 100 in the base period and the costs in other periods are expressed as percentage changes compared to the base period. For example, if the CPI is 110, this means that there has been an increase of 10% in the cost of the basket since the base year; similarly an index of 90 means a 10% decrease in the cost of the basket (Dievert, Greenlees, and Hulten, 2009.p431).

2.3.4.2. The CPI basket

The CPI basket is based on the expenditures of private Mauritian households in a reference period. The items constituting the basket have been selected on the basis of the importance of household consumption expenditure on them. The basket includes all

1 The Consumer Price Index (CPI) is an indicator of changes over time in the general level of prices of goods and services acquired by Mauritian consumers.
important items on which consumption expenditure is significant, i.e. accounting for around 0.1% or more of total household consumption expenditure. Non-consumption items such as income tax, social security contributions, and purchase of land, shares and life insurance are excluded.

The commodities in the basket are classified according to the UN COICOP (Classification of Consumption Expenditure according to Purpose) with 12 divisions, 43 groups and 84 classes (consumer price index manual theory & practice, ILO. 2004).

**Formula for computation of the CPI:**

The CPI is computed according to the Laspeyres Formula\(^1\) as a weighted average of price relatives of individual items. The weights are fixed and correspond to the base period expenditures. The Laspeyres Index measures the cost of a basket of goods and services at different points in time, relative to the cost of the same basket in the base period (Lippe, 2008. P2).

The formula used for computing the CPI at time \(t\) is:

\[
I_t = \frac{\sum W_i (P_{it} / P_{io})}{\sum W_i} \times 100 \tag{2.25}
\]

Where,

- \(I_t\) : CPI for period \(t\) with reference to a base period 0
- \(P_{io}\) : Price of item \(i\) at time 0, i.e. during base period
- \(P_{it}\) : Price of item \(i\) at time \(t\)
- \(W_i\) : Weight of item \(i\)

---

\(^1\) Laspeyres suggested this index formula in 1871. In case of calculating the price index
3.1. **Introduction:**

The Palestinian economy is unique at the global level as follows almost entirely to the Israeli economy and each of the West Bank and Gaza Strip (WBGS) is like the backyard of the Israeli economy which do not enjoy Palestinian control or border control and you cannot impose or collect customs duties on the various crossings, under the Paris Convention economic signed in 1994 Israel is entitled to control 70% of Palestinian revenues through the collection of customs duties on exports and imports through the various crossings in addition to the collection of income tax from Palestinian workers Israel \(^1\), on the other hand Israel controls on natural resources and most important of which sources water and land grabbing.

Consequently, Israel has to strengthen the dependency of the Palestinian economy after the 1967 war and became difficult to describe the Palestinian economy because it is faceless and not a specific rule or clear boundaries, market economy or natural resources utilized in the control of the crossings, and increased the situation worsened after Al-Aqsa Intifada on 2000, which cost the various economic sectors heavy losses as a result of Israeli actions represented a comprehensive closure of the Palestinian territory and hit a tight blockade on the majority of cities and isolated from each other has been blocked by a period of recession, Perhaps the 2006 election and the resulting outcomes led to the tightening of the siege on the Palestinian Territories.

3.2. **Historical background for the Palestinian economy:**

Since the Ottoman Empire, Jerusalem was follow the mandate of Damascus, one of three states formed the Levant in the spectrum of time, has divided each state into a number of Alsnagq \(^2\), and to Jerusalem, which included the private Snjrq Hebron and nearby villages.

The economic life of the period of the Ottoman Empire consists of five branches of the head of the manufacturers in the city of Jerusalem, namely:

1 - The food industry is to extract oil and grain milling and the era of fruit.
2 - Textile and dyeing industry.
3 - Leather Industries.
4 - soap industry.
5 - Mineral Industries.

---

\(^1\) Palestinian Land which occupied by Jewish in 1948 exclude West Bank and Gaza Strip.

\(^2\) Alsnagq: is governorates Palestine includes five governorates or snagq: Jerusalem, Gaza, Safed, Nablus, Al-lojon.
6 - Permeated this period the movement of active commercial was in the export of soap to Egypt via the port of Gaza, and grain and textiles from Egypt, clothing and coffee from Damascus, and also some textiles from Istanbul, China, Saudi Arabia and Iraq. (Juul, 2008. P42).

The economic system in Palestine during the British occupation, a pattern distinct translated colonial British allied with the Zionist Executive, has resulted in this absence of management of national development, which represents the majority Arab population in Palestine during that era, and the agricultural sector was the most important sectors in the land of Palestine, in addition to trade And craft industries and those related to agriculture, a political review of British occupation - the so-called mandate - were as follows:

The Palestinian economy is primarily agricultural economy, and was more than two thirds of the inhabitants of Palestine livelihoods depend directly on agriculture, so the bad actions taken by the Government of the British Mandate on the Palestinian agricultural sector had a negative impact on the majority of Palestinians. (Owen, 1988, p15).

The Israeli occupying forces since the occupation of the WBGS in 1967, has worked systematically to adapt the Palestinian people through various practices, which included control of all the capabilities of the Palestinian development and controlled development indicators in the WBGS through the control of health institutions and education, infrastructure and municipal councils and Rural Municipalities. The budget and the WB, GS lies with the Israeli Ministry of Finance, where the Israeli authorities have taken an important decision in the first week after the 1967 war is that the budget areas are part of the defense budget after the war, the Israeli authorities to set up the Committee of Ministers in particular for economic policy in the WBGS. And the main themes that were placed on the agenda of this committee were:

- The budget for civic activities in the WB
- GS must be covered from income tax in the Palestinian territories
- Prevention of (or close supervision) to enter the Palestinian agricultural products to the Israeli market, and do not enable competitive production of Israeli expensive
- prevent the establishment of a Palestinian industry compete with Israeli industry.
- To supervise the entry of Palestinian workers who compete with non-trained work force in Israel. Israeli government and the Histadrut\(^1\) (General Federation of Labor in Israel) in

\(^1\) Histadrut was founded in December 1920 in Haifa to look out for the interests of Jewish workers.
Chapter 3: Palestinian economy

1970 to an agreement providing for the entry of Palestinian workers from the WBGS to the Israeli labor market, to be under the joint control of the authorities of the military government and the Histadrut. Where Palestinians bet on this resistance, we can say that the concept of development at that time focused on external support for the resistance until the liberation of the land and ending the occupation see Table (3-1).


Table (3.1): National Accounts in Palestine (1968-2009): Value in million $

<table>
<thead>
<tr>
<th>Year</th>
<th>GNP</th>
<th>GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1968</td>
<td>450</td>
<td>445</td>
</tr>
<tr>
<td>1980</td>
<td>1439</td>
<td>1071</td>
</tr>
<tr>
<td>1990</td>
<td>2974</td>
<td>2170</td>
</tr>
<tr>
<td>1992</td>
<td>3234</td>
<td>2238</td>
</tr>
<tr>
<td>1994</td>
<td>3407</td>
<td>3012.3</td>
</tr>
<tr>
<td>1995</td>
<td>3683.4</td>
<td>3193.2</td>
</tr>
<tr>
<td>1996</td>
<td>3721.7</td>
<td>3286</td>
</tr>
<tr>
<td>1997</td>
<td>4218.6</td>
<td>3170.6</td>
</tr>
<tr>
<td>1998</td>
<td>4869.5</td>
<td>4147.9</td>
</tr>
<tr>
<td>1999</td>
<td>5285.6</td>
<td>4511.7</td>
</tr>
<tr>
<td>2000</td>
<td>4770.6</td>
<td>4118.5</td>
</tr>
<tr>
<td>2001</td>
<td>4096.7</td>
<td>3765.2</td>
</tr>
<tr>
<td>2002</td>
<td>3512</td>
<td>3264.1</td>
</tr>
<tr>
<td>2003</td>
<td>4011.6</td>
<td>3749.6</td>
</tr>
<tr>
<td>2004</td>
<td>4430.4</td>
<td>4198.4</td>
</tr>
<tr>
<td>2005</td>
<td>4896.9</td>
<td>4559.5</td>
</tr>
<tr>
<td>2006</td>
<td>4719.9</td>
<td>4322.3</td>
</tr>
<tr>
<td>2007</td>
<td>4993.9</td>
<td>4554.1</td>
</tr>
<tr>
<td>2008</td>
<td>5249</td>
<td>4820.9</td>
</tr>
<tr>
<td>2009</td>
<td>5604.3</td>
<td>5147.2</td>
</tr>
</tbody>
</table>

3.2.1. Development Program for the Palestinian national economy from 1994 to 2000:

This program is the first attempt to develop a plan ambitious development in order to rebuild Palestinian society after the Oslo Agreement, has estimated the program costs about $ 11.6 billion U.S., and prices in 1991, the program has on the assumptions and strategies are important given the priority to correct the distortions caused by the occupation, and job creation and infrastructure development and encourage the export sector, housing, and despite the importance of this program and the size and quality of the work to make it, but its application is not practical due to several factors, most notably the lack of necessary funding and the lack of realistic assumptions on which it is, whether political or demographic or geographic (PLO, 1993).

3.2.2. Developing the occupied territories and investment in peace (World Bank, September 1993):

This plan called for a focus in the medium term the following things:
- Restoration and improvement of infrastructure and public services in the field of water supply, sewerage, solid waste, roads, transport, electricity, education and health
- Some support for strengthening agricultural support services and improve the management of natural resources through measures to combat erosion and forest development
  As called for in the long-term access to:
- Completion of the construction and operation of energy facilities
- The ability to expand the network of main roads, and the ability to expand into health and education sectors.
- Construction and improvement of airport facilities (MOP, 1993).

3.2.3. Palestinian Development Plan 1998 to 2000:

The general objectives included: - the operating and economic development
- Rehabilitation and rural development.
- Institutional development and financial policies.
- Human Resources Development.

That access to these goals by:
1- Rehabilitation and development of infrastructure and services, especially in rural areas.
2- Human resources development and raise the level of social services.
3- To activating the role of public sector institutions and the private sector.
4- To provide and establish the legal framework for the different economic activities.
5- To consolidate the concepts of democracy, human rights and the development of the system of government (MOP, 1997).

3.2.4. **Palestinian Development Plan 1999 to 2003:**

Formed the plan for clarification of the previous plan and based on the following assumptions:

Implementation of the Way River agreement and its accessories and start to run Gaza airport and seaport, and reduce the pressures and constraints imposed on the Palestinian economy. Authority's ability to achieve a surplus in the current budget, and this depends on the Palestinian economic performance in general.

International aid physically and emotionally by the donor countries.

The private sector to play a vital role and is effective in the next five years.

In this era varied views of development. Some felt it should be done for the development of the state and institution building. And others felt that the development is the means to get rid of the occupation and achieve prosperity for the Palestinians, which led to the diligence on the distribution of the roles of development between the public and the private sector and between the National Authority institutions and Non-Governmental Organizations NGOs, as well as on the expansion of the degree of participation in the completion of development decision and monitor its implementation and accountability assigned by the, leading to distortion and disable the development process in the Palestinian territories, where the groups have rejected traditional in the Palestinian Authority to see the value of civic organizations, some even endorsed the integration of all existing non-governmental bodies in the structure of the Palestinian Authority, which led to a sharp decline in financing institutions Eligibility According to the World Bank, the international assistance to the NGOs, which amounted to U.S. $ 220 million in 1993, had fallen to $ 74 million in 1997 (a decrease of 66%) This sharp drop led to the closure of hundreds of kindergartens and about 60% of health clinics is government, and despite the increasing number of troubled institutions, civil in this era but most are ineffective due to lack of funding. Where the percentage of organizations that suffer from this crippling 96.3% of organizations that failed to achieve the objectives of the plans (of the total non-
governmental institutions). The clubs and youth organizations, sports and cultural centers are the sectors that suffered most from the financial deficit in their budgets. It is the things that should not be overlooked that the areas that took the responsibility of the Palestinian Authority (where he was her full powers at the level of structural planning and building permits) of less than 35% of the WB and designated areas are the areas (a, b). In regions (c), which constitute 65% of the WB is still such powers, however, the occupation authorities that hamper the process of Palestinian construction in and practiced the policy of demolishing houses as well as the demolition of the elements of growth and development and prevent the delivery of infrastructure and the intensification of settlement activity aimed at grabbing land is one of the most important means of economic development in particular and overall development can in general. Add to this that all the above mentioned development plans failed to achieve its development objectives either because of weakness in the extrapolation of the future and change indicators either because of poor experience which has been entrusted with the implementation of plans or because of administrative corruption in most of the ministries concerned (MOP, 1998).


Palestinian territory after the outbreak of the second intifada in September 2000 there was destruction of more than 60% of the infrastructure in the Palestinian territories in addition to the destruction of the 590 building in the Palestinian National Authority. These incursions, where, in addition to the barriers imposed by Israel to the high level of unemployment and low income level and increasing the poverty rate to 40% of the total population of the Palestinian territories and to reach the GDP growth in 2007 to 0%, and the events of September 2001 and under which the entry of funds into the territory of the Palestinian Authority is restricted to the American conditions, and then Hamas won legislative elections, prompting Western governments and Arab to cut support for the Palestinian government submission to the decisions of the Quartet, which stipulated that the arrival of funding terms of development and political goals. which focused on providing the basic requirements of the Palestinian people, such as food, and reduce the concept of development: "development in order to live.

(http://multaqa.org/atemplate.php?id=66,).

In light of the continued Israeli occupation of Palestinian lands and its policies settlement expansion in the light of Israeli military checkpoints that cut through the WB and impede and restrict the movement of Palestinian social and economic alike, the Palestinian government building plan development reform launched by the name: the reform plan and Development (2008 - 2010), which made her the government $ 7.7 billion, 70% of them to fill a budget deficit of power and 30% of the development plans and projects can stimulate the Palestinian economy and other projects contributing to the implementation of the reform program deep in the institutions of power, and adopted to this plan, the combined efforts of both the Palestinian Authority and Palestinian NGOs and the private sector and international development and the Israeli government. When that all the parties pledged to abide by, the Israeli side to stop watching an obstacle to any progress. As for the Palestinian Authority has pledged to facilitate the process of development and investment through the Palestine Investment Conference in Bethlehem, and at the level of the donor countries have pledged to the last of the authority $ 5.6 billion in the Paris conference of donor countries to support the reform plan and development At the level of civil institutions were and is still the cornerstone in the development process. But what has failed to do this plan is not linked to overall political framework, which aims to develop a strategy to strengthen the steadfastness of the Palestinian people and strengthen its capacity to confront the occupation and enable it to reach its goals of liberation and independence, building block first and fundamental in the development process in this country. In 2009 growth in the WBGS, and preliminary estimates indicate that the rate of real growth of 6.8 per cent, far above the expected rate in the Palestinian Authority budget for 2009 is 5 per cent. And achieve most of this growth in the West Bank, where estimates of the International Monetary Fund and the Palestinian Central Bureau of Statistics that the rate of growth of real GDP was 8.5 per cent. However, despite the continued closure of the GS, it estimates a positive growth in the sector at about 1 per cent. The Central Bureau of Statistics estimates indicate at the outset that the real growth rate of the WBGS in 2008 will reach 2.3 per cent, which would have been a real decline in per capita income. But the department has recently issued revised estimates indicate that the real growth rate up to about 5.9 per cent, which means that the per capita GDP. And thus represents the performance in 2009 the third consecutive year of growth in per capita GDP, and perhaps
indicates that the economy of the WB at least is recovering after years of decline. But growth is still less than you would expect from an economy recovering from such a low level (MOP, 2007).

3.3. Palestinian Foreign Trade:
Since 1967 until now, the Palestinian economy in the WBGS is a supplement to the Israeli economy, and its development has become captive to the relationship that is balanced and forced this economy with the larger and more dynamic and complex. The successive Israeli governments since that date continued to have a policy of destructive systematically against the Palestinian economy is based on the transfer of WBGS into a consumer market for products and services Israel in order to corrupt them and a source of cheap labor, has led this policy to create distortions structural inherent in the Palestinian economy, it expanded its service activities and marginal at the expense of the productive activities of development, which work to undermine the productive capacity of the Palestinian economy and the continued Israeli restrictions stifling the Palestinian economy during the transitional phase that began in 1993 under the justification of so-called security requirements to the extent that vanished with the optimistic forecasts about the economic gains of peace, and this continues until Al Aqsa Intifada, the economic burden is multiplied by a severe siege and closure and the Israeli continuous aggression yet (Saiyg, 1989, p266). Palestinian economy and its growth has become the Palestinian economy since 1967 is subject to economic policies and the Israeli security, both through the security policies formulated by Israel to control and dominate the Palestinian economy, or by imposing restrictions on industrial and investment, encouraging a flight of investors and owners of capital and Palestinian professionals out of hand, and the exploitation of Palestinian labor market cheap pay for work in the productive sectors and the Israeli economy on the other hand, where land is the Palestinian issue labor to Israel instead of exporting goods and services in exchange for the importation of about 90% of Palestinian imports from Israel. The foreign trade with the outside world is limited affected trade system in one direction as defined by Israeli interests, was Israel is dealing with the Palestinian market as an extension of its market and strengthened the provisions of the control of the Palestinian economy, and during this period, stopped trade and economic relations in a final between the GS and Egypt, both on the one hand imports from Egypt, or export it and continued relations with Jordan in accordance with the provisions of domestic trade, but under Israeli
Chapter 3: Palestinian economy

control continues on the Palestinian economy (Mansor & Abu Amro, 1989, p102,122). In April 1994 became the Paris economic agreement is the framework relations in Palestinian trade with the outside world. Under this period increased adoption of the Palestinian economy to the outside world in general and Israel in particular. there has been no positive development on the overall performance of macroeconomic indicators in the occupied Palestinian economic relations and trade between the two parties were still very imbalance and unequal and favored the interests of Israel (General authority of information, Palestinian economic report, 2001, p72).

Even though the full realization of the existence of many of the limitations and constraints contained in the Economic Protocol, which supposedly sought to be corrected gradually by expanding the margins available to the Palestinian National Authority.

In addition to the many restrictions and trade barriers included in the Protocol and which were not formally defined in 1994, and in particular those imposed on agricultural trade, also became Paris Economic Protocol framework and reference for the negotiation and implementation of economic and trade agreements between the Palestinian National Authority and other countries (General authority of information, Palestinian economic report, 2001, p72).

The current reality of the internal and external trade, and the Palestinian economy in general confirms the correctness - and objective - to diagnose or characterize the relationship of append, through many of the indicators, such as:

1. The Israeli enemy is the senior partner and the first in Palestinian trade, foreign trade in particular

2. After the establishment of the Palestinian Authority, the Palestinian through the Convention or the Paris Protocol, in accordance with the formula of the Customs Union and the unification of prices, in addition to the embargo imposed by the terms of this Protocol from the restrictions on the entry of Palestinian goods to the Israeli market types and quantities according to a "quota" or a certain share, as under free trade in the Palestinian imports from abroad as part of the quota system known as lists of (A) and (B), and a result of these constraints to direct a large number of Palestinian traders, to import various goods from abroad by Israeli traders on the pretext that they do not can import these goods directly, and in this case, the customs duties on the goods go to the Israeli treasury, except that the Israeli import by the merchant, commission and the benefits, lead
Chapter 3: Palestinian economy

to higher costs for goods and increase the burden on the Palestinian consumer, and all this is done by the Palestinian Authority, which did not take specific protective action against these harmful practices, revenue from the Palestinian side, Palestinian and consumer on the other hand, under the pretext of openness and free market open without sergeant. The Table (3-2) Shows the performance of foreign trade of Palestine, whether continuous fluctuations in the exports or imports during this period.

Table (3-2) Palestinian Foreign Trade Performance 2004 - 2009

<table>
<thead>
<tr>
<th>Item/Year</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP In thousand dollars</td>
<td>4196700</td>
<td>4478800</td>
<td>4107000</td>
<td>4133400</td>
<td>4878300</td>
<td>5241300</td>
<td>5754300</td>
</tr>
<tr>
<td>Exports in thousand dollars</td>
<td>312688</td>
<td>335443</td>
<td>366409</td>
<td>512979</td>
<td>558446</td>
<td>518335</td>
<td>694898</td>
</tr>
<tr>
<td>Imports in thousand dollars</td>
<td>2373248</td>
<td>2667592</td>
<td>2758726</td>
<td>3284035</td>
<td>3466168</td>
<td>3600785</td>
<td>4089351</td>
</tr>
<tr>
<td>Exports as a percentage of imports%</td>
<td>13.2%</td>
<td>12.6%</td>
<td>13.3%</td>
<td>15.6%</td>
<td>16.1%</td>
<td>14.4%</td>
<td>16.99%</td>
</tr>
<tr>
<td>Balance of trade in thousands of dollars</td>
<td>-2060560</td>
<td>-2332149</td>
<td>-2392017</td>
<td>-2771056</td>
<td>-2907922</td>
<td>-3082430</td>
<td>-3394453</td>
</tr>
<tr>
<td>The proportion of exports to domestic production%</td>
<td>7.5%</td>
<td>7.5%</td>
<td>8.9%</td>
<td>12.4%</td>
<td>11.45%</td>
<td>9.9%</td>
<td>17.2%</td>
</tr>
<tr>
<td>Ratio of imports to GDP%</td>
<td>56.55%</td>
<td>59.56%</td>
<td>67.17%</td>
<td>79.45%</td>
<td>71.05%</td>
<td>68.7%</td>
<td>71.1%</td>
</tr>
<tr>
<td>Proportion of the deficit in the trade balance to GDP%</td>
<td>49.1%</td>
<td>52.07%</td>
<td>58.24%</td>
<td>67.04%</td>
<td>59.61%</td>
<td>58.81%</td>
<td>58.99%</td>
</tr>
</tbody>
</table>


Can be shown the persistent deficit in trade balance, which has risen sharply of 2060 million in 2004 to 2771 million in 2007 and then to 3082 million in 2008 and finally to 3394 million in 2010, has represented the trade deficit 49% of the total GDP year.
2004.52% in 2005 and rose sharply to 67% in 2007 and decreased to 58.99% in 2010. The high deficit in the trade balance continued Palestinian twice the structure But despite that, the coverage of Palestinian exports to total imports rose from 13.2% in 2004 to 14.4% in 2009. Thus, the ratio of exports to GDP reached its highest percentage of Palestine in 2007 with a 12.4% of GDP, and remained between7.5% to 17.2% during the period of 2004-2010. This negative index shows the degree of susceptibility suffered by the Palestinian economy in comparison with the economies of neighboring countries, which requires the condensation of official and private efforts to adopt a policy whose main objective to support the national economy and strengthen its capacity to reduce the chronic deficit in the trade balance. The proportion of imports to GDP of 57% in 2004 until it reached 71% in 2010, the highest rate in comparison with neighboring countries.

Foreign trade has witnessed significant growth during 2008. This is due mainly to allow the Israeli authorities and based on pressure from the international community or the result of a number of rulings issued by the Israeli Supreme Court to ease some restrictions on the export of goods and Palestinian products and particularly agricultural exports from the West Bank, especially those that are needed middle Israeli and value of exports Palestinian goods and services from $ 500 million in 2007 to 737 million in 2008 With a higher ratio to GDP from 10.7% to 14.5% during the same period. Israel allowed some export shipments from the GS After the decision of the Supreme Court to be export flowers and strawberries, accounting for about 10% of the total amount available for export. It also allowed the leakage of some shipments of commodities such as agricultural products from the WB to Israel, which led to the growth of the value of Palestinian exports during this year (Central Bureau of Statistics, foreign trade, 2011).

The Palestinian imports of goods and services rose in value from about $ 3.6 billion in 2007 to about $ 3.8 billion in 2008 with the decline attributed to the GDP from about 77.4% to about 73.9% for the years 2007 and 2008 respectively, and decreased the value of the deficit in balance of goods and services from about $ 3.1 billion in 2007 to about $ 3 billion in 2008 with a lower proportion of the deficit to GDP from 66.7% to 59.5% during the same period natural result of the growth of Palestinian exports in 2008 at a rate far exceeding the growth rate of Palestinian imports. It also resulted in the coverage rate of exports to imports of goods and services from 13.8% in 2007 to 19.6% in 2008, the highest rate of coverage is accessible since 2003, but it remains lower than in 2000, while the
coverage ratio of exports to imports about 24.5%, despite the relative improvement in sector performance indicators Palestinian foreign trade in 2008, but the analysis of the trade structure of the Palestinian economy shows continued suffering of many of the imbalances of the persistence of high trade deficit to GDP is higher than power of the Palestinian economy in addition to the continuing high rate of imports to the total volume of Palestinian trade from 83.1% in 1999 up to 87.8% in 2007 thin 2008, about 83.6%. Although the rise in this ratio does not itself constitute a defect substantially the structure of such imports is a real indicator to assess their economic impact, As well as the continued monopoly of the Israeli economy, where trade-Palestinian exports to Israel represented some 93% of the total Palestinian exports and imports from Israel represented some 97.5%, of the total Palestinian imports market remains Palestinian harnessed to serve the Israeli economy and a catalyst for productive and export sectors and then to the trade balance and the growth rate of GDP per capita and the average Israeli than at the expense of depletion of the capacity of the Palestinian economy and the destruction of productive sectors (Central Bureau of Statistics, foreign trade, 2010).

The analysis will be based on annual data mainly obtained from the national accounts. (Figure 3-1) shows total exports and imports in current prices and the balance between them (exports). The data show a significantly large deficit on the trade balance. Furthermore this deficit shows an increasing trend since the mid–nineties, and is even strengthening in the most recent years, due to a much stronger positive trend in total imports as compared to total exports. As can be seen from (Figure 3-2), the coverage ratio of total imports by total exports fluctuates around 17%.
Figure (3-1) Total exports and imports

*Author design

Figure (3-2): Export coverage of total imports

*Author design

This coverage ratio can be decomposed into a volume and a price effect (Figure 3-2) the ratio of exports to imports measured at constant prices does not show any negative long run trend. This means that on average the prices of imported goods and services rise stronger relative to the prices of exported goods and services. A decline in the terms of trade implies an income loss on behalf of the country’s residents.
Table (3-3) the value of imports and exports, compared to gross domestic product and the trade balance from 1993 to 2009

<table>
<thead>
<tr>
<th>Year</th>
<th>Commodity exports</th>
<th>Commodity imports</th>
<th>Trade deficit in the balance of trade of commodity</th>
<th>The proportion of trade of commodity</th>
<th>Gross domestic product (GDP)</th>
<th>Ratio of imports to GDP</th>
<th>Ratio of exports of commodity to GDP</th>
<th>The proportion of trade deficit to GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>312</td>
<td>1229</td>
<td>917</td>
<td>1541</td>
<td>2651.7</td>
<td>12.1</td>
<td>46.3</td>
<td>34.2</td>
</tr>
<tr>
<td>1994</td>
<td>355</td>
<td>1361</td>
<td>1006</td>
<td>1716</td>
<td>2596</td>
<td>13.7</td>
<td>52.4</td>
<td>38.8</td>
</tr>
<tr>
<td>1995</td>
<td>407</td>
<td>1412</td>
<td>1005</td>
<td>1819</td>
<td>3081.9</td>
<td>13.2</td>
<td>45.8</td>
<td>32.6</td>
</tr>
<tr>
<td>1996</td>
<td>503</td>
<td>2220</td>
<td>1717</td>
<td>2723</td>
<td>3517.6</td>
<td>14.3</td>
<td>63.1</td>
<td>48.8</td>
</tr>
<tr>
<td>1997</td>
<td>565</td>
<td>2273</td>
<td>1708</td>
<td>2838</td>
<td>3667.7</td>
<td>15.4</td>
<td>62</td>
<td>46.4</td>
</tr>
<tr>
<td>1998</td>
<td>581</td>
<td>2425</td>
<td>1844</td>
<td>3006</td>
<td>4011.9</td>
<td>14.5</td>
<td>60.4</td>
<td>46</td>
</tr>
<tr>
<td>1999</td>
<td>598</td>
<td>2587</td>
<td>1989</td>
<td>3185</td>
<td>4261.5</td>
<td>14</td>
<td>60.7</td>
<td>46.7</td>
</tr>
<tr>
<td>2000</td>
<td>615</td>
<td>2759</td>
<td>2144</td>
<td>3374</td>
<td>4516.6</td>
<td>13.6</td>
<td>61.1</td>
<td>47.5</td>
</tr>
<tr>
<td>2001</td>
<td>591</td>
<td>2456</td>
<td>1865</td>
<td>3047</td>
<td>4441.8</td>
<td>13.3</td>
<td>55.3</td>
<td>42</td>
</tr>
<tr>
<td>2002</td>
<td>451</td>
<td>2613</td>
<td>2162</td>
<td>3064</td>
<td>4093</td>
<td>11</td>
<td>63.8</td>
<td>52.8</td>
</tr>
<tr>
<td>2003</td>
<td>442.4</td>
<td>2391.1</td>
<td>1948.9</td>
<td>2833.5</td>
<td>3749.6</td>
<td>11.8</td>
<td>63.8</td>
<td>51.9</td>
</tr>
<tr>
<td>2004</td>
<td>354.7</td>
<td>2253.5</td>
<td>1898.8</td>
<td>2608.2</td>
<td>4196.7</td>
<td>6.8</td>
<td>56.55</td>
<td>53.7</td>
</tr>
<tr>
<td>2005</td>
<td>351.8</td>
<td>2522.6</td>
<td>2170.8</td>
<td>2874.4</td>
<td>4497.8</td>
<td>7.2</td>
<td>59.56</td>
<td>48.3</td>
</tr>
<tr>
<td>2006</td>
<td>354.2</td>
<td>3667.4</td>
<td>3313.2</td>
<td>4021.6</td>
<td>4107</td>
<td>8.6</td>
<td>67.17</td>
<td>80.7</td>
</tr>
<tr>
<td>2007</td>
<td>646.5</td>
<td>3824.7</td>
<td>3178.2</td>
<td>4471.2</td>
<td>4133.4</td>
<td>15.7</td>
<td>79.45</td>
<td>76.9</td>
</tr>
<tr>
<td>2008</td>
<td>669.6</td>
<td>4123.4</td>
<td>3453.8</td>
<td>4793</td>
<td>4878.3</td>
<td>14.9</td>
<td>71.05</td>
<td>70.8</td>
</tr>
<tr>
<td>2009</td>
<td>442.4</td>
<td>2391.1</td>
<td>1948.7</td>
<td>2833.5</td>
<td>5241.3</td>
<td>11.8</td>
<td>68.7</td>
<td>37.2</td>
</tr>
<tr>
<td>2010</td>
<td>575.5</td>
<td>3958.5</td>
<td>3383</td>
<td>4534</td>
<td>5754.3</td>
<td>10</td>
<td>68.8</td>
<td>78.8</td>
</tr>
</tbody>
</table>


From the previous table layout that the percentage of trade with the outside world to GDP volatility of 34% in the year 1993 and increase this percentage to 47% in 1999 and the fall of 2000 to 48% and improved in 2001 and 2002 to reach 53% and then start declining in 2003 to reach 52%.

In 2004 began the improvement of this ratio to 54% then to 48% of the years 2005, And reached highest levels in 2006 to reach 81%, with the beginning of the siege imposed on the Palestinian Authority after the elections and the winning of Hamas and the following figure illustrates the extent of volatility in winning trade deficit:
Figure (3-3): The proportion of trade deficit to GDP:

*Author design*

Paris Convention and the economic impact on the Palestinian foreign trade: Paris Economic Protocol was based on the Oslo agreement and its content is restricted in terms of Israel's continued monopolizing viable Palestinian economy and to control and restrict the powers of the Palestinian Authority and the potential for economic growth of the Palestinian people. But take it a step in the protocol for the salvation of the Israeli occupation and the full control of the "civil rule" the destiny of the Palestinian people.

3.4. **The transitional period and the Paris Economic Protocol:**

This Protocol was the economic application of the Oslo agreement and could have led to more autonomy to the Palestinian areas and to improve the standard of living of the population and disengagement. There have been many attempts to achieve this at Camp David, and finally, the road map announced in 30/3/2003 and targeted to end the conflict and reach a permanent status agreement based on the existence of two states in Palestine during the period ending in 2005. But these initiatives have failed before the Israeli refusal to abide by and implement, and its quest to impose a unilateral solution by building a wall "boundary" and continues to "fatten" the colonies and other colonial policies.

- **Customs and import policies:**

Paragraph (1) identified in second article that the policies will govern import from overseas operations, including customs duties levied on imports.

It is known that import policies are placed in any society in line with the economic
circumstances and consistent with the achievement of the objectives of economic policy because these policies have an impact on local economic activities, such as the protection of infant industries locally - and support policies for the development of some productive sectors.

1. Making the import process linked to an agreement with a third party has no link process of import is the kind of process complexity procedures, especially if we have tried to link the item to item, which followed and which gives authority powers and specific responsibilities and strapped lists specific as stipulated {list (a 1)} and {list (a 2)} are determined items and quantities with reference to the need of the Palestinian market.

2. How can determine the need for the Palestinian market - as indicated by the item (3) in this article?

Will provide surveys determine the size of the demand for these goods? What are the criteria for that?

Certainly that such action needs to be studies and great efforts if we tried to determine the quantities of all the items in the lists, the matter needs to be huge technical crews and will make it more difficult process of importing goods.

3. That the world is moving towards market systems and freedoms in all areas of economic life and especially in the field of foreign trade, and such agreements inconsistent with this approach.

4. For each goods not specified in the lists as stated in item (5) of the same material as well as those quantities in excess of what was specified in paragraphs (2 a) and (3) the Israeli standards on customs and purchase tax, levies and other charges is the rule that will be applied, and if they want power determine other criteria matter needs to amendments to be agreed upon in the process of coordination with the Israeli side.

- **VAT:**

Select item (7) in this article that the validity of the Palestinian Authority levy VAT on goods produced locally and import the same percentage, but not of the powers of the rate change this tax only two percentage {identified Israel rate of VAT to 17% on all services The goods and power can be reduced to only 15%}. This linkage between the price of value added tax (VAT) in Israel and the PA is not commensurate with the economic conditions in both Israel and the Weak areas.
in our productive sectors needs to Palestinian tax policy in line with the promotion of the productive activities and projects by reducing the tax rate. While the productive sectors in Israel and sophisticated afford such a high price that Israel also adopts alongside other policy tax policy, a policy that some industries and projects required by the Israeli economy.

- **Exit and transit points:**

Gave paragraph (13) Palestinian side has the right to use the points in Israel giving Palestinian imports and exports treated equal economic and trade. But we find paragraph (14) gives the Israeli customs officials the right to inspect the goods and collection of taxes, where is the economic and trade treatment equal? And Israel is still dealing with the Palestinians in accordance with the laws of occupation and not on equal terms.

- **Clearing procedures in the collection of taxes and import duties:**

This paragraph will be the authority to collect all customs imposed on Palestinian imports in Israeli ports and by tariff even if they are imported by an agent Israeli; where Israel will transfer these amounts to the Palestinian Authority within six days from payment of customs duties and clearance of goods.

If audited in this paragraph we find the inevitable result of Israel's control of border crossings with the Palestinian areas under the authority of the without this control, the possible revenue collection authority. On the other hand, Israel sets the customs tax values commensurate with the Israeli economy as the agreement did not give the Palestinians the right to determine the tariff in only two sets of goods imported from Jordan and Egypt being the only Arab countries signatories to the peace agreements with Israel.

### 3.4.1. Economic agreements with Israel

Select Paris Protocol, which was reached in April 1994 and the Washington Convention signed between the PLO and Israel in September 1995 procedures and regulations that govern the economic relations between the WBGS and Israel.

The Convention provides the basic economic principle of free trade with Israel, according to the customs union arrangements. Regarding trade with a third party, the Paris
Convention governing the relationship between the WBGS and the rest of the world and is as follows (Al-Ja'fari, 2000):

1. Palestinian products are not subject to any export restrictions. Trade to and from the WB have full access to the ports of entry and exit Israel.
3. The import policies of the Israeli regulations on customs, purchase tax and standards they apply to Palestinian imports with the exception of goods listed in the menus A1, A2 & B. The Palestinian Authority has the right to apply tariff rates for the purchase tax and other import taxes within the quota-e scoop on these imports.
4. Moreover, the Palestinian National Authority has full control in the import of goods included in the lists A1, A2, regardless of Israeli standards requirements.

One result of applying the policy of Israeli import is to consider bilateral trade agreements held between Israel and other parties legal and valid in the WBGS. And traders can the Palestinians take advantage of the free trade agreements held with the countries: the Czech Republic, Hungary, Turkey, and Slovakia.

Palestine Liberation Organization has the right to negotiate and conclude trade agreements on behalf of the Palestinian National Authority as long as the import policy to be applied in Israel applies in the WB, GS (Abu Aqumsan, 2006).

3.4.2. Partnership Agreement between the EU and the Palestine Liberation organization:

Give the partnership agreement progress on trade and cooperation reciprocal treatment for the exemption of customs for industrial products that adhere to the rules of origin with regard to agricultural products, the EU grants products imported under the quota-free treatment of customs and tariffs reduced, apply the same thing on agricultural products imported from the EU to the WB, GS, claiming the certificate of origin that give the free product treatment (EURI)

1995 Barcelona Declaration form a quantum leap towards the enhancement of economic cooperation in order to create the Palestinian European mechanism of action of a specific order to gain access to economic conditions, through a range of economic activities and to
achieve these goals identified certain specific steps the following points (Al-Ja'fari, 2000):

1. Creating free trade zones to promote Palestinian goods to meet the requirements of standards for these areas to help them compete and will be there for the Palestinians their rights, such as commercial property law and the protection of industrial property rights and the right of the competition.

2. Development of economic policy adopting the principle of market economy to meet the needs of the Palestinians.

3. Develop the exchange of expertise and technological modernization and development of economic and social structures and private sector development for the advancement of the productive sector and the creation of legal frameworks for a market economy.

4. The creation of regional cooperation to help the Palestinians to encourage foreign direct investment and try to pressure Israel to reduce the obstacles to such investment.

5. Encourage the establishment of small and medium enterprises and providing financing programs for the technical development of these projects.

6. Assistance in managing and developing water sources, which has priority to the Mediterranean and help the Palestinians in the area of agriculture to develop agricultural policies and provide training and technical support to Palestinian farmers.

Under the duties of customs applicable to the import of the WBGS for the products manufactured in Europe and covered by the special procedures, but not more than 25% of its value and shall not exceed the value of the import total of these products, which are subject to these procedures, 15% of the value of total imports of industrial products manufactured in European countries.

3.4.3. Palestinian-Jordanian Trade Agreement:

Since the signing of business cooperation between Palestine and Jordan in 1995 underwent operations of trade rules and arrangements for a new protocol included the Palestinian economy - Israel, which took place in 1994 some of the rules, which included the continuity of the link with Israel, while allowing for a margin of limited trade and economic relations with Arab countries and Islamic neighbors, especially of such as Egypt and Jordan, have been identified lists of goods that are allowed to be imported from Jordan.
under categories called A1, A2 & B was later modified these lists and increase the number of goods allowed to be imported. The Palestinian-Jordanian trade agreement signed in 1995; its implementation still depends on the Israeli side, which creates obstacles to the development of trade between the two countries (Al-A’rdh & Al-Ja’fari, 2000).

3.4.4. **Palestinian-Egyptian trade relations:**

Had to the historical relations the Palestinian - Egyptian, and the depth of links geographic and complexity of interests to look objectively the long-term prospects for trade cooperation between the terminal it can be for Egypt to import from Palestine between (20 ~ 9.52%) of products and Palestinian goods in return imports of Palestine is between (12%. 53%), goods and Egyptian goods with the possibility of doubling the bilateral trade volume if it was removed and the abolition of all duties and restrictive measures imposed by Israel on Palestinian external trade. which requires the parties to bear any grudge it and to break the Israeli hegemony as follows (Masiaf & Al-Ja’fari, 2000):

1. Environmental trade liberalization on a large scale, and the removal of all restrictions and obstacles and facilitate the import and export procedures between Egypt, Palestine, Jordan and Egypt.

2. Coordinate policies and actions between the Palestinian and Egyptian sides to break the monopoly of foreign trade of Israel out of Palestinian national and economic interest.

3. Coordination of policies on production and marketing, and enable the Palestinian side to use the infrastructure to take advantage of Egyptian in the areas of export and import.

4. The establishment of joint projects to enhance the ability of the two economies Mental our machine to foreign products in the markets of Egypt and the Palestinian Investment Promotion and border trade, especially in the northern Sinai and the GS (Masiaf & Al-Ja'fari, 2000).

3.5. **Gaza tunnels:**

The beginning to use tunnels for commercial purposes, in the siege imposed on the Gaza Strip in mid-2007, and in the context of adaptation citizens and traders with the blockade and techniques, rejecting and resisting him, in order to work on securing assets necessary for the domestic market, which no longer reach of Israel due to the closure of commercial crossings, and to consider the Gaza Strip a hostile entity in 19/9/2007.

(http://www.ahewar.org/debat/show.art.asp?aid=156356)
Since 2007, Israel has imposed an economic blockade on 1.7 million Palestinians in Gaza aimed at halting the import of goods to an already-isolated and impoverished population. In response, the Gazans have been forced into securing 80 percent of their consumables—foodstuffs, fuel, cars, even livestock—through tunnels. In this sense, the tunnels represent a form of resistance to the blockade. The tunnel has more than one partner and managed through the stock price which determines the number of partners and the system of distribution of profits to shareholders. (Asurani, 2008)

With the intensification of the blockade became materials and goods different types, including electrical appliances, especially those generating profits and different types of fuel intervention through the tunnels except gas that all attempts to enter, and fuel which is Strategy Item sold at half price compared to Israeli fuel addition tobacco, while the remaining goods are sold at prices higher and there is no export from Gaza to Egypt and abroad and thus became the Gaza economy 100% consumer and cash moving in one direction to pay the import bill. (AboMedlla, 2010)

Monthly import through tunnels between 35-40 million dollars which destroys the possibility of building and the establishment of a productive economy based on maximizing available resources in preparation to treatment chronic defect in the trade balance and improve the available capabilities to produce physical goods and services that will provide the necessary ingredients for sustainable economic development that fights primarily unemployment and poverty within the economic and financial policies and trade balance and monetary moving toward social justice and to put an end to unproductive work and illicit enrichment.

The tunnels are used to import a wide range of goods, including livestock, zoo animals, food, clothes, car parts and building supplies. Palestinians view the tunnels as a lifeline, enabling them access to a wide range of commercial goods during the blockade of the Gaza Strip.

At the same time, there are serious drawbacks to the tunnel economy. Especially problematic are the so-called tunnel millionaires, numbering roughly 500, whose wealth amassed from the tunnel trade is visible in a burgeoning industry of luxury homes that appear as anomalies on a landscape scarred by poverty and war. Recently, the Egyptian military shut down most of the tunnels in response to an attack on its soldiers in the
Chapter 3 Palestinian economy

Sinai Desert, emphasizing how precarious the tunnel trade can be. In the meantime, people in Gaza are without fuel and essentials. (AboMedlla, 2010).

3.6. Conclusion:

Despite the recently establishment of the Palestinian National Authority, but the Palestinians took stable steps towards real achievements on the level of the national economy.

This chapter discussed historical context of the Palestinian economy, in particular, where it distinguish between the period of Ottoman Empire and the British occupation and the economic development that is based on achieving progress in all economic variables and explained chapter also core values in the development process under the Israeli occupation, as well as the refutation of the most important stages of the development process under the occupation.

Chapter discuss reality of economic development in the occupied Palestinian territories with regard to the statement impact internal and external environment in the development process, as discussed chapter development plans Palestinian formulated according to the desire of donors, and there were difficulties facing the application of these plans because of the political circumstances of the Palestinian situation, as well as corruption and poor Leaders by those who participated in the implementation of these plans.

Discuss Chapter Palestinian foreign trade and development since the establishment of the Palestinian Authority and how the exports cover only a small percentage of imports, then discussed the separation relationship of the Palestinian Authority the European Union countries and the Arab countries, America and Israel and how his relationship with Israel dependency relationship where Israel has persist to put obstacles to the Palestinian economy from through agreements such as the Economic Paris agreement, Economy and Foreign Trade Palestinian under the mercy of the Israeli economy.

Finally chapter discussed the tunnels economy in GS and how that Gaza's external trade became come through those tunnels.
Chapter 4 Analysis of the structure of Palestinian imports

4.1. Introduction:

Flows of commodity markets in the Palestinian and Israeli show that there is mutual interest of both the Palestinian and Israeli process of trade exchange between them, in spite of that the movement of trade exchange between the West Bank and Gaza Strip from Israel's point of hand since 1967, is subject to many complex factors. These factors include a lot barriers and trade restrictions that made the process flow of goods and services depend on the interests and policies of Israeli economic and trade, which led to the left margin of limited Palestinian interests, especially during the transition period since 1995. Trading system prevailing between Palestinian areas and Israel is not a free trade area due to the lack of border customs stations, or between the parties. At a time in which we find that about 90% (The report of the Palestinian economy 1994/1999, SIS, p.71) of the volume of Palestinian trade commodity subject to the fees and taxes of not less than those prevailing in Israel and to prevent leakage of Palestinian imports to Israel, on the other hand that there is limited movement of factors of production such as labor from the Palestinian territories into Israel and the movement of capital and returns to work toward Israel's West Bank and Gaza. Though the economic and trade relations and trade between Palestine and Israel includes some of the rules and arrangements for the Free Trade Area and the Common Market, but those relationships are in are mostly of the rules and arrangements, the customs union, but union unilaterally (by Israel) (Palestinian economy, decision-Quds Open University, p. 373), was abolished customs duties between the Palestinian territories and Israel on goods flowing between the two sides. But the returns of such cancellation differ significantly between the party and another, the size and value of goods that flow from Israel to the West five times the size and value of Palestinian exports to Israel. This is because the difference to the availability of complete freedom for the flow of goods from Israel to the Palestinian markets without allowing for the movement of the opposite similar, while the flow of Israeli products into Palestinian markets with ease, Israel still imposes many restrictions and obstacles of security, health, environmental, and many of the standards and specifications for goods Palestinian flowing into their local markets, according to its trade policy that has been elaborated during the seventies of the last century. The margins and the limited powers granted to the Palestinian side in the context
of trade policy is governed according to the Paris Economic Protocol has made the process of re-exports and a deviation occurs in the trade for roads natural does not harm the Israeli side, but led to link fiscal policy Palestinian and approve the financing of the Palestinian treasury to customs duties and taxes which make the level of prices of many imported goods in Palestinian markets are higher than those prevailing in Israel. And still the flow of goods between Palestinian areas and Israel is a specific internal factors related to the performance of the Palestinian economy, but also determined according to supply and demand conditions in Israel.

4.2. The growth of imports in Palestine:
In the period from 1988 - 1994 exports from West Bank to Israel was amounted 73%, and 23% to Jordan, while exports from Gaza Strip to Israel was amounted 75% and Jordan 17% for the same period, (PCBS – foreign trade Statistics, 1998), while the period from 1995 to 1998 the exports from West Bank to Israel was 95 % and the exports from the Gaza Strip was 89%, while Palestinian exports to Jordan and other Arab countries did not exceed 4%, and continued reliance on revenues from the Palestinian labor in the financing of imports exceeding wage bill to work in the end of 1998 billion thus covering more than 40% of imports of goods for the year 1998, and formed the taxes and customs duties on imported goods and services from Israel, through and those exporting to the most important sources of finance treasury of the Palestinian Authority which characterize the clearance revenues and fees other customs imposed on commodity imports by about 83% of total revenues Palestinian public in 1998, and the rate of import of strategic goods from Israel $ 560 million annually. Exacerbated the effects of the economic crisis as the siege continues on the Palestinian economy in the long term, where the economy is no longer able to restore his normal even with the lifting of the siege and closure. Since 28 / 9/ 2000,( Mas, 2001. P10) Israel tightened the blockade on the Palestinian territories markedly, and converted to semi-isolated from the outside world (even from each other). It banned Palestinian exports from reaching the Israeli market or through ports and border crossings controlled by the world's foreign and impeded the flow of Palestinian imports (especially inputs) coming from - or through - Israel, which affected some sectors of economic leadership, such as the industrial sector, as reflected in the decline in exports hampered
Chapter 4 Analysis of the structure of Palestinian imports

exports severely damaged the agricultural sector and industrial sectors - which relied on Israel in the marketing of production - such as stone and marble industry and clothing (especially sub-contracting) and plants in addition to the damages caused by the inability to local marketing between the Palestinian governorates themselves - or damage direct result of the bombing and destruction of industrial and agricultural investments repeated without any reason, and damaged as well as institutions and establishments operating in foreign trade due to lower volume of trade by the obstacles in front of the Israeli ¬ exports and to a lesser extent to the movement of imports, which affects the nature of production and the overall width of the Palestinian reduced demand for domestic goods imported. (PCBS, 2000).

Dependent losses in foreign trade on the severity of obstacles to trade on the one hand and the quality of goods exported or imported on the other - some of the goods with flexible marketing high as stone and food imports (frozen and canned) and with a lifespan is relatively long such as oils will be the impact of closure by less than exports of goods perishable like vegetables and roses. But the delay of itself lost some of the deals concluded with the Palestinian industrial companies, which diminishes the size of marketing, whether internal or external. The imports have been affected in addition to the already high costs resulting from delays in ports and obstacles of shipping and the long wait at the checkpoints, which have affected the high cost of imported goods, and can be considered partial protection of the domestic product (assuming that the local product not affected by these obstacles through the timing and cost of raw materials for this product).

The results (Palestinian foreign trade, PCBS 2004) indicate that the total value of imports of goods in 2002 was 1,515,608 thousand US$ distributed on 2145 commodities with a decrease by 24% compared with 2001. On the other side the results indicate that imports of services was 66,233 thousand US$ distributed on 46 service with a decrease of 26% compared with 2001, total value of exports in 2002 was 240,867 thousand US$ distributed on 910 commodities with a decrease by 17% compared with 2001. While the total value of export of services in 2002 was 84,771 thousand US$ distributed on 41 kind of services with a decrease by 22% compared with 2001, net trade balance amount to -1,274,741 thousand US$ in goods with surplus by 27% compared with 2001, while the net trade
balance on services was 18,538 thousand US$ with an increase by 27% compared with 2001. The total value of imports of goods in 2003 was 1,800.3 million US$ distributed on 2197 commodities with a surplus by 18.8% compared with 2002. On the other side the results indicate that imports of services was 61.6 million US$ distributed on 46 service with a surplus of 25.7% compared with 2002, the total value of exports of commodities in 2003 was 279.7 million US$ distributed on 859 commodities with a surplus by 16.1 % compared with 2002. While the total value of export of services to Israel in 2003 was 73.1 million US$ distributed on 41 kind of services with a surplus by 10.3% compared with 2002, the net trade balance amount to -1,520.6 million US$ in goods with a surplus by 19.3% compared with 2002, while the net trade balance on services was 11.5 million US$ with a decrease by 33.4% compared with 2002.

The total value of imports of commodities in 2005 (Palestinian foreign trade, PCBS 2006) was 2,666.8 million US$ distributed on 2265 commodities with an increase by 12.4% compared with 2004. On the other side the results reveal that imports of services from Israel was 119.2 million US$ distributed on 75 kind of services with an increase of 26.7% compared with 2004, total value of exports of commodities in 2005 was 335.4 million US$ distributed on 1029 commodities with an increase by 7.3% compared with 2004. While the total value of export of services to Israel in 2005 was 127.7 million US$ distributed on 65 kind of services with an increase by 38.0% compared with 2004, the deficit in trade balance amount to 2,331.3 million US$ in goods with an increase by 13.1 % compared with 2004, and the surplus in balance trade on services was 8.6 million US$. 
4.3. Commodity of the Palestinian imports Classification for Foreign Trade: -

Table: (4-1)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average value</td>
<td>Rate of growth</td>
</tr>
<tr>
<td>Agriculture imports</td>
<td>44.1</td>
<td>4.0%</td>
</tr>
<tr>
<td>Industrial imports</td>
<td>243.5</td>
<td>5.0%</td>
</tr>
<tr>
<td>Total imports</td>
<td>287.6</td>
<td>5.0%</td>
</tr>
<tr>
<td>Agriculture imports/Total imports</td>
<td>17%</td>
<td>--</td>
</tr>
<tr>
<td>Industrial imports/Total imports</td>
<td>83%</td>
<td>--</td>
</tr>
</tbody>
</table>


Table: (4-2) Distribution of commodity imports to the Gaza strip:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average value</td>
<td>Rate of growth</td>
</tr>
<tr>
<td>Agriculture imports</td>
<td>28.0</td>
<td>6.3%</td>
</tr>
<tr>
<td>Industrial imports</td>
<td>172.7</td>
<td>6.5%</td>
</tr>
<tr>
<td>Total imports</td>
<td>200.7</td>
<td>6.5%</td>
</tr>
<tr>
<td>Agriculture imports/Total imports</td>
<td>14%</td>
<td>--</td>
</tr>
<tr>
<td>Industrial imports/Total imports</td>
<td>86%</td>
<td>--</td>
</tr>
</tbody>
</table>


The data available in tables (4-1&4-2) that Palestinian imports of the West Bank was in a steady increase with different rates of growth in some years 1968-1987 period, they ranged
Chapter 4 Analysis of the structure of Palestinian imports

in value from 70 to 639 million in the West Bank in the period between 1988 - 1998 was a general trend of commodity imports in the West Bank increased continuation thereof, ranging from $ 453 - 1839 million. In the Gaza Strip was the direction of commodity imports it similar to the situation in the West Bank has increased during the period 1968 - 1987 and the value ranged between 15 & 412 million dollars during the period 1986 - 1999 has been the general trend of commodity imports also growing to continue and increased value of 223-800 million dollars.

Table: (4-3)

Distribution of commodity of Palestinian imports in percentage,

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Agriculture commodity &amp; food</td>
<td>13</td>
</tr>
<tr>
<td>2 Beverages and tobacco</td>
<td>4.4</td>
</tr>
<tr>
<td>3 Raw materials</td>
<td>2.2</td>
</tr>
<tr>
<td>4 Fuel</td>
<td>13</td>
</tr>
<tr>
<td>5 Vegetable fats and oils of animal</td>
<td>1.3</td>
</tr>
<tr>
<td>6 Chemicals</td>
<td>5.5</td>
</tr>
<tr>
<td>7 Manufactured goods</td>
<td>49</td>
</tr>
<tr>
<td>8 Machinery and equipment</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>


the data contained in Table (4-3) describes the stability of the structure of Palestinian merchandise imports during the period 1995 - 1998. According to international classification did not change the importance of imports of food, agricultural commodities, raw materials, chemicals, machinery, transport equipment and for the total commodity imports for imports of fuel was ratio to total imports fluctuate from year to year due to changes in world prices. Imports of manufactured goods have declined their
importance during the two years, 1996-1997, where became a 30% and 35% of total imports. In the year 1998 has increased the importance of baldness manufacturer to become attributed to the total commodity imports over 50%, also increased its value by 20% in 1998 compared with the level in the years 1996 and 1997.

Since 1995 (Palestinian foreign trade, PCBS 1996) detailed data are available about the distribution of commodity imports to the Palestinian and can be seen from Table (4-3) that more than half of Palestinian merchandise imports are concentrated in four commodity groups where the goods manufactured and classified the largest share of imports increased by 20% This is followed by a group of food and live animals and a set of fuel where the contribution of each of them 3% of total merchandise imports were followed by the group the machines did not increase its stake to 16%, while the rest of the groups has not increased its contribution to 25% of commodity imports.

Commodity imports rose(Palestinian foreign trade, PCBS 1999) of 1229 million in 9921 to 2759 million in 1999 by 124%, and at an annual rate of 15.5% but fell to 2456 million in 2000, an increase of 11% by closures and the siege and the average percentage of merchandise imports to gross domestic product during the period 1992-2000 about 56%.

Reflecting the weakness of local production capacity in meeting domestic demand on the one hand, and rising purchasing power resulting from workers, remittances - either in Israel or abroad, in addition to increased reliance on imports as consumer goods imports increased 40% from the period 1986-1994 for more than 60% during the period 1995-1998 and increased to about 70% in 2000.

The average ratio of credit facilities granted (PCBS 2000) to imports during the period 1996-2000 about 5% per annum of the total facilities of the economic sectors, which is extremely low, and the reason is because of the high degree of risk in foreign trade to the lack of adequate safeguards by the producers of the banking institutions and the lack of institution to secure loans in Palestine. (Mas, 2001. P57)

There is no doubt that all the goods which were imported into the Palestinian territories go through a broker an Israeli (agency owner), the owner of the profit most by virtue of his agency and governed in his commodities at home, but things have changed (SIS 1999, p.15) relatively since the implementation of the Paris Economic Protocol which became
some of the local companies get a commercial agencies independent (although the lack of economic justice in granting the merchants national, as well as monopolies on certain goods strategy), one of the most important issues that can bring out the economic activity of the Palestinian Israeli control - as the direct import offers many advantages of Palestine, including the collection of the full tariff to calculate the power without the mediation of Israel (PCBS 1998), which gets 3% of its value to meet the collection of these fees in addition to lower prices to the consumer of final goods or on the product of raw materials, machinery and equipment by reducing the number of intermediaries and additional expenses and the freedom to choose imports within the multiple sources to ensure selection of the best and finest e but Many of the Palestinian importers prefer to import by Israeli agents. On the other hand are still operations that are not registered you get between Israel and the Palestinian territories, either through settlements or through the border semi-open with Israel (especially in the WB), and for imports of services, which include insurance, shipping and returns of foreign investment, which includes the entry that gets by foreigners working in international institutions, transport services, travel, higher education and health services received by the Palestinians in the Large delicious - and the estimated average annual value during the period 1995-1998 by about $606 million.

Ratio of commodity imports from Israel for each of the West Bank and Gaza Strip during the period 1968-1998,( decision-Quds Open University, p. 379/Oertani, 1989. P157) respectively, 87% - 90%, and about 2% of Jordan to the West Bank was not there, and imports from Jordan to the Gaza Strip despite a final trade agreement signed with the National Authority and about 10% each with the outside world and despite encouragement from the National Authority for direct import from the outside world (not Israel), Israel is still the main source of Palestine.

Which amounted to 86% in 1996 and dropped to 62% in 1999 (PCBS, 2000), and returned to rise to 73% in 2000 due to not controlling the mechanism of registration of imports, especially in the West Bank, where many of the imports on the import it is Israeli, and in fact is foreign goods imported through the agencies an Israeli, as well as to the effectiveness of direct import (very little) by the conventions and privileges granted to Palestine, which was able to convert part of the imports from Israel, this is the average
ratio of imports from Egypt during the period 1996-2000 (PCBS, 2001) about 0.94% per year with a very small port on the rear of the Arab geography and history (especially the Gaza Strip) As for the proportion of imports of goods from European Union (EU) countries is ranging between 7.5% and 16% during the period 1996-2000, the proportion of imports with other Arab countries almost non-existent as only 0.07% during the same period. As for the rest of the non-Arab Asian countries have increased their share in the share of imports of 3% in 1996 to 4% in 1999 but rise to 9% in 2000, the most important Chinese market, which increased imports, especially of clothing and footwear, which have affected the national industry dramatically and the emergence of the so-called phenomenon of dumping the commodity in those branches of industry, which limited the degree of competition with local industry, and finally ranged imports of goods between 5% and 3% of the group's member states of America during the same period.

Reflect these indicators over the adoption of the Palestinian market to Israeli products, and demonstrates the activity and the strength of the business relationship with Israel and the weakness of the relationship with Jordan and Egypt in special and the rest of the world in general, although the agreements concluded by the national authority with a lot of these countries.

Because of the lack of detailed data on the commodity classification for foreign trade, we will rely on the Palestinian available data on the structure of Palestinian exports and imports by sections of the International Standard Classification\(^1\); see Table (4-4).

---

\(^1\) Standard International Trade Classification (SITC) is a classification of goods used to classify the exports and imports of a country to enable comparing different countries and years.
### Table (4.4a) Value of major groups SITC code

<table>
<thead>
<tr>
<th>SITC code</th>
<th>Major groups</th>
<th>Value in million $</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Imports</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Food and live animals</td>
<td>494423 452224 464697 514096 641221 703675</td>
</tr>
<tr>
<td>1</td>
<td>beverages and tobacco</td>
<td>125579 102389 125079 124798 141275 166072</td>
</tr>
<tr>
<td>2</td>
<td>raw materials, inedible except fuels</td>
<td>52624 62034 51813 29947 51982 39343</td>
</tr>
<tr>
<td>3</td>
<td>metal and metal slides and related articles</td>
<td>1122994 718269 942380 1457877 1131979 1247526</td>
</tr>
<tr>
<td>4</td>
<td>oils and fats Animal and Plant</td>
<td>22610 20343 20631 19580 17666 21126</td>
</tr>
<tr>
<td>5</td>
<td>Chemicals and related products g. M. A</td>
<td>228069 222988 198959 244718 275313 353198</td>
</tr>
<tr>
<td>6</td>
<td>items made and classified mainly according to Article</td>
<td>463297 490493 413508 493529 564170 651031</td>
</tr>
<tr>
<td>7</td>
<td>Machinery and transport equipment</td>
<td>298377 433895 329269 408580 582390 536618</td>
</tr>
<tr>
<td>8</td>
<td>Crafts Miscellaneous</td>
<td>181448 147529 153063 172541 186958 239922</td>
</tr>
<tr>
<td>9</td>
<td>Commodities and transactions not classified last in the International Standard Classification for Foreign Trade - Amendment III</td>
<td>31178 17429 59327 502 418 -</td>
</tr>
<tr>
<td></td>
<td>Total imports</td>
<td>3020598 2667592 2758726 3466168 3593372 3958512</td>
</tr>
</tbody>
</table>

### Table (4-4b) Value of major groups SITC code

<table>
<thead>
<tr>
<th>SITC code</th>
<th>Major groups</th>
<th>The value</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Food and live animals</td>
<td>31396</td>
<td>38819</td>
<td>36180</td>
<td>63126</td>
<td>59597</td>
<td>79440</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>beverages and tobacco</td>
<td>8953</td>
<td>9973</td>
<td>14322</td>
<td>19409</td>
<td>23432</td>
<td>24013</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>raw materials, inedible except fuels</td>
<td>2561</td>
<td>18492</td>
<td>13165</td>
<td>9457</td>
<td>29927</td>
<td>11610</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>metal and metal slides and related articles</td>
<td>1500</td>
<td>3332</td>
<td>12220</td>
<td>3164</td>
<td>2093</td>
<td>1548</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>oils and fats Animal and Plant</td>
<td>3057</td>
<td>13706</td>
<td>12276</td>
<td>21069</td>
<td>15905</td>
<td>15761</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Chemicals and related products g. M. A</td>
<td>38200</td>
<td>35216</td>
<td>28866</td>
<td>72729</td>
<td>40498</td>
<td>73984</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>items made and classified mainly according to Article</td>
<td>185246</td>
<td>155426</td>
<td>129788</td>
<td>240246</td>
<td>177468</td>
<td>244984</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Machinery and transport equipment</td>
<td>24771</td>
<td>22108</td>
<td>18522</td>
<td>32276</td>
<td>27864</td>
<td>32976</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Crafts Miscellaneous</td>
<td>95809</td>
<td>69630</td>
<td>64645</td>
<td>96970</td>
<td>129396</td>
<td>91196</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>commodities and transactions not classified last in the International Standard Classification for Foreign Trade - Amendment III</td>
<td>8</td>
<td>6</td>
<td>5459</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Total exports</strong></td>
<td></td>
<td>391502</td>
<td>366709</td>
<td>335443</td>
<td>558446</td>
<td>506180</td>
<td>575513</td>
<td></td>
</tr>
</tbody>
</table>

Chapter 4 Analysis of the structure of Palestinian imports

Indicate the data contained in Table (4-4) that the structure of Palestinian imports a variety of large and constitute industrial imports about 85% of the total Palestinian imports, which include food products and industrial inputs (machinery and equipment and materials manufacturers), consumer goods and goods durable .. etc.

The value of Commodity imports in (2006) 2.758.7 million $ distributed over 2128 items, up 3.4% compared with (2005), while the value of service imports from Israel $ 23.21 million distributed on 71 service, up 3.4% compared to with (2005). The value of merchandise exports of $ 366.7 million in 2006, distributed over 1171 items, an increase of 9.3% compared with 2005, while the value of service exports to Israel, $ 131.3 million distributed to 65 service, up 2.8% compared with the (2005). The deficit in the balance of trade of commodity one million 2.392.0% in (2006), with the balance of trade deficit increased by 2.6% compared with (2005) due to increased imports in (2006). The surplus in the trade balance on services for (2006) amounted to $ 8 million.

Merchandise imports rose in (2008), reaching $ 3.4662 billion and achieved a 5.5% increase in Ceuta, compared with the year (2007) as well as high commodity exports to reach 559.4 million $ by an increase of 8.9% compared to, and in (2007), has increased deficit in the balance of commodity trade in (2008) reaching 2907.7 million $, while the deficit for the year (2007) value of 2771.1 million $ and the deficit is due to the increase in the volume of imports against exports. If we look at the Palestinian imports, we see a picture contrary to the reality of exports, as there is a continuous increase, but the excessive growth of Palestinian imports. Increased imports of 2373 million in (2004) to 3284 million $ in (2007), and then to 3600 million $ in (2009) and this will exacerbate the deficit in the trade balance.

The year (2008) saw a remarkable rise in Palestinian imports and ranked first in the structure of Palestinian imports item and fuel and a metal slides, metal and related materials valued at 718.269 million dollars in the year 2007, which rose significantly in 2008 to $ 1.457877 billion dollars, their share is significantly also up to 1131979 million in the year 2009. The data show the previous case of the deficit and sagging experienced by the Palestinian economy dominance of the Israeli occupation, and the weakness of trade exchange between the West Bank and Gaza Strip and the lack of clarity of policy,
Palestinian trade has led to more rapid growth of Palestinian imports and the worsening trade deficit and this large cast on the Palestinian Authority and the various segments of the Palestinian people for condensing efforts and a policy of its main goals to promote national production to replace imported products.

We can see by the International Standard Classification to manufactured goods classified by material (6) occupies first place in Palestinian exports, where the issue of Palestine is worth $ 185 million of this item the year 2004 and rose to 240 million $ in the year 2008 and decreased by 26.2% to 177.4 million $ in the year 2009. Exports of non-metallic mineral products, metal manufactures, cork and wood manufactures, iron and steel in 2009. And can therefore circulate the same conclusion for Palestinian exports.

4.4. Geographical Distribution of Palestinian imports:

The period 1968-1998 (Palestinian foreign trade, PCBS 1996 / Palestinian economy, decision-Quds Open University, p. 389) the proportion of 85% -88 9% of merchandise imports to the West Bank come from Israel and 10% of the rest of the world and about 2% of Jordan to the Gaza Strip, was more than 90% of commodity imports comes from Israel and 10% of the rest of the world. In spite of encouraging the Palestinian Authority to import from the outside world, Israel is still the main source of Palestinian areas it accounts for 95% of the sector's imports and 85% of imports of the West Bank. In the Gaza Strip continues to import from abroad because the high-cost procedures and inspection delays and obstacles, and Israeli intervention in the ongoing Israeli import procedures and as a result of the increased import of the Gaza Strip from Israel.

As for Jordan did not exceed the proportion of Palestinian imports from more than 1% of total imports during this period, from 2% in the previous period and in the Gaza Strip were not there, and imports from Jordan's final despite the economic changes that have occurred in the region such as the Convention Jordan Trade - the Paris Agreement and the Palestinian economy. It could be argued that the geographical distribution of imports to the Palestinian West Bank and Gaza Strip with Israel almost exclusively a rate of 90% for the three periods (Quds Open University, 2008, p. 392).

These indicators reflect the extent to which the Palestinian market to Israeli products and the result was similar to the geographical distribution of Palestinian exports and the growth
Chapter 4 Analysis of the structure of Palestinian imports

rate indicates the period on the activity and the strength of the business relationship with Israel and the weak relationship with Jordan and the rest of the world.

Table: (4-5) Distribution of commodity imports to the West Bank

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1988-1994</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average value</td>
</tr>
<tr>
<td>Agriculture imports</td>
<td>130.0</td>
</tr>
<tr>
<td>Industrial imports</td>
<td>632.5</td>
</tr>
<tr>
<td>Total imports</td>
<td>762.0</td>
</tr>
<tr>
<td>Agriculture imports/ Total imports</td>
<td>16%</td>
</tr>
<tr>
<td>Industrial imports/ Total imports</td>
<td>84%</td>
</tr>
</tbody>
</table>


It has been divided for the distribution of commodity imports to the Palestinian West Bank in table (4-5) to the first of two terms 1970-1987 and the second from 1988 - 1994 and found that the rate of total merchandise imports during the first period reached 287 million dollars and the share of agricultural imports, of which 17%, while imports of industrial and consumer goods was 83% and the average annual growth of 5% means that imports have risen dramatically during the second period, despite the changed not goods distribution, the rate of imports of the West Bank has doubled more than three times compared with the initial period.

Table: (4-6) Distribution of commodity imports to the Gaza strip:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1988-1994</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average value</td>
</tr>
<tr>
<td>Agriculture imports</td>
<td>46.0</td>
</tr>
<tr>
<td>Industrial imports</td>
<td>294.9</td>
</tr>
<tr>
<td>Total imports</td>
<td>341.0</td>
</tr>
<tr>
<td>Agriculture imports/ Total imports</td>
<td>14%</td>
</tr>
<tr>
<td>Industrial imports/ Total imports</td>
<td>86%</td>
</tr>
</tbody>
</table>

Chapter 4 Analysis of the structure of Palestinian imports

The table (4-6) shows the imports of industrial and agricultural goods to Gaza Strip constituted 14% of total imports and about 86% of imports of industrial and the growth rate of imports of agricultural and industrial development in the Gaza Strip, a close during this period amounted to about 6.5%. In the period 1994 -1988 did not change the structure of imports remained as the proportion of agricultural imports to total imports in the range of 14% growth rate has remained in the imports also continued, reaching 6.5%, indicating continued dependence on imports to meet demand local in the West Bank and Gaza Strip. In spite of the different political circumstances during the two periods, particularly the period 1988 - 1994 Palestinian uprising, a period but the commodity composition of imports has not been affected as the Palestinian remained similar to the situation in the first period. Trade directions indicate that the trade transactions in 2002 was with 92 countries, Israel represents 74% of the whole value of imports(Palestinian foreign trade, PCBS 2009), with an increase by 8% compared with 2001, in addition 90% of whole exports was exported to Israel with a decrease by 4% compared with 2001, on the other side the results indicate that the total value of direct imports in 2002 was 398,371 thousand US$, and imports from the European Countries was 189,463 thousand US$ in 2002 with a decrease by 39% compared with 2001, and the direct exports to European Countries was 9,162 thousand US$ in 2002 with an increase by 27% compared with 2001.

The direct imports of commodities from Arab Countries in 2002 was 31,074 thousand US$ with an increase by 22% compared with 2001, while direct exports to Arab Countries in 2002 was 15,093 thousand US$ with an increase by 4% compared with 2001.

Regarding the direct imports from American Countries, the results indicate that the value of imports was 81,581 thousand US$ in 2002 with a decrease by 9% compared with 2001, while direct exports of commodities to American countries in 2002 was 203 thousand US$ with an increase by 4% compared with 2001.

On the export side, the results reveal that the direct exports in 2002 was 24,541 thousand US$, and 50% of the whole exports was exported to Jordan, while it was 63% in 2001.

Regarding the trade partners, the results indicate that the trade transactions in 2003 was with 110 countries, Israel represents 72.7% of the whole value of commodities imports, with an increase by 17.2% compared with 2002, in addition 91.5% of the whole value of
commodities exports was exported to Israel with an increase by 18.3% compared with 2002, on the other side the results indicate that the total value of direct imports in 2003 was 490.6 million US$, and imports from the European Countries represent 31.5% and the direct exports to European Countries was 29.7%.

The direct imports of commodities from Arab Countries in 2003 was 45.7 million US$ with a surplus by 47.1 % compared with 2002, while direct exports to Arab Countries in 2003 was 15.0 million US$ with decrease by 1.0% compared with 2002. On the export side, the results reveal that the direct exports in 2003 was 23.7 million US$, and 45.5% of the whole value of commodities exports was exported to Jordan.

Regarding the direct imports from American Countries, the results indicate that the value of imports was 42.9 million US$ in 2003 with an increase by four times compared with 2002, while direct exports of commodities to American countries in 2003 was 1.0 million US$.

Regarding the trade partners, the results indicate that the trade transactions in 2005 was with 119 countries, on one hand Israel represents 70.2% of the whole value of imported commodities, with an increase by 7.2% compared with 2004, in addition 86.6% of the whole value of exported commodities was exported to Israel with an increase by 3.3% compared with 2004, on the other hand the total value of direct imports in 2005 was 794.0 million US$ with an increase by 27.0% compared with 2004. Direct imports from the European Countries represent 31.5% and the direct exports to European Countries was 25.7% from the whole value of direct exports (Palestinian foreign trade, PCBS 2005).

The direct imports of commodities from Arab Countries in 2005 was 69.0 million US$ with an increase by 6.0% compared with 2004. Direct exports to Arab Countries in 2005 was 25.9 million US$ with an increase by 33.6% compared with 2004. The results reveal that 17.5 million US$ of direct exports in 2005 was exported to Jordan, which represent 67.5% of whole value of direct exports of commodities to Arab countries.

Regarding the direct imports from American Countries, the data show that the value of imports was 51.5 million US$ in 2005 with a decrease by 8.6% compared with 2004, while direct exports of commodities to American Countries in 2005 was 4.3 million US$ in 2005. In (2006) (Palestinian foreign trade, PCBS 2007) shows that the number of
countries that have been trading with them reached 110 countries, imports goods from Israel, 72.6% of total imports and recorded imports of which rose by 2.4% compared with (2005), while the percentage of exports to 89.1% of the total exports, up 2.4% compared with (2005). The volume of imports of goods direct from Israel is 756 million$ in (2006), down 2.3% compared with 2005, and accounted for (2006) accounted for 27.4% of the total imports, where formed imports from (EU) countries accounted for 29.8% of the total direct imports from Israel while the percentage of exports of goods direct to the European Union 6.6% of the total direct exports. Total merchandise imports direct from the Arab countries 66.9 million$ decline to 3.0% compared with (2005). The volume of direct exports of goods to Arab countries 34 million$, up 1.6 percent compared with (2005) has reached commodity exports to Jordan 23 million$ and by 57.2% of the total exports of goods direct to the Arab countries see Table (4-7).

Table (4-7)

Palestinian commodity foreign trade with the countries of the world (2010):

<table>
<thead>
<tr>
<th>Groups of States</th>
<th>imports</th>
<th>exports</th>
<th>the ratio of the total percentage of the total imports</th>
<th>the ratio of the total percentage of the total exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Israel</td>
<td>2873343</td>
<td>488396</td>
<td>72.6%</td>
<td>%84.9</td>
</tr>
<tr>
<td>Arab countries</td>
<td>129816</td>
<td>65929</td>
<td>3.3%</td>
<td>%11.5</td>
</tr>
<tr>
<td>European countries</td>
<td>345403</td>
<td>10277</td>
<td>8.7%</td>
<td>%1.8</td>
</tr>
<tr>
<td>Asian countries</td>
<td>458392</td>
<td>1256</td>
<td>11.6%</td>
<td>%0.21</td>
</tr>
<tr>
<td>American countries</td>
<td>67169</td>
<td>9508</td>
<td>1.7%</td>
<td>%1.7</td>
</tr>
<tr>
<td>The rest of the world</td>
<td>84389</td>
<td>9655</td>
<td>2.1%</td>
<td>%1.7</td>
</tr>
<tr>
<td>Total</td>
<td>3958512</td>
<td>575513</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>


Volume of commodity imports from American States, in 2005 was $ 51 million increasing to 67.2 million$in 2010, while the volume of exports of goods direct to the States United States 2.6 million U.S. dollars in 2006 increasing to 9.5 million$in 2010.
Chapter 4 Analysis of the structure of Palestinian imports

The total commodity imports accounted for the direct counties (other than Israel) accounted for 28% while imports from Israel of 72%, and imports recorded an increase of 20% compared with 2007 (Palestinian foreign trade, PCBS 2009).

As for the international groups, the results indicate a rise in imports from Arab countries increased by 22% of American States and by 15% compared with 2007, and European Union countries increased by 10% and the Asian countries increased by 6% compared with the same year.

4.5. Conclusion:

This paper already discussed this chapter historical context of the Palestinian foreign trade in particular, where between this chapter growth Palestinian imports since the beginning of the Israeli occupation, and explained chapter also distribution of commodity imports by the Palestinian (SITC code) under Israeli control of the crossings, as well as there was a refutation of the main stages import growth under the Palestinian Authority.

Chapter discussed the geographical distribution of imports and said the Palestinian extent of Israel's dominance on imports where that hegemony formed 59.9% of total imports.

Finally chapter discussed a historical part of the distribution of the commodity in terms of agricultural and industrial imports and service for each of the GSWB.
5.1. Introduction:
This chapter defines different research methods used in this study and explains the chosen methods. It will further describe the research strategy, data collection methods and data analysis approach. Furthermore, this chapter will describe the way in which the data for the study has been collected and techniques that’s used to analyze the data. In addition, the validity and predictability issue of the present study is discussed.

5.2. Research Techniques
There are several techniques could be used to carry out the research based on research problem area. When dealing with research problem, one can choose any of the following three types of research (Yin, 1994):

- Exploratory
- Explanatory

1) Exploratory research: is often conducted when the problem is not well known or it has not been clearly defined yet, or its real scope yet unclear (Yin, 1994).

2) Explanatory research: this is a research type in which the primary goal is to understand the nature or mechanisms of the relationships between the independent and dependant variables. This approach is used when it is necessary to show that one variable causes or determines the values of other variable (zk mund, 1994).

In this thesis, the research purpose and research question reveal that this study is mainly explanatory where the data has been collected through PCBS as will be detailed later in this chapter.

5.3. Methodology for studying import demand:
There are many approaches that consider with the import demand; every approach has its hypotheses and conclusions. The most important approaches are the imperfect substitute and excess demand approach.

5.3.1. The imperfect substitute approach:
This approach assumes that, the imported goods and services are not substances with the domestic goods and services; the consumer is requested for itself that mean the import demand is to maximize the result of consumer behavior or producer (Fatthall, 2006. P5). That mean the consumer utility depend on the quantity that he consume:
Chapter 5 Econometric model for the import demand function

\[ U = f(X_1, \ldots, X_n) \]  \hspace{1cm} (5.1)

Where \( U \) consumer utility \((X_1 \ldots X_n)\) quantity of good

When the consumer wants to maximize their utility within the available budget, so total expenditure on goods that within budget:

\[ \sum_{i=1}^{n} P_i X_i = y \]  \hspace{1cm} (5.2)

Where \( P_i \) list of prices \( y \) Cash income for the consumer so, to maximize utility within the budget we can reach to demand function for consumer \((j)\) for the good \((i)\) will be:

\[ X_{1,j} = f_i(p_1, \ldots, p_n, y_i) \]  \hspace{1cm} (5.3)

That means the consumer demands is function of commodity price, alternative and complement good prices, and consumer income. (Consumers face same prices). There is another demand function with weighted average prices for all goods consumed (Shabbir & Mahmood, 1991, p3):

\[ p = \sum_{i=1}^{n} w_i p_i \]  \hspace{1cm} (5.4)

Where \( w_i \) fixed weights:

\[ \sum_{i=1}^{n} w_i = 1 \]  \hspace{1cm} (5.5)

So, the consumer demand function will be:

\[ X_{ij} = f_i\left(\frac{p_1}{p}, \ldots, \frac{p_i}{p}, \ldots, \frac{p_n}{p}, \frac{y_i}{p}\right) \]  \hspace{1cm} (5.6)

Where \( \frac{p_i}{p} \) relative price \( \frac{y_i}{p} \) real income

When the import is the imperfect substitute for the domestic goods, so we must discriminate the goods that considered as imperfect substitute from the goods that doesn’t considers.

The import demand function will be:

\[ M_{ij} = f_{ij}(p_m, p_d, y_j) \]  \hspace{1cm} (5.7)

Where \((i)\) good \((j)\) Consumer \( p_m \) import price \( p_d \) domestic good price \( y_j \) income

so, the aggregate import demand function will be:

74
Chapter 5 Econometric model for the import demand function

\[ M = f(p_m, p_d, y) \]  

(5.8)

\( M \) Aggregate import demand

\( y \) Aggregate consumer income

Finally, the import demand function will be:

\[ M = f_1\left(\frac{p_m}{p_d}, \frac{y}{p_d}\right) \]  

(5.9)

Or

\[ M = f_2\left(\frac{p_d}{p_m}, \frac{y}{p_m}\right) \]  

(5.10)

The last two equations impose the absence of money illusion that means any increase in income will raise the quantity of demand (Learner & stern, 2006. P80).

On other hand the import demand function for the producer from raw materials and intermediate goods (which consider as inputs for his production), will be (Fatthall, 2006. P7):

\[ M = f(Q_m, Q_d, O) \]  

(5.11)

Where:  

\( Q_m \) import from raw materials and intermediate goods

\( Q_d \) Domestic good price

\( O \) Production

Since we consider absence of money illusion the function will be:

\[ M = f\left(\frac{Q_m}{Q_d}, \frac{O}{Q_d}\right) \]  

(5.12)

5.3.2. Excess demand approach:

Assumes that the import demand is to face excess domestic demand; according to classical economic analysis the prices and income not enough to explain import demand so; we must take excess demand in consideration.
Chapter 5 Econometric model for the import demand function

When we drop any variable from demand function it might be biased and weakness of the model to forecast and the quantity of demand within any price may depend on the factors we drop.

This approach assumes that import goods are perfect substitute for domestic goods, the imports will be excess of aggregate demand on aggregate supply as shown in the figure (Fatthall, 2006. P7).

**Figure 5.1: Excess demand and imports:**

The upper figure show that the equilibrium in closed economy at the point (Z) and the difference between the domestic price and international price, after the economy tend to foreign trade, we find that the difference between the two prices tends to line (P3), which is international price after tariff to have domestic production is line (p3/c) and the rest of the domestic demand (excess demand) is supplied through imports and is line (c/d).

The demand function will be:

\[ M = Q_d - Q_s \]  \hspace{1cm} (5.13)

\[ \begin{align*}
M & \quad \text{Imports} \\
Q_d & \quad \text{Domestic demand} \\
Q_s & \quad \text{Domestic supply}
\end{align*} \]

In this approach imports must close gap between domestic demand & supply and it assumes that imports are perfect substitute for domestic goods, so; there isn’t defiance in their prices and elasticities very high.
Chapter 5 Econometric model for the import demand function

According to equation (5.13) we have price elasticities equation:

\[ e_m = \frac{Q_e}{Q_m} e_d + \frac{Q_e}{Q_m} e_s \]  \hspace{1cm} (5.14)

\( e_s \) Price elasticities for exports \hspace{1cm} \( e_d \) price elasticities for imports

Finally, the domestic producers think there three ways:

1. Continuing existence of excess demand will lead producer to change his stock to face gap. It occurs when there is slowdown in occurs excess demand identifies it and faces it.

2. Include the biggest change in inventory and the response of output to change, based on several factors such as credit terms and anything to help the purchase decision and sealing decision which called effective price and the function will be:

\[ R(\frac{I^*}{I_{t-1}}, \frac{W}{W^*}, \frac{Q}{Q^*}, Z_{t-1}) = 0 \]  \hspace{1cm} (5.15)

\( Q \) Quantity of product

\( W \) Factors of production.

\( W^* \) Equilibrium value for \( W \) (change in price level will change in excess demand).

It means that any change in prices will lead to the next equilibrium Function:

\[ \frac{P_{t-1}}{P_t} = f(Z_{t-1}) \]  \hspace{1cm} (5.16)

\( Z_{t-1} > 0 \) when \( \frac{P_{t-1}}{P_t} > 1 \) \hspace{1cm} \( Z_{t-1} < 0 \) when \( \frac{P_{t-1}}{P_t} < 1 \)

Which means that price will increase as a result of demand excess (Cheelo, 2001,p16).

5.4. Target Population

The aim of this research is to investigate the role that the Palestinian imports and studying the effective of the explanatory variables in Gaza strip and West bank without Jerusalem.
5.5. Econometric methodology:

Through economic theory and previous studies, the study found a number of determinants of the demand for imports such as income, domestic prices, import prices and the exchange rate in addition to what is in the privacy of Gaza through smuggling tunnels and when the researcher looks for such determinants could not find data for tunnels trade because there's no official data, as well as the recent establishment of the Palestinian Authority researcher find only some determinants like gross domestic product instead of income and the Israeli shekel exchange rate to the U.S. dollar and the consumer price index as domestic price, the researcher used the Statistical Package for the Social Sciences (SPSS) and (Eviews) for manipulating and analyzing the data. The research utilizes the following statistical tools to discuss the existence of Econometrics problems:

- **Correlation**: single number that describes the relationship between two variables.
- **Multiple regressions**: the relationship between several independent or predictor variables and a dependent or response variable.
- **Durbin-Watson test**: designed for detecting errors that follow a first-order autoregressive process. This statistic also fills an important role as a general test of model misspecification.
- **Multicollinearity**: statistical phenomenon in which two or more predictor variables in a multiple regression model are highly correlated. In this situation the coefficient estimates may change erratically in response to small changes in the model or the data.
- **Heteroskedasticity**: occurs when the variance of disturbance term is not constant. It is a problem often encountered in cross section data.
- The possible existence of Heteroskedasticity is a major concern in the application of regression analysis, including the analysis of variance.

To resolve this problem we must do one of the flowing methods:

- Weighted least squares.
- Heteroskedasticity-corrected standard Errors.
- Redefining the variables. (Johnson, 2010, p362).
Chapter 5 Econometric model for the import demand function

- **Normality:** used to determine whether a data set is well-modeled by a normal distribution or not.

### 5.6. Data analysis and discussion:

#### 5.6.1. Descriptive Statistics:

Table (A-1) (shown in appendix) shows the descriptive statistics, the mean of import is 636064.1459 with std. deviation 170169.08799, the mean of Exchange rate is 4.0790 with std. deviation 0.45479, the mean of GDP is 1041093.9286 with std. deviation 147546.05178, the mean of CPI is 137.3593 and the std. deviation is 23.0388.

Table (A-2) (shown in appendix) shows that the correlation coefficient between import demand and the independent variables, we find that independent variable Exchange rate has weak correlation ($R = -0.24$) with the p-value =0.038 which is smaller than 0.05, the independent variable GDP has strong correlation ($R = 0.887$) with the p-value smaller than 0.05, the independent variable CPI has moderate correlation ($R =0.594$) with the p-value smaller than 0.05.

In addition, table (A-2) shows that there is no significant relationship between exchange rate and both of the variables GDP and CPI since the p-value is greater than 0.05 for each case.

Table (A-2) shows that there is no significant relationship between Time and the variables GDP, CPI, exchange rate and imports since the p-value is greater than 0.05 for each case.

#### 5.6.2. Statistical data analysis:

In the table (A-4) (shown in appendix) shows that independent variables (Exchange rate & GDP & T) are significant, because the p-value is smaller than 0.05 for each variable; while the variable CPI is not significant, because the p-value equals (0.036) which is greater than 0.05.

\[
\text{IMPORT} = 240211.8 + 0.94*\text{GDP} - 1833.2*\text{CPI} - 106811.6*\text{EXR} + 3683.5*\text{T}
\]

<table>
<thead>
<tr>
<th>T test</th>
<th>P-values</th>
<th>N = 56</th>
<th>K=3</th>
<th>DW = 1.812</th>
<th>F-statistic =72.95</th>
<th>Adjusted R-square = 0.840</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1.419</td>
<td>0.084</td>
<td>10.003</td>
<td>0.000</td>
<td>0.037</td>
<td>0.000</td>
<td>0.008</td>
</tr>
</tbody>
</table>
**Chapter 5 Econometric model for the import demand function**

**Adjusted R-square:** Table (A-3) (shown in appendix) shows that Adjusted R-square = 84% of the variability in import is explained the independent variable, the remaining percent (16%) is due to other variables may affect import demand.

The disturbances are independent: DW = 1.812, by using Durbin-Watson table (N=56, K=3), $d_L = 1.48$, $d_U = 1.69$, since DW is greater than $d_U$, we conclude there is no serious autocorrelation. Table (A-4) shows the Analysis of Variance for the regression model; Sig. < 0.0001, so there is significant relationship between the dependent variable imports and the independent variables Time / CPI, GDP, and exchange rate.

**Multicollinearity:** Table (A-5) (shown in appendix) shows that the value of VIF for each independent variable is smaller than 10, (Johanson, 2010, P258) so the problem of Multicollinearity does not exist.

**Heteroskedasticity:** Table (A-6) (shown in appendix) shows that the value of Prob. Chi-Square (14) is 0.0053 which is smaller than 0.05, so the problem of Heteroskedasticity does exist, we must find how to get resolve this problem.

So, we must do one of the flowing methods:
1. Weighted least squares.

In this case, the appropriate technique is redefining the variables, using logarithm and make differences for all variables.

Table (A-8) (shown in appendix) shows that the value of Prob. Chi-Square (5) is 0.2518 greater than 0.05, so the problem of Heteroskedasticity does not exist, and the regression model will be:

$$
\Delta IM = -0.0000164 + 1.263*\Delta GDP + 0.480*\Delta EXR - 0.426*\Delta CPI + 0.00022*T
$$

<table>
<thead>
<tr>
<th>T test</th>
<th>P-values</th>
<th>N</th>
<th>K</th>
<th>DW</th>
<th>F-statistic</th>
<th>Adjusted R-square</th>
</tr>
</thead>
<tbody>
<tr>
<td>-0.000432</td>
<td>0.499</td>
<td>55</td>
<td>3</td>
<td>2.407</td>
<td>=6.28</td>
<td>=0.281</td>
</tr>
</tbody>
</table>

This model shows that independent variables ($\Delta EXR$ and $T$) are not significant, (the p-value. which is greater than 0.05).
Chapter 5 Econometric model for the import demand function

Since Sig. = 0.149 which is greater than (0.05), then there is insufficient evidence to support the research Hypothesis (There is negative relationship between exchange rate and the demand for imports function in Palestine).

This in turn did not approve all of import demand theory that mentioned there is negative relationship between import demand and EXR, this can be explained because of the high dependence on Israel to trade and deal in one currency, which led us to the inevitable result that the exchange rate does not affect the foreign traders, Also the study of (Dombrecht and Khalil) & (Dutta and Ahmed) Agreed with this study in this result.

We use stepwise method to get a regression model with the most significant variables, the final regression model is:

\[ \Delta IM = 0.0085 + 1.219 \Delta GDP - 0.428 \Delta CPI \]

<table>
<thead>
<tr>
<th>T test</th>
<th>0.486865</th>
<th>4.656814</th>
<th>-2.315363</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-values</td>
<td>0.312</td>
<td>0.0000</td>
<td>0.0123</td>
</tr>
</tbody>
</table>

N = 55  K=2  DW = 2.514  F-statistic = 12.23  Adjusted R-square = 0.294

The Residuals are normally distributed: Figures (5-2) and (5-3) show histogram and Normal Probability plot of the residuals. The histogram shows the standardized residuals are bell-shaped; the plot shows that the points fall very close to the normal line.

Figure (5-2): Histogram of the residuals:
Figure (5-2): Normal Probability plot:

![Normal Probability plot](image)

Figure (5-3) shows Jarque-Bera test (to test the normally distribution) = 0.365, and the Probability = 0.833, which is greater than 0.05. This means the residuals are normally distributed.

Figure (5-4): Jarque-Bera test:

![Jarque-Bera test](image)

**Multicollinearity**: Table (A-9) (shown in appendix) shows that the value of VIF for each independent variable is smaller than 10, so the problem of Multicollinearity does not exist.

**The disturbances are independent**: DW = 2.513908, by using Durbin-Watson table (N=55, K=2), $d_L=1.51$, $d_U = 1.65$, since DW is greater than $d_U$, we conclude there is no serious autocorrelation. Table (A-10) (shown in appendix) shows the Analysis of Variance for the regression model; Sig. is smaller than 0.0001, so there is a significant relationship between the dependent variable imports and the independent variables CPI and GDP.

**Heteroskedasticity Test**: Table (A-11) (shown in appendix) shows that the value of Prob of Chi-Square is 0.2605 greater than 0.05, so the problem of Heteroskedasticity does not exist.
5.7. **Economic analysis:**

We conduct a multiple regressions analysis between the import demand in Palestine, GDP and CPI in Palestine, the results were sufficient evidence to support the research Hypothesis.

**Non-pressure imports**\(^1\): accounted for 0.0085 million dollars and it's not significant, (the 
p-value= 0.312 which is greater than 0.05).

**Adjusted R-square** = 0.294.

It means that 29.4% of the variability in import is explained the independent variable, the remaining percent (70.6%) is due to other variables may affect import demand.

Determinants represented by (70.6%) are the import price index (IPI) as well as tunnels trade and consumer behavior and Substitution which researcher could not find any data.

**GDP:** The one million dollar Increase in GDP leads to increased demand for Palestinian imports by 1.219 million dollars.

**CPI:** Increasing in CPI within 1% will lead to reduced demand for Palestinian imports by 0.428 million dollars.

**Exchange rate:** there is insufficient evidence to support that there is relationship between exchange rate and the demand for imports function in Palestine. The study Agrees with (Dombrecht and Khalil) & (Dutta and Ahmed) in its result.

5.7.1. **There is a positive relationship between the gross domestic product and the import demand in Palestine.**

As shown in table (A-10) (shown in appendix) T-test = 4.657, with Sig. = 0.000 which is smaller than (0.05), then there is significant positive relationship between import and GDP, this in turn agrees with the import demand theory that mentioned there is positive relationship between import demand & GDP.

Statistical results estimated demonstrate that there is growth in GDP which effect the Palestinian foreign trade, Gross national product (GDP) decreased during the nineties when the advent of the Palestinian Authority to the West Bank and Gaza, because of the

---

\(^1\) The necessary imports as necessary food consumer materials, spare parts are needed for the replacement and renovation of existing production capacities, intermediate goods, such as materials, energy and raw materials necessary for the operation of the production sectors, production equipment necessary for the implementation of investment programs
increased of population by (25%), which led to a decline in per capita GDP. The political
instability and dropped by the Israeli occupation authorities from their commitments and
promises of peace agreements signed between the Palestinians and Israelis to weakness of
domestic and foreign investment. Recently Palestinian territories have a growth in gross
domestic product (GDP) in 2010 increased by 9.3% compared with 2009. Where data
indicate growth in economic activities contribute to relatively higher in GDP, per capita
GDP rose in 2010 by 6.1% compared with 2009.

5.7.2. There is negative relationship between exchange rate and the demand for imports
function in Palestine
As shown in table (A-7) (shown in appendix) T-test = 1.0476, with Sig. = 0.2999 which is
greater than (0.05), then there is insignificant relationship between import and Exchange
rate. This in turn did not approve import demand theory that mentioned there is negative
relationship between import demand and EXR; this can be explained because of the high
dependence on Israel to trade and deal in one currency, which led us to the inevitable result
that the exchange rate does not affect the foreign traders, but agrees with (Dombrecht and
Khalil) & (Dutta and Ahmed) studies.

5.7.3. There is a negative relationship between CPI and the demand for imports in
Palestine.
As shown in table (A-10) (shown in appendix) T-test = -2.315, with Sig. = 0.0123 which is
smaller than (0.05), then there is significant negative relationship between import and GDP,
this in turn agrees with the import demand theory that mentioned and there's negative
relationship between import demand & CPI. Statistical results estimated demonstrate that
there is inflation which effect the Palestinian foreign trade, the Palestinian economy is
directly linked to the Israeli economy, especially in the field of trade, so Israel could
transfer the burden of inflation in the economy to the Palestinian economy, and note that
the rise in commodity prices in Israel is directly reflected on the Palestinian economy,
regardless of domestic demand, and the daily trading in Palestinian territories Israeli
currency, it should be noted the risk of inflationary pressures on the growth of the
Palestinian economy, particularly inflation and that this leads to a decrease in the volume of
savings, which reflected negatively on investment, consumption and foreign trade.
Most of previous studies such as (Dombrecht and Sarsour, 2011, Dombrecht and Khalil, 2011, Shamasdini and Moghaddasi, 2010, Alabdali, 2007, Fathalla, 2006) have agreed with this study result that there is positive relationship between import demand & GDP and there's negative relationship between import demand & CPI.

The demand for a good is the amount people are prepared to buy with their income and at prevailing prices, law of demand states that, ceteris paribus, there is a negative relationship between the price of a good and the quantity demanded of it, the income effect: as a product's price falls, the purchasing power of consumers' income increases, which generally motivates people to raise their purchases of goods, so there is positive relationship between import demand & GDP, and there's negative relationship between import demand & CPI, statistical results estimated demonstrate that there isn't structural changes in the Palestinian foreign trade (goods and services) through the last three stages\(^1\), which means constant trade policies Israeli toward Palestinian market, while Israel control supply and demand forces and macroeconomic variables in Israeli goods and services that supported to Palestinian markets and model estimated to test this result, statistically results estimated showed that many of the results analyzed and extrapolate significance, before making recommendations for the formulation of economic and trade relations future between Palestine and Israel in the final stage.

There is no doubt that the Palestinian foreign trade affected according to the political and economic conditions affecting the surrounding nature of trade. Especially that the Palestinian economy is at the stage of the most dangerous stages, where he is totally linked to the state of occupation that have worked and are still working on that this fragile economy and economy associated with this entity and the biggest proof of that is programmed destruction of all components of the Palestinian economy during the past five years. The volume of commodity imports from the Israeli economy by more than 80%, while more than 90% of Palestinian exports are exported to market Israeli, which entrenches economic dependency Palestinian to the Israeli economy, Israel has developed production structures to confront domestic demand in Israel and the Palestinian markets in the past three stages.

\(^1\) Before Oslo, from 1994 to 2000, after Alaqse Intifada.
6.1. Conclusions:

The main goal of this research is to identify the variables that determine demand for imports. In this research, results of the analysis supported the hypothesis of the study, we find that the import demand function is increasing steadily by the Palestinian society and affected by two main factors: Gross domestic product (GDP) & Consumer price index (CPI).

This research indicates the following points:

The foreign trade accounted for 58.8% of GDP and employs 18% of the total workforce. The imports of goods accounted for 66.4% of total imports and 33.6%, and imports of service. Israel occupies the forefront of the geographical distribution of imports, accounting for 80% of total imports for the year 1998, and decreased to 74% in 2002 to settle in 2010 to 59.9%, due to the beginning of the siege in 2006, after the legislative elections and the direction of most of the foreign trade of smuggling from the Egyptian border. The imports from Arab countries have reached 20.6%, European Union countries to 8.7%, and the rest of the world to 1.6%. The percentage of imports to GDP increased from 56.55% in 2004 to 68.7% in 2010. The ratio of exports to imports increased from 13.2% in 2004 to 14.4% in 2010. Also percentage of deficit in the Palestinian trade balance to GDP increases from 49.1% in 2004 to 58.81% in 2010.

The first hypothesis was accepted, which states that there is a positive relationship between the demand for imports and GDP, which in turn agree with all of economic theory and previous studies. Second hypothesis was rejected, which states that there is a negative relationship between import demand and exchange rate, which in turn did not approve all of economic theory and previous studies. This can be explained because of the near total dependence on Israel to trade and deal in one currency, which led us to the inevitable result that the exchange rate does not affect the foreign traders. Third hypothesis was accepted, which states that there is a negative relationship between import demand and the CPI, which in turn agrees with the import demand theory and most of previous studies such as (Dombrecht and Sarsour, 2011, Dombrecht and Khalil, 2011, Shamasdini and Moghaddasi, 2010, Alabdali, 2007, Fathalla, 2006).
Chapter 6 Conclusions and recommendations

The equation of demand for Palestinian imports is:

\[ \Delta IM = 0.0085 + 1.219 \Delta GDP - 0.428 \Delta CPI \]

Can be explained by the equation:

Non-pressure imports accounted for 0.0085 million dollars.

One million dollar increase in GDP leads to increased demand for Palestinian imports by 1.219 million dollars. Increasing in CPI within 1% will lead to reduced demand for Palestinian imports by 0.428 million dollars. Agreed with previous results in both economic theory of the relationship between GDP and import demand, and there is an inverse relationship between the index of consumer prices and the demand for imports. Also results agreed with previous studies in the relationship of each of the gross domestic products and the index of consumer prices. While the study varied with economic theory and previous studies regarding the relationship between the demand for imports and exchange rate while the study of (Dombrecht and Khalil) & (Dutta and Ahmed) Agreed with the study in that there is a relationship between the demand for imports and the exchange rate and this is due because most of the foreign trade with Israel and with the same currency.

6.1 Recommendations:
The researcher recommends the following points:

6.1.1 Recommendations for PNA:

- Work to find outlets for the import and export non-Israeli ports, such as Egypt and Jordan.
- Work on the development and modification of the Paris Convention, which prohibits the Palestinian economy to benefit from foreign trade.
- Make a pressure on the Israeli government to ease restrictions on Palestinian external trade.
Chapter 6 Conclusions and recommendations

- Encourage investment, leading to improve and increase the volume of Palestinian exports. Raise the level of the Palestinian gross domestic product, which in turn leads to increase the volume of Palestinian exports.
- The Palestinian government Participate of representatives of the Palestinian private sector effectively in the formulation and development of laws relating to the economy. Work on the mechanism of action is clear from the Palestinian side to give the commercial crossings with facilities necessary for the entry of goods parity.

- **Suggested policies:**
  - Rearrange imports items in terms of importance and divided into segments according to its priorities and to impose customs duties on luxury goods to curb the increasing growth of imports in order to reduce the deficit in the trade balance.
  - Combat dumping policy and the smuggling of goods of poor quality.

- **Recommendations for Traders:**
  - Coordination with industry associations by taking account into specifications and standards, increase production and risk appetite while achieving a reasonable profit margin to increase the competitiveness of the national product in the domestic and global markets.
  - Traders must consideration with quality, technical and administrative aspects, and the development of the marketing aspects.
  - Participate in exhibitions locally and regionally to increase the competitiveness of the national product.
References:

1. **English references:**
   - Case and Fair, (2007), principles of economics, Eighth edition, prentice hall,
   - Kurgman & Obstfeld , (2006),International economics, Forth edition, prentice hall,
   - Palestinian economy, 1988
References


2. Papers and researches:


Arabic references: .3

- أبو الفقصان، خالد (2006)، ملاحظات للأداء الاقتصادي الفلسطيني، وآفاق نموه، بحث مقدم في مؤتمر تنمية وتطوير قطاع غزة بعد الانسحاب الإسرائيلي، الجامعة الإسلامية غزة.
- العبد، جورج، المحرر (1989)، الاقتصاد الفلسطيني تجديات التنمية في ظل احتلال، صيد، بيروت، مركز دراسات الوحدة العربية، الطبعة الأولى.
- جامعة القدس المفتوحة، (2008)، الاقتصاد الفلسطيني، كتاب جامعي، الطبعة الجديدة، محمد، محمود (2000)، التجارة الخارجية الفلسطينية الإسرائيلية وآفاقها المستقبلية، إمام الله، معهد أبحاث السياسات الاقتصادية
- العارضة، ناصر، الجعفري، محمود (2000)، التجارة الخارجية الفلسطينية الأردنية وآفاقها وآفاقها المستقبلية، إمام الله، معهد أبحاث السياسات الاقتصادية
- فتح الله، محمود رضا (2006)، اقتصاديات الطابع على الورادات (النظريات-
References

4. Internet references:

5. Reports:

- Economic department, PLO 1994 to 2000 Development Program for the Palestinian national economy from, Palestine.
- Ministry of planning, Developing September 1993 the occupied territories and investment in peace (World Bank,), Palestine.

السياسات-منهجية القياس). القاهرة، دار النهضة العربية. الطبعة الأولى.


• الصوراني، غازي، (2008) ورقة عمل : أتفاق رفح وآثارها الاقتصادية والاجتماعية والسياسية، الحوار المتعدد، العدد 2495.

• أبو مقالة، سمير ، (2010) اقتصاد الألفاق بقطاع غزة : ضرورة وطنية أم كارثة اقتصادية واجتماعية، مجلة سياسات، العدد 12.
### Table (A-1): Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Import</td>
<td>636064.1459</td>
<td>170169.08799</td>
<td>56</td>
</tr>
<tr>
<td>Exchang_rate</td>
<td>4.0790</td>
<td>.45479</td>
<td>56</td>
</tr>
<tr>
<td>GDP</td>
<td>1041093.9286</td>
<td>147546.05178</td>
<td>56</td>
</tr>
<tr>
<td>CPI</td>
<td>137.3593</td>
<td>23.03880</td>
<td>56</td>
</tr>
<tr>
<td>Time</td>
<td>28.50</td>
<td>16.310</td>
<td>56</td>
</tr>
</tbody>
</table>

### Table (A-2): Correlations

<table>
<thead>
<tr>
<th></th>
<th>Import</th>
<th>Exchang_rate</th>
<th>GDP</th>
<th>CPI</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Import</td>
<td>1.000</td>
<td>-.240-</td>
<td>.887</td>
<td>.594</td>
<td>.589</td>
</tr>
<tr>
<td>Exchang_rate</td>
<td>-.240-</td>
<td>1.000</td>
<td>-.027-</td>
<td>.198</td>
<td>.330</td>
</tr>
<tr>
<td>GDP</td>
<td>.887</td>
<td>-.027-</td>
<td>1.000</td>
<td>.711</td>
<td>.681</td>
</tr>
<tr>
<td>CPI</td>
<td>.594</td>
<td>.198</td>
<td>.711</td>
<td>1.000</td>
<td>.906</td>
</tr>
<tr>
<td>Time</td>
<td>.589</td>
<td>.330</td>
<td>.681</td>
<td>.906</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Import</td>
<td>.038</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Exchang_rate</td>
<td>.038</td>
<td>.423</td>
<td>.071</td>
<td>.006</td>
<td>.000</td>
</tr>
<tr>
<td>GDP</td>
<td>.000</td>
<td>.423</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>CPI</td>
<td>.000</td>
<td>.071</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Time</td>
<td>.000</td>
<td>.006</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

### Table (A-3): Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.923a</td>
<td>.851</td>
<td>.840</td>
<td>68161.45478</td>
<td>1.812</td>
</tr>
</tbody>
</table>

*a. Predictors: (Constant), Exchang_rate, GDP, CPI, Time.*

*b. Dependent Variable: Import.*
### Table (A-4): Coefficients

Dependent Variable: IMPORT  
Method: Least Squares  
Date: 08/11/12   Time: 14:21  
Sample: 1996Q1 2009Q4  
Included observations: 56

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>240211.8</td>
<td>169240.0</td>
<td>1.419356</td>
<td>0.1619</td>
</tr>
<tr>
<td>GDP</td>
<td>0.939742</td>
<td>0.093949</td>
<td>10.00267</td>
<td>0.0000</td>
</tr>
<tr>
<td>EXCHANGE_RATE</td>
<td>-106811.6</td>
<td>23295.56</td>
<td>-4.585060</td>
<td>0.0000</td>
</tr>
<tr>
<td>CPI</td>
<td>-1833.202</td>
<td>1001.210</td>
<td>-1.830986</td>
<td>0.0729</td>
</tr>
<tr>
<td>T</td>
<td>3683.511</td>
<td>1470.242</td>
<td>2.505378</td>
<td>0.0155</td>
</tr>
</tbody>
</table>

R-squared     0.851227  
Adjusted R-squared 0.839559  
S.E. of regression  2.37E+11  
Sum squared resid 2.37E+11  
Log likelihood -700.1014  
F-statistic 72.95109  
Prob(F-statistic) 0.000000

### Table (A-5): VIF

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Uncentered</th>
<th>Centered</th>
<th>VIF</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>2.86E+10</td>
<td>345.2361</td>
<td>NA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP</td>
<td>0.008826</td>
<td>117.5872</td>
<td>2.274711</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXCHANGE_RATE</td>
<td>5.43E+08</td>
<td>110.1608</td>
<td>1.328781</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPI</td>
<td>1002422.</td>
<td>234.2685</td>
<td>6.298764</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>2161611.</td>
<td>27.96984</td>
<td>6.806820</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table (A-6): Heteroskedasticity Test:

<table>
<thead>
<tr>
<th>Heteroskedasticity Test: White</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>F-statistic</td>
<td>3.666215</td>
<td>Prob. F(14,41) 0.0006</td>
</tr>
<tr>
<td>Obs*R-squared</td>
<td>31.13187</td>
<td>Prob. Chi-Square(14) 0.0053</td>
</tr>
<tr>
<td>Scaled explained SS</td>
<td>27.84411</td>
<td>Prob. Chi-Square(14) 0.0149</td>
</tr>
</tbody>
</table>

Test Equation:

Dependent Variable: RESID\(^2\)

Method: Least Squares

Date: 09/05/11  Time: 14:13

Sample: 1 56

Included observations: 56

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>2.66E+11</td>
<td>6.40E+11</td>
<td>0.416277</td>
<td>0.6794</td>
</tr>
<tr>
<td>GDP</td>
<td>-584906.4</td>
<td>410719.3</td>
<td>-1.424103</td>
<td>0.1620</td>
</tr>
<tr>
<td>GDP(^2)</td>
<td>0.236927</td>
<td>0.094677</td>
<td>2.502483</td>
<td>0.0164</td>
</tr>
<tr>
<td>GDP*CPI</td>
<td>-2338.834</td>
<td>4133.912</td>
<td>-0.565768</td>
<td>0.5746</td>
</tr>
<tr>
<td>GDP*EXCHANGE_RATE</td>
<td>102998.4</td>
<td>30215.60</td>
<td>3.408781</td>
<td>0.0015</td>
</tr>
<tr>
<td>GDP*T</td>
<td>-369.3538</td>
<td>5512.314</td>
<td>-0.067005</td>
<td>0.9469</td>
</tr>
<tr>
<td>CPI</td>
<td>5.94E+09</td>
<td>7.14E+09</td>
<td>0.832309</td>
<td>0.4101</td>
</tr>
<tr>
<td>CPI(^2)</td>
<td>-12386862</td>
<td>12108508</td>
<td>-1.022988</td>
<td>0.3123</td>
</tr>
<tr>
<td>CPI*EXCHANGE_RATE</td>
<td>-22003583</td>
<td>1.13E+09</td>
<td>-0.019479</td>
<td>0.9846</td>
</tr>
<tr>
<td>CPI*T</td>
<td>17009060</td>
<td>27247713</td>
<td>0.624238</td>
<td>0.5359</td>
</tr>
<tr>
<td>EXCHANGE_RATE</td>
<td>-1.99E+11</td>
<td>1.37E+11</td>
<td>-1.452842</td>
<td>0.1539</td>
</tr>
<tr>
<td>EXCHANGE_RATE(^2)</td>
<td>1.50E+10</td>
<td>6.36E+09</td>
<td>2.360657</td>
<td>0.0231</td>
</tr>
<tr>
<td>EXCHANGE_RATE*T</td>
<td>-1.17E+09</td>
<td>1.54E+09</td>
<td>-0.759627</td>
<td>0.4518</td>
</tr>
<tr>
<td>T</td>
<td>1.80E+09</td>
<td>1.05E+10</td>
<td>0.171676</td>
<td>0.8645</td>
</tr>
<tr>
<td>T(^2)</td>
<td>7016170.</td>
<td>32259762</td>
<td>0.217490</td>
<td>0.8289</td>
</tr>
</tbody>
</table>

R-squared          | 0.555926    | Mean dependent var 4.23E+09 |

Adjusted R-squared | 0.404291    | S.D. dependent var 6.27E+09 |
## Table (A-7) Coefficients:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-1.64E-5</td>
<td>0.037991</td>
<td>-0.000432</td>
<td>0.9997</td>
</tr>
<tr>
<td>GDP</td>
<td>1.262940</td>
<td>0.267349</td>
<td>4.723944</td>
<td>0.0000</td>
</tr>
<tr>
<td>EXR</td>
<td>0.479681</td>
<td>0.457881</td>
<td>1.047610</td>
<td>0.2999</td>
</tr>
<tr>
<td>CPI</td>
<td>-0.426195</td>
<td>0.186360</td>
<td>-2.286940</td>
<td>0.0265</td>
</tr>
<tr>
<td>T</td>
<td>0.000220</td>
<td>0.001140</td>
<td>0.192842</td>
<td>0.8479</td>
</tr>
</tbody>
</table>

- **R-squared**: 0.334536
- **Mean dependent var**: 0.015091
- **Adjusted R-squared**: 0.281299
- **S.D. dependent var**: 0.152338
- **Akaike info criterion**: -1.169229
- **Akaike criterion**: 47.66190
- **Schwarz criterion**: 48.20441
- **Hannan-Quinn criter.**: 47.87223
- **Log likelihood**: -1319.533
- **Hannan-Quinn criter.**: 47.87223
- **F-statistic**: 3.666215
- **Durbin-Watson stat**: 2.736512
- **Prob(F-statistic)**: 0.000580

---

**Date**: 03/11/12  **Time**: 12:48

**Sample (adjusted)**: 1996Q2 2009Q4

**Included observations**: 55 after adjustments
## Appendix

### Table (A-8) Heteroskedasticity Test:

<table>
<thead>
<tr>
<th>Test Equation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable: RESID^2</td>
</tr>
<tr>
<td>Method: Least Squares</td>
</tr>
<tr>
<td>Date: 03/11/12  Time: 12:50</td>
</tr>
<tr>
<td>Sample: 1996Q2 2009Q4</td>
</tr>
<tr>
<td>Included observations: 55</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.024085</td>
<td>0.011648</td>
<td>2.067743</td>
<td>0.0452</td>
</tr>
<tr>
<td>GDP</td>
<td>0.032849</td>
<td>0.164914</td>
<td>0.199190</td>
<td>0.8431</td>
</tr>
<tr>
<td>GDP^2</td>
<td>1.310147</td>
<td>0.433218</td>
<td>3.024222</td>
<td>0.0043</td>
</tr>
<tr>
<td>GDP*DEXR</td>
<td>0.961283</td>
<td>1.870214</td>
<td>0.513996</td>
<td>0.6101</td>
</tr>
<tr>
<td>G^* CPI</td>
<td>7.038428</td>
<td>4.564915</td>
<td>1.541853</td>
<td>0.1310</td>
</tr>
<tr>
<td>GDP*T</td>
<td>-0.001384</td>
<td>0.004302</td>
<td>-0.321665</td>
<td>0.7494</td>
</tr>
<tr>
<td>EXR</td>
<td>-0.143104</td>
<td>0.275057</td>
<td>-0.520271</td>
<td>0.6057</td>
</tr>
<tr>
<td>EXR^2</td>
<td>2.032822</td>
<td>1.755117</td>
<td>1.158226</td>
<td>0.2536</td>
</tr>
<tr>
<td>EXR* CPI</td>
<td>-0.901032</td>
<td>7.525232</td>
<td>-0.119735</td>
<td>0.9053</td>
</tr>
<tr>
<td>EXR*T</td>
<td>0.004788</td>
<td>0.005811</td>
<td>0.823870</td>
<td>0.4149</td>
</tr>
<tr>
<td>CPI</td>
<td>-0.678036</td>
<td>0.433543</td>
<td>-1.563941</td>
<td>0.1257</td>
</tr>
<tr>
<td>CPI^2</td>
<td>-0.811972</td>
<td>0.496337</td>
<td>-1.635928</td>
<td>0.1097</td>
</tr>
<tr>
<td>CPI*T</td>
<td>0.030790</td>
<td>0.015724</td>
<td>1.958121</td>
<td>0.0572</td>
</tr>
<tr>
<td>T</td>
<td>-0.000954</td>
<td>0.000849</td>
<td>-1.123517</td>
<td>0.2679</td>
</tr>
<tr>
<td>T^2</td>
<td>8.29E-06</td>
<td>1.44E-05</td>
<td>0.577132</td>
<td>0.5671</td>
</tr>
</tbody>
</table>

| R-squared | 0.310585 | Mean dependent var | 0.015163 |
| Adjusted R-squared | 0.069290 | S.D. dependent var | 0.021495 |
| S.E. of regression | 0.020737 | Akaike info criterion | -4.686764 |
| Sum squared resid | 0.017201 | Schwarz criterion | -4.139309 |
| Log likelihood | 143.8860 | Hannan-Quinn criter. | -4.475059 |
### Appendix

<table>
<thead>
<tr>
<th>F-statistic</th>
<th>1.287157</th>
<th>Durbin-Watson stat</th>
<th>1.821291</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prob(F-statistic)</td>
<td>0.257572</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Table (A-9) Variance Inflation Factors:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Variance</th>
<th>Uncentered VIF</th>
<th>Centered VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.000306</td>
<td>1.027258</td>
<td>NA</td>
</tr>
<tr>
<td>GDP</td>
<td>0.068532</td>
<td>1.040166</td>
<td>1.021162</td>
</tr>
<tr>
<td>CPI</td>
<td>0.034128</td>
<td>1.033896</td>
<td>1.021162</td>
</tr>
</tbody>
</table>

#### Table (A-10) Coefficients:

Dependent Variable: IM

Method: Least Squares

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.008519</td>
<td>0.017498</td>
<td>0.486865</td>
<td>0.6284</td>
</tr>
<tr>
<td>GDP</td>
<td>1.219086</td>
<td>0.261785</td>
<td>4.656814</td>
<td>0.0000</td>
</tr>
<tr>
<td>CPI</td>
<td>-0.427734</td>
<td>0.184737</td>
<td>-2.315363</td>
<td>0.0246</td>
</tr>
</tbody>
</table>

R-squared          | 0.319809       | Mean dependent var | 0.015091 |
Adjusted R-squared | 0.293648       | S.D. dependent var  | 0.152338 |
S.E. of regression | 0.128032       | Akaike info criterion | -1.220067 |
Sum squared resid  | 0.852398       | Schwarz criterion   | -1.110576 |
Log likelihood     | 36.55185       | Hannan-Quinn citer. | -1.177726 |
F-statistic        | 12.22457       | Durbin-Watson stat  | 2.513908 |
Prob(F-statistic)  | 0.000045       |                     |          |
Table (A-11) Heteroskedasticity Test:

Heteroskedasticity Test: White

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-statistic</td>
<td>1.313642</td>
<td>0.2738</td>
</tr>
<tr>
<td>Obs*R-squared</td>
<td>6.501046</td>
<td>0.2605</td>
</tr>
<tr>
<td>Scaled explained SS</td>
<td>5.977118</td>
<td>0.3085</td>
</tr>
</tbody>
</table>

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 03/17/12   Time: 13:12

Sample: 1996Q2 2009Q4

Included observations: 55

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.013651</td>
<td>0.004332</td>
<td>3.151121</td>
<td>0.0028</td>
</tr>
<tr>
<td>Gdp</td>
<td>-0.002777</td>
<td>0.064952</td>
<td>-0.042762</td>
<td>0.9661</td>
</tr>
<tr>
<td>Gdp^2</td>
<td>0.906650</td>
<td>0.394763</td>
<td>2.296695</td>
<td>0.0260</td>
</tr>
<tr>
<td>Gdp* Cpi</td>
<td>3.174295</td>
<td>3.474095</td>
<td>0.913704</td>
<td>0.3653</td>
</tr>
<tr>
<td>Cpi</td>
<td>-0.178369</td>
<td>0.182845</td>
<td>-0.975518</td>
<td>0.3341</td>
</tr>
<tr>
<td>Cpi^2</td>
<td>-0.390796</td>
<td>0.395537</td>
<td>-0.988015</td>
<td>0.3280</td>
</tr>
</tbody>
</table>

R-squared 0.118201  Mean dependent var 0.015498
Adjusted R-squared 0.028221  S.D. dependent var 0.022433
S.E. of regression 0.022114  Akaike info criterion -4.682501
Sum squared resid 0.023963  Schwarz criterion -4.463519
Log likelihood 134.7688  Hannan-Quinn criter. -4.597819
F-statistic 1.313642  Durbin-Watson stat 1.422638
Prob(F-statistic) 0.273789