Chapter

VI

Summary and Conclusion
6-1–Summary

Introduction

Foreign Trade sector is one of the most important sectors of an economy. An improvement of this sector in any country can be an important factor for economic growth. Although, imports are considered as one of the factors of economic growth, the impact of which is apparently negative, but under certain specific conditions, it can also help improving the economic situation and livelihoods in a country. As we know, for the imports we need foreign exchange. The foreign exchange is obtained from exports. Iran needs to obtain at least 80 Billion dollars in a year and without an improvement in oil revenues, it is impossible. In this connection, unnecessary imports in the form of luxury goods are taking a lot of foreign exchange in the country therefore leading to a reduction in national income. Thus, Iran requires the following steps: reduction of non-oil exports, reducing dependence on various sectors of agriculture, industry and mining, development of small and medium industrial towns. In addition, increase the quality of domestic products and reduce competitive ability.

Also it should join the World Trade Organization, and to reduce their regular imports and exports. Imports should be such that there is minimum negative impact on the economy. Thus the aim for foreign exchange policy should control
unnecessary imports in the form of luxury goods which are taking a lot of foreign exchange in the country therefore leading to a reduction in national income. Thus, Iran requires the following steps: reduction of non-oil exports, reducing dependence on various sectors of agriculture, industry and mining, development of small and medium industrial towns. In addition, increase the quality of domestic products and reduce competitive ability.

Exchange rate, regardless of titles like formal, floating, and the black market and etc from the perspective of the real exchange rate is notable.

Real exchange rate in a simple definition represents the real value of goods and services of a country at international level and with its direct effect on other variables changes the balance of payments in the country.

The study is pursued with the following objectives:

1 – Calculate, study and analyze the trends of world economic growth (GDP of the country's major trading partners of Iran during 1962-2011).

2 – Calculate, study and analyze the trends in real effective exchange rate for the years 1962 to 2011 in Iran.

3 – To study the process of changes in the real exchange rate of Iran(REER), world economic growth(WGDP), Iran’s GDP, inflation and finding a significant
long term relationship between real effective exchange rate, world economic growth, Iran’s GDP, inflation and Iran's imports.

Sample selection and Methodology

For calculation of global economic growth (GDP of the country's major trading partner of Iran) and calculate the real effective exchange rate, we used the GDP data of India, Japan, united Arabic emirates (UAE), France, Canada, Italy, Turkey, Denmark, Switzerland, Belgium, Germany, Britain, Austria, Pakistan, China, Korea. These countries were chosen because during the period studied, these countries had the highest share in Iran’s foreign trade. The secondary sources of data are used in the empirical analysis.

Most data used in calculating gross domestic product and data needed to calculate the real exchange rate have been obtained from the International Monetary Fund (IMF) and data relating to imports extracted from the annual reports and balance sheets of the Central Banks that includes annual data for the period 1962-2011 for Iran. Other statistics and information using the Internet (particularly the statistics relating to countries other than Iran) and various statistical year books and reports have been prepared by the Central Bank and the Management and Planning Organization. The study period for the analysis is 1962-2011.
In order to study relationships between variables we used regression and correlation methods. More specifically, the co-integration methods developed by Gregory- Hansen have been used. To calculate the real exchange rate of Iran the Software office excels has been used and for calculating REER and for the estimation the co-integration models, the software Microfit and Eviewshave been used.

From the past years until recently Dickey - Fuller test and Dickey - Fuller augmented test were used to do the unit root test, for test of co-integration Engel – Granger and Johansson - Zhyslyys were used. In these tests, the issue of structural change in time series was not regarded as an important factor. If a structural change occurred in the data used, the conventional unit root tests and the conventional co-integration tests will lose their effectiveness. Due to the recent advances in the econometric techniques, and considering the importance of the structural change in the time series, unit root tests and co-integration tests were designed in the presence of structural change. In this study and in the previous chapter, I used Dickey - Fuller augmented to perform the unit root test. Peron unit root test also has been used in consideration to structural break. Pretest of Gregory – Hansen has been used for testing the Breakage. And finally Gregory - Hansen has been used to perform the co-integration test. Results and discussion about results have put into this chapter.
This chapter is divided into three sections. The second part, the conclusion of results of the tests carried out in the previous chapter will be reviewed, and in the third section, the results obtained are used to offer suggestions and comments to improve existing situation in the import sector of the country.

**Empirical Results**

Unit root tests were used on Dickey - Fuller augmented (ADF) for all the variables. Based on conventional tests the results show that all the variables in their level are (I(1)), and in first order difference all the variables in their level are (I(0)). The unit root test has been conducted also with a consideration for the presence of probable structural change in the time series, with the three methods offered by Perron.

Results obtained from the test are, the change in the intercept (Ta (b1)) for the variables IVL and (REERL) and (WGDPL), and (IGDP) also confirms that all the variables in their levels of variable (I(1)), and only (INFL) in its level is (I(0)). First order difference of variables (DIVL), and (DIGDPL), variable (I (1)), and difference of the first order difference, and other variables are (I (0)).

Test Results obtained from a change in slope (Ta(b2)) shows that all variables except (INFL) on their surfaces (I(1)) and their first-order difference for all variables except (DIGDPL) is variable (I(0)). All of results except (CDI GDP) are equal with the results obtained by the method of Dickey - Fuller.
Results obtained based on test trend change within intercept and slope functions, (Ta (b3)), all the variables in their levels are (I(1)) . Based on the results obtained, first-order difference of all the variables (I(1)) and only the variables (DWGDPL) and (DINFL) are variables (I(0)).

Test results, estimation of break point be achieved with method pretest Gregory - Hansen. In this method, all the three models are presented, and the year of structural change has been determined as 1995, which is in accordance with the incidents happened in the Iranian economy, such as the end of the imposed war and beginning of the reconstruction period at the time.

Considering that, the desired variables in their levels of variables (I(1)), for the study of long-term equilibrium relationship between the variables, the co-integration test, Gregory - Hansen has been used. The model offered by Gregory - Hansen, model, structural shift (s/c), have estimated in the previous chapter.

These results indicated that the co-integration relationship between world economic growth, the real exchange rate, GDP, inflation and the value of imports, which is confirmed by the statistics. The results also show that, the year of structural change in 1995, has occurred with respect to the great changes, such as ending the war in 1989, and the beginning of the reconstruction period, and the changes in government decisions.
6-2- Conclusions and Recommendations

Based on our empirical analysis the following conclusions are made:

1-The REER has influenced the value of imports of Iran positively which is contrary to the expectation. This is due to an increase in the import bill, which the country could not control, in spite of rising REER.

2-World GDP and the domestic GDP of Iran have a positive impact on Iran’s imports. This is obvious as the rise in domestic income leads to an increase in import and due to inelastic nature of the imports.

3-Exchange rate should influence the imports negatively but in Iran it could not take place due to in the inelastic nature of imports and due to the rise inflation rates in the domestic economy.

4-The empirical models suggest that there is co-integrating relationship between then the time series variables such as REER, WGDP, IGDP, and inflation rate and there exists a structural break during 1995.

6-3- Policy recommendations

Based on our empirical results the following policy suggestions can be made.

1 - Considering the relationship between the global economic growth and the value of imports, it is suggested that we participate in trade with the rest of the world such that we import mainly the capital goods. With this we can increase
domestic production capacity and in addition would have the policies of strengthening import substitution in the priority sectors of the country.

2 – Exchange rate is an important variable influencing both imports and exports of the country. It should be made relatively flexible and should not be kept arbitrarily at the low level.

3 – Iran should aim at the policies both monetary and fiscal to control inflation to enhance exports and reduce the import bill. In addition a combination of policies such as export promotion and import substitution in the relevant sectors should be planned.

It is recommended for further research that, in calculating the exchange rate both the exchange rates, official rate of foreign exchange and the rate for transactions in the black market have to be considered. In this case, the average of official rate and the black market rate is more eloquent than any of the two rates separately. It is better if we use the volume of imports instead of the value of imports. In an economy such as Iran, where a large extent is regarded as a single product, it appears that the elasticity of imports, compared to the exchange rate is very low. It is better if this is also examined in the future research.