The Relationship Between the Growth of Exports and Economic Growth in the Period 1981-2013

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Abstract: If a country's economic does not enjoy a high and continuous growth, growth dilemmais sign of absence of competitiveness and qualified technologies and developmental institutions. Regarding the relationship between non-oil export growth and gross domestic product growth, three hypothesis including base export growth, base growth export and mutual relation between economic growth and export growth may be raised. The present research's main goal is study the relationship between non-oil export growth and economic growth in Iran in time period of 1982-2012. The present research's method is post-event. Statistical population of present research includes total 30 years from the years 1982 up to the end of fiscal year 2012 and it includes time series. The minimum effect square method has been used in present study in order to perform cumulative test.

Key words: Export, economic growth, non-oil, competitiveness, domestic product

INTRODUCTION

The relationship between free trade and economic growth is one of the controversial topics in the area of economic knowledge and an extensive experimental studies have been took place regarding the existence of relationship between export and gross national product. Surely the main reason of these researches is disagreement among economists and lack of their thought and vote convergence in the areas of adapting export development strategy or outward growth against import replacement strategy which has been known as introspective growth. This issue that whether this driving force of each country's economic growth should be sought inside or outside it depends on structural characteristic and time period of each country's investigation more than anything (Mahmoud, 1999). Todays economists reach an agreement in this area that economic growth is a complicated process it depends on different factors such as accumulation of human and physical capital, trade, price fluctuations, political conditions, income distribution and even geographical features. If one country's economic does not enjoy a high and continuous growth, growth dilemma is sign of absence of competitiveness and qualified technologies and developmental institutions. Competitiveness, qualified technologies and developmental institutions are fundamental precondition of export growth so, the country which is caught in the trap of slow and limited growths, it do not have a remarkable and sustainable

export and it should provide the fields of growth through capital accumulation (even through import) and then it should develop export. When sustainable export is emphasized in an economic, in fact technical, institutional and making competitiveness fields have been emphasized in economic. These institutional requirements are that growth requirements (Samad and Hamed, 2009). In fact, actual and continuous export and continuous growth are both the effects of a common cause while supply of export good is remarkable components of growth. In addition, export industries are creator of productivity growth and it will give continuity to competitiveness of total economic (Rasoul et al., 2012). Three hypotheses are distinguishable from each other regarding the relationship between growth and export. The base export growth hypothesis refers to this important issue that capital and workforce are not able to promote one country's economic growth alone; rather export development is one of the main factors of economic growth.

This statement that export is growth's motor is interpreted from this angle. This point is also notable that the proponents of base export growth theory know the bmost effect of economic growth not on the export incomes but on the positive side effects of export development on domestic economic. In the other hand, base growth export hypothesis is proposed for the countries which are at the early stages of development. According to this hypothesis, human capital growth, workforce skills and capital accumulation along with this

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fact that affairs became more smoothly which are consequences of progress in technology levels make each country able to reach to a threshold level which relative advantage topic has been the matter of discussion at higher level and required conditions for country's export growth will be provided. The third hypothesis is two-side causality hypothesis in which long-term and two-side relationship between export and gross domestic product is emphasized (Abol-Qasem and Shahin, 2010).

The most conducted studies regarding the relationship between export and economic growth have been based on the econometrics models and some different and controversial results are stated regarding export and economic growth in this conducted studies. Totally, the existence of two-side relation, absence of relation, existence of relation from export growth toward gross domestic product growth or vice-versa is the sum of results which have been obtained for different countries. In the most studies which have investigated the relationship between trade growth and economic growth, the trade alternative variable has included export, import, net export in gross domestic product, volume of foreign trade, etc. Balassa in 1978 in a study using Michealy's Method in 1973 reported in his research that they evaluated the relationship between export and economic growth in 11 developing countries in which industrial bases have created previously. The results showed that gross national product is increased in amount of 0.04% in exchange for one percent increase in export.

In the other side, sustainable and large export increase the chance for importing capital goods and qualified institutions and those which make fields for product growth. In growing dynamic economic, export and growth have a mutual effect on each other and they strengthen each other through a dynamic interaction. Export causes growth through the channel of creating additional demand for the economics which their supply power is stronger in some industries and totally in the economics which have been faced with demand shortage, by increasing export, the expenses of total demand and therefore total income can be increased through multiplier coefficient mechanism and then it can sustain and accelerate their growth (Piri, 2009). This research results also indicate that commercial policies implementation with export orientation has more effect on economic growth compared with import alternative policies. He also shows that there is a significant correlation between variables including export growth and gross national product of non-export. This issue indicates indirect effects of export on incomes and costs.

Respecting the mentioned matters and the importance of evaluating economic growth and its relationship with non-oil export, so the main question of present research is this that is there any relationship between non-oil export and economic growth in Iran in time period of 1982-2012 or not?

MATERIALS AND METHODS

Because present research seeks to study the relationship between non-oil export and economic growth in the years including 1982-2012 by using the data of previous years, so the method applied in this research is retrospective or post-event. The present research is cross-sectional time series analytical approach. The present research's statistical population includes total 30 years from 1982 up to end the fiscal years 2012, so considered sample in this research includes total 30 years of time series by using census method. The time series respecting this fact that are also unstable in studies of macroeconomic and their instability provides the possibility to occur spurious regression in experimental studies, so the variables' reliability is examined by using generalized Dickey-Fuller Root test. Ordinary Least squares was used to estimate research model. Time series data have been collected annually and they are evaluated by using software EViews.

RESULTS

Economic growth implies on product or per capita income. If goods or service product is increased in a country by any means, it can be said that economic growth has been occurred in that country. Economic growth rate refers to changes percentage due to determined equal national product compared to last year that we have used here of gross domestic product to fixed prices. Economic growth rate was obtained by growth formula (Fig. 1).

According to definition, gross domestic product is the value of sum of goods and services which are produced during one year in a country. Of course, it should be noted that the level of people's welfare and enjoyment of a country is not determined only due to gross domestic product but also the better indicator is per capita GDP (Gross Domestic Product) which shows the product amount by means of each one as per capita.

In fact, a country's people welfare affected by gross domestic product and the population of that country is reflected in per capita gross domestic product. While the product level and per capita income indicates the level of welfare, economic growth rate shows the speed of
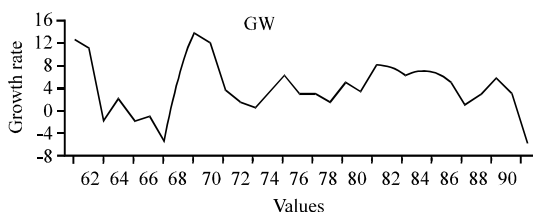
Fig. 1: Related to economic growth rate in Iran during the period under study
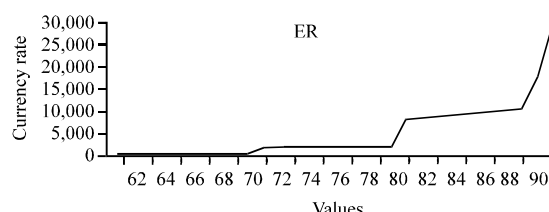

Fig. 2: Related to foreign currency rate in Iran during the period under study

increase or decrease gross domestic product and consequently that speed shows improvement or decrease in welfare level and people's enjoyment. Iran's economic growth rate has experienced many rise and fall in this historical period. The beginning of Islamic revolution in 1973 and after it and by staring the war, economic growth rate was strongly decreased and except the years including 1982-1985, economic growth rate has experienced negative figures up to end of war. The average of economic growth rate in this period has been -3.2% in year. At the periods of after war, economic growth rate has been also appeared full of fluctuation and it has experienced the rate of -5.2% up to 16% but average of economic growth rate at the period of after war up to 2009 has been 5%. Economic growth rate at the course of construction has experienced many fluctuations. At first, economic growth rate reached to the range of 15% at the end of 1980 during an ascending process but it has been faced with a strong falling in 1990 and it fluctuated up to end of 1992 at the range of zero or even negative figures.

Then, it reached to the range of 8% with repeated increase in 1994 but it faced with decrease again. Totally, economic growth rate has been averagely equal to 5.5% in the eight years of construction. At the first period of reformations, economic growth rate have been preserved at the range of <5% and at the second period, it has been preserved at the range of higher than 5% and totally economic growth rate has been averagely equal to 9.4% at the 80 years of reformations. At the period following reformation firstly, economic growth rate was increased up to 9% in 2006 but it took a descending process. Economic growth rate has been again increased and it reached to 5.3%. In this period, economic growth rate has been averagely equal to 1.5% up to end of 2009.

A look at the process of currency rate fluctuation in Iran's economic shows that there were 12 rate for foreign currency after war but through accomplished actions from the year 1979 in April 1983, the foreign currency became single-rate in Iran's economic that this process continued up to seven months but single-rate foreign currency was not preserved following the emergence of a new government and then the change in system's economic

policies and we were witness of occurring two rate including free and governmental rate for foreign currency in economic. But the free and governmental rate of foreign currency became again the same in 2001 and it continued up to 2010 but the distance between the free and governmental rate of foreign currency was created due to the increase in the inflation and growth of liquidity so that the significant distance between rate of free and governmental foreign currency led to misuse of someone and it caused the increase in corruption in economic. Following this affair, the tenth government launched the center of currency exchanges in October 2012 with the aim of organizing currency market and monitoring dollar rate because of the increase in price-gap between reference currency rate and free market and the presence of profiteers in this market and using reference foreign currency for entering unnecessary goods and as a result, we were witness of the existence of three rate for foreign policy in country economic until government suggested managed floating system for rate of foreign currency at least where it is present and it was supposed that our fundamental goods and animal and agricultural institutions are paid the difference of foreign currency rate and the currency of the exchanges which are about 2500 Toman. Although, this issue followed by some problems for importers but it finally led to eliminate reference foreign currency from country economic (Fig. 2).

The test of variables' became static (unit root): The results of test on the models' variables on the surface and width of origin and process are on the Table 1.

As it is observed in Table 1, absolute value of computed generalized Dickey-Fuller statistic for economic growth have been equal to 3.41 and it is more than the value of Dickey-Fuller statistic at the level of 5% (2.96). The results of test also show that absolute value of computed generalized Dickey-Fuller statistic for rate of foreign currency is equal to 3.62 and it is more than value of Dickey-Fuller statistic at the level of 5% (2.92). It is more than absolute value of crisis values of table in level and process and this statistic for the variables including rate of foreign currency and economic growth, growth rate

Table 1: The results of the test of variables' became static on the surface and width of origin

Name of variables	Test statistic	Result
Economic growth	3.62	Static
Rate of foreign currency	3.41	Static
The growth rate of non-oil export	4.40	Static
The growth rate of oil export	5.27	Static

2.96: the percentage of 5 surface at value crisis

Table 2: The results of estimating model by the OLS Method

Results	GW	ER	NOILX	OILX
Mean	4.054839	4693.819	7551.143	2107.035
Median	3.300000	1755.000	3362.000	2208.000
Maximum	14.10000	28300.00	33818.64	2602.000
Minimum	-5.800000	66.90000	283.7400	1250.000
SD	4.778831	6307.353	9512.310	350.7624
Skewness	0.058035	1.974697	1.646172	-0.738818
Kurtosis	2.921434	7.462197	4.549583	2.622348
Jarque-Bera	0.025375	45.86568	17.10262	3.004454
Probability	0.987393	0.000000	0.000193	0.222634
Sum	125.7000	145508.4	234085.4	65318.10
Sum Sq.Dev.	685.1168	1.19E+09	2.71E+09	3691028
Observations	31	31	31	31

of oil export and growth rate of non-oil export; accordingly variables' being static is proved. Therefore, the Ordinary Least Squares (OLS) Method can be used to estimate equation.

Model estimation: As it is mentioned, the below regression model has been used in this research: the variables under study in this research consist of: independent variables: rate of foreign currency, value of oil and non-oil export value, dependent variable: economic growth (Table 2).

It can be said respecting to the findings of table that rate of foreign currency variable is at the 5% level of significance regarding statistic and it does not have an obvious and determined effect on economic growth.

Also as it has been shown in table, variable coefficient of non-oil export growth rate in model is insignificant amount equals to 0.002 and in the other hand, this coefficient is not significant at the 5% level of confidence because the value of its SIG is equal to 0.8844 therefore, the null hypothesis is not rejected and so research hypothesis which study the significant relationship between non-oil export and economic growth is rejected. Another variable which has been entered in model is oil export variable. The results show that the oil export variable's impact on the level of economic growth is significant at the level of 5% and it has a positive effect on economic growth in the current period of economic. It can be said with the confidence higher than 99% that there is a relationship between these two variables because Sig. = 0.0001. The R^2 index is equal to 0.59 and this means that 59% of the changes of economic growth's dependent variable have been explained by independent variables. Durbin-Watson statistic is related to regression is close to 2.10 number. So, it can be said that that the hypothesis of lack of self-correlation in model is confirmed and accordingly model's results are trustable.

DISCUSSION

The government's main income sources in the previous years in country has been from the crude oil sale, gas and other related products or in the other words, oil export. The statistics in this field indicated that especially after 2005, through increase in crude oil and oil products, oil revenues of country have been faced with a remarkable growth. The primary assumption in analyses is usually this that because oil section has a remarkable share in gross domestic product, the strokes which took place in value added of this section (due to increase in the level of product or price) generally leads to a remarkable growth in total product and consequently to increase in economic growth. In addition because excess oil revenue can be expended in investment in some production, this issue generally should lead to production increase in next years. In spite of this fact, many investigations have been took place that show there have been many cases which property growth due to natural resources, especially oil, not only did not led to economic growth but also it has made it weaker not only in Iran but also in other countries.

CONCLUSION

Software EViews was used and the results showed that there is no significant relationship between non-oil export and economic growth. A causality relation between the variables including non-oil export and economic growth is not also observed.

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