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THE ROLE OF MACROECONOMIC FACTORS ON IRAN'S NON-OIL EXPORTS TO TURKEY

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Abstract: *The of non-oil exports considered as the most important strategy to get rid of the dependence of the economy on oil exports. In this regard, it is necessary to consider the category of international marketing variables that affect the market and macroeconomic variables. In developing countries like Iran, the importance of macroeconomic variables on international markets is far more important than market-level variables. Hence, in this study, the role of the variables or macroeconomics were reviewed on Iran's non-oil exports to Turkey's market on the basis of the ARDL method in the period 1980-2012.*

The results of the study showed that in short-term the variations of the real effective exchange rate, at first had negative impact or one-year hiatus positive impact on Iran's non-oil exports to Turkey. So the high rate of growth in the general price level in Turkey towards Iran, and Turkey's per capita income in the short-term has positive effect on Iran's non-oil exports, but trade openness of Turkey due to the low competitiveness of export merchandises has negative impact on Iran's non-oil exports to Turkey. but in the long run, only Turkey's per capita income and trade openness has a significant impact on Iran's non-oil exports.

Keywords: *International Marketing, Non-oil Exports, Turkey, Iran, Macroeconomic Variables*

INTRODUCTION

The study of time series of the Central Bank of Islamic Republic of Iran during the various years shows that about 80 to 90 percent of export earnings and 40 to 50 percent of the state's annual budget comes from oil, 20 percent of the oil sector is from the country's total gross domestic product. In this regard, Iran's economy has always been dependent on oil exports to earn foreign exchange. The Problems of economic monoculture and over-reliance on oil revenues over the years, has led the attention of scholars, researchers and planners in the country's economy to the replacement policy of non-oil exports to earn foreign exchange requirements and presentation of necessary strategies to its development and in the socio-economic development programs of the Islamic Republic of Iran is also given emphasis and importance to this.

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The target for export in each market, exporters trying to access to sufficient information and understanding of the market structure and the degree of competition between the competitors, the policies, price and nonprice policies have been designed in a way that they can maximize their own interests. (Khodad Kashi and Shahyky Tash, 1384). On the other hand, A country may have a comparative advantage in the production and exportation of goods, but due to lack of understanding of export markets and ignorance of the laws governing on those markets, was unable to export merchandise to those markets (khaksar Astaneh *et al.*, 1387). Exports of each country to target market is influenced by variables that are investigated in the area of international marketing. These variables are related to primarily macroeconomic variables affecting trade between the two countries, and considered as restrictive macroeconomic variables, facilitating and stimulating trade between the two countries. These variables are usually the result of exchange policy, trade and domestic economic conditions in the target countries of export, export and competing countries. In second place variables are introduced in the market areas which mostly resulting from function and interaction of business marketing policy not the result of economic conditions and policies of subsidiaries. In developing countries such as Iran, due to fluctuating of macroeconomic variables affecting the exchange rates exports and the general level of prices as compared to values of target countries for export, it seems that the role of these variables in changes in market share in the country's export target is far more important than his performance in the target market. Accordingly, the present study has given an important role to the macroeconomic factors in international marketing and in this case, it studies the role of above-mentioned factors in Iran's non-oil exports to Turkey within the period of 1980-2012, autoregressive distributed lag method (ARDL).

Then in the second part of the paper, theoretical and experimental studies are reviewed, in the third section autoregressive distributed lag method is described. The research model is presented in Section IV. In Section V models and the results are analyzed. The final section is conclusion.

2. THEORETICAL FRAMEWORK AND REVIEW OF THE LITERATURE STUDY

The trade movement in the world, has changed the countries with closed economies to dynamically open economic systems. In this regard Smith's theory in 1776 can be remembered that countries were encouraged to produce and export goods in which they have an absolute advantage. After Smith, Ricardo introduced theory of comparative advantage which is also known for the theory of relative cost. Ricardo's theory proved that every country should have a comparative advantage in producing a merchandise or service, although the advantage is not optimal, the gains will be successful, and profits belong to all the countries with exchange granted. Hashkar and O Hilman propounded the theory of abundance production factors and it completed by economists such as Johnson, Jones, Lancaster, Astolpar, Samuelson.

According to this theory, each country will export those goods which used from its relatively large amount of resources and will import goods which are scarce in the country. In addition to development of the theory of trade, Harbeler propounded partial division of labor theory and the idea was proposed that the international division of labor and international trade, to each country which is entering into the global economy provides the necessary capabilities to be able to specialize in the production of goods and their production and export to a better and cheaper way is possible. In his view, the international division of labor and international trade, are basic factors of providing economic well-being and increase national income. Harbeler believes that whatever is appropriate for a country's standard of living and income, of course, would be beneficial for the economic development (Tagavi and Nemati Zadeh, 1383).

In line with the development of international trade theory, policies and also different business strategy widely used by countries. The main objective of these policies on the export of goods was providing a platform for the development of exports in international markets. The set of these policies in international marketing literature known as the Export Development Strategy at the macro level. Of conceivable measures, about the implementation of this strategy can be pointed to programs encourage exports.

Export promotion programs are among public policies, which seek to improve the level of exports in firms, industries and national level (Ruth, 1971). Of course, these policies are part of economic development strategies which are also used in the developing countries (Seringhaves and Rossen, 1990). On the other hand, access to international markets and export goods to these markets, one of the basic goals of the manufacturing firms in countries all over the world. However, access and success in export markets was not so simple and this was because of the multiple nature in out of the country for many different reasons (Samiee and Walters 1990). as a whole, the studies showed that there were different factors in the success of country exports (Chetty and Hamilton, 1993), which can be briefly summarized these factors in five categories as follows:

A-Management, experimental and behavioral characteristics of decision-makers in production units, and decision-makers at the national level.

B-Characteristics relating to performance, resources and exporting organization goals.

C-The macroeconomic factors within environment which the production units operate and abroad environment.

D-Definition, selection, and analysis of the international markets.

E - Marketing variables including pricing, , distribution and export development strategies

Holzmuller and Kasper (1991) have classified variables affecting export performance into 3 categories. The first group includes variables related to

management, structural and environmental factors that indirectly affect export performance. The second category includes variables indicating export marketing strategies of productive units. Among the variables introduced in this study, and in this area can be mentioned marketing programs and targeting. These variables are directly impacting on exports. Export promotion strategies are also part of this group of variables. And the third category of variables including economic and non-economic measures are from exports performance of production units. The results indicate a significant effect of introduced variables on exports.

In a number of studies has been discussed separately the role of each of the groups mentioned above on exports. For example, Greenly (1986), Miller and Cardinal (1994), have discussed the role of export marketing on export performance. Bilkey (1978) in his study has discussed 5 different stages of export development and export of globalization. In the first stage the manufacturing units have the desire to export but lack of the facilities do not make this task happen. In the second stage by creating the possibilities, exports possibility is done for production units. In the third stage production units export their goods to neighboring countries experimentally. In the fourth stage exports of these countries have changed due to changes in environmental conditions inside and outside, such as changes in exchange rates, tariffs, foreigners income and ..., but also exports occur to neighboring countries. The fifth stage is also the last stage that the present results and experiments conducted in collaboration with the government and… will lead to the expansion of exports to other countries. At this stage, we need to introduce the produced goods to the world that this requires accurate and sufficient marketing.

Johanson, Vahalne (1977), and Bilky (1978), In their studies have examined the behavior of export production units. The conclusion which drawn from these studies is that the development of exports may lead to learning process. following the activity of production units and globalization of their activities, they will encounter with different problems. In this case the production units will follow appropriate government helps to deal with these problems. Bilky in his study summarizes the main reasons for not entering production units in international markets as follows.

lack of accurate data concerning with global markets and the relationship with them.

B -the complexity of exporting.

C - risk and ack of confidence because of the entering new markets.

D-low quality of manufactured goods and lack of competition with the global markets.

E- He suggests that most of these problems can be solved through a suitable export strategies. For example, he recommends the formation of international exhibitions for giving data about global markets of export process and lowering the risk of entering to new markets.

In an overall view of the above and other related studies, variables affecting the exports can be divided into 2 types of macroeconomic variables and firm-level

performance variables. Macro-economic variables resulting from economic policies of exporters, importers and competing countries that are exogenous to affect export performance of firms. But the firm-level variables result from functional mechanisms, policy research, manufacturing and marketing of their own firms and endogenously, play a role in determining the amount of the firm's market share in the country's export market. In developing countries like Iran due to economic conditions as well as a lack of balance and stability in policies related to trade, the export firms in the target markets mostly affected by macroeconomic variables. But because the economic conditions and economic policy are relatively stable, the role of macroeconomic variables that include price and non-price factors are included in determining their firms' share of the export market declined and the share of firms is mostly due to firm's performance. For this reason, In this study, with focus on Iran's non-oil exports to Turkey, it is limited to the effects of macroeconomic variables. The following are some of the studies mentioned external and internal.

Cooke, (2014), a dynamic general equilibrium model has developed to examine the relationship between the two countries between the real exchange rate and exports. In this model, prices are assumed to be sticky. In this study it is shown that the exchange rate impact on exports through Consumer Price Index.

Rodríguez-Pose *et al.*, (2013), analyzed the impact of firm-level and macroeconomic variables on exporting firms in Indonesia, with an emphasis on geographic firms during the period 1990-2005. The results of this study showed that both the inner and outer factors are important. They showed that a provincial conditions which firms are based as well as firms that are located in neighboring counties, determines the firm's exports. In other words, there are spillover effects from firms located in provinces to firms located in suburb. i.e condensation effects, education, transport infrastructure play a leading role in the trends of the firms to the exports as well as spillover effects.

Mohammadi Limaei *et al.*, (2011) studied the import and export of wood in Iran and determining its relationship with the main macroeconomic variables such as population, gross domestic production (GDP), the world price of oil and the amount of domestic production of wood. In this regard they have used from analysis of multi-variable regression(MRA). The results showed a significant relationship with a significance level of 5% between the import of wood as a dependent variable and population, GDP and the amount of the domestic production of wood as an independent variable. And also there is a significant association between the export of wood and population, GDP, the amount of domestic wood production and the world price of oil.

Wagner (2007), studied the relationship between exports and productivity in 34 countries (including Developed countries like USA, UK, Canada and Germany, the countries of Latin America Such as Colombia and Mexico and developing countries and least developed countries such as Estonia and Slovenia Africa) during the years 1995-2006. The results that come from the study focuses on the high levels of

productivity for firms with international exchanges with regard to companies that choose domestic market as target as well as being more successful Institutions of higher productivity in global markets.

Greenaway and Kneller (2004) used from 11,225 data of Institute in England and divided these institutions into two categories exporting and non-exporting in the period between 2002, and after a comparative analysis of the data concluded that one of the most important factors of success in the international markets is the increase of productivity.

Asma *et al.* (1392), analyzed the uncertainty impact of exchange rate on exports to Iran. In this study, the uncertainty exchange rate was estimated by using generalized autoregressive conditional heteroscedastic of variance model (GARCH). Then to estimate the relationship between uncertainty exchange rate and non-oil exports for the period 1389-1359, econometric vector error correction models (VECM) autoregression approach (VAR) were used. The results showed that uncetainty of exchange rates in short-term with a coefficient of 1/06 in long-term with a coefficient of 7.29 has negative and significant impact on non-oil exports. Expansion the uncertainty of exchange rates by creating improper grounds for exports cause departure of exporters from export sectors and reduction of the non-oil exports.

Dezhpasand *et al.*, (1390) examined the factors affecting non-oil exports with emphasis on non-price factors. In this study non-oil exports considered as a function of the variables in the real exchange rate, the total productivity of factors of production, GDP and the degree of openness of economies and ARDL method is used to estimate the model and to evaluate the effect of each of these factors on non-oil exports during 86-1353. The results show that non-oil exports are basically dependent to the non-price variables and this effect is significant, so the results of the estimates show a positive effect of productivity, degree of openness of economy and gross domestic product on non-oil exports, however, given the fundamental problems in manufacturing and country exports and with regard to the results estimated, the exchange rate has no significant effect on non-oil exports.

Nazemi (1388), has studied the effect of macroeconomic variables on non-oil exports. This study has attempted after a theoretical analysis of the importance of non-oil exporting countries, using OLS analyze the macroeconomic variables relationship such as inflation, exchange rate and GDP with non-oil exports. The data used in this study is related to after revolution. This study shows that (A) a positive relationship between exchange rate and GDP with the export of non-oil and (B) – there is a reverse relationship between rate inflation and non-oil exports in this time distance. According to these results of this study economic policy-makers can take constructive steps to reduce the rate of inflation and increase the GDP and exchange rates in order to develop the country's non-oil exports.

Ehsani *et al.* (1388) have investigated unstably of real weighted exchange rate on Iran's non-oil exports during 1338-83. To quantify the unstably of the exchange rate is

used two conditional standard deviation and standard deviation of the moving average. econometric techniques used for Johansen - Juselius and autoregression Distributed Lag (ARDL). Based on the findings, the positive effect of exchange rate is approved the unstably negative effect on non-oil exports.

Dezhpasand and karami (1387), examines the impact of electronic commerce on non-oil export. In this study, he examines two groups of countries. The first group includes the United States, Canada, France, South Korea, Malaysia, Singapore, China, Denmark, India, and the second group includes Iran, Pakistan, Spain, Italy, Greece, and Poland respectively. The data gathered in this study relates to the period 2000-2006 and a panel data approach is used. The results show that the electronic trade effecting the trade pattern of studied worlds and by increasing the penetration coefficient of the Internet and spending on information and communication technology, the volume of exports is significantly increased.

Taghavi and Nemati Zadeh (1383) have studies the impact of macroeconomic variables on non-oil exports in Iran's economy. This study sought to determine the effect of macroeconomic variables such as exchange rate, inflation rate, real GDP on non-oil exports during 1350 to 1380 and this trend is predicted to be the next ten years. In this study, in the econometric is used unuseful VAR method. The results of data during 1350 to 1380 GDP and the exchange rate has a direct effect on non-oil exports and inflation rate on non-oil exports is almost inert. Moreover, the results predicted in 1381 to 1391, show that in the long-term GDP had no influence on non-oil exports and in this case simulation is presented. of other studies such as Abbas Shakeri (1383), Sajjadi (1379), Pakdaman (1377), Hadian (1377) and Sharzehee (1375). The present study with above-mentioned studies is in the period of time as well as case studies of Iran's non-oil export market in Turkey.

RESEARCH METHODOLOGY

If there were not variables of stationary time series, econometric models only if they will have enough credibility in that case the above-mentioned time series are stacked. Cointegration's meaning is that when two or three time series are related to each other based on theory basics so to form a differential long-term relationship, although the time series has a stochastic trend (unstable) but they follow each other over time, so their difference is stable (Noferesti, 1378.) to verify the presence of Cointegration (long term relationships) Engel-Granger method may be used which in the regressions more than two variables, due to weaknesses they are not recommended. From other methods maximum likelihood of Johansen-Juselius and other error correction models can be mentioned that because of the limitations to these approaches, suitable approaches suggested for the analysis of short-term and long-term relationships between variables that in the meantime, you can mention ARDL approach (boys and boys, 1997).

The advantage of using the ARDL approach is this that regardless of research variables were at stationary level or by once differentiating, they become stationary,

we can study and find the Cointegration (long-term) relationship between the variables. A model of $ARDL(p, q_1, q_2, ..., q_k)$ can be written as follows:

$$\alpha(L, p)Y_t = \sum_{i=1}^{k} \beta_i(L, q_i)X_{it} + \delta' W_t + \varepsilon_t$$

$$\alpha(L, p) = 1 - \alpha_1 L - \alpha_2 L^2 - ... - \alpha_p L^p$$

$$\beta_i(L, q_i) = 1 - \beta_{i1} L - \beta_{i2} L^2 - ... - \beta_{iq} L^q$$

Where; L is lag operator; W_t is a vector of variables (nonaccidental) as a y-intercept, dummy variables with lag fixed, P interval adopted for the dependent variable and q_i Intervals used for the independent variables.

The number of optimal intercepts for each of the explanatory variables can be determined with the help of the Akaike criteria (AIC), Bayesian-Schwarz (SBC), Hannan-Quinn (HQC) or adjusted coefficient of determination. Usually in samples less than 100, Schwarz Criteria is used, In order not to lose too many degrees of freedom. These measures will save the determining interrupts and Consequently, the estimate will have more degrees of freedom (Pesaran and Shin 1996).

Because of avoiding problems, such as autocorrelation and endogenous the estimates of the ARDL are efficient. By performing this method economic analysis periods can also be conducted in the short and long term (Kamiab and Gholizadeh, 1387). For this reason, in this study, we applied the above model to estimate and the Microfit software is used. The software estimates the equation for all states and for all possible combinations of values i.e, to the number of times (m is the maximum number of Lags and k is the number of explanatory variables) (Azam Zadeh, Shorak and Khalilian, 1389).

The second step in estimating the ARDL model is the study of a long-term relationship. In order to incline the dynamic model of autoregression with distribution lags to the equilibrium long-term trends, it needs all the coefficients (P is the number of Lag) with dependent variable lag in the estimation dynamic model is smaller than one. So to test the existence of cointegration in the autoregression pattern of distributional lag, it is necessary to test the following hypothesis:

$$\begin{aligned} H_0 &= \Sigma_{i-1}^{p} \alpha_i - 1 \geq 0 \\ H_1 &= \Sigma_{i-1}^{p} \alpha_i - 1 < 0 \end{aligned} \tag{2}$$

The statistic quantity of t required to perform the above test is calculated as follows:

$$t = \frac{\Sigma_{i-1}^{p} \alpha_i - 1}{\Sigma_{i-1}^{p} S.E_{\alpha}} \tag{3}$$

Where $S.E_{\alpha_i}$ is the standard deviation of dependent variable in i lag. The statistic amount of above-mentioned calculatinal t is compared with critical quantities in Banerjee, Dolado and Mestre (the 1993). If the value of t obtained is larger than the critical value, the hypothesis H_0 (Absence of Cointegration) Rejected and it is approved the long-run equilibrium relationship. So with the rejection of Hypothesis $H_{0,}$ we can analyze the long-run relationship between the pattern variables. (Abunory and Khanalipur, 1388).

If the model parameters are stacked together, it is possible to be imbalance in short-term between them. Therefore, the error term can be taken as the "equilibrium error". This error is used to link short-term dependent variable to the long-term equilibrium. For this purpose, the error correction model (ECM) can be used. The numerical value of error correction part indicating that how much the standard deviation and dependent imbalance reform in a period and the next period. The larger the value, the faster the adjustment is and return to a path of long-run equilibrium will be more (Sadeghi Shahedani, *et al.*, 1388).

THE RESEARCH MODEL

Considering that the current research model using ARDL method is estimated so, the dynamic research model will be as follows:

$$\begin{aligned} \exp ir_t = \beta_0 + \sum_{i=1}^{P} \alpha_i \exp ir_{t-i} + \sum_{i=0}^{q1} \beta_{1i} exchir_{t-i} + \sum_{i=0}^{q^2} \beta_{2i} pgdptur_{t-i} \\ + \sum_{i=0}^{q3} \beta_{3i} \inf tr_{t-i} + \sum_{i=0}^{q4} \beta_{4i} opentur_{t-i} + \varepsilon_t \end{aligned} \quad (4)$$

If there is cointegration, the long-term relationship of research is as follows:

$$\exp ir_t = \beta_0 + \beta_1 exchir_t + \beta_2 pgdptur_t + \beta_3 \inf tr_t + \beta_4 open_t + \varepsilon_t \quad (5)$$

If there is a long-term relationship the error correction model as follows:

$$\begin{aligned} \Delta \exp ir_t = \sum_{i=1}^{P} \alpha_i \Delta exchir_{t-i} + \sum_{i=0}^{q1} \beta_{1i} \Delta pgdptur_{t-i} + \sum_{i=0}^{q2} \beta_{2i} \Delta \inf tr_{t-i} \\ + \sum_{i=0}^{q3} \beta_{3i} \Delta LOPEN_{t-i} + \lambda ECM_{t-1} + \varepsilon_t \end{aligned} \quad (6)$$

Where, is Iran's non-oil exports logarithm to Turkey at the time t; is natural Logarithm of the real effective exchange rate in year t; is natural logarithm of per capita income in Turkey in the year t; is natural log of the general price level in Turkey than Iran in year t, the natural Logarithm of the ratio of trade to GDP (Openness trade index) of Turkey for years t and is model residue.

Model and Research Findings

It needs to be tested the unit root of research variables before estimating the model. In this study, Dickey- Fuller test is used for this purpose. The results are presented in

Table 1. based on Table 1, all variables were in the nonstationary and become stationary by subtracting once. For estimating research model by ARDL method, Microfit software is adjusted by determing three lags and according to Schwarz- Bayesian criterion. Based on this criterion, the optimal dynamic model was determined based on the Interruptions of the (ARDL (1,1,0,1,1), the results in Table 2 have been reported. Based on The absolute value of the statistic test the Cointegration Banerjee, Dolado and Mastre (1993) in this model is equal to 4/852 which is more than critical value. Consequently, it can be explained that the relationship of cointegration (long-term) are among the variables. The results of the cointegration relationship have been reported in Table 2.

Table 1
Results of unit root tests of Dickey-Fuller (ADF)

Results	*Critical values at*			*Statistics*	
	10%	*5%*	*1%*	*Computational*	*Variable*
Nonstationary level	617/2-	957/2-	641/2—	-612/0-	exp ir_t
Nonstationary level	610/1-	195/1-	641/2	612/0 to	$exchir_t$
Nonstationary level	610/1-	195/1-	641/2-	434/3	$pgdptur_t$
Nonstationary level	610/1-	195/1-	641/2-	374/1-	inf tr_t
Nonstationary level	610/1-	195/1-	641/2-	374/1-	$opentur_t$
Stationary by Subtracting	619/2-	960/2-	661/3-	550/5-	Δ exp ir_t
Stationary by Subtracting	610/1-	952/1-	641/2-	541/3-	Δ $exchir_t$
Stationary by Subtracting	610/1-	952/1-	641/2-	635/4-	Δ *pgdptur*
Stationary by Subtracting	610/1-	952/1-	641/2-	143/2-	Δ inf tr_t
Stationary by Subtracting	610/1-	952/1-	641/2-	619/4-	Δ *opentur*

Source: Findings

Based on the results of estimating the dynamic model in Table 2, one percent increase in Iran's non-oil export to Turkey, it is expected that non-oil exports will increase to 0/408 in the next year. The increase of Iran's real effective exchange rate has negative effect on non-oil exports in that year. So that by increasing one percent in above-mentioned rate Iran's non-oil exports to Turkey reduce to 0/676 in that year. This relates to Iran's non-oil exports' dependence to importing capital and Intermediate goods. Because It is time-consuming to increase the production process and in the meantime, simultaneously increasing the exchange rate increases the goods' prices and this limits the country's exports production in the first place. But after a year , non-oil exports to Turkey reacts to changes in the real effective exchange rate, as a percentage increase in the exchange rate for the Iranian exports to Turkey increases to 0/860 with one year hiatus. Turkey's per capita income rise without time delay leads to increased imports from Iran.

Turkey's demand for non-oil imports from Iran increases. So, based on estimated results by a percentage increase in the per capita income in Turkey the amount of imports from Iran increases to 2/467%. The increase of prices in Turkey compared to Iran, at first lead to exports reduction to Turkey which can be attributed to Lire's

devaluation compared to Rial, this increases import goods' prices to Turkey. So, demand for Iran's export goods in Turkey decreases. But after one year it reverses because Iranian exporters have enough opportunity for increasing production and productivity of higher prices in Turkey. Based on estimating results, one percent increase in prices level in Turkey with regard to Iran, the amount of non-oil exports initially decreased to 1/683% and with one year hiatus increased to 1/717 percent. But Turkish trade Openness index with one year hiatus will have significant impact on Iran's non-oil exports and this will be in the reverse direction. Therefore, one percent increase in the ratio of trade to GDP in Turkey after a year 1/386% of the country's non-oil exports will decrease. it can be interpreted in a way that by trade openness in Turkey other countries entry into the markets of it will be easy and Iran's exports will not compete with competing countries' exports and therefore, Iran will lose its market share.

In table 2 the results of Goodness of fit statistics are from significance of total regression and classic hypotheses are from correctness of classic hypotheses about dynamic model. And on the basis of long-term coefficient only Turkey's per capita income variables and trade openness have significant impact on Iran's non-oil exports to Turkey, So that by one percent increase in Turkey's per capita income and its trade openness the amount of non-oil exports of Iran to Turkey's markets increase to 4/168 and decrease to 2/698, respectively. These coeficients need to plan in order to increase the power of competitiveness of export industries of Iran to Turkey more than ever. But based on the results of estimating the error correction model (Table 3) about 59/2% of the deviation and imbalance of the Iran's non-oil exports to Turkey variable in a period, amend in the next period.

Table 2
Results of the dynamic model (ARDL (1,1,0,1,1)) and long-term Model

Cointegration relationship (long-term)			*Dynamic model (ARDL)*		*Model*
SD	*Factor*	*Variable*	*SD*	*Factor*	*Variables*
0/313	0/310	$exchir_t$	0/122	*0 /408	exp ir_{t-1}
1/392	*4 /168	$pgdptur_t$	305/0	* 676/0	$exchir_t$
0/160	058/0	inf tr_t	312/0	* 860/0	$exchir_{t-1}$
0/942	* 698/2	$opentur_t$	001/1	467/2 *	$pgdptur_t$
5/595	407/5	$inpt_t$	648/0	683/1 *	inf tr_t
Assumptions of classical test Dynamic			630/0	717/1 *	inf tr_{t-1}
Model			725/0	210/0	$opentur_t$
Significant level.	Chi-square statistic	Test	586/0	386/1 *	$opentur_{t-1}$
0/127	324/2	Autocorrelation	488/3	200/3	$inpt_t$
0/943	005/0	Function form		921/0	R^2
0/503	374/1	Normal		893/0	$\bar{R}^2$
0/708	141/0	Variance		485/33 *	F

*, ** And *** show the significance at one, five and ten percent.

Table 3
Results of error correction model

ECM_{t-1}	$\Delta opentur_t$	$\Delta inftr_t$	$\Delta pgdptur_t$	$\Delta exchir_t$	$\Delta expir_t$	*Variable*
592/0 to *	-0.015	0	-1/683*	2/467 *	* -0/676	Factor
122/0	-0.00615	0/725	0/648	1/001	0/305	SD
	F			Goodness of fit statistics		
	8/727 *	535	0/655	Statistical values		

DISCUSSION AND CONCLUTION

Based on the theory of international trade, developing countries due to the relative advantages and inputs frequency and production primitive resources, are from primary specialties. In this context, development economists criticize international specialization due to the high dependence of the economy on the export goods. They believe that international specialization in goods leads to a strong economy dependence of that country to the export revenues of those goods. And due to unpredictable of export goods prices, strong fluctuations leading to instability of export earnings and this will have negative effect (and sometimes positively) on the whole economy. Variability and fluctuations of prices mainly reflect in the instability of national income and economic growth (Abrishami and Mohseni, 1381). The degree of development of modern economy of a country is its direct relationship with the volume of international trade. Therefore, the export promotion and gaining foreign resources are in objectives of economy policy-makers. By using exports countries are able to, A- by increasing the domestic production increase the peoduction rate and occupation and B- provide necessary exchange resources for increasing imports and domestic use which causes the increase of economic welfare. Exports increasing has been the government's economic policy in recent decades. To get rid of the single-product economy, the development of non-oil exports for Iran is an undeniable necessity (Nazemi, 1388). This issue makes the macroeconomic variables relate to international marketing noticeable, until the export firms will have appropriate places and motivations. Given the importance of this issue, we studied the role of macroeconomic factors on Iran's non-oil exports to Turkey within the period 1980-2012, according to autoregressive distributed lag (ARDL).

The results showed that in the short term, an increase of one percent of non-oil exports to Turkey will lead to the increase of this variable to 0/408 percent in the coming year. One percent increase in the real effective exchange rate in that year has negative impact on non-oil exports (-0/676 percent)., but after one year hiatus this positive effect increases to 0/860 percent. This issue is in association with dependence on non-oil exports of Iran to capital goods and intermediate imports. By one percent increase in per capita income of Turkish the amount of imports from Iran increase to 2/467 percent. With one percent increase in prices level in Turkey than Iran, the amount of non-oil exports to Turkey initially decreases to 1/683 and with one year hiatus increases to 1/717. In order to benefit from higher prices for products in Turkey the

amount of exports increase to Turkey. Based on the results with a percent increase in the ratio of trade to GDP in Turkey after a year decreases to 1/386 per cent of Iranian exports to this country. This is because of low competitiveness of exporting firms of Iran compared to firms of competing countries in the export of non-oil commodities market in Turkey. But in the long run simply per capita income of Turkey and Turkey's trade openness have a crucial role in the Iranian oil exports to those markets. So that by one percent increase in per capita income and trade openness of Turkey the amount of non-oil exports to the markets of Turkey increases to 4/168 % and decreases to 2/ 698 percent.

According to above results if policy-makers and economic planners in Iran can lower the increase of prices level with regard to Turkey, and decrease the dependence on non-oil exports than importing capital goods, in that case we can expect that by increasing real effective exchange rate can affect the increase of non-oil exports to Turkey mostly in the positive direction. In any case, in the long term only by increasing the competitiveness of produced goods and exports, Iran can keep its market share in Turkey. In this way, the government's attention is necessary for increasing innovations, benefit from higher technologies and as a whole, the increase of quality and innovation and the decrease of export goods fixed prices.

Resources

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