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Forecasting Change of Iran's Trading Partners with an Emphasis on Continuing Sanctions in Horizon of Fifth Iranian Development Plan

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ABSTRACT: Expanding non-oil exports for diversifying export earnings is a common policy in developing countries with monoculture economics. However, in recent years, sanctions as the major obstacle of achieving the objectives lead to change of trading partners through affecting domestic and foreign policies. Therefore, the uncertainty of future trading partners due to the uncertain conditions of sanction highlights the necessity of forecasting the change trends of Iran's trading partners. This paper aimed to review and forecast share changing of Iran's major trading partners from 1996 until the end of the fifth development plans. Thus, first, the share of trading partners from agricultural export products as the part of non-oil exports during 1996-2012 was investigated using the data on non-oil exports of Iran Customs Administration. Then, the share of Iran's trading partners was forecasted during 2013-2015 by considering sanctions and using econometric techniques. Results of the forecasts showed that, in the non-sanction conditions, the share of western countries of Iran's non-oil exports would increase and, with continuing sanctions, exports would be limited to the neighbouring countries.

KEYWORDS: Forecasting, Trading Partners, Non-oil Exports, Iran's Fifth Development Plan.

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1. INTRODUCTION

The role and importance of export development, especially non-oil exports, have been completely accepted in the process of economic development so that export development provides exchange resources for economic development and could have a decisive role in creating economic infrastructures, allocating optimal resources, using economies of scale, and achieving international specialization (Salvatore, 2008). Although the situation of non-oil exports in Iran has been at a lower level than the expected state during the first, second, and third economic development plans in Iran, in the fourth development plan, the non-oil exports turned to an effective and key element in economic development. In addition, preparation of social and cultural infrastructures for applying export strategies has been emphasized. In this period, the operation of non-oil exports indicated the success of the adopted policies so that about 92% of desired goals were achieved in the third development plan and this number almost reached 149% for the fourth development plan. In other words, the target that was considered for non-oil exports in the fourth plan was $ 52.9 billion; but, the performance during this plan was more than $ 79 billion. This situation seems to indicate that exports in development conditions have been rising and the governmental policies have had a positive impact on the trend of exports. Thus, Iran's non-oil exports are expected reach $ 300 billion until the end of the fifth development plan (2015) (Abbaschian and Zirak, 2012). Also, in order to achieve the desirable level of development, in addition to using internal resources and capabilities, it is necessary to establish more effective economic and trade relations with other countries. While managing economic and trade relations for achieving export development, countries have to do proceedings such as (Rahmani and Abedin Moghanaky, 2008):

- Detecting and identifying export potentials and import requirements consistent with development plans,
- Identifying and measuring relative advantages and planning to maintain and develop these advantages,
- Prioritizing export-oriented industries and economic activities for the optimal allocation of scarce resources,
- Identifying the target market of exports based on the comparative advantages of the country, and
- Finally, identifying and determining trading partners based on the needs of import and export markets.

Each of these actions has had a vital role in the success of trading strategies, particularly export development strategies and appropriate practical studies are needed. Also, ignorance of trading partners and priorities of each country in establishing trade relations are the most important issues in the trade policies that should be considered (Fathi and Pakdaman, 2010). In order to establish and maintain trade relations between Iran and other countries, it is necessary to note and thoroughly analyse Iran's foreign trade. One of the aspects that could be influential in the development of the trade fields between Iran and its partners and lead to the extension of Iran's presence in export markets, particularly in non-oil exports, is determining the possibility of expanding trade with trading partners. Accordingly, this study intended to survey the share of five major trading partners of Iran in agricultural products as a part of non-oil products during 1996-2012 and forecast their shares during 2013-2015 (end of the fifth development plan) by considering the severity of sanctions in recent year. Results of this forecast can be an instrument for guiding foreign policymaking. The present study attempted to answer the following question: What will change the share of Iran's selected trading partners in future, if these sanctions will continue? Indeed, the purpose of this study was to forecast the share of Iran's trading partners in the horizon of the fifth development plan (2015). In this regard, it was assumed that the sanctions can be effective in the share of Iran's trading partners so that, by continuing international sanctions against Iran, Iraq would remain the largest trading partner of Iran.

2. LITERATURE REVIEW

So far, there have been no studies in the field of forecasting domestic and foreign trading partners. The present work was the first study that investigated and forecasted the share of Iran's major trading partners for the first time. However, several studies have been done on the predictive techniques that were used in this study. Among the conventional forecasting methods, time series, ARIMA procedure, and its classes have had wider application. In an article entitled "Modelling and forecasting the value of imports in Malaysia", Mohamed et al. (2014) considered variables such as exchange rate, tariff, sales tax, producer price index, and values of exports and imports in previous years and used the ARIMAX method to forecast future values of imports in Malaysia. In another study, Ranjit Kumar et al. (2013) applied SARIMA method to model and forecast monthly meat exports from India. Then, desired forecasting was evaluated by calculating root mean square prediction error (RMSPE), mean absolute prediction error (RMSPE), and relative mean absolute prediction error (RMAPE). Maknickiene and Maknickas (2012) used various neural network techniques to forecast the financial market of Lithuania; among their used methods, Delfi method had higher compatibility and reliability than others. In his study, Wang (2011) forecasted the export of Taiwan using ARIMA method. Kargbo (2007) applied exponential smoothing, ARIMA, VAR, and Engle-Granger (EG), methods to predict the value of exports and imports of agricultural sector in South Africa. He concluded that the ARIMA method had less percentage of forecasting error than others. Moreover, Ghafoor and Hanif (2005) first investigated the past behavior of imports and exports in Pakistan during 1971- 2003 and then used the ARIMA methods to forecast the trading patterns of Pakistan from 2004 to 2010. Gilanpour and Kohzadi (1997) used this process and, based on monthly data for the period of January 1975 to December 1989, predicted the Thai rice prices. In this study, the best model of ARIMA was chosen according to Akaike and Schwarz Bayesian criteria. Afterward, rice price was predicted and compared with the actual values in the months of January, February, and March 1990. The results showed that rice price was not static in the international market and the occurrence of any shocks in the market would follow long-term effects. Mojaverian and Amjadi (1999) forecasted the price of citrus using common methods of time series and trigonometric functions . The main objective of their paper was to compare the predictive power of these methods by considering the effects of seasonality. For this purpose, by using monthly data, simulation was made during 1982 to 1995. Finally, the predictive power of alternative models was compared for the year 1996 using mean squared error (MSE), mean absolute deviation (MAD), and mean absolute percentage error (MAPE). The results showed that the trigonometric functions were more efficient than the time series method in terms of predicting outside the sample.

Based on these studies, despite the existence of various methods in forecasting, experimental conditions cannot be generalized to actual occurrences for real-time expectation purposes.

3. THEORETICAL FOUNDATIONS

Forecasting is usually done based on the past behavior of the variable as non-parametric models of exponential smoothing and parametric models of time series. These models often forecast based on the past behavior of the variables. In general, in time series models, instead of stress on the theoretical basis for investigating the behavior of economic variables, it is believed that behavioral characteristics of variables must be inferred from their observations. Time series models are a set of models that consist of two general categories of univariate and multivariate models. Autoregressive integrated moving average (ARIMA) and autoregressive integrated moving average with X (ARIMAX) are the most important univariate models and autoregressive distributed lag models (ARDL), vector autoregressive (VAR), and vector error correction models (VECM) are in the group of multivariate models (Besler and Brandt, 1979).

In the univariate time series models, future behavior of the variable will be modeled based on its past behavior and it is assumed that, in order to forecast the behavior of the occasion variable, the data, except those of its series, are not needed. In these models, y variables are explained by the past values and error terms. In other words, the information contained in the probability distribution of a series ($y_1,...,y_n$) is the basis for inferring and forecasting events y_{n+1} (Nelson, 1973).

Multivariate time series models include a set of techniques which assumes that a variable cannot be explained only by its past and there is other information that is effective in explaining its behaviour. Each of these models represents a specific behavior of variables and shows their special relationships. In this study, in order to forecast the behavior of time series variables, single and double exponential smoothing techniques and autoregressive integrated moving average with X (leading indicator) were used. Each of the techniques that were used for forecasting is explained below:

3.1. Eexponential Smoothing Methods

In the exponential smoothing method, the forecasting value of each variable is the weighted average of its predictive value in the last period and prediction error (Brown, 1959). For example, if f is the predictive value of the interested variable and t is time variable, the following equation will be obtained:

$$F_{t+1} = F_t + \alpha e_t \quad (1)$$

In the above equation, α is smoothing parameter and its value is between zero and one. Its value is determined using trial and error so that minimum prediction error is obtained. If this equation is considered without any time trend, it will be single exponential smoothing; if time trend is considered, it becomes double exponential smoothing (Hendman et al., 2008).

3.2. Arima Methods

To use this method, characteristics of the variable are constant over time. Thus, the variables used for forecasting in the models should show stationary trends over time (Noferesti, 1999). Thus, before estimating the models, the stationary state of the variables used in the models needs to be ensured. ARMA method consists of two classes of autoregressive (AR) and moving average (MA). Characteristics of autoregressive and moving average models are gathered and make up the model called ARMA (p, q), in which p variable is the lag numbers of studied variables and q is the lag number of error term. If the time series is differenced by d times in order to show a stationary behaviour and then is given as ARMA (p, q) model, it will be said that the first time series is an autoregressive with moving average process from orders p, d, and q and is represented as ARIMA (p, d, q) (Gujarati, 1995). If there are other independent variables such as dummy variable in this model, the corresponding model without any difference would be ARMAX (p, q) (Teaser Yang et al., 1995). One of the most common methods of forecasting variables is ARIMAX methods, because it is used as both dependent variable and leading indicator for determining the future value of the variable. In fact, ARIMAX method has been used in various fields such as forecasting the number of tourists (Akal, 2004; Lim et al., 2008) and forecasting the number of cars that daily pass streets (Williams, 2001). In the field of economic forecasting, Claveria et al. (2007) focused on adding the leading indicator that increased the accuracy of the model.

In general, ARIMA method was introduced by Box and Jenkins (1970). This model contains three parameters of p, d, and q and has three steps including identification, estimation, and forecasting (Anders, 2004):

The first step is diagnosis (identification), in which actual values of q, d, and p are determined. To this end, Dickey-Fuller test and autocorrelation and partial autocorrelation graphs are used.

The second step is estimation, in which parameters of the model are estimated. In this study, the ordinary least squares method was used.

The third step is forecasting, in which the final model is used for forecasting time series. In many cases, the forecasts obtained from estimating the ARIMA method, which are especially used for a short term, are more reliable than the traditional econometric modeling approach.

At present, the success of time series models in the field of forecasting the economic variables such as price and inflation rates has led to their wider use in this regard. They are often used in formulating the behavior of these variables and forecasting their future values. However, the question is that: Which models should be practically chosen from among different time series models and how can be this selection done? The answer of this question is important, because in several studies, only one of the above models have been selected as the forecasting model, based on which the forecasting has been done. In other words, the most important issue that exists in using time series models is the identification of appropriate models from among the wide range of these models which have minimum forecasting error (Fomby, 1989).

Discussions about the assessment accuracy of forecasting in economic models have attracted the attention of many economists in recent decades and several theoretical and experimental works have been conducted in this context (Moshiri and Morovat, 2006; Moshiri, 2001; Tayebi et al., 2009). In order to evaluate the accuracy of the forecasts made by different methods, different indices are used. The index that was used in this study was mean absolute percentage error (MAPE). Equation (2) shows the method of calculating this criterion.

$$MAPE = \frac{1}{T}\sum_{t=1}^{T}\left|\frac{P-A}{A}\right| \qquad (2)$$

In the above equation, P and A represent the predicted and actual values, respectively. The forecast error criteria represent the accuracy of forecasting (Sengopta and Datta, 2014).

3.3. Data

The data used in this study were obtained from the statistics by Iran Customs Administration. The websites of Iran Customs Administration and Tehran Chamber of Commerce, Industries, Mines, and Agriculture were used for data extraction. Share of each country is stated as a percentage and dummy variables are used to study the effect of sanctions on trading partners according to Approval 1737 of UN Security Council in 2006.

4. METHODOLOGY

The method used in this study was autoregressive integrated moving average with X (ARMAX) and its theoretical foundations were described in the previous section. Usually, in order to obtain a model that is effective in providing forecasting, time series data are used. Irregular fluctuations in a time series include scatter movements in a time series that do not follow the regular and given patterns. In the studies in which time series data are used, the stationary state of the variables should be examined. So, in the present study, the Dickey Fuller and adjusted Dickey Fuller tests were used in order to detect the stationary state of the time series variables. Afterward, ARMAX and single and double exponential smoothing methods were used[3]. ARIMA method was introduced by Box and Jenkins (1970); this model is in fact the augmented ARIMA model that has three parameters of p, d, and q. ARIMA(p,q) models are defined as follows:

$$\Phi(L).\Delta^d y_t = \theta(L)\varepsilon_t \tag{3}$$

where $\theta(L)$ denotes the moving average polynomial:

$$\theta(L) = (1 - \theta_1 L^1 - \theta_2 L^2 - \cdots - \theta_p L^p) \tag{4}$$

$\Phi(L)$ is autoregressive polynomial defined as equation (5):

$$\Phi(L) = (1 - \Phi_1 L^1 - \Phi_2 L^2 - \cdots - \Phi_p L^p) \tag{5}$$

y_t, Δ^d, and ε_t denote the dependent variable in period t, the symbol of difference from d degree, and the white noise process, respectively. By adding leading indicators (which was dummy variable of sanctions in this study) to the previous equation, equation (6) can be obtained:

$$\Phi(L).\Delta^d y_t = \Phi(L)X_t + \theta(L)\varepsilon_t \tag{6}$$

Where $\varphi(L)$ is a Lag Polynomial defined as

$$\varphi(L) = (1 - \varphi_1 L^1 - \varphi_2 L^2 - \cdots - \varphi_r L^r) \tag{7}$$

X_t denotes the sanctions dummy variable and vector of leading indicators at time t. Equation (6) shows the general form of ARIMAX (p, d, q) equation (Jantarakolica and Chalermsook, 2012).

The ordinary least squares (OLS) method is used to estimate a variety of ARIMA models. Also, vector autoregressive model in the conditions with constant variance of error term of model and lack of serial correlation is separately estimated using ordinary least squares (OLS) for each of the equations in the system.

After estimating the model, in order to evaluate the ARIMAX model, the models with higher degrees of autoregressive and moving averages were estimated and compared with the initial model. Then, the appropriate models were determined based on stochastic error terms of estimation. In addition to estimating ARIMAX methods, the following methods were used for forecasting.

4.1. Single Exponential Smoothing Methods

This method is based on the work of a thermostat. When errors are large (positive), predicted values increase and vice versa. So, this process is frequently repeated until the error goes to zero. This method is defined as follows:

[3] Estimates and tests were done using EVIEWS 8.0 software.

$$F_{t+1} = F_t + \alpha e_t \quad (8)$$

Where α is a coefficient between zero and one and e_t is the difference between the actual and predicted values. The only problem in this method is in determining the values of α andF_t; If two parameters are determined, calculating the forecast for the next period will be easily possible. This expression is equivalent to:

$$F_{t+1} = F_t + \alpha(Xt - F_t) \quad (9)$$

Series average is usually is used as the first forecast in primary data and is similarly calculated for the rest of years. To calculateα, values of 0.1 to 0.9 are placed in the primary data and each of them which leads to a lower MSE is selected (Haykin, 1994).

4.2. Double Exponential Smoothing Methods

This method is similar to single exponential smoothing methods, with the exception that trend is added to it. It is defined by the following three equations:

$$F(t) = \alpha(X_t) + (1 - \alpha)F(t - 1) \quad (10)$$

$$F(t) = \alpha(F_t) + (1 - \alpha)F^{'}(t - 1) \quad (11)$$

$$f(t + h) = f^{'}(t) \quad (12)$$

In the above equations, $F(t)$ and $F^{'}(t)$ are the forecasts using single and double exponential smoothing methods, respectively.

After estimating the above models, the optimal model was selected with the highest predictive power and the lowest percentage of errors using the mean absolute percentage error (MAPE) index for each of the countries.

5. DATA ANALYSIS RESULTS

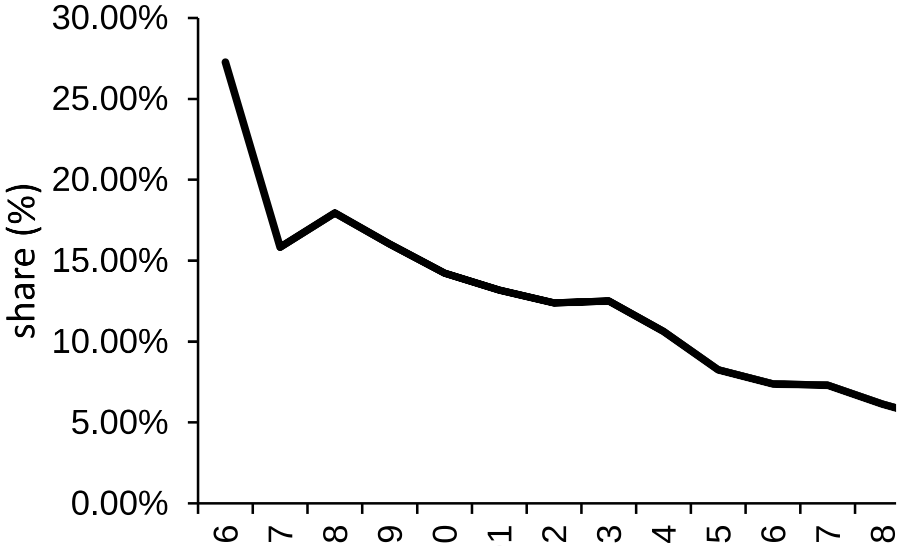
5.1. Explanation and Analysis

In this section, first, share of each Iran's trading partners of agricultural exports have been investigated using graph analyzing and then predicted by econometrical techniques.

5.1.1. Share of Five Selected Trading Partners of Iran

According to the existence of fluctuations in the 10 major trading partners of Iran, only 5 countries were considered which constantly had a considerable share in Iran's agricultural exports over the past few years. In recent years, by releasing the statistics about Iran's exports and imports in 2012, Iran Customs Administration notified that Germany was the sixteenth trading partner of Iran in the mentioned year. Iranian exports to Germany was $ 350 million in the reported period. Figure 1 shows that the reducing share of Germany from Iran's agricultural exports as one of the trading partners. While the share of this country was almost 27% in 1996 and was considered as the first trading partner of Iran until 1999, this trend had been declined with the intensification of sanctions since 2005. As can be observed in Figure 1, share of Germany from Iran's agricultural exports reached less than 10% in 2005.

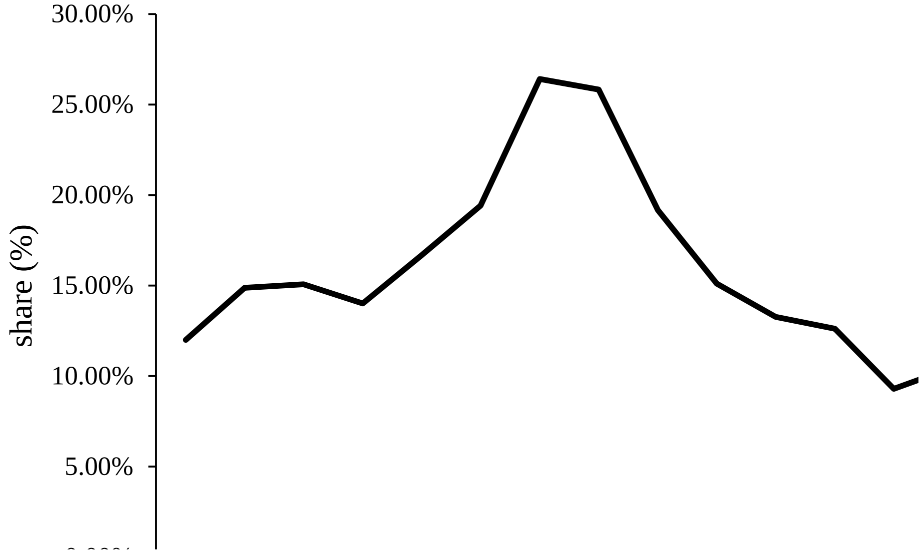
Figure1. Germany's exporting share of agricultural products during 1996-2012



Source: Data released by Islamic Republic of Iran Customs Administration

United Arab Emirates has been another studied trading or intermediary partner and, according to the statistics released by Iran Customs Administration, it was the third trading partner in 2012 by importing $ 3.5 billion. Figure 2 shows that the share of this country from Iran's agricultural exports had been almost increasing until 2003; but, with the sanctions in 2005 and in competition with Iraq, this value was decreased.

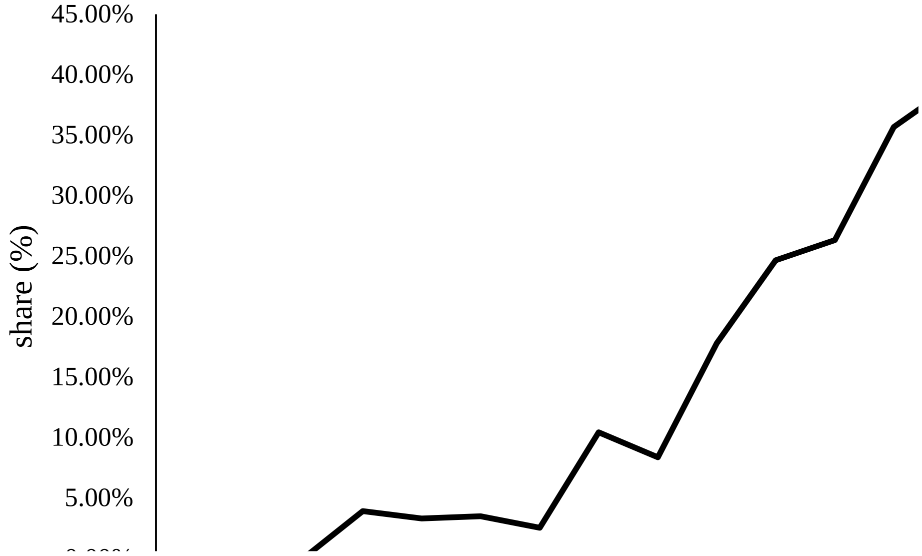
Figure2. Emirate's exporting share of agricultural products during 1996-2012



Source: Data released by Islamic Republic of Iran Customs Administration

Iraq, by occupying the position of the UAE, became the largest trading partner of Iran in terms of the value of non-oil exports in 2005 (except, gas condensates). Figure 3 shows that, although the share of this country from Iran's non-oil exports was less than 5% in 1996-2002, its trend was ascending so that, by importing non-oil commodities from Iran with the value of $ 6.25 billion as the largest trading partner, it had constantly had the share of over 20% up to 2012.

Figure3. Iraq's export share of agricultural products during 1996-2012



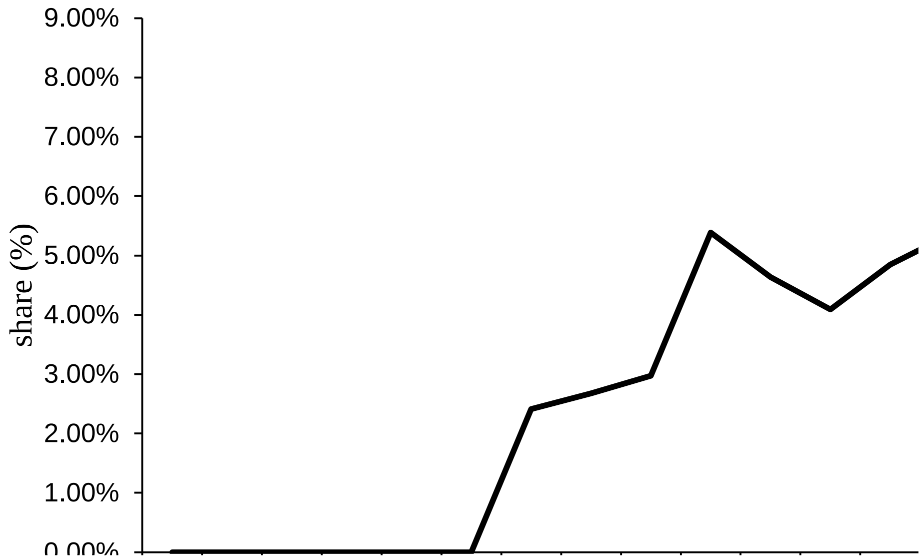
Source: Data released by the Islamic Republic of Iran Customs Administration

Figures 4 and 5 represent the shares of both Hong Kong and Afghanistan from Iran's agricultural exports as a part of non-oil export. Hong Kong since 1997 and Afghanistan since 2002 had been among the ten major export partners of Iran. Considering the high share of Iraq from Iran's export, these two countries had appropriate second and third places in recent years with the share of less than 10% .

Figure4. Hong Kong's export share of agricultural products during 1996-2012

Source: Data released by Islamic Republic of Iran Customs Administration

Figure5. Afghanistan's export share of agricultural products during 1996-2012



Source: Data released by Islamic Republic of Iran Customs Administration

5.1.2. Analysis

Considering that most of the time series data are non-stationary, stationary state of these variables should be investigated before estimating the model. Many tests are done to check stationary state of variables, the most widely used of which unit root tests are including Dickey-Fuller and Phillips-Perron. Stationary state of the variables was tested by augmented Dickey Fuller in this model and the table shows the unit root test results. To ensure the unit root test results, values of the unit root tests are reported as follows.

Table 1. Unit root test results

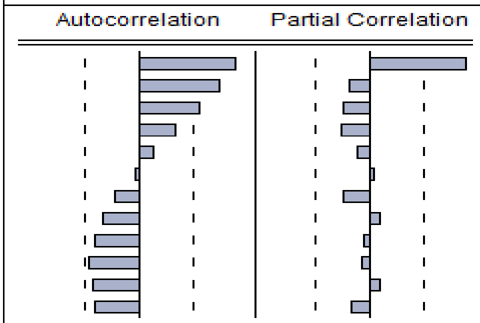
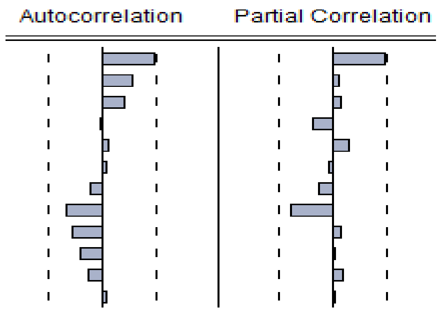
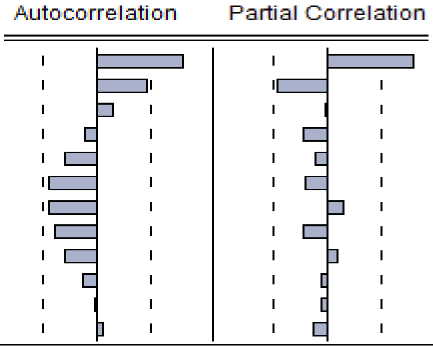
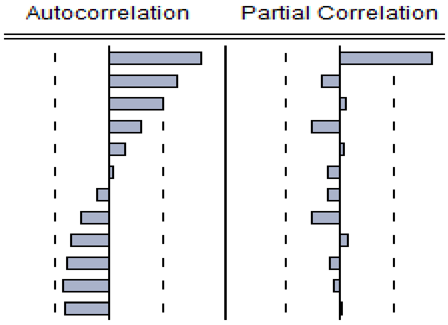
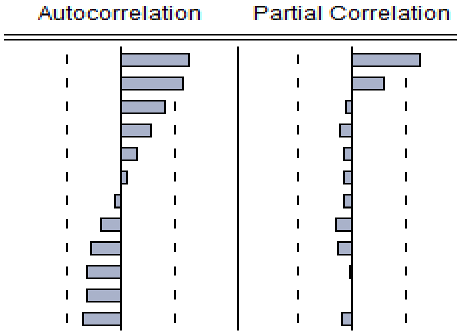
Variables	Test	Critical value	Calculation value	Significance level	Test results
HK	ADF	-4.72	-5.54	1%	I(1)
Irq	ADF	-3.32	-3.53	10%	I(1)
Afg	ADF	-3.36	-3.60	10%	I(0)
UAE	ADF	-3.34	-3.64	10%	I(2)
Ger	ADF	-3.38	-3.83	10%	I(1)

Source: Research findings

As can be seen, the variables of shares of Hong Kong (HK), Iraq (Irq), and Germany (Ger) were stationary after the first differencing. Also, the variable of the share of United Arab Emirate (UAE) was stationary after two differencing, while the variable of Afghanistan's share was stationary.

To specify which of the studied variables were associated with their past, the correlogram diagrams including autocorrelations (AC) and partial correlations (PAC) were drawn. Table 2 shows that the variable of Hong Kong's share did not depend on its prior period, while the share variables of Afghanistan and Germany depended on two prior periods. The variable of Iraq's share depended on three prior periods and that of Emirate's share depended on one past period. Although these charts can be used to select the degree of AR and MA of the models, but in order to achieve a model with fewer error percentage, other grades of moving average (MA) and autoregressive (AR) were evaluated.

Table 2. Results of the correlogram graphs

AC & PAC	Variables	AC & PAC	Variables
	Irq		HK
	UAE		Afg
			Ger

Source: Research findings

In this study, because the forecasting was based on the actual behavior of the variable in its past, all of the variables that were stationary after one or two differencing were used without any differencing. Further, to ensure the accuracy of estimation, after estimating different models, stationary test of the error term for each model was done to denote that the error term of each model was stationary; otherwise, the model estimation would be wrong in terms of specification error of the models. To determine the parameters p and q for each model, PAC and AC graphs and Akaike criterion were used, respectively, the values of which are given in table 3 by considering outsourcer and within-sample errors. For example, the selected Iraq models, due to less internal sample errors, was an ARMAX (5, 0, 2). Note that the fourth lag of parameter q and first lag of parameter p was removed using restricted F test. In the next step, the selected models were estimated by ordinary least squares methods and stationary tests on the residuals obtained from the estimated model which specified that the residuals were stationary. The related results are demonstrated in table 4.

Table3. Error percentage of forecasting in ARMAX method

Variables	Forecasting method	Within-sample forecast error	Outsourcer-sample forecast error
HK	ARMAX(0 ، 0 ، 0)	2.26%	1.68%
	single	30.12%	-
	double	28.98%	-
Irq	ARMAX(2 ، 0 ، 5)	2.87%	0.41%
	single	4.48%	-
	double	14.55%	-
Afg	ARMAX(2 ، 0 ، 4)	0.44%	0.09%
	single	12.90%	-
	double	5.93%	-
UAE	ARMAX(1 ، 0 ، 2)	4.92%	0.79
	single	10.00%	-
	double	12.92%	-
Ger	ARMAX(2 ، 0 ، 5)	3.93%	0.99%
	single	34.65%	-
	double	41.13%	-

Source: Research findings

Table4. Results of ADF test for the fitted residual

Residuals	T-statistics
Res_{HK}	-5.32*
Res_{Irq}	-7.49*
Res_{Afg}	-4.24*
Res_{UAE}	-8.78*
Res_{Ger}	-5.92*

Source: Research findings
*Significance at level of 1%

5.2. Results

After selecting each model, the share values for each partner of Iran's export can be forecasted during 2013- 2015. The predicted values for this period are reported in table 5. Forecasting average of this method in the predicted years are given in the last column of the table.

Table5. Forecasted values by ARMAX methods

Variable	Method	2013	2014	2015	Mean
HK	ARMAX(0،0،5)	7.39%	5.59%	6.29%	6.42%
Irq	ARMAX(5،0،2)	31.33%	28.71%	27.56%	29.20%
Afg	ARMAX(4،0،2)	7.68%	7.39%	7.09%	7.38%
UAE	ARMAX(2،0،1)	13.63%	14.22%	14.67%	14.175
Ger	ARMAX(5،0،2)	4.45%	4.75%	5.23%	4.81%

Source: Research findings

6. Conclusion

The purpose of this study was to forecast the share of each of the 5 selected export partners of Iran with an emphasis on agricultural exports and considering the sanctions until the end of the fifth development plan. In this regard, sanctions were assumed to be effective for the share of Iran's trading partners. Also, by continuing international sanctions against Iran, this impact would be such that Iraq would remain the largest trading partner of Iran. Based on the achieved results, shares of Germany and United Arab Emirates (UAE) would rise up the end of the fifth development plan; but, the share of Iraq as the first export partner of Iran would decrease as the same time. Such a reduction could be also found for the cases of Afghanistan and Hong Kong. Therefore, by considering the ranking, the position of export partners in Iran's agricultural products would be changed to Iraq, UAE, Afghanistan, Hong Kong, and Germany at the end of the fifth development plan. It should be noted that Iraq, UAE, and Afghanistan would be located on the first to third places in the case of continuing sanctions. The most important objective of these oppressive sanctions is to enfeeble national economy by restricting trade with other countries. Since trade and economic development are two sides of a coin, the amount of trade development and level of exchange with other countries have a direct relationship with the level of well-being of people and strength of national economy. Under these imposed sanctions which limit Iran's oil exports and decline oil revenues, Iran's currency market is thirsty for new foreign exchange sources. Accordingly, maintaining and developing non-oil exports are the important issues. On the other hand, the government plays an important role in strengthening the development of non-oil exports. A part of the government's task is a focus on targeted programming to develop trade relations with the countries which are more beneficial for the national economy. Therefore, the aids that should be made by the government to trade development with other countries can be divided into several categories:

1- Identifying potential business opportunities in new markets and introducing them to the traders and merchants of the private sector;

2- Trying to eliminate non-tariff barriers on the way of trade development; and

3- Trying to establish "free trade agreements" with other countries.

Economic sanctions in the present situation of Iran are a reality and have a direct effect on its business opportunities with the world. So, although we may not be able to reduce or eliminate these sanctions, at least we should have accurate knowledge about them which lets us plan for compensatory policies in the best possible form. However, the neighbouring countries of Iran, due to their special characteristics and grants (such as common land and sea borders, small distance, and common cultural, religious, linguistic, etc. issues) are of strategic importance compared with other partners. So, all of these countries must be placed in priority for any plans to foreign trade development. On the other hand, there is the possibility of re-export produced goods for trans-regional markets through neighboring countries. In the case of realizing this goal, the impact of these sanctions on Iranian foreign trade can be reduced. Existence of the old political and economic relations between the neighbors can lead to minimizing the effect of international political tensions. So, if reducing the impact of abroad pressures on the national economy is aimed for, share of the neighbors should be increased in foreign trade.

The predicted results clearly confirmed the idea that our trade relations with the neighboring countries have less vulnerability from international sanctions and programming to increase the share of these countries in our foreign trade will lead to reduced risk of vulnerability to the national economy caused by international political tensions.

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ETHICAL CONSIDERATION

Authenticity of the texts, honesty and fidelity has been observed.

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Planning and writing of the manuscript was done by the authors.

CONFLICT OF INTEREST

Author/s confirmed no conflict of interest.

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