



An inspection of the relationship between economic growth, employment and export in agricultural sector in Iran (with emphasis on commercial and currency policies)

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ABSTRACT

Objective: The economic growth of agriculture sector and the improvement of its export as fundamental objectives in the country economical plans on one hand and unemployment and expectations of generating employment by economic sectors including agriculture on the other hand have caused simultaneous attention to the three sensitive and important variables of above mentioned in regulating the agricultural policies and the way these variables are related is also of importance. **Methodology:** For the very same purpose, in this study by using the statistics related to agricultural sector from 1971 to 2004 and by drawing on methods of econometrics, we have inspected the effective factors on economic growth in agricultural sector, its employment and export and the prevailing link between them. The resulting indicates the effect of employment, capitals and productivity of producing factors on economic growth of agriculture, the effect of agriculture capitals and export on employment and finally the effect of agriculture growth, relative indicator of agricultural export price and supportive and exchange policies on agricultural export. **Results:** According to the results, the necessity of investment increase, depreciation decrease and the productivity improvement of producing factors for the realization of higher economic growth, concentration on investment development through raise in capital stock and regulating strategies related to export development in order to develop employment generation in agriculture. **Conclusion:** Following policies of producing competitive products in agricultural sector, reform of exchange rate and keeping and expanding supportive policies (giving out export prizes) in order to expand agricultural export must be taken into account by governors and politicians.

1. Introduction

1.1 Introduction and Expressing the Issue

Three Macro variables of economic growth, employment (unemployment) and Trading are considered as part of important discussions of Macro Economy and politics and country's economic programs. Meanwhile, employment (unemployment) mainly because of special social consequences has been known as one of the main indicators of estimating economy. The resolving of unemployment is much more important than providing employment. In other words, in many societies (including Iran) resolving unemployment through employment (productive or non-productive) is more important than the positive role of labor in economic growth and as a result they have paid attention to escaping from the social and political consequences of unemployment. In current situation of our country also, the level of unemployment in urban and rural areas are high and the immigration of many rural unemployed (unemployed farmers) towards urban area has become a big issue for society and government. For this matter, the statesmen and politicians try to use every tool to deal with the mentioned issue. Using Monetary, Financial and Trading tools because of fast and spread effects can be considered as an effective option in this path. According to the theoretical basis related to the employment, unemployment, the investment and economic growth have been

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known as a well-known factor in order to provide the wide jobs opportunities in Economy. The role and position of foreign commercial development specially exports through providing direct job opportunities (in service department) and indirectly (in production department) to provide employment in the economy is a fact. Meanwhile, the high dependency of foreign commercial status of an economy to the currency and trading policies and domestic production potentials on economy is really obvious. Non-comprehensive view in our country, caused that we are not successful in this field although we have executed dispersed politics of employment. Still we could not receive the clear political prioritization, through categories of economic growth, employment and Non-Oil Export's development (due to interaction effects) by statesmen and politicians. Whenever, in the country's economic programs, economic growth and Non-Oil Export's development take in to consideration, employment and resolving the unemployment directly or indirectly will be zoomed out. Because decreasing unemployed is prior to providing productive and effective employment on economic growth. Because the magnification of unemployment and employment issues made the moderation of labor and increase of productivity in the next levels of importance. These political inconsistency in the agricultural sector are more significant as they are more practical than other sectors of country's economic. It seems that with acquisition of knowledge through methods and mutual interaction of discussed variables which means employment (unemployment), export and economic growth of agricultural sector, we can help to codify more accurate the employment's politics of this sector. In addition to this, through identifying the effective factors on economic growth and exports in agricultural sector, providing policies to improve economic growth and exports' developments of this sector is possible.

1.2 History of Research

According to the extension of research's topic, for example we can mention some studies about investigation of the relation between export and economic growth, export and employment, investment and economic growth, exchange rate and export and etc.

Jung & Marshal (1985) have done their researches with Time Series Data of 37 developing countries in a Time Period of (1950-81), they have used Granger causality Theory for the cause investigation. The results of their research will support the export led growth in only four countries of Indonesia, Egypt, Costa Rica and Ecuador.

Ram (1984, 1987) used the data of 88 countries during period of 1960 – 1982, and they have concluded with the Granger Causality test in more than 80 percent of countries, there is a one-sided positive relation from export to growth, and in fact the export led growth theory will be supported.

Ahmad & Harnhirun (1995) in their research with using Data Series Technique, have used the countries data ASEAN for the periods of 1966-90. The data have not supported generally the cohesion of growth and export. Singapore is the only country that the above-mentioned researches could find a mutual causality between two variables of export and economic growth.

Sinha (1999) have researched the export's instability effect on economic growth of 8 Asian countries in one Neoclassic Production function through Feder Method (1983). The researches which have followed up the Feder Method in investigation of relation between export and economic growth, have postulated the economic growth as a function of growth's rate of different inputs such as labor, investment and export. Sinha has completed this production's function with adding an unstable criterion of export which consists of the absolute value of the actual export's deviation from the moving average of 5-years export. The variable's stability test has been done in order to prevent suspended Regression estimation through moderated Dickey - Fowler method. The convergence of variables has been studied with Johansson test and finally have been estimated Vector Equilibrium Correction Model (VECM) in order to investigate the short term and long-term relations of variables. The obtained results showed that there is a negative relation between export's instability and economic growth in countries of Japan, Malaysia, Philippines, and Sri Lanka. However, the mentioned relation is positive in countries such as South Korea, Myanmar, Pakistan and Thailand. In most of the cases, the investment's variable has a positive relation with economic growth.

Jafari Harandi (2000) in their investigation entitled Non-oil Export and employment have been reviewed the relation between Non-Oil Export and employment in Iran in time period of 1959-1997. In this study expressed that with attention to the importance of Non-Oil exports and its effect on country's economic growth and decrease of dependency to the obtained currency's income from export of oil and oil products and also the current importance of employment in our country, the recognition of effective factors on employment seems necessary in order to resolve problems. This research from effective factors on employment have been focused on Non-Oil Exports. With this theory despite of small share of currency's income from Non-Oil exports from the total currency's income of country, the changes of this variable have a meaningful effect on increase of employment. In order to prove this theory, with respect to the structure of Iran's economy, they will use a model which includes a simultaneous system's equations, with using the Two Stages Least Square (2SLS), the coefficients of desired equations have been estimated. The obtained results from estimation of model, have been confirmed the theory of this research which means the existence of positive meaningful relation between Non-Oil exports and employment.

Haffar Ardestani (2001) have been investigated the relation between export and economic growth of agricultural sector in Iran during 1970-1999. The used methodology in the research is inspired by experimental research based on Granger Causality Relations. The experimental pattern, is the generalization of provided pattern in the research paper of Feder (1983) and in order to investigate the effect of currency's exchange rate on the exports of sector, the variable of currency's actual rate have been entered to the pattern. The stability of variables with using unit's root testing of Dickey-Fowler and the stability of Linear combination will be tested through Johansson's convergences method. In order to study the causality of two variables and identifying the long term and short-term causalities, they will estimate the vector error correction model. The results show that the export's growth of agricultural sector in short and long term will motivate the economic growth of this sector. However, the economic growth of agricultural sector leads the export's growth of this sector in short time. The growth of this sector's capital stock leads to the economic growth in long term, therefore, the growth of employed workforce of the sector will have a negative effect on economic growth of the sector. The growth of labor and capital stock will not have a meaningful effect on the exports of this section in long term. But they are considered as effective indirect factors on export of agricultural section in short term and finally the actual changes of currency's rate do not have a meaningful effect in long term and short term on growth and export of agricultural sectors.

Khalilian and Farhadi (2002) in their article have studied the effective factors on export of agricultural products in period of 1962 - 1999 with using time series analysis and convergence techniques. The experimental results of the research show that the gross domestic product of the country (the capacity of production), relative prices of exports and domestic consumption (internal demands) have a meaningful effect on the exports of agricultural products. However, the effect of exportable effective currency's rate on exports of agricultural products is not meaningful and it is the reason that government's currency's policies in field of agricultural exports in the studied era is inappropriate.

Azarmand and Jafari Samimi (2005) in their article have studied the little relation between economical release and the performance of Macro Economics in period of 1980 - 2001 among 80 countries and have used the indicator of "J.Warton" as a credible indicator to measure the economic freedom. The variables of economical average growth, the average rate of investment to the gross domestic product, the capita income and the average rate of inflation as explanatory indicators expressed the performance of macro economy. The results of estimation of patterns show that the primary level of economic freedom and also its growth have a positive impact on the economical average growth and also the increase of economic freedom can increase the positive effect of investment on economic growth. For investigation of the indicator's impacts of economic freedom on growth, each impact will be studied separately, and among the indicators, the variables of property rights and bureaucracy have a meaningful and positive relationship with economic growth. Brothers Partners and Safari (2005) in their study, in order to measure the effects of labor, investment and exports on economic growth, while emphasizing that the process of economic integration, is influenced by liberalization of restrictions of goods, and services, the flow of investment and flow of labor, and the global developments in the field of population, capital flows, and exports of goods and services, have been made this process to the controversial area in most countries of the world, have mentioned that although the developing countries are involved in the process of economic integration, but its main benefits are awarded to the world's industrial regions. The results for the estimation of theoretical model of the article with different methods suggests that in the general model (includes 127 countries) and also in regional models, the capital flow (Investments), the flow of labor (population growth) and the flow of goods and services (export's growth) have been explained this process, but the severity of the impact of these variables (elasticity) on the economic growth in different regions is different.

2. Materials and methods

In this research with using Time Series Statistics 1971-2004 in Agricultural sector and with help of one transactions set (including three transactions of economic growth, employment and the export which is related to agriculture), accompanied with identifying the available relation between three variables of employment, economic growth and export of agriculture in Iran, the effects of country's currency and trade politics especially during the programs of economic development will be investigated. The required statistics and information have been collected from official resources (Central Bank and Cargo of Islamic Republic of Iran). To estimate the Economic Models, they will use the economical software which is called E-Views and in order to ensure about the obtained results of estimated models, the required economical exams which means the linear, stability, convergence and solidarity will be done. The transaction of economic growth, employment and agricultural exports have been extracted as below as:

A) The Transaction of Economic growth

It is expected that in addition to Capital (K) and Labor (L), the currency's income of exports (oil and non-oil) and Total Factor Productivity (TFP) can also have an effect on volume of GDP as an index of economic growth:

$$GDP = [AL]^{a1} K^{a2} X^{a3} TFP^{a4} e^v \quad (1)$$

$$\ln GDP = \ln A + a_1 \ln L + a_2 \ln K + a_3 \ln X + a_4 \ln TFP + U_1 \quad (2)$$

Explaining the existence of exports' variable (X) in Iran's Economic growth's function with Dual Gap Theory is possible. According to this theory, Iran's Economy's Functioning based on the currency's income, in addition to the labor and investment, has a high reliance on the obtained capacities of foreign currency's income (for the import of intermediate and capital commodities and also supplying a big portion of construction and investment costs of government). Therefore, the incomes of export can be an important factor in the Iran's economic cycle including the agricultural sector.

The TFP index is calculated from division of value added on the index of Total Factor Productivity (QI):

$$QI = L^a K^B \quad (3)$$

L is number of employees; K is the current investment and a and B are in order elasticity of providing labor and capital stock.

B) Employment's Transaction

According to Klayn (2000, Jafari Harandi), if we could build the total production and the factor of investment from other relations in the specified model, we can easily extract the labor's transaction from normalizing the production function of Kab Daglas to the labor. K is an exogenous variable and GDP will be provided from the related function. In order to study the export's effects, the exports variable will be placed in the related transaction of employment.

$$\ln L = B_0 + B_1 \ln K + B_2 \ln GDP + B_3 \ln X + U_2 \quad (4)$$

C) Non-Oil Export's Transaction

There are three theses on the relation of exports and economic growth:

1 - Growth of export is the reason of economic growth

Export \longrightarrow Growth

2. - Economic growth is the reason for growth of export.

Growth \longrightarrow Export

3 - Growth of economy and export are cause and effect of each other.

Growth \longleftrightarrow Export

*The first theory can be explained through the traditional argument of free trade, obtaining currency and indirect effects of trade and development of exports.

*The second theory also can be explained through effect of economic growth on the supply of exportable goods and also through increase of demands and the size of internal market.

Country's non-oil export is affected by factors such as gross domestic product (GDP), relative indicator of exportable goods and etc. To show this matter we can use the below exponential function:

$$XNO = BGDP\theta_1 PXG \theta_2 e^{\nu} \quad (5)$$

$$\ln XNO = \theta_0 + \theta_1 \ln GDP + \theta_2 \ln PXG + U_3(\theta_1, \theta_2 > 0). \quad (6)$$

$PXG = [P_x / P_g] \cdot eR$ Relative indicator for price of exportable goods

$P_x(S)$: The price of exportable goods in dollar

eR: The exchange rate

P_g : The price for domestic goods

In the relative indicator of price for exportable goods because of some reasons such as lack of access to the statistic of price for exportable goods and... instead of numerator which means $P_x(\$)$. eR, they will use the price of wholesale for exportable goods. Therefore, we will have:

$$\ln XNO = \theta_0 + \theta_1 \ln GDP + \theta_2 \ln PXG + \theta_3 D + U_3 \quad (7)$$

$PXG = P_x / P_g$ and in that we have:

P_x : The indicator of price for wholesales of exportable goods and P_g : The indicator of price for domestic goods

D: The imaginary variable (The effects of developing politics of non-oil exports)

In this study, they have used more logarithmic relations instead of linear relations in the equations. One of the advantages of logarithmic relations to the linear relation is that the access to the constant and moderate elasticity of explanatory variables are easier. Another advantage is that the information and data are harmonic and it has been elevated the special share of problems which is caused from anisotropy of variances and the explanatory variables of one line.

With considering the above-mentioned contents, the sum of required equations for the agricultural sector are adjusted as below as:

$$\begin{aligned} (I). \ln AGDP &= \ln A + a_1 \ln L + a_2 \ln K + a_3 \ln XAg + a_4 \ln TFP + U_1 \quad a_1 a_2 a_3 a_4 > 0 \\ (II) \ln L &= B_0 + B_1 \ln K + B_2 \ln AGDP + B_3 \ln XAg + U_2 \\ (III). \ln XAg &= \theta_0 + \theta_1 \ln AGDP + \theta_2 \ln PXG + \theta_3 D_1 + \theta_4 D_2 + \theta_5 D_3 + U_3 \\ \theta_1 \theta_2 \theta_3 \theta_4 &> 0, \theta_5 < 0 \end{aligned} \quad (8)$$

AGDP: Added value in agriculture sector

L: The employment's value in agriculture sector

XAg: Value of export in agriculture sector

PXG: The relative indicator for the price of exportable goods

TFP: Total Factor Productivity of Agriculture

D1: The effect of currency's politics (The currency's exchange rate) (1994 - 2004)

D2: The effects of exports' prizes (2002 - 2004)

D3: The effects of 8-year war (1980 - 1988)

3. Discussion and results

3.1 Econometric Test

3.1.1 The same linear

The investigation of the same linear of explanatory variables in estimated functions shows that none of these functions have the severe problem of the same linear (Table 1).

Table 1. Investigation of the same linear explanatory variable of estimated function

PXG	LNTFP	LNAGDP1	LNAGDP1	LNL	LNK	
-0/14	0/22	0/44	0/68	0/53	1	LNK
-0/5	-0/47	-0/31	0/20	1	0/53	LNL
0/46	0/71	0/82	1	0/20	0/68	LNAGDP1
0/73	0/96	1	0/82	-0/31	0/44	LNAGDP1

0/82	1	0/96	0/71	-0/47	0/22	LNTFP
1	0/82	0/73	0/46	-0/5	-0/14	PXG

Source: Results of Investigation

3.1.2 Autocorrelation

In order to ensure about the lack of autocorrelation, they will use the camera indicator of Watson (for normal equations) and H of Watson camera (for Auto Regressive Equations). In estimation's equations based on these indicators, there is no autocorrelations.

3.1.3 Stationary

Investigation of stability (static) of used variables in the equations shows that some of these variables which are in the level, are stationary and other variables will be static with the difference of one or two (Table 2).

Table 2. The obtained results of researches for variable's stability

Variable	Stability Status	Statistic of Dickey - Fowler
LNAGDP	I (0)	4/53*
LNL	I (1)	3/89**
LNK	I (1)	2/05**
LNAG	I (1)	3/88*
LNTFP	I (0)	2/80*
LNPXG	I (1)	4*
D1	I (1)	3/93*
D2	I (1)	3/93*
D3	I (1)	3/74*

Source: Results of Investigation *1 percent **5 Percent

3.1.4 Convergence

With attention to non-stationary of some variables, in order to prevent fictional regression, using the difference of non-stationary variables is essential. It is obvious that using the difference in variables will cause elimination of its long-time effects and as a result the lack of generalization of obtained results and lack of forecasting in future. In these cases, investigation of convergence of models could be useful. It means that in case of convergence of estimated models, without using the difference in non-stationary variables, they can both ensure about the non-fictional of models and keeping the power of forecasting and generalization. The results of exam in convergence of models will be showed based on the camera's tests of Co integration Watson Regression (CRDW) and Engel - Granger (E-G), and all three equations are convergent (Table 3).

Table 3. Determination of models' convergence status with using Engel - Granger Tests and CRDW

Model	E G			CRDW		
	Statistics of ADF	Results	Level	Statistics of DW	Results	Level
Economical Agricultural Growth	4/01	Convergent	1%	2/1	Convergent	1%
Employment in Agriculture	2/3	Convergent	5%	0/85	Convergent	1%
Agriculture's Exports	3/3	Convergent	5%	1/49	Convergent	1%

Resource: Results of Investigation

3.2 Estimation and Analyzing the Equation

3.2.1 The Economic growth on Agricultural Sector

The obtained results from equation of economic growth (Table 4) shows that from required factors of labor, investment and total factors productivity based on the theory has a meaningful direct effect on economic growth of this sector. According to that the increase of total factors productivity can improve the economic growth of agriculture. The results of investigation of agricultures' exports show that this variable doesn't have a meaningful effect on the economic growth of this sector. According to that, we can mention two reasons: first the exports of this sector is not that much (4/2 percent of total added value of the section during the investigation's period) to leave a significant effects on the economic growth of this section and second according to the structure of Iran's Agriculture Production and lack of export's views authority and lack of signaling of exports to the production section of that, agricultures' exports cannot be a shock on the growth of this sector and if there is any benefits on the exports, will be given to the exporters (Service Section) not the producers (Agriculture Section). Due to the elasticity of calculation, achieving to the higher economic growth in agriculture section based on the shortage of investment in this section, it will be faster with the focus on the increase of total factors productivity. However, in view to the need of increase in the productivity and injection of technology, emphasis on the increase of employment in this section cannot be considered as a correct policy.

Table 4. Effective factors on economic growth of agricultural sector

Explanatory Variable		Unit	Factor (Elasticity)	T (Student)
lnk	Agricultural Capital Stock	Milliard Rials	0/20	15 *
lnL	Agricultural Labor	person	0/35	2/1**
lnXAg (1)	Export of Agricultural Sector	Milliard Rials	-0/0005	-0/1

lnTFP	Total Factors of Productivity	Milliard Rials	0/98	33*
C	Width from Origin	-	-0/69	-0/26
R^2			0/99	
D.W			2/1	

Source: Results of Investigation *1 Percent **5 Percent

Employment is a dependent variable to the several economical and non-economic factors. Among economic factors, the role of factors such as investment, economic growth and exports are more significant. The obtained results from estimation of employment's equation shows that the increase in the capital stock of agricultural sector as a complementary input and the spread of agricultural product's exports have a positive meaningful impact on the level of employment in the agricultural area. Nevertheless, the ability to attract and using of this investment in the agricultural area has a serious doubt. But among that, agricultural economic growth, doesn't have a meaningful effect on the level of employment in this section. These results from one side can explain the effect of agricultural growth on the employment of other economical sections instead of employment of the same department and on the other hand, indicates the investment's growth path on Iran's agricultural section (Table 5). The elasticity of employment is not related to the capital stock and high agricultural exports and based on the model of width from the origin, we can conclude that the employment in agriculture is more effected by other economical and non-economic factors which is not included in the mentioned model.

Table 5. The effective factors on agricultural employment

Explanations Variable		Unit	Factor (Elasticity)	T (Student)
lnK	Agricultural Capital Stock	Milliard Rials	0/04	2/7 *
lnAGDP	Agricultural Growth	Milliard Rials	0/07	1/5
lnXAg	Export of Agricultural Sector	Milliard Rials	0/01	2/6 *
AR (1)	Interruption of Employment	-	0/91	30*
C	Width from Origin	-	13	23*
R^2			0/95	
D.W			1/89	
H Camera - Watson			0/29	

Source: Results of Investigation * 1 Percent **5 Percent

3.2.2 Agricultural Exports

In order to investigate the impacts of trade politics and also the effect of economic growth of agricultural section on the export of this sector, they have used the normal and imaginary variables. The obtained results from the estimation of agricultural export's equation indicate the effect of all chosen explanatory variables (Table 6). Economic growth of agricultural sector with a break and relative indicator of price for exportable goods of agricultural section (the indicator's ratio of price for wholesale of exportable goods to the price's indicator of domestic goods) directly lead to increase of agricultural exports. The effects of new currency's policies after 1994 (moderation and increase of official exchange rate) and payment of exportable prizes after 2002 directly leads to the increase of agricultural exports. Versus 8-year war as a decreasing factor in the process of Iran's agriculture exports was effective. The calculation's elasticity indicates the high sensitivity of agricultures' exports to the currency's and supportive policies in compare to the relative indicator of price for agricultural exports and the economic growth of this sector. According to this, the boom of export is possible through spread of supportive policies (pay of exporting prizes) and modifying the currency's policies (increase of exchange rate).

Table 6. The effective factors on agriculture's exports

Variable		Unit	Factor (Elasticity)	T (Student)
lnPXG	The relative indicator of agricultural exports' price	-	0/39	3/8 *
lnAGDP (1)	Agricultural Growth	Milliard Rials	0/67	2/8 *
D_1	Effect of currency's policies	-	3/22	23 *
D_2	Effect of export's prizes	-	1/76	14/8*
D_3	Effects of 8 - year war	-	-0/59	-8/6 *
AR (4)	Break of agricultural exports	-	-0/5	-2/8*
C	Width from origin	-	-3/1	-1/3
R^2			0/99	
D.W			1/87	
H Camera - Watson			1/62	

Resource: The results of Investigation * 1 Percent ** 5 Percent

4. Conclusion

The obtained results of this investigation:

1. Employment, capital stock, and the total factors of production has a direct effect on economic growth in agricultural sector, but the meaningful effect of this section's export on economic growth of this section has not been confirmed yet;
2. The influence of employment from capital stock and exports of agricultural section has not directly been confirmed, but this matter on the economic growth of agriculture has not been confirmed.
3. The growth in the agricultural section, relative indicator for the price of agricultural exports and currency's and supportive politics, direct impact and 8 - year war, has left a meaningful reverse impact on the economical exports.

According to the mentioned results, we suggest:

- A) To realize the higher economic growth, the necessity of increase in investment, decrease of depreciation and improvement of total factors productivity will be considered;
- B) In order to spread the employment in agricultural area, in addition to the replacement of educated and expert labor instead of current labor, it is appropriate if the statesmen focus on the spread of investment through increase of capital stock and codifying the strategy in developing agriculture's export in the programs and country's policies especially in field of agriculture.
- C) Following up the policy of producing comparable products in agriculture area, edition of exchange rate and spread of supportive policies (payment of exportable prizes) in order to develop the export of farmer by statesmen and politicians.
- D) Codifying and executing the moderation program of agriculture's labor through decrease and replacement of older labour, low literacy and illiterate to the educated and export labor of agriculture in order to improve the productivity and economic growth of this section

REFERENCES

- Ahmad, J., & Harnhirun, S. 1995. Unit roots and cointegration in estimating causality between exports and economic growth: empirical evidence from the ASEAN countries. *Economics letters*, 49(3), 329-334.
- Azarmand, H and Jafari Samimi. 2005. Investigation of relation between economical release and performance of Macroeconomic in worldwide (1980 - 2001). *Commercial Journal*; 10 (37)
- Feder, G. 1983. On exports and economic growth. *Journal of development economics*, 12(1-2), 59-73.
- Haffar Ardestani, M. 2001. Investigation the convergence relation and mutual causality between export and economic growth in Agriculture field in Iran. Thesis in Master of Agriculture's Economy, Agriculture Faculty, Tarbiat Modarres University, Tehran.
- Jafari Harandi, Z. 2000. Non-oil exports and employment. Thesis of master in Economic Field, Faculty of Economic and Political Sciences, Beheshti University, Tehran.
- Jung, W. S., & Marshall, P. J. 1985. Exports, growth and causality in developing countries. *Journal of development economics*, 18(1), 1-12.
- Khalilian, S and Farhadi. 2002. Investigation of effective factors on exports in Iran's Agriculture's area. *Quarterly magazine of Agriculture's economy and Development*, No. 39.
- Ram, R. 1984. Causal ordering across inflation and productivity growth in the post-war United States. *The Review of Economics and Statistics*, 472-477.
- Ram, R. 1987. Exports and economic growth in developing countries: evidence from time-series and cross-section data. *Economic development and cultural change*, 36(1), 51-72.
- Ram, R. 1987. Wagner's hypothesis in time-series and cross-section perspectives: Evidence from "real" data for 115 countries. *The review of Economics and Statistics*, 194-204.
- Sinha, D. 1999. Export instability, investment and economic growth in Asian countries: a time series analysis (No. 799). Center Discussion Paper.
- The brothers partners, H and Safari. 2005. Measuring the effect of labors variables, Investment and exports on economic growth with using combinational data. *Commercial Journal*; 10 (37)

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