

CHAPTER-VI
ANALYSIS OF RESULTS
AND DISCUSSIONS

CHAPTER-VI

ANALYSIS OF RESULTS AND DISCUSSIONS

6.1. Results of Model I

Results of the Hausman tests show that random and fixed effects models would be an appropriate model to test hypothesis in Model I. GLS, LS and SUR GLS methods have been used in the Model I to test the hypothesis for all five groups, which are Base group, high-income group, upper middle-income group, lower middle-income group and low-income group. Results show that for two groups that are the high-Income group and low-income group, LINDER1 is significant and negative which approves Linder's hypothesis. In the other remaining three groups, which are the Base group, upper-middle income and lower-middle income, LINDER1 is not significant, while in case of Tobit model (only applicable for base group), LINDER1 is also significant and negative. (See Table 6.1 for details)

Table 6.1: Summary of Estimation Results of Model I									
Dependent variable RTRADE		GDPP		GDPIRI		RECHANGEP		LINDER1	
Base	FX and RE	2.58E-06	SS	1.27E-05	SS	-0.637140	IS	-0.000296	IS
	Toboit	3.47E-06	SS	0.000161	SS	-0.050317	IS	-0.001068	SS
HI		-1.07E-06	IS	6.47E-05	SS	-73.23571	IS	-814.8061	SS
UMI		1.64E-05	SS	-3.26E-06	IS	-0.979686	IS	-0.000317	IS
LMI		1.09E-05	SS	1.13E-05	SS	-9.724434	IS	-179.1339	IS
LI		-2.51E-05	SS	5.05E-05	SS	-6.113315	SS	-4531.587	SS
<i>Source: Results of Model I, Chapter V</i>									
*SS: Statistically Significant and **SI: Statistically Insignificant									

6.2. Results of Model II (Gravity Model A)

The GLS method has been used to test the hypothesis for Model II in all groups, i.e. Base group, high-income group, upper-middle income group and low-income group. Results show for four groups, which are Base group (including all countries), high-income group, upper-middle income, and low-income groups, LINDER2 is significant and negative which approves the Linder hypothesis. Only in case of the lower-middle income group, LINDER2 is not significant. LNDIS is significant and negative in all five groups which are Base group, high-income group, upper-middle income, lower-middle income group and low-income group, which implies that there is the negative effect of distance on bilateral trade between Iran and potential trading partners. According to results, except high-income group, the economic size of countries has positive and significant effect on total trade in Base group, upper-middle income group, lower-middle income group and low-income group.

The dummy variable that related to common border is positive and significant and dummy variable for membership in OPEC is negative and significant (only applicable in Base group). Time dummy variable is negative and significant only in case of Base group and lower-middle income group while in remaining three groups is insignificant. (See Table 6.2)

Table 6.2: Summary of Estimation Results of Model II													
Dependent variable LTRADE2	LOG(SUM1)		LNDIS		LINDER2		LOG(POPP)		LOG(REXCHNAGEP)		Dummy*		
											T	B	O
Base	0.56	SS	-1.31	SS	-1.40	SS	0.68	SS	0.04	IS	-0.14 SS	0.91 SS	-1.48 SS
HI	0.55	IS	-0.89	SS	-1.96	SS	1.29	SS	0.12	IS	-0.12 IS	---	---
UMI	1.04	SS	-1.77	SS	-1.75	SS	0.70	SS	0.02	IS	-0.13 IS	---	---
LMI	2.33	SS	-2.13	SS	-0.90	IS	0.67	SS	-0.10	SS	-0.45 SS	---	---
LI	1.54	SS	-4.32	SS	-3.43	SS	0.78	SS	0.018	IS	-0.06 IS	---	---

Source: Results of Model II, Chapter V

* T: Time dummy variable, *B: Border and *O:OPEC

*SS: Statistically Significant, and **SI: Statistically Insignificant

6.3. Results of Model III (Gravity Model B)

GLS and LS methods have been used to test the hypothesis in Model III for the Base group, high-income group, upper-middle income group, lower-middle income group and low-income group. Results show only in the Low Income group, LINDER3 is significant and negative which approves the Linder hypothesis. In the Base group, high-income group, upper-middle income group, LINDER3 is not significant. LINDER3 is positive and significant in the lower-income group. In all five groups, which are Base group, high-income group, upper-middle income group, lower-middle income group and low income group, LNDIS is negative and significant which implies the negative effect of distance on bilateral trade. Except in high-income group and low-income group, size of country and

population have positive and significant effect on share of trade in Base group, upper-middle income group and lower-middle income group.

Dummy variable that related to common border is positive and significant and dummy variable for membership in OPEC is negative and significant (only applicable in Base group). Time dummy variable is negative and significant in case of Base group, high-income group and lower-middle income group while in upper-middle income group and low-income group is insignificant. (See table 6.3)

Table 6.3: Summary of Estimation Results of Model III													
Dependent variable LTRADE	LOG(SUM2)		LNDIS		LINDER3		LOG(POPP)		LOG(REXCHNAGEP)		Dummy*		
											T	B	O
Base	0.67	SS	-1.41	SS	0.11	IS	0.57	SS	0.06	SS	-0.24 SS	0.87 SS	-1.30 SS
HI	-0.31	IS	-0.59	SS	2.37	IS	0.20	IS	0.29	SS	-0.16 SS	---	---
UMI	0.82	SS	-1.71	SS	0.10	IS	0.71	SS	0.02	IS	-0.15 IS	---	---
LMI	2.74	SS	-2.12	SS	1.53	SS	0.84	SS	-0.12	SS	-0.55 SS	---	---
LI	0.51	IS	-4.31	SS	-9.88	SS	0.81	SS	0.01	IS	0.02 IS	---	---

Source: Estimation Results of Model II, Chapter V

* T: Time dummy variable,*B: Border and *O:OPEC

**SS: Statistically Significant and **SI: Statistically Insignificant

6.2. Discussions

In this part, the effect of variables such as Linder effects, economic size, real exchange rate, distance and dummy variables on bilateral trade are analyzed and discussed.

LINDER effects:

The Linder hypothesis implies that the more similar is the demand structure of two countries, the more intensive is the potential trade between these two countries. The Linder Hypothesis in models used in this study is explained under ‘Linder effects’.

Empirical studies¹ formulated the ‘Linder effect’ in terms of degree of dissimilarity of Per Capita GDP. In this study, which is computed for the period 1992 -2012, The Linder Effects describe the effect of dissimilarity of per capita GDP of Iran and its trading partners on bilateral trade. If the Linder hypothesis were supported by results of this analysis, coefficients on this variable would be negative and statistically significant.

Model I: In base group, LINDER1 does not show any significant effect on trade, however, by using censored dependent variable (Tobit model), it shows negative and significant effect on trade (-0.001) (See table 6.1 for details). LINDER1 shows negative and significant effect on trade in HI group (-814) and LI group (-4531) but it does not show any significant effect on trade in UMI group and LMI group.

LINDER1 is not valid in Base group of Model I. However, if censored dependent variable includes in model, LINDER1 shows significant and negative effect. As mentioned in the chapter V in case of using Tobit model, the trade between Iran and its partners must be positive. In the estimation process, countries with zero trade are excluded from study. If countries are omitted because of zero trade with Iran, and those countries have GDP per capita incomes similar to Iran, there will be a bias toward accepting the Linder effect. In the Tobit model, LINDER1 shows the strongest effect on bilateral trade because the model removes the bias toward overestimating the effects of countries with positive trade with Iran, and bias toward underestimating the effects of countries with zero trade with Iran as well. Most of changes in RTRADE, which was explained by the Linder effect, show the dissimilarity in GDP per capita as the greatest forces behind bilateral trade in this model.

The results show that the LINDER1 is also strong, negative and significant in HI group and LM group in Model I. This implies that in these two groups of countries, Linder effect is the most important stimulus for bilateral trade between Iran and these countries. In addition, existence of the Linder effect in HI group and LM group shows the validity of Linder theory between Iran as a developing country, and with both developed countries (HI) and less developing countries (LI). However, LINDER1 is not valid in

¹ For example see the studies conducted by Fortune ,1971; Thursby and Thursby ,1987 ; Hanik ,1988 ,etc

UMI group and LMI group, since Iran is an upper-middle income country, strong Linder effect was expected in this group (UMI). As explained, due to lack of Linder effect in these groups, there must be other important factors affecting bilateral trade. Since Iran's economy and bilateral trade severely affected by international sanctions imposed on the country by UN., USA, EU, etc, Iran was forced to search for new allies in the world.

For instance, Iran has made strategic attempts to improve bilateral relationships with Latin America. There is no doubt that Iranian-Latin American economic and trade relations are based on the geopolitical factors rather than economic benefits for the country. The Asian countries are potentially better trade markets for Iran because of adjacency, cultural bonds, historical trade backgrounds, etc, rather than unknown markets in Latin America, thousands kilometers away. Under Ahmadinejad's presidency, the trade and economic relations with Latin American countries such as Venezuela and Bolivia improved regardless of the far distance. It cannot be economically justified, as it is less beneficial for the country. Thus, the decision making to choose trade direction is likely based on political factors rather than the similarity in GDP per capita between Iran and its trade partners.

Because of the nature of the fixed effects model used for analysis in Model I, time invariant variables and dummy variables cannot be included. Therefore, effects of qualitative factors such as political ones and distance between countries cannot be used to explain the trade pattern in Model I.

Another reason for invalidity of the Linder hypothesis in this model could be in formulating the Linder effect as absolute dissimilarity in GDP per capita between Iran and its trade partners. Johnson (1964) also criticized Linder's theory and asserted that the formulation of Linder's theory as average income, which is calculated through dividing national income by the population, is not suitable for under-developed countries, where income distribution is very widespread. In these countries, due to the skewness in the distribution of income, the median income seems to be more reliable.

One more reason for invalidity of the Linder effect in UMI group in Model I could be related to the annual classification of countries according to their GNI per capita¹.

Model II: LINDER2 shows negative and significant effect on trade in Base group (-1.4), HI group (-1.96), UMI group (-1.75) and LI group (-3.43). (See Table 6.2 for details) It does not show any significant effect on trade in LMI group.

Negative and significant LINDER2 in most of groups in the Model II implies that there is strong Linder effect as one of the most important stimuli for bilateral trade. This model addressed and justified the hypothesis; 'changes in per capita income differences between trading partners show a negative effect on bilateral trade'.

One reason for better performance of Linder effect in this model can be choosing a different formulation for Linder effect. LINDER2 is formulated as absolute differences in Logarithm of GDP per capita of Iran and its trade partners. The existence of the Linder effect in HI group, UMI group and LI group shows the validity of the Linder theory between Iran as an upper-middle income developing country, and with developed countries (HI), developing countries (UMI) and less developing countries (LI). It also approves results of Model I. The Linder Effect is found strong, negative and significant in UMI group, as expected. Because of the logarithm nature of the Model II, coefficients can be also explained in terms of elasticity. In three groups of HI, UMI and LI, LINDER2 is elastic. It means that LTRADE2 will respond more than proportionally to change in LINDER2. In LI group, this elasticity is the strongest one (-3.43) which implies that one small change in the Linder Effect can affect bilateral trade more than three times. On other hand, bilateral trade with low-income countries is too much sensitive to any change in the dissimilarity in per capita GDPs.

There is no Linder effect in LMI group. One reason for invalidity of the Linder effect could be related to the annual classification of countries according to their GNI per capita.

¹The World Bank classifies countries according to their per capita GNI annually. This classification may have different groups of countries and the country may change its status every year as per GNI per capita.

Model III: LINDER3 shows negative and significant effect only in LI group (-9.8). It does not show any significant effect on trade in Base group, HI group and UMI group. However, in LMI group, LINDER3 shows positive and significant effect (1.5). This implies that if per capita GDP differential increases, total trade increases. The positive sign of LINDER2 for LMI group indicates that the Heckscher–Ohlin Effect (differences in factor endowments) dominates the Linder effect in LMI group.

Strong, significant and negative Linder effect in LI group in Model III implies the validity of the Linder theory between Iran as developing country and less developing countries (LI). Results also show that the Linder effect is most effective stimulus for bilateral trade in LI group. Linder effect is highly elastic (-9.88) in this group, and one small change in Linder effect can affect bilateral trade about more than ten times. This shows bilateral trade with low-income countries is too much sensitive to any change in the dissimilarity of per capita GDPs.

There is no Linder effect in HI group, UMI group and LMI group in this study. It implies that there must be other important factors such as political ones (international sanctions, domestic political instability, etc) and distance between countries affecting bilateral trade. There are strong evidences to approve the effects of these variables on bilateral trade in Model III.

Another reason for invalidity of the Linder hypothesis in these groups could be in formulating the LINDER3 as the logarithm of the share of an absolute dissimilarity in per capita GDPs from aggregate per capita GDPs.

One more reason for invalidity of the Linder effect in these groups in Model III could be related to the annual classification of countries according to their GNI per capita.

Results also show that there is a strong H-O Effect in LMI group. It means that in the review group, the dissimilarity in factor endowment is explaining the change in bilateral trade instead of dissimilarity in per capita GDPs (Linder Effect). This effect is strong and elastic. It implies that bilateral trade with LMI group is sensitive to any change in differences in factors endowment.

Economic Mass

Empirical literature does not give any standard measure of size of economy or economic mass in gravity models. In this study, different measures of economic mass are used. This variable is measured by GDP, aggregate GDP, aggregate GDP per capital and population. Generally, a high level of income in the exporting country indicates a high level of production, which increases availability of goods for exports and a high level of income in importing country indicates higher ability for imports. It is expected that variables related to the economic size show positive and significant effects on bilateral trade.

GDPP and GDPIRI: To test the effects of economic size or economic scale of countries on trade, real GDPs of Iran and its trading partners are included. GDP will be considered as supply (for exporting countries) and demand (for importing countries). Thus, the bigger GDPs imply the bigger size of trade. On other hand, GDP of a country as economic scale determines the export and import. Therefore, GDP's value of a country reflects the power of trade of that country. It is expected that these variables show a positive and significant effect on bilateral trade.

Model I: Analysis of data describes, GDPIRI shows a positive and significant effect on bilateral trade in Base group (Including Tobit model), HI group, LMI group and LI group but does not show any significant effect in UMI group. Similarly, GDPP shows a positive and significant effect on bilateral effect in base group (Including Tobit model), UMI group, LMI group and LI group but does not show any significant effect in HI group.

Analysis of results in Model I show that GDPs of Iran and its partners mostly have positive and significant effect on bilateral trade but this effect is too weak. It implies that there are other factors more important than size of economy in terms of GDP, which are affecting bilateral trade in the Model I. In this model, intercepts¹ have high unit values. It means there are effects of other variables such as political factors, distance between countries, etc, which are not included in this model. For instance, in base group, residual squared has weak value, which implies same facts.

¹ 'C' in estimations shows Intercept /constant

SUM1 and SUM2: These variables measure the aggregate GDP levels (SUM1) of Iran and its trading partners, which are included to verify the fact that larger countries will have more trade than smaller ones. Further, aggregate per capita GDP (SUM2) of Iran and its trading partners is included in model to indicate the level of development. Linder (1961) himself argued that a smaller country would almost certainly have a greater trade volume with a larger trading partners than with a smaller one. It is expected that these variables should show a positive and significant effects on bilateral trade.

Model II: SUM1 show a positive and significant effect on trade in Base group, upper-middle income group, Lower-middle income group and low-income group. It does not show any significant effect in HI group.

Model III: SUM2 shows positive and significant effect in Base group, UMI group and LMI group. It does not show any significant effect in HI group and LI group.

Analysis of results shows that economic mass in terms of aggregate GDP does not affect bilateral trade with high-income countries. One reason can be this fact that most of changes in bilateral trade in this group are explained by dissimilarity in per capita GDP and the bilateral trade is highly sensitive to any change in Linder effect rather than economic size of countries.

The analysis shows that aggregate per capita GDP does not affect bilateral trade with high-income and low-income countries.

Per capita GDP shows the level of development and can be a good indicator for economic strength. In the process of development in any countries, consumers are likely to demand more foreign varieties with high quality. Moreover, development also brings innovations and inventions of new products that can be exported to other countries or vice versa. Further, since developed countries have more advanced infrastructures in all sectors including transportation, it eases the trade for them, while in less developing countries, lack of such infrastructures hamper the trade. The analysis shows that aggregate per capita GDP of Iran and less developing low-income countries does not affect bilateral trade. This implies that the level of development of these countries in terms of

innovations, infrastructures, etc. can boost bilateral trade and on the other hand, due to lack of such developments, bilateral trade will be affected by other variables such as transportation cost, dissimilarity in per capita GDP, etc. Analysis of results shows that aggregate per capita GDP does not affect trade in HI group. Reasons could be political factors such as international sanctions, political instability, etc. which caused for 16 percent decline in bilateral trade in this group.

POPP: The Populations size of trading partners is included to verify the fact that whether or not bigger countries trade more. Bigger countries, in terms of population size, have a higher probability of exporting and importing.

Bergstrand (1989) also argued that the positive (negative) impact of exporter population indicates that the exports tend to be labor (capital) intensive goods, whilst a positive (negative) impact of importer population indicates that the exports tend to be necessity (luxury) goods.

Population effect on bilateral trade may be positive or negative, depending on whether the country exports less when it is big (absorption effect) or whether a big country exports more than a small country (economies of scale). Baldwin (1994) argued that both impacts might be negative as larger countries are sometimes self-efficient.

Model II and Model III: In both models in case of Base group, UMI group, LMI group and LI group, population has positive and significant effects on trade. It shows a positive and significant effect in HI group in Model II. However, it does not show any significant effect on trade in HI of Model III.

Analysis of results shows that economic size of countries in term of population mostly affects trade positively and significantly, which implies that more population gives more ability to export and import. In case of developing upper-middle income, lower-middle income and low-income countries, export are mostly labor-intensive goods and so working population of these countries can boost bilateral trade.

REXCHANGEP:

In order to determine the fluctuations of relative prices among trading partners, the real exchange rate is included in models. If the real exchange rate moves upward direction,

export will increase and import will decrease but the final effect of changes in real exchange rate on trade is not clear.

Model I: Only in LI group, real exchange rate shows negative and significant effect. In Base group, HI group, UMI group and LMI group, it does not show any significant effect.

Model II: Real exchange shows negative and significant effect in LMI group. It does not show any significant effect in Base group, HI group, UMI group and LI group.

Model III: Real exchange rate shows positive and significant effect in Base group and HI group. It shows negative and significant effect in LMI group. It does not show any significant effect in UMI group and LI group.

Analysis of results shows that the effect of real exchange rate on bilateral trade is mixed but mostly insignificant. Empirical literature on the effect of real exchange rate volatility on trade is inconclusive and the results are mixed and sensitive to model specification. Some empirical studies indicated that there is no significant impact of real exchange rate volatility on the volume of trade.¹ On other hand, the effect of real exchange rate on bilateral trade is related to the elasticity and sensitivity of trade to change in real exchange rate. Devaluation policy generally decreases the price of exportable goods of home country so that increase the price of imports. It encourages the net export, discourages import, and improves the balance of payment position. If devaluation increases prices in domestic markets, exportable goods will not be able to compete in international markets. Further, domestic consumers also substitute domestic products by cheaper imported commodities. Therefore, devaluation is not likely to affect total trade. Iran's foreign exchange system was changed several times in direction of restrictions, quantitative controls, and a multi-rate structure. Exchange rate volatility and misalignment are major cause of limits on export promotion during last three decades.

DISTANCE: This variable is measured by physical distance between capitals of Iran and its trading partners. Distance is a proxy for transportation cost so longer distance means

¹ For more details See McKenzie (1999) ; Hooper & Kohlhagin (1978) ,etc

higher transportation cost and thus decreases bilateral trades. It is expected that distance should show negative and significant effect on trade.

Model II and Model III: Geographic distance has negative and significant effect on trade in Base group, HI group, UMI group, LMI group and LI group.

Analysis implies that distance variable in all groups of Model II and III, have a significant, strong and negative effect on bilateral trade. Further, this variable is one the most important stimulus that is affecting bilateral trade between Iran and its trading partners. Except in HI group, distance coefficients are elastic, which show that if distance changes one percent, bilateral trade will change more than proportionally. On other hand, bilateral trade is highly sensitive to any change in distance between Iran and its trade partners . Especially in LI group, this effect is highly elastic (-4.31). One reason can be lack of proper infrastructures for transportation that increase cost of transportation and worsen bilateral trade with less developing low-income countries. This effect is not elastic in case of HI countries. It shows that due to developed level of infrastructures for transportation in these countries, distance is not a restriction for bilateral trade, however it is still one of the main barrier for free bilateral trade.

Political factors: Time dummy variable (2005-2013) is included in model to verify impacts of Ahmadinejad's presidential term, political instability and international sanctions on total trade of Iran. It is expected that this variable should show the negative and significant effect on trade.

Model II: Time dummy variable (DUMMYG) shows the negative and significant effect in Base group and LMI group. It does not show any significant effect in HI group, UMI group and LI group.

Model III: Time dummy variable (DUMMYG) shows the negative and significant effect in Base group, HI group and LMI group. It does not show any significant effect in UMI group and LI group.

Results show that in UMI and LI groups in both models, time dummy variable does not affect bilateral trade. As discussed before, in these two groups, distance between trading

partners is one of the most important stimulus that is affecting bilateral trade. Furthermore, it can be discussed that most of international sanctions were imposed on Iran's oil and gas industries and bilateral trade in this study includes non-oil export that is not affected much by this kind of restrictions. However, the total impact of international sanctions to deteriorate Iran's economy and bilateral trade cannot be denied.

Common border: This variable, which measures the individual effects on certain types of trading partners, is included in model to determine the political and cultural affinities, common linguistic or religious heritage. It is expected that this variable should show the positive and significant effect on trade. (Only applicable in Base group)

Model II and Model III: In Base group, common border has positive and significant effect.

Neighbor countries with same border normally have close cultural bonds, same language, etc and the cost of unfamiliarity in international trade is less for them. In addition, consumers who are living near borders can easily cross border and have access to products and markets of neighbor countries. Firms and producers near border also can sell their goods in other countries without any transportation costs. In addition, they have access to sources of neighbor countries easier. It can be discussed that bilateral trade is easier for countries with same border rather than when countries do not share a common border.

OPEC: OPEC dummy variable is included in model to see the effect of membership in OPEC on Iran's total trade. In general, membership in trade treaties and economic blocs must affect trade positively. Membership in OPEC can affect Iran oil trade positively. However, it is expected that this variable should show negative effect on trade variable in this study. The total trade in this research includes non-oil trade. Reviewing Iran trade data shows that whenever oil trade increase, non-oil trade decrease and vice versa. (Only applicable for Base group)

Model II and Model III: In Base group, membership in OPEC shows negative and significant effect on trade.

6.4. Comparing Results of Models

Empirical evidences derived from results of three models indicate the existence of the Linder effect for Iran. This study found that there is a significant and negative Linder effect in some of groups. Further, evidences show that Model II is performing better to reply to the hypothesis of this study.

Stronger effect is expected for Linder effect in UMI. Not only is it significant in base group, HI and UMI, but it is also surprisingly strong and significant in LI among three models of this study. There is strong, negative and significant effect in LI group in all three models of this study. In addition, Linder effect is highly elastic in this group, which shows that bilateral trade with lower-income countries is too much sensitive to any change in dissimilarity in per capita GDPs. In all three models in LMI group, no Linder effect is found. It implies that bilateral trade with lower-middle income countries is not affected by dissimilarity in per capita GDPs, but affected by dissimilarity in factors endowments. Further, it is derived that results of study are sensitive to formulation of Linder effects. In addition, there is also Linder effect in bilateral trade of developing countries with developed countries, other developing countries, and less developing countries.

According to evidences, the size of the countries, which is measured, by GDP, aggregate GDP, aggregate GDP per capital and population in most of the groups in this study (except HI group) show positive, strong and significant effect on Iran's trade.

The results for effect of the real exchange rate on trade in this study are mixed (both negative and positive) but mostly insignificant.

There are strong evidences in this study about the negative and significant impact of distance among trade partners on Iran's trade (range between -0.59 and - 4.32).

Empirical evidences of this study shows that time dummy variable does not have significant effect on trade in UMI group and LI group. This variable has negative and significant effect in other groups (range between -0.14 and -0.55).

Results imply the strong effects of dummy variables of common border (range between 0.87 and 0.91) and membership in OPEC (range between -1.48 and -1.3) on trade in this study.

6.5. Conclusion

This study shows some insights in support of the Linder hypothesis between Iran and its potential trading partners. In particular, this study indicates that Iran trades more intensively with economies that have per capita income levels similar to its own. However, the Linder effect is not strong for all groups of study. In some income groups, there is no significant relationship between trade intensity and the similarity of per capita income levels implying that there is no income effect in those groups to boost trade. Surprisingly, the Linder effect is too strong and highly elastic in the Low-income group. It means that there is significant effect even for trade between developing countries. Since the later empirical studies have not seriously tested the Linder theory among developing countries, this research provided some evidences on the possible validity of Linder theory in the developing world.

Furthermore, the study found that although income similarities can affect trade positively among countries, there might be other important factors, which affect trade among countries.

The study came to conclusion that there are impacts of several factors on Iran trade such as, economic size, political shocks and instability, international sanctions, physical distance, common borders, trade treaties, etc .