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The Sanctions and Geographical Shift in Trading Partners: Evidence from Iran and Russia through a Gravity Model

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Abstract

This paper is an attempt investigating the relationship between sanctions implications and geographical shift in trading partners. To this end, we analyze separately foreign trade patterns of two countries namely Iran and Russia - which are under imposed sanctions experience - with two United Nations Regional Groups (The Asia-Pacific and the Western European groups) using a gravity model. The gravity models are estimated over two different time periods: (i) 2006-2015 for Iran and (ii) 2008-2016 for Russia. The main results provide evidence supporting the Asianization and de-Europeanization of Iran and Russia under sanctions which proves the hypothesis of geographical shift in trading partners under imposing sanctions. However, sanctions have stronger impacts on modifications of Iran's foreign trade rather than Russian shift in trading partners.

Keywords: Sanctions, Trade Policy, Gravity Model.
JEL Classification: C33, F10.

1. Introduction

Over the past decades, policy of imposing sanctions has been a controversial academic topic among scholars. While many scholars found the negative impacts of sanctions on a target (a country under sanctions) economy (e.g. Jabalameli and Rasoulinezhad (2012), Majidi et al. (2014), Moret (2015), Gurvich and Prilepskiy (2015), Kilnova and Sidorova (2016), Rasoulinezhad (2016), Rasoulinezhad and Popova (2017)), others believed that economic restrictions may help a target to reconstruct its economic sectors and transform into flourishing economy (Popova and Rasoulinezhad (2016), Nasre Esfahani and Rasoulinezhad (2017)).

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Iran and Russia as two target economies have been under various rounds of sanctions imposed by different nations as penalties or other means of enforcement. The last round of serious sanctions against Iran started in response to the Iranian nuclear program in 2006, included many hard restrictions such as disconnection of Iranian banks from the SWIFT system or the EU oil embargo, and was finished by running the Joint comprehensive Plan of Action in 2015. Moreover, Russia as one of the largest global economies has experienced various sanctions as well due to its political conflicts with the West. Since the 2008 Russo-Georgian war, the USA imposed sanctions against this country and in continue from 2014 the Western world has ratcheted up sanctions against Russia over its actions in Ukraine.

One of the consequences of sanctions imposed against a target economy may be the modification in its foreign trade policy. Kaempfer and Lowenberg (1992, 1999) express that a target can shift its trade destinations from a sender (a country who imposes sanctions) to a number of non-senders. Despite other reasons (e.g. economic growth of a certain region, geopolitical matter and transport infrastructure) causing modification of foreign trade direction of a country, sanctions are considered as a major influential factor turning a target from sanctions' senders towards a nation/region who does not impose sanctions against the target.

Although the effects of sanctions on economies of Iran and Russia have drawn some attention from researchers such as Faraji Dizaji (2014), Borszik (2016), Shirazi et al. (2016), Gharehgozli (2017) and Salehi et al. (2017) for Iran and Gurvich and Prilepskiy (2015), Tuzova and Qayum (2016), Veebel and Markus (2016), Ankudinov et al. (2017) for Russia, there has not been any serious study to test and compare empirically the effects of sanctions on shift in trading partners of targets.

In this paper, we try to use a gravity model to investigate the bilateral trade patterns between (i) Iran and two United Nations Countries Groups (the Asia-Pacific group and the Western European group) during the period 2006 to 2015; and between (ii) Russia and two United Nations Countries Groups (the Asia-Pacific group and the Western European group) during the period 2008 to 2016. The choice of these countries in this study is based on these facts that Iran and

Russia have many economic characters in common (e.g. having oil-based economy and independent economy from the West). Furthermore, the states including in the Western Europe and the Asia-Pacific regions are their top trading partners in the last decade.

We do not find any study, considering the comparison of sanctions' effects on shift in trading partners of target economies through a gravity model. Therefore, this study leads to make new research results for scholars and policy makers.

Following the objective of the research, assumptions of theory of gravity and considering the sanctions as an influential factor in foreign trade modification, the main research hypothesis is as follows:

H0: Sanctions against a target economy lead to shift in its trading partners.

The remainder of this research is structured as bellow:

The next section provides data and methodology. Research results are presented and the last section concludes with a discussion and directions for further research.

Table 1: List of our Samples from the United Nations Regional Groups

The Western Europe group (27 members)	The Asia-Pacific group (53 members)
Andorra, Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, Malta, Monaco, Netherlands, New Zealand, Norway, Portugal, San Marino, Spain, Sweden, Switzerland, Turkey, United Kindom.	Afghanistan, Bahrain, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Cyprus, Fiji, India, Indonesia, Iran, Iraq, Japan, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lao, Lebanon, Malaysia, Maldives, Marshall Islands, Micronesia, Mongolia, Myanmar, Nauru,Nepal, North Korea, Oman, Pakistan, Palau, Papua New Guinea, Philippines, Qatar, Samoa, Saudia Arabia, Singapore, Solomon Islands, South Korea, Sri Lanka, Syria, Tajikistan,Thailand, Timor-Leste, Tongo, Turkmenistan, Tuvalu, UAE, Uzbekistan, Vanauta, Viet Nam, Yemen

Source: http://www.un.org/depts/DGACM/RegionalGroups.shtml

2. Data Description and Methodology

2.1 Dataset Description

This study covers bilateral trade patterns of Iran and Russia with the states of the Western Europe and the Asia-Pacific region based on the

United Nations Regional Groups, listed in Table 1, over two time periods of: 2006 to 2015 in the case of Iran and from 2008 to 2016 for Russia.

The variables used in this study contain trade volume (sum of import and export) between a target and these countries in thousand U.S. dollars, GDP and GDP per capita in thousand U.S. dollars, distance between a target and the trade partners in kilometers and sanctions as a dummy variable. The source of the data on trade volume is IRICA (Islamin Repuplic of Iran Customs Administration) and Russian Federal State Statistics Service. The data on GDP and GDP per capita are collected from the World Bank and the World Economic Outlook Database (IMF, 2015). Data for distance between countries were gathered from the GeoDist database (CEPII, 2015). Furthermore, all the time-variant series level are transformed in to natural logarithms, based on the advantages of this form than using the level of variables.

2.2 Model Specification

The earliest form of the gravity model which was introduced by Tinbergen (1962) has the following structure:

$$lnExport_{ij} = \beta_0 + \beta_1 lnY_i + \beta_2 lnY_j + \beta_3 lnDIS_{ij} + \varepsilon_{ij}$$

Where the export volume of country i to j ($lnExport_{ij}$) has relationship with the GNP in country i (Y_i) and in country j (Y_j), meanwhile the distance between countries i and j (DIS_{ij}) as a proxy for transportation cost.

Over the years, numerous scholars have developed the above basic form by using other real or dummy variables. For instance, Linnemann (1966) extends the gravity model and introduces population size of countries i and j, and the artificial trade resistance factor. Pfaffermayr (1994) adds foreign direct investment as a variable affecting trade flows between countries. Nguyen (2010) includes bilateral exchange rate and regional trade preference. Anderson and Wincoop (2003) define the multilateral resistance factors (MRF_s) such as language,remoteness etc. Guttmann and Richards (2004) include the openness level as a variable, influencing on trade between countries.

In this study, we employ a gravity model, recently developed by Rosoulinezhad and Seong Kang (2016) to model bilateral trade flow between a target economy and its trade partners in the Western European and Asia-Pacific regions to find out how sanctions can impact shift in trading partners. Comprising the time-variant and time-invariant variables, our model can be formulated as:

$$lnTRADE_{ijt} = \delta_1 + \delta_{2a} \ln(Y_{it}Y_{jt}) + \delta_{2b} \ln(YP_{it}YP_{jt}) + \delta_3 lDIS_{ij} + \delta_4 sanctions + \varepsilon_{ijt}$$

Where TRADE represents trade volume between a target (country i) and a trading partner (country j) at specific time t. $Y_{it}Y_{jt}$ indicates the economy size of a target and trading partner j at time t. Moreover, $YP_{it}YP_{jt}$ shows income (GDP per capita) for a target (country i) and a trading partner (country j). Dis_{ij} indicates the geographical distance between capitals in a target (country i) and a trading partner (country j). Meanwhile, variable sanctions is a dummy variable which is captured bi-nominal variables. It takes a value of 1 if there are sanctions against Iran/Russia or takes 0 otherwise (It should be noted that based on consideration of economic sanctions in this paper, for the case of Iran this variable takes a value of 0 over 2006-2010 and takes 0 between 2011-2015. For th case of Russia, this variable captures a value of 1 from 2014 to 2016 and takes 0 over the period 2008-2013).

According to Narayan and Nguyen (2016), Jabalameli and Rasoulinezhad (2018) and Rasoulinezhad and Wei (2017), to avoid of the multicollinearity problem, it is better to break the above gravity model into two various models in which GDP and income variables are considered separately in each. Following this idea, the two following gravity model will be applied in our study:

Model I :

$$lnTRADE_{ijt} = \delta_1 + \delta_{2a} \ln(Y_{it}Y_{jt}) + \delta_3 lDIS_{ij} + \delta_4 sanctions + \varepsilon_{ijt}$$

Model II :

$$lnTRADE_{ijt} = \delta_1 + \delta_{2b} \ln(YP_{it}YP_{jt}) + \delta_3 lDIS_{ij} + \delta_4 sanctions + \varepsilon_{ijt}$$

Here, Since we will have 4 different panel data estimations (Model I, II in the case of target-Western European states bilateral trade and Model I, II in the case of target-Asia Pacific countries' bilateral trade), the expected signs of coefficients in our gravity models can be explained as in Table 2.

Table 2: Expected Signs of the Variables

Variable	Type	Expected sign
Trade	Time-variant	Positive
$Y_{it}Y_{jt}$	Time-variant	Positive
$YP_{it}YP_{jt}$	Time-variant	Positive
Dis	Time-invariant	Negative
Sanctions	Time-invariant	Positive (trade with Asia)
Sanctions	Time-invariant	Negative (trade with Europe)

Source: Authors' compilation.

According to the theoretical framework of the gravity model, it is expected that economy size and income would have positive impacts on trade volume and encourage trade between a target (Iran/Russia) and her trading partners, including the Western European states and Asia-Pacific countries. In the case of time-invariant variables, the coefficient of DIS is expected to bear a negative sign as distance shows the transportation cost between a target and a trading partner. Due to the fact of foreign trade modification under sanctions and existence of the Western European States as a major sanctions imposer, we expected that the sign of sanctions would be negative in trade flows of a target with Europe, while it would have a positive sign in trade flows of a target with Asian trade partners.

3. Results and Discussion

3.1 Panel Cross-section Dependence Test

Before applying panel unit root tests, cross-section dependence should be tested to find out whether the sample data are cross sectional dependent or independent. Otherwise, based on Pesaran (2007), Rasoulinezhad (2017), Taghizadeh-Hesary et al. (2017) and Rasoulinezhad (2019), the results of our estimation would be biased and inconsistent. According to the time and cross sections in our

study, the Pesaran residual cross-section dependence (CD) test is computed based on the pairwise correlation coefficients $\hat{\rho}_{ij}$as below:

$$CD = \sqrt{\frac{2}{N(N-1)}} \sum_{i=1}^{N} \sum_{j=i+1}^{N} \sqrt{T_{ij}} \hat{\rho}_{ij}$$

Based on the result of the CD Pesaran test, shown in Table 2, the null hypothesis (No cross-section dependence in residuals (residuals of each of our models) can be strongly rejected at the 5% level. It implies that all series have strong evidence for cross-sectional dependence.

Table 3: Pesaran (2004)'s CD Test

Case	Variables	Pesaran's CD test	Prob.
Iran- WE trade	LTRADE	14.43	0.00
	LYY	34.09	0.00
	LYPYP	29.89	0.00
Iran- AP trade	LTRADE	18.28	0.00
	LYY	43.30	0.00
	LYPYP	31.59	0.00
Russia- WE trade	LTRADE	21.49	0.00
	LYY	37.11	0.00
	LYPYP	22.03	0.00
Russia- AP trade	LTRADE	21.19	0.00
	LYY	33.92	0.00
	LYPYP	26.30	0.00

Source: Authors' compilation from Eviews 9.0

Note: WE and AP indicate the Western European states and the Asia-Pacific countries, respectively

The result of the cross-section dependence test shows which kind of panel unit root test is appropriate to apply. For cross-sectional independence in panels, using LLC test and PP test are more convenient, because they assume cross-sectional independence. Based on our finding which depicts cross-sectional dependence of our series, the most proper unit root test is the cross-sectionally augmented ADF.

3.2 Panel Unit Root Tests

In order to determine the stationarity of all the underlying time series data in a cross sectional dependent panel, we carry out the CADF panel unit root test (Pesaran, 2007) for the variables at levels and first differences.

Pesaran (2007) for a panel with N cross-sectional units and T time series observations, suggests a simple linear heterogenous model as:

$$Y_{i,t} = (1 - \delta_i)\mu_i + \delta_i Y_{i,t-1} + u_{i,t} \qquad i = 1, \dots, N \quad t = 1, \dots, T$$

And suggests a test based on the t-ratio in the following cross-sectionally ADF regressions:

$$\Delta Y_{i,t} = a_i + b_i Y_{i,t-1} + c_i \overline{Y}_{t-1} + d_i \Delta \overline{Y}_t + \epsilon_{i,t}$$

In the above equation, $\overline{Y}_t = \frac{1}{N}\sum_{i=1}^{N} Y_{i,t}$ and $\Delta \overline{Y}_t = \frac{1}{N}\sum_{i=1}^{N} \Delta Y_{i,t}$. Furthermore, $\epsilon_{i,t}$ indicates the regression error.

By applying this unit root test through the software, the results are calculated as:

Table 4: Panel Unit Root Test Results

Case	Variable	Pesaran's CADF	Case	Pesaran's CADF
Iran- WE trade	LTrade	19.55 [0.81]	Russia-WE Trade	16.08 [0.53]
	D(LTrade)	325.49[0.00]		285.11[0.00]
	LYY	23.02[0.63]		19.82[0.75]
	D(LYY)	200.83[0.00]		312.85[0.00]
	LYPYP	2.94[1.00]		16.04[0.80]
	D(LYPYP)	232.52[0.00]		196.35[0.00]
Iran- AP trade	LTrade	24.12 [0.50]	Russia- AP trade	25.30 [0.62]
	D(LTrade)	193.28[0.00]		214.69[0.00]
	LYY	9.83[0.93]		11.19[0.88]
	D(LYY)	259.01[0.00]		188.25[0.00]
	LYPYP	14.24[0.53]		16.43[0.39]
	D(LYPYP)	301.62[0.00]		291.64[0.00]

Source: Authors' compilation from Eviews 9.0

Note: Numbers in brackets indicate p-values, WE and AP indicate the Western European states and the Asia-Pacific countries, respectively.

The reported p-values in the above table imply that all the series are non-stationary at levels (means accepting the null hypothesis representing that the series contain a panel unit root) and stationary

(rejecting the null hypothesis) at their first difference which stands for the integration at I(1).

3.3 Pedroni Panel Cointegration Test

Since all the variables are cointegrated at I(1), the Pedroni panel cointegration test can be applied to find out whether there is any long-run equilibrium relationship between the series (Taghizedeh-Hesary et al., 2017; Rasoulinezhad and Jabalameli, 2018). From the results, by considering all the panel, group and weighted statistics, it indicates that the most statistics have p-value less than 0.05 and hence, the majority of the all statistics tests can significantly reject the H0 of no cointegration at the 5% significance level. In sum, it can be concluded that there is an evidence of a long run relationship between variables in all our four models in two cases of Iran and Russia.

3.4 Gravity Model Estimation

After applying the cointegration test and finding out that there is a long run relationship between series in all our gravity equations, the three panel data estimation approaches, i.e. fixed effect (FE), random effect (RF) and fully modified OLS (FMOLS) are applied to explore the coefficients of our all variables. The findings are reported in Table 5.

Table 5: The Gravity Model Estimation

-	-	Variables	FE	RF	FMOLS
Iran- WE trade	Model I	LYY	0.26(0.08)	0.17 (0.01)	0.38 (0.00)
		LDIS	-	-1.08 (0.05)	-
		SANC	-0.56 (0.00)	-0.48 (0.00)	-0.57 (0.00)
	Model II	LYPYP	0.29 (0.03)	0.14 (0.05)	0.50 (0.09)
		LDIS	-	-1.37 (0.00)	-
		SANC	-0.75 (0.00)	-0.69 (0.00)	-0.76 (0.00)
Iran- AP trade	Model I	LDYP	0.50 (0.00)	0.50 (0.00)	0.49 (0.00)
		LDIS	-	-2.90 (0.00)	-
		SANC	0.31(0.00)	0.29 (0.00)	0.46 (0.00)
	Model II	LYPYP	0.14 (0.02)	0.12 (0.04)	0.19 (0.00)
		LDIS	-	-1.78 (0.03)	-
		SANC	0.84 (0.00)	0.83 (0.00)	0.96 (0.00)

-	-	Variables	FE	RF	FMOLS
Russia- WE trade	Model I	LYY	0.95(0.00)	0.91 (0.00)	0.95 (0.00)
		LDIS	-	-0.26 (0.00)	-
		SANC	-0.13 (0.00)	-0.13 (0.00)	-0.17 (0.00)
	Model II	LYPYP	0.87 (0.00)	0.79 (0.02)	0.83 (0.02)
		LDIS	-	-0.34 (0.00)	-
		SANC	-0.19 (0.00)	-0.21 (0.00)	-0.16 (0.00)
Russia- AP trade	Model I	LYY	0.68(0.00)	0.69 (0.02)	0.69 (0.00)
		LDIS	-	-0.43 (0.05)	-
		SANC	0.35 (0.00)	0.29 (0.00)	0.33 (0.00)
	Model II	LYPYP	0.78 (0.01)	0.81 (0.00)	0.80 (0.00)
		LDIS	-	-0.58 (0.00)	-
		SANC	0.26 (0.00)	0.29 (0.00)	0.29 (0.00)

Source: Authors' compilation from Eviews 9.0

Note: WE and AP indicate the Western European states and the Asia-Pacific countries, respectively

As it can be seen, the basic features of gravity model estimations are very similar across all three estimators. Hence, our findings prove the similarity of these three estimators in the case of panel-gravity model.

In addition, the results of our two case studies (Iran and Russia) are represented separately as follows:

I. Case of Iran

The estimation results of "Model I" for the bilateral trade of Iran – Western European states confirm that GDP has a significant positive impact on bilateral trade, while distance negatively influences on the trade volume. Moreover, as we predicted, sanctions against Iran decrease the trade volume between this country and the Western European states. This result proves the Iran's trade policy of de-Europeanization or Trade Divergence (TD) of Iran from the Western Europe region. The estimation findings of "Model II" for the trade of Iran – Asia Pacific region depict that income (GDP per capita) increases the bilateral trade volume, while similar to the first model estimation result, distance and sanctions have a significant negative impact on the trade volume.

In the case of Iran's bilateral trade with the Asia-Pacific region, the results reveal that a 1% increase in the joint GDP in Iran and the Asia-Pacific countries, raises the bilateral trade volume by approximately 0.50%. Joint income (GDP per capita) has a less positive influence on the Iran-Asia Pacific countries' bilateral trade. The results show that the bilateral trade between these countries is boosted up about 0.15% with a 1% increase in the joint GDP per capita. Moreover, the effect of the sanctions (SANC) on trade is positive and significant which supports the existence of Iran's trade policy of Asianization or Trade Convergence (TC) of Iran towards the Asia-Pacific region. The findings of models estimations provide evidence of a significant negative effect of sanctions on Iran –Western European states' bilateral trade. The coefficient of SANC is estimated at an average of 48% [=Exp(-0.65)-1] by FE estimator, compared to an average of 44.2 % [=Exp(-0.58)-1] by RF and 48.5% [=Exp(-0.66)-1] by FMOLS. This indicates that trade volume decreases by nearly 46.9%[1] when the sanctions are imposed against Iran. In regards to the positive effect of sanctions on Iran-Asia Pacific countries' bilateral trade, it can be calculated that the trade volume increases about 77.7% [=Exp(1.15)-1] by FE, 75% [=Exp(1.12)-1] by RE and 103% [=Exp(1.42)-1] by FMOLS. As an average of findings by these three estimators, trade volume between Iran and the Asia-Pacific countries would increase by 85.2%[2]. In the case of distance as a proxy of transportation cost, the negative sign of its coefficient, estimated by random effect (RE), represents that geographical distance has a negative impact on bilateral trade between Iran and the Western European states and Asia-Pacific countries. A 1% increase in this variable decreases the trade volume between Iran and the Western European states and Asia-Pacific countries by an average of 1.22%[3] and 2.34%[4] respectively.

II. Case of Russia

The estimation findings of "Model I" for the bilateral trade of Russia – Western European states confirm a strong positive effect of joint GDP

1. It is calculated as the average of 44%, 44.2% and 48.5%
2. It is calculated as the average of 77.7%, 75% and 103%
3. It is calculated as the average of 1.08 and 1.37
4. It is calculated as the average of 2.90 and 1.78

(Average of 0.91, 0.95 and 0.95), while this variable has a less positive stronger effect on Russia-Asia Pacific region trade flows (average of 0.68, 0.69 ad 0.69). Joint Income has positive effects as well in both trade cases of Russia with the Western European and Asia-Pacific regions. Our results show an evidence of negative relationship between Russo-Western European and Russo-Asia Pacific regions and geographical distance. A 1% increase in geographical distance between Russia and the Western European states decrease the bilateral trade volume by nearly 0.26%, while it reduces the trade flows between Russia and the Asia-Pacific region by about 0.43%. The estimation results prove that imposing sanctions against Russia pushes this country towards shift in trading partners from the Western European members to the Asia-Pacific countries. The coefficient of SANC is estimated at an average of 14.7% [=Exp(-0.16)-1] by FE estimator (-0.16 is average of -0.13 and -0.19), compared to an average of 15.6 % [=Exp(-0.17)-1] by RF (-0.17 is average of -0.13 and -0.21) and 15.2% [=Exp(-0.16)-1] by FMOLS. This indicates that trade volume between Russia and the Western European states decreases by nearly 15.1%[1] when the sanctions are imposed against Russia. Moreover, it can be calculated that the trade volume between Russia and the Asia-Pacific region increases about 35.6% [=Exp(0.305)-1] by FE, 33.6% [=Exp(0.29)-1] by RE and 36.3% [=Exp(0.31)-1] by FMOLS. As an average of findings by these three estimators, trade volume between Russia and the Asia-Pacific would increase by 35.1%[2].

4. Concluding Remarks

This paper explores the relationship between imposing sanctions and geographical shift in trading partners. For this purpose, we employ the gravity trade model comprising a dummy variable of sanctions and run it for bilateral trade patterns of two recent targets of sanctions (Iran and Russia) in the world economy and two United Nations Countries groups (The Western European States and the Asia-Pacific countries). Following Narayan and Nguyen (2016), we develop

1. It is calculated as the average of 15.2%, 15.6% and 14.7%
2. It is calculated as the average of 35.6%, 33.6% and 36.3%

different gravity model equations according to GDP and GDP per capita to avoid any multicollinearity problem. The estimations of these equations are done by three panel approaches, i.e. fixed effect, random effects and the fully modified OLS.

The main conclusions of our research can be expressed as follows:

1. Our results reveal that the basic features of gravity model estimations are very similar across all three estimators, i.e. FE, RE and FMOLS. Since our estimation findings prove that the final results of these three estimators are very similar, it would be useful for future studies of the gravity trade models to run only one of these three estimators.
2. It can be concluded that an increase in GDP and GDP Per Capita implies increase trade flow between Iran-trade partners, Russia-trade partners with both regions (Western European region and the Asia-Pacific region). However, the effects of these gravity variables are stronger in the case of Russia. The main reason is the larger trade integration of Russia with the world economy than Iran. This country has been a member of WTO since 2012, so it tries to boost up its economy through dealing trade with larger economies in the world (Popova et al., 2017).
3. The magnitude of the geographical distance effects lets us conclude that in our both cases of Iran and Russia, the negative effects of distance in trade with the Western European region is less than the trade with the Asia-Pacific region. The major reason is the more developed transport infrastructure in the Western European region which leads to a cheaper transport cost.
4. In regards to the sanctions, the empirical estimations confirmed that the imposition of various sanctions in related to the Iran's nuclear program and the Russian political conflicts has pushed the foreign trade policy of these countries towards Asianization (Trade Convergence with Asia) and away from Europeanization (Trade Divergence from Europe).
5. It can be concluded from the mangnitute of sanctions' effects on Russian shift in its trading partners is less than on the shift in Iranian trading partners. The main reasons is that Russia is one of the Western European region's largest energy suppliers. Therefore this high level of energy dependency on Russia deaccelerates the pace of

de-Europeanization policy of this country. In contrast, Iran as an oil-exporting country has not a significant market share in the Western European region, hence the pace of policy of de-Europeanization under sanctions is faster than Russia. The faster pace of Iran's Trade Divergence from the Western European region leads to the faster Trade Convergence of this country to the Asia-Pacific region rather than Russia.

Of course, ultimately even aggregated trade analysis can never be as fine as reality, so some degree of bias is inevitable. Thus, the use of disaggregated trade data precludes further researches from inconsistency a bias. In our view, analyzing relationship between sanctions implications and shift in trading partners at levels of disaggregated trade would be a natural and important next step. Furthermore, encouraging policy makers to develop Iranian economic ties with the East Asian nations, even in the period of lifting sanctions, can be a proper economic policy for this country. The strong economic ties between the US and the EU with other different issues such as security, cultural or historical, can be a negative influenctial component on the Iranian economy. Hence, developing economic cooperation with the Eastern Asia can be a fruitful policy for this country.

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