Impact of Turkey's Zero Problem Policy Upon Trade with the Neighboring Islamic Countries and Comparison with the Preferred Trade Blocs: An Empirical Analysis 1992-2011

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Abstract

Turkey holds a special place in one of the most strategic regions in the world and connects the European and Asian continents. It also has important advantages in terms of commercial activities thanks to naval transportation facilities to the North African countries. Despite the geographical advantages, its trade with the neighboring countries has remained limited up to early 2000s. One of the primary reasons for this lack of improved trade is the failure in the Turkish foreign policy to focus on the Middle Eastern countries due to its traditional policy of Westernization. Since the remarkable changes in the identity of Turkish foreign policy and adoption of the zero-problem policy with the neighboring countries, trading activities have intensified and Turkey has improved its economic relations with the Islamic countries in the last decade. The global economic crisis that erupted in 2007 in the US has influenced almost the entire European continent whereas its impacts have remained limited upon Turkey thanks to its improved ties with the Middle Eastern countries. However, the developments associated with the Arab Spring process have led to serious criticisms towards the zero-problem policy. Turkey has been negatively influenced by the process as evidenced in the decline in the volume of trade with these countries. The trajectory of the developments in the years to come remains unclear. However, the general conviction tells that the people will become more assertive and decisive in the political stage in Arab countries and this will boost economic demand in the region, serving the economic interests of Turkey. This study examines the impacts of the zero-problem policy upon Turkey's economic relations with the Islamic countries and further analyzes the economic consequences of the future political developments.

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1. Introduction

Since late period of the Ottoman Empire, Turkey has been impressed by the economic development in the Western countries; in consideration of this, Turkey has adopted a policy of Westernization in an attempt to attain similar economic success and performance. The young republic which turned to the Western world in an effort to benefit from its technological and economic advantages maintained loose relations with the Islamic countries despite historical and cultural ties. The weakened political relations also led to decline in the economic relations as well. However, advanced Western states have huge amount of trade with their neighboring countries. They even create regional and international trading blocs and zones to improve the economic and trade ties.

Up to early 2000s, the trade with the neighboring countries, particularly the Arab and Islamic countries has remained limited. Even the border trade with the Islamic countries, rich of global energy and raw material resources, was limited. Turkey which has been trying to improve its relations with the neighboring countries in recent years has taken significant steps to enhance the commercial relations. Visa requirements were lifted with many Arab countries; measures were taken to enhance the tires with the peoples in the region. This change in the foreign policy style influenced the trade volume with these countries. The EU countries hold an important place in Turkey's exports. Half of the exports is made to these countries. The economic uncertainty in the EU zone becomes a graver issue, raising serious doubts on the viability of the EU as one of the most important successes in the history of global integration. The EU countries are currently experiencing serious political and economic problems(Ustaoğlu, 2013). It does not seem possible that they would preserve their common currency and adopt a common fiscal policy in the near future. The ongoing recession in the EU negatively affects Turkish economy. On the other hand, the Arab Spring that started with the popular uprising in Tunisia and Egypt remains the biggest obstacle before achievement of stability in the Middle East. The uprisings which led to regime changes in many Islamic countries revealed the fault lines between the communities in these countries.

The recent developments that concern Turkish foreign policy including the growing tension with Israel, the situation in Syria and the worsened relations with Azerbaijan raise discussions and questions on the effectiveness of the zero-problem policy approach. It is apparent that the ongoing political instability will inevitably influence the economic relations as well.

2. Literature Review

2.1 Turkey's Political Relations with the Neighboring Islamic Countries

Turkey's political relations with the neighboring Islamic states have historically been timid. It could be argued that Turkey's Western orientation in the Cold war era was the main reason for Turkey's indifference to the Islamic world and the MENA region(Çakmak & Güneysu, 2013). This state of indifference could be linked to the security concerns that Turkey held back then. These concerns could only be addressed by involvement in Western institution and alliance. As a result of this choice, Turkey generally remained reluctant to interact with the neighboring states.

However, this started to change in the 2000s for several reasons. The primary reason is the radical change in the priorities and content of Turkish foreign policy. This change does not refer to an axis of change; but it is of course visible that Turkey has adopted a new style of policy which now recognizes the importance of its near abroad and of the Islamic world as well. Another reason for this change is Turkey's ambition to broaden its set of relations. In the new approach, Turkey understands that it is important to act as a strong state that is able to mediate in the regional problems and also have good relations with the West at the same time. As a result of this new approach, the neighboring states gained importance in Turkish foreign policy. This led to strong ties of friendship and cooperation in many fields.

2.2 Zero Problem Policy

The zero problem policy seeks to change the mutual perceptions between Turkey and its neighbors in respect to security threats and concerns. A similar pattern is being followed in the policies devised in line with this overall goal and purpose. For this reason, joint cabinet meetings were held with the participation of Turkish delegation and the respective neighboring state representatives.

The joint cabinet meetings as well as the high level cooperation councils created in the relations with the neighboring states could be seen as ambitious steps to change the mutual perceptions held by the two parties in respect to the threats posed by each other and replace them with a new perception of cooperation and friendship in the field of diplomacy, politics and economy(Abramowitz & Barkey, 2009).

In case this is achieved, the complex bilateral issues will also be resolved eventually. This is the overall idea of the zero problem policy(Kirişçi, 2011).

At this point, the psychological impact of such attempts upon the administrators of the neighboring states is pretty important. To this end, no particular attention is paid to specific bilateral issues in the type of relationship that emerged around this pattern because it is obvious that problem-oriented approach has not obviously worked properly. Unlike this traditional and conventional approach, a new style seeking to build confidence and focusing on common economic interests is being devised within the framework of zero problem policy. This has been the main difference and new item in the Turkish foreign policy in the new era(Abramowitz & Barkey, 2009).

The zero problem policy should be evaluated from this perspective. Of course, this approach does not seek to resolve the problems by focusing on the problems themselves. On the contrary, this seeks to achieve a serious and dramatic transformation in the bilateral relationships with respect to the content of the external relations through confidence-building measures and moves that would address the current threat perceptions.

2.3 Turkey's Economic Relations with the Neighboring Islamic Countries

The introduction of zero problem policy has been extremely influential in the foreign policy making in Turkey. By virtue of the change associated with this new style of policy making, Turkey's relations have gone through radical transformation. This has been particularly visible in the economic relations with the neighboring countries. The announcement of zero problem policy has been promising for many states in the area; the policy has built confidence between Turkey and the neighboring countries. This was reflected in the change of the composition of the economic relations and in the increased amount of foreign trade volume between Turkey and its neighbors. The impact of the zero problem policy upon Turkey's economic relations with the neighboring states has been radical (Abramowitz & Barkey, 2009).

While the EU has been the main foreign trade partner of Turkey up until 2000s, this started to change in the aftermath of the introduction of the zero problem policy and Turkey's opening to the Middle East. The overall share of the Middle East states in Turkey's foreign trade has dramatically increased in the period where the zero problem policy has been implemented whereas the share of the EU has visibly declined. Even though this could be partly attributed to the economic crisis in the EU region, the influence of the zero problem policy should also be acknowledged.

The business associations and private sector players have been the major drivers in the change where Turkey's trade with the MENA countries has increased. However, the role of the state in this change should also be considered for analytical purposes. The state created high level cooperation councils that would facilitate interaction between players from different backgrounds in both Turkey and the neighboring states.

3. Methodology and Data Collection

3.1. Research Goal

The purpose of this study is to examine Turkey's foreign policy vis-à-vis the neighboring Islamic countries in recent years and analyze the reflections of this foreign policy style upon economic relations. The period between 1992 and 2011 will be empirically tested. Due to lack of data on the foreign trade volume of neighboring Islamic countries of Turkey, only quarterly terms were included in the tests.

3.2. Data Collection

The statistical data used was collected mainly through internet sources: the Turkish governments' official statistical webpage TurkStat (Turkey's import and export to the Azerbaijan. Iran and Syria quarterly period of 1992-2011), The World Bank (Real GDP growth of Turkey, Iran, Azerbaijan and Syria quarterly period of 1992-2011) and Central Bank of Turkey (Turkey's foreign trade volume and real GDP growth quarterly period of 1992-2011) web data catalogs.

3.3.1 ADF Unit Root Test

The ADF unit root test results reveal that not all variables are static at level; however, they are static at 5 pct of significance level at first different. It is observed that all series are I(1) and that they are static at the same level.

Table 1. ADF Unit Root Test Results

Variables (H_0 hypothesis)	X^2statistics	Prob	Result
TURX→ AZM	51.61	0.0000	Ho rejected
TURX→ AZX	73.45	0.0000	Ho rejected
TURX→ IRM	23.13	0.0052	Ho rejected
TURX → IRX	22.48	0.0063	Ho rejected
TURX → SURM	11.222	0.1540	Ho accepted
TURX→ SURX	5.384	0.6154	Ho accepted
TURM→ AZM	30.001	0.0008	Ho rejected
TURM→ AZX	56.25	0.0000	Ho rejected
TURM→ IRM	39.29	0.0001	Ho rejected
TURM→ IRX	37.72	0.0004	Ho rejected
TURM→ SURM	10.571	0.1831	Ho accepted
TURM → SURX	5.569	0.5908	Ho accepted

Test results also tell that unit root should be considered because the Toda-Yamamoto test tests the causality in the series that static at the first degree; and there is no need for co-integration between the series. For this reason, whether or not the series are co-integrated is not investigated in the paper.

3.3.2 Toda-Yamamoto Causality Analysis

Toda-Yamamoto (1995) show that the result of this test used for the Granger causality test may not be applicable since the traditional F-statistics cannot have standard distribution in case where the series are not static in the system (Yavuz, 2006; Toda & Yamamoto, 1995).The causality relationship between the series was first tested by the Granger (1969) causality test. Because the causality test developed by Granger was implemented by Sims (1972), it was called Granger-Sims causality test. It was observed that the Toda-Yamamoto (1995) enhanced the causality tests; it has been popularly used in many articles and studies since then.

In periods where Granger (1969) causality test was used, the level values of the series were included in the models because no attention was paid to the notion of static. However, many studies proved that most macroeconomic series were not static at the level. On the other hand, Granger and Newbold (1974) show that in case the series are processed in their non-static standing, fake regression problem may be encountered and therefore the regression results may not show the reality.

The regression analyses run with the non-static time series may only reflect a genuine relationship if there is a co-integration relationship between these series. F test may be used in the testing of the causality in the error fixing model which is a restricted VAR model. In this causality test developed by Engle and Granger (1987), the condition that the series where causality relationship will be investigated should be co-integrated makes this test dependent upon the co-integration tests.

Table 2. Toda-Yamamoto Causality Analysis Results

Variables (H_0 hypothesis)	X^2statistics	Prob	Result
TURX$\rightarrow$ AZM	51.61	0.0000	Ho rejected
TURX$\rightarrow$ AZX	73.45	0.0000	Ho rejected
TURX$\rightarrow$ IRM	23.13	0.0052	Ho rejected
TURX $\rightarrow$ IRX	22.48	0.0063	Ho rejected
TURX $\rightarrow$ SURM	11.222	0.1540	Ho accepted
TURX$\rightarrow$ SURX	5.384	0.6154	Ho accepted
TURM$\rightarrow$ AZM	30.001	0.0008	Ho rejected
TURM$\rightarrow$ AZX	56.25	0.0000	Ho rejected
TURM$\rightarrow$ IRM	39.29	0.0001	Ho rejected
TURM$\rightarrow$ IRX	37.72	0.0004	Ho rejected
TURM$\rightarrow$ SURM	10.571	0.1831	Ho accepted
TURM $\rightarrow$ SURX	5.569	0.5908	Ho accepted

The test results depicted at the table show that there is no causality between Turkey's exports and Syria's imports and exports. In addition, there is no causality relationship observed between Turkey's imports and Syria's imports and exports. The political stability in 2000s had positive impacts upon Turkish economy. Turkey's competitiveness increased in the aftermath of the customs union agreement in 1996 in international arena. The amount of exports to Iran and Azerbaijan has increased as a result of the improved political relations. Iran and Azerbaijan have become visible beneficiaries of the trade relations with Turkey because of oil and energy exports.

Turkey's energy need grows because of the growing industrial production; Turkey acquires a substantial part of its energy materials from Iran and Azerbaijan. The zero problem policy contributed to the transportation of the oil and natural gas via the pipelines to the EU countries over Turkey. In the exports and imports with Syria, a growth in parallel to the real GDP growth is observed. Syria has no oil or natural gas resources. For this reason, the volatility in the global oil prices in 2000s positively affected Iran and Azerbaijan whereas this did not lead to any contribution to Syria's economic performance. Despite overall increase in its foreign trade volume, Turkey's bilateral trade with Syria did not show a similar trend. The primary reason for this is lack of import items in Syria that Turkey needs whereas Turkey does not have a lot to export to Syria. The zero problem policy of Turkey has positively affected the volume of trade with the neighboring countries up until the Arab Spring. However, the recent political crisis with Syria will inevitably deteriorate the trade relations between Turkey and Syria.

In 1995, Toda and Yamamoto developed a causality test by using the VAR model whose delay was enhanced. There was no co-integration relationship between the series in this test; however, it was sufficient to know the degree of the maximum integration level of the variables in the model and to identify the model properly. In this study, the bilateral trade between Turkey and its neighboring countries including Azerbaijan, Iran and Syria were investigated. The trade relations between Turkey and Iraq were suspended due to the embargo imposed after the Gulf War; for this reason, the bilateral trade volume with this country was considered zero and was not included in the scope of the study. In this study, Granger (1969) and Toda-Yamamoto (1995) causality tests were used to analyse the relationship between the imports and exports, and the size of foreign trade. Granger causality is sensitive at the static level of the series. Unless series are I(0), it does not yield to effective results. The Toda-Yamamoto test, on the other hand, is applicable regardless of the static levels of the series. For this reason, it is pretty useful and suitable.

The following equations may be taken as bases in the Toda-Yamamoto (1995) causality test:

$$Y_t = \alpha_0 + \beta_{1i} \sum_{i=1}^{k} Y_{t-i} + \beta_{2j} \sum_{j=k+1}^{d_{max}} Y_{t-j} + \gamma_{1i} \sum_{i=1}^{k} X_{t-i} + \gamma_{2j} \sum_{j=k+1}^{d_{max}} X_{t-j} + \varepsilon_{1t} \qquad (1)$$

$$X_t = \alpha_1 + \lambda_{1i} \sum_{i=1}^{k} X_{t-i} + \lambda_{2j} \sum_{j=k+1}^{d_{max}} X_{t-j} + \delta_{1i} \sum_{i=1}^{k} Y_{t-i} + \delta_{2j} \sum_{j=k+1}^{d_{max}} Y_{t-j} + \varepsilon_{2t} \qquad (2)$$

As evidenced by the equations above, expanded VAR equations were obtained by addition of expanded lags to the standard VAR equations. In this way, for the causality test, a VAR model at the degree of **$k \square\square\square d_{max}\square$** can be estimated. Here, k refers to the optimal lag length of the estimated VAR model whereas d_{max} to the maximum integration level of the variables in the model, in other words, to the maximum static level.

One important feature of this method offered by Toda and Yamamoto is that pre-estimation tests like unit root and co-integration were not necessary. In this case, the risk in connection with the error in identifying the integration level on the estimation of the model is minimized.

The following causality hypotheses are obtained by using the equations (1) and (2):

For equation (1);

H_0hypothesis: $\gamma_{1i} = 0$ (X is not cause of Y)
$H_a$hypothesis: $\gamma_{1i} \neq 0$ (X is cause of Y)

For equation (2);

H_0hypothesis: $\delta_{1i} = 0$ (Y is not cause of X)
$H_a$hypothesis: $\delta_{1i} \neq 0$ (Y is cause of X)

Here, a standard Wald test is applied by neglecting the coefficients corresponding to the lags added to the optimal lag length. The Wald test is calculated as follows:

$$W = \frac{SSR_R - SSR_{UR}}{SSR_{UR}/n}$$

If the calculated X^2statistics is greater than table value or the prob value is smaller than the significance level, the zero hypothesis is rejected. In this case, there is causality relationship between two variables. Its graphic depiction is $X \square\square Y$ and Xvariable is the cause of Y.

The stages of the test take place as follows:

- First, the series are subjected to the static (unit root) test. From this, the highest level of integration level of the series (d_{max}) is obtained.
- At the second stage, standard VAR analysis is run. The lag which displays normal distribution without auto-correlation and changed variance is identified as optimal lag. This lag is referred to as "k" in the literature.
- At the third stage, "k+ d_{max}" delayed expanded VAR model is predicted.

Finally, causality tests are run via the expanded lag VAR model. The coefficients in thecausality analysis are subjected to the Wald test. However, not all coefficients but the coefficients of the standard VAR model are subjected to the WALD test. X^2statistics and the prob value are calculated.

Conclusion

The 1990s are referred to as wasted years in Turkey due to many chronic political and economic problems and their repercussions. The public investments stopped; huge problems were experienced with the neighbors; and economic crises erupted because of the populist policies in connection with political problems and political instability. No political stability was achieved in the 1990s; and Turkey was governed by coalition governments. Because these governments acted like short term election administrations, no strong measures that would be proper for long term were taken to address prominent political and economic problems. This led to grave economic crises in following years. The financial crisis in 2001 has been particularly disruptive and harmful to Turkish economy; in the first election held after the crisis, the political parties represented in the government were unable to gain representation in the parliament. The most important development that affected Turkey's economic performance in the 1990s was the customs union agreement signed in 1996. By this agreement, the national economy started to renew its industry and production items and went through a process of structural change. Even though many firms have experienced serious problems at the beginning in respect to the strong competitiveness, they have gone through a process of transformation from labor-intensive production to capital-intensive production thanks to technology transfer. Many exporting sectors of Turkey have achieved structural transformation and accomplished high level of efficiency and productivity. The increased productivity and efficiency enhanced competitiveness and increased the amount of exports.

The textile sector, one of the most important export sectors in the 1990s, was replaced by the automotive sector in 2000s.

For Turkey, the general elections in 2002 represented a turning point. The single party administration that won a landslide election in the election maintained political stability; this facilitated the decision making that was extremely important and relevant to the identification of economic problems vital for the national economy. Thanks to the strong measures, the amount of exports increased to $135 billion in 2007. The crisis in 2007 negatively affected the United States and the European Union; Turkey barely experienced the impacts of the crisis thanks to the opening to the new markets in foreign trade.

Turkey which had minimal interaction with the neighboring countries in 2000s; as a result, the level of foreign trade with these states remained at low levels. However, in the aftermath of the zero problem policy with the neighboring countries, the size of foreign trade with these countries rose as a result of bilateral trade agreements. Iran and Azerbaijan, net exporters of oil and natural gas, were positively influenced by the fluctuations in the energy prices and price increases in these commodities. For this reason, the contribution by the partnership agreements with these two countries has been great to the bilateral trade with Turkey. It is observed that the demand for the Turkish goods in these countries has been on rise in the last decade. Turkey's neighboring countries face serious political and economic problems. Turkey is the most stable and economically strongest state in the region. For this reason, Turkey's foreign trade volume with the neighboring countries has been on the rise.

Acknowledgment

References

Abramowitz, M., & Barkey, H. J. (2009). Turkey's Transformers: The AKP Sees Big. Foreign Affairs Vol. 88, No. 6 , 118-128.

CRBT. (2012, 12 15). CRBT Electronic Data Delivery System. Retrieved from The Central Bank of Turkey: http://evds.tcmb.gov.tr/yeni/cbt-uk.html

Çakmak, C., & Güneysu, G. (2013). Turkish–American Relations During Obama Era: Unfulfilled Expectations. Turkish Studies Volume 14, Issue 2, 193-211.

Engle, R. F., & Granger, C. W. (1987). Co-integration and error correction: representation, estimation, and testing. Econometrica: journal of the Econometric Society , 251-276.

Granger, C. (1969). Investigating casual relations by econometric models and cross spectral methods. Econometrica Vol. 37, 434-439.

Granger, C., & Newbold, P. (1974). Spurious regressions in econometrics. Journal of econometrics, 111-120.

Kirişçi, K. (2011). Turkey's "Demonstrative Effect" and the Transformation of the Middle East. Insight Turkey, 33-55.

The World Bank. (2012, 12 14). DATA/The World Bank . Retrieved from The World Bank: http://data.worldbank.org/country/turkey

Toda, H. Y., & Yamamoto, T. (1995). Statistical inference in vector autoregression with possibly integrated process. Journal of Econometrics 66, 225-250.

TurkStat. (2012, 12 13). Turkish Statistical Institue. Retrieved from TurkStat: www.tuik.gov.tr

Ustaoğlu, M. (2013). Türkiye'de uygulanan döviz kuru politikalarının Türk otomotiv sektörünün rekabet gücü üzerindeki etkileri: ampirik analiz. İstanbul: İstanbul Üniversitesi Sosyal Bilimler Enstitüsü.

Yavuz, N. C. (2006). Test for effect of the tourism reciepts on economic growth in Turkey; Structioral break and causlity analisys. Doğuş Üniversitesi Dergisi, 162-171.