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THE RELATIONSHIP AMONG THE CURRENT DEFICIT - SHORT TERM CAPITAL MOVEMENTS AND ECONOMIC GROWTH: EVIDENCE FROM TURKEY

Abstract. *In this study, it was analysed if there is a short and long term relationship among the current deficit, short-term capital movements and the economic growth within the periods of 1998Q1-2011Q4 in Turkey. It was used to Autoregressive Distributed Lag model for analyzing the series. As a result of the Autoregressive Distributed Lag model test, it was confirmed the co-integration relationship among the series related to current deficit, economic growth and short term capital flows in short term and long term.*

Keywords: *economic growth, short term capital movements, current deficit, cointegration, ARDL model.*

JEL Classification: F32, F43.

I. Introduction

Short-term capital flow and current deficit are very important subjects for all economies. Current deficit is an unwanted phenomenon since it fluctuates the macroeconomic balance of economies but on the other side, current deficit is a usual phenomenon in economies where growth takes place. In this respect, the important thing is not the question whether to return current deficit or not but it is the question how it can be financed and how the growth can be sustained. In economies where current deficit is at very high levels, capital account balance is very important for payment statements balance. Instabilities in balance of payment can be cured by reducing open capital transaction balance excessively which is seen in current transaction balances. Under the flexible foreign exchange policy, determining the foreign exchange rate according to demand and supply of the exchange and making it out of central banks control makes official reserve account – which is another important aspect of payment statements – trivial. As a matter of

fact, in an economy that faces current deficit, capital flow is of great importance for economies, which do not want to have any problems in terms of balance of payments and other macro economic variables. Among the possible solutions for current deficit are short-term capital flows. Short-term capital flows, also called "hot money", are directed at markets where high interest rates and profitability take place. Short-term capital input, even though it has a positive effect on economic growth through indirect factors such as debt costs, it is a matter of discussion if this effect is permanent and sustainable.

In Turkey, especially after the economic crisis that took place in 2000 and 2001, short-term capital flows and current deficit subjects had been in the top agenda. In addition to the fact that the Central Bank of the Republic of Turkey (CBRT) was made autonomous, the transition from stable exchange rate to floating rate policy increased the importance of short-term capital flow and current deficit. In addition to the floating exchange rate policy, the low rate-high interest policy used by CBRT accelerated the short-term capital flow into the country. Besides, with the low rate-high interest policy, export has become attractive. This case led to the increase of current deficit steadily. The acceleration of the economic growth with the increase in short-term capital flow and current deficit that occurred in the Turkish economy after the economic crisis in Turkey between the years 2000-2001 played an important role in our study which depends on if there is an interaction among those three variables. Besides, since there is not much study done on within this scope – as mentioned in the literature– this study takes up an important place in terms of the literature on this subject. Sections of the study are as follows: Second Section – comprises model which implemented in this study. Third Section – literature about our study will be explained; Fourth Section, – data will be introduced and empirical methodology used in study will be comprised; Fifth Section, – comprises the empirical findings; sixth section in the final place, - comprises the results and policy recommendations related to the study.

II. Model Specification

The CA model employed in this study and it takes the following long-run (cointegrating) form:

$$\ln CA_t = \alpha_0 + \alpha_1 \ln GDP_t + \alpha_2 \ln SA_t + \varepsilon_t \qquad (1)$$

An ARDL representation of Equation 1 is formulated as follows:

$$\Delta \ln CA_t = \beta_0 + \sum_{i=1}^{m} \beta_{1i} \Delta \ln CA_{t-i} + \sum_{i=0}^{m} \beta_{2i} \Delta \ln GDP_{t-i}$$
$$+ \sum_{i=0}^{m} \beta_{3i} \Delta \ln SA_{t-i} + \beta_4 \ln CA_{t-1} + \beta_5 \ln GDP_{t-1} + \beta_6 \ln SA_{t-1} + v_t \qquad (2)$$

In equation (2), m stands for optimal lag length. In the model, the optimal lag lengths expressed as *m* is defined by criteria such as AIC, SBC and HQC and in order that the test returns healthy results, there should not be serial correlation problem in the error term. β_1, β_2 and β_3 represent the short run dynamics and β_4, β_5 and β_6 represent the long run elasticities.

The bounds testing procedure is based on the F or Wald-statistics and is the first stage of the ARDL cointegration method. Accordingly, a joint significance test that implies no cointegration $H_0 = \beta_4 = \beta_5 = \beta_6 = 0$, should be performed for Equation 2. The F-test used for this procedure has a nonstandard distribution.

Thus, Pesaran et al. compute two sets of critical values for a given significance level. One set assumes that all variables are I(0) and the other set assumes they are all I(1). If the computed F-statistic exceeds the upper critical bounds value, then the null hypothesis is rejected. If the F-statistic falls into the bounds then the test becomes inconclusive. Lastly, if the F-statistic is below the lower critical bounds value, it implies no cointegration.

Once a long-run relationship has been established, Equation 2 is estimated using an appropriate lag selection criterion. At the second stage of the ARDL cointegration procedure, it is also possible to perform a parameter stability test for the selected ARDL representation of the error correction model (ECM).

An Error Correction Model of Equation 2 is given as below:

$$\Delta \ln CA_t = \alpha_0 + \sum_{i=1}^{p} \alpha_{1i} \Delta \ln CA_{t-i} + \sum_{i=0}^{q} \alpha_{2i} \Delta \ln GDP_{t-i} + \sum_{i=0}^{l} \alpha_{3i} \Delta \ln SA_{t-i}$$
$$+ \lambda EC_{t-1} + u_t \qquad (3)$$

Where, *p*, *q* and *l* represent optimal lag length, λ is the speed of adjustment parameter and EC represent error correction term derived from long run relationship as given in Equation 2.

III. Literature Review

No serious empirical findings were ascertained about the relationship among short-term capital flow, current deficit and growth or all in one. But, the effect of foreign capital flow directed at developing countries on economic growth or current deficit separately was examined in many empirical studies.

According to Barisik and Kesikoglu (2006) who questioned relationship between current deficit and some basic macro financial variables with the Vector Auto Regression model and Granger causality for the 1987:1 – 2003:4 periods, there is a bidirectional causality relationship among budget deficit, inflation, current deficit and economic growth. Erbaykal (2007) who expressed that most of the causality analyses were shaped in the economic growth and foreign exchange index found that both economic growth and foreign exchange led to current deficit in the Toda and Yamamoto (1995) causality model depending on GDP, real effective foreign exchange index and transactions for 1987:01-2006:03 period. Ozbek (2008) who studied the relationship of current deficit, economic growth and short-term credit flows found in his study dealing with 2000-2006 that the short term capital flow has an influence on growth and that this growth led to the widening of the trade volume. Telatar and Terzi (2009) analyzed the relationship between economic growth and current balance between the periods of 1991:4 – 2005:4. According to the Granger causality and VAR analysis, there was found a mono directional causality from the growth rate to current balance. Namely, economic growth increases the current deficit.

Turkey-only issues are as above mentioned. Although there are not so many studies made on Turkey, there are many studies made on developing and developed countries.

Milesi-Ferretti and Razin (1999) studied what starts continuous and large-scale reductions in the current deficits of five countries belonging to low and middle level income through EKK and Probit models. In the result of that study, it was not possible to find any systematic relationship between decreases in the growth rate and current account balance. Calderon et. al. (1999) carried out a study on the relationship between basic macroeconomic variables and current deficit for the period 1966-1994 throughout 44 developing countries by using panel data and Generalized Method of Moments. As a result of that study, it was found that there is a weak relationship between growth rate and current deficit in the same way.
Chinn and Prasad (2000) looked for determinants of current deficit balance for 70 developed and developing countries between the years 1971-1995 throughout EKK and Stable Effects Method. They claimed that there is a weak relationship between growth rate and current deficit. Bussiere et. al. (2004) studied the determinants of current deficit balance in developed and developing countries for the years between1980-2002 and 1995-2002 by using Fixed Effect Method, least squares dummy variables model and Generalized Methods of Moments. In their studies,

they found that there is a weak relationship in the same way, just as it was seen in Chin and Prasad (2000). Prasad, et. al. (2007) analyzed the current deficit, investment and growth relationship of 56 countries including Turkey by panel data method using the data between the years of 1970-2004. According to empirical results, in some of the countries mentioned in the country groups that conduct investments via domestic savings, there found faster growth rates and higher investment when compared to the countries that meet their investments via short-term capital inflow. Christian (2011), evaluated bilaterally the effects of money stock and current deficit on economic growth for the period 1975-1997. In his study, he tried to explain the situation of 27 OECD member countries using panel data and treatment type analysis putting forward that economic growth leads to instability in the money market rather than current deficit.

IV. Data and Methodology

In this study, the co-entegration between the data of GDP, current deficit and short-term capital flow in Turkey, covering 1998Q1-2011Q4 process, have been analysed using unit root tests and the Autoregressive Distributed Lag (ARDL) model. CA is a dependent variable in model. It had been used to quarterly data for all variables and only portfolio investment was reviewed as a short-term capital flow in this study. In testing of these relationships, data updated every three months from 1998Q:1 to 2011Q:4 obtained from the Central Bank of the Republic of Turkey's electronic data distribution system (EDDS). In order to deseasonalize the variables, we use TRAMO/SEATS program. In this context, we can connote to variables as follows:

Table 1. List of variables

Variables	Explanations	Source
CA	Current Deficit (USD)	CBRT
GDP	Gross Domestic Product (USD)	CBRT
SA	Short-Term Capital Flow-Portfolio Investment (USD)	CBRT

In this study, ADF and PP unit root tests And ARDL bound tests were used. The explanation related to these tests are as follows:

1. Unit Root Tests

Unit root tests can be used to determine if trending data should be first differenced or regressed on deterministic functions of time to render the data stationary. In this research, the ADF and PP tests are used for analysis.

As a result of the variables applied, if stability levels return differently, in order to test if there is a short or long term relationship Vector Error Correction Model

(VECM) and co-integration tests cannot be done. This problem can be eliminated by the Autoregressive Distributed Lag (ARDL) by Pesaran et al. (2001).

2. ARDL Bound Test

Testing the relation between level of parameter and cointegration has gained importance since the essay of Engle-Granger (1987). Testing the existence of cointegration can be analysed under two topics. These are two level approach of Engle-Granger,'s based on remnants of regression and Johansen system approach based on reduced rank regression. Exept that, there is Stock-Watson (1988)'s scholastic common system approach that based on method of main constituent. The common feature of all these approaches are that all parameters worked on are assumed all are I(1). It brings some indefiniteness as it is a compulsory that the parameters' union tests are conducted before cointegration analyses.

Based on Pesaran (2001) ARDL model a new approach that enables the cointegration relation to be tested was developed. The new method is based on parameters level delay relevance Wald or F tests in ARDL model's Error Correction forms. It is shown that every two test range doesn't fit to standard distribution independent form being explanatory parameters I(0) or I(1) under the assumption telling that there is no relation between Pesaran parameter levels.

In Pesaran's analyse asymptotic critic values were obtained for two extreme situations. When in the first one all explanatory variables were I(0), in the second all explanatory parameters were I(1) it didn't create asymptotic critic values. If counted F statistic falls between this critic two rate, the test has no result. When Explanatory parameters are I(0), a F written on the left of created critic rate or no relation of Wald statistic cointegration are the result. For the other situation a F written on the right of I(1) created critic rate or relation of Wald statistic cointegratin are come to a conclusion.
ARDL models are advantageous as they offer both short term and long term relations at the same time. Another advantage of these models is that small samples give more accurate (robust) results compared to other cointegration test results.

A (L), B (L) and C (L), the delay processor polynomials are defined as follows.

Formed of 3 variables (y_t, X_{2t} X_{3t}) and a ARDL (p,q,m) model respectively formed of p,q and m degrees can be like the one below.

$$y_t = a + a_1 y_{t-1} + a_2 y_{t-2} + ... + a_p y_{t-p} + b_0 x_{2t+b1} x_{2t-1} + b_2 x_{2t-2} + ... + b_q x_{2t-q} + c_0 x_{3t+1} x_{3t-1} + c_2 x_{3t-2} + ... + c_m x_{3t-m} + u_t \quad (4)$$

We can explain the ARDL model in this way by using delay processors multi-terms.

$$A(L)y_t = \alpha + B(L)X_{2t} + C(L)X_{3t} + u_t \qquad u_t \sim WN(0,\sigma^2) \qquad (5)$$

Here A(L), B(l) and C(L) delay processor multi terms are defined like that.
$A(L)=(1-a_1L-a_2L^2-\ldots\ldots-a_pL^p)$
$B(L)=(b_0+ b_1L+b_2L^2+\ldots\ldots+b_qL^q)$
$C(L)= (c_0+ c_1L+c_2L^2+\ldots\ldots+c_mL^m)$

Therefore ARDL (p,q,m)

$A(L)y_t = \alpha + B(L)X_{2t} + C(L)X_{3t} + u_t$ model can be parametrized in this way:

$$\Delta y_t = \alpha + \sum_{i=1}^{p-1} \theta_i \Delta y_{t-i} \quad \Delta y_t = \alpha + \sum_{i=0}^{q-1} \delta_i \Delta X_{2t-i} + \sum_{i=0}^{m-1} \varphi_i \Delta X_{3t-i} + d_1 y_{t-1} + d_2 X_{2t-1} + d_3 X_{3t-1} + u_t \qquad (6)$$

d1, d2, d3 coefficient numbers above can be matched with ARDL coefficient numbers on this level in the following manner :

$d_1= (a_1+a_2+\ldots\ldots+a_p)-1$
$d_2=(b_0+ b_1+b_2+\ldots\ldots+b_q)$
$d_3= (c_0+ c_1+c_2+\ldots\ldots+c_m)$

The hypothesis that there is no cointegration here can be tested as:

$H_0: d_1=d_2=d_3=0;$ There is no cointegration.
$H_A:$ at least one of them is different from 0; There a is cointegration.

$$F = \frac{(RSS_R - RSS_{UR})/g}{RSS_{UR}/(T-K)}$$

k= The number of explanatory variable
g= constraint (restrict) number
K= parameter number

After calculating F statistic, we look at Pesaran(2001) table value. To be able to do cointegration test, all the variable numbers don't have to be I(1). In other words, some of them can be I(0), some can be I(1). That's why there is a maximum limit and minimum limit in tests.

No Cointegration F statistics is in this area	Area of inconclusive F statics are in this area	Cointegration F statics are in this area
I(0) (lowest limit)		I(1) (highest limit)

In ARDL model (If there is any) cointegration relation is like the following;

$d_1y_{t-1} + d_2X_{2t-1} + d_3X_{3t-1} = 0$. *From that balance error,*
$\varepsilon_{t-1} = d_1y_{t-1} + d_2X_{2t-1} + d_3X_{3t-1}$ *can be obtained.*

V. Empirical Findings

Unit root test results related to GDP, CA and SA are shown in Table2 and Table3.

Table 2. ADF unit root test results

Variables	Level		1st Difference	
	Intercept [a]	Trend and Intercept[b]	Intercept[a]	Trend and Intercept[b]
GDP	2.892 [0]	0.809[0]	-5.385[0]***	-6.010[0]***
CA	-0.680[0]	-2.477 [0]***	-7.286[0]***	-7.261[0]***
SA	-3.768 [0]***	-4.965 [0]***	-9.747 [0]	-9.645 [0]

*The asterisks ***, ** and * represent the significance level at the 1%, 5% and 10%*
[a] *The asymptotic critical values for intercept -3.560, -2.917, -2.591 at the 1%, 5% and 10% levels.*
[b] *The asymptotic critical values for trend + intercept -4.140, -3.496, -3.177 at the 1%, 5% and 10% levels.*
The figures in parenthesis denote the number of lags in the tests that ensure white noise residuals. They were estimated through the Schwarz criteria. The critical values for ADF test are obtained from MacKinnon (1996).

Table 3. PP unit root test results

Variables	Level		1st Difference	
	Intercept [a]	Trend and Intercept[b]	Intercept[a]	Trend and Intercept[b]
GDP	2.443 [3]	0.234 [3]	-6.623 [4]***	-8.416 [3]***
CA	-2.289 [1]	-2.561 [1]	-7.288 [3]***	-7.259 [4]***
SA	-3.693 [1]***	-5.140[2]***	-13.68[13]	-13.42[13]

*The asterisks ***, ** and * represent the significance level at the 1%, 5% and 10%*
[a] *The asymptotic critical values for intercept -3.560, -2.917, -2.591 at the 1%, 5% and 10% levels.*
[b] *The asymptotic critical values for trend + intercept 0.146 at the 5% -4.140, -3.496, -3.177 at the 1%, 5% and 10% levels. Figure in parentheses denotes the optimal lag bandwidth. The optimal bandwidth for PP test is selected using the Newey-West Bartlett kernel. The critical values for PP test are obtained from MacKinnon (1996).*

According to the ADF and PP unit root tests, GDP and CA series become stable when first difference is taken. SA series is stable at level. According to this, GDP and CA series include unit roots. Therefore, the stability of GDP and CA series are I(1), and that of CA is not include unit root. Thereby, the stability of SA series is I(0). VECM and co-integration tests cannot be done in that case. This problem can be eliminated by the ARDL by Pesaran et al. (2001).

In order to predict the ARDL (p,q,m) model in which short term and long term relationship among the variables are searched, first of all the optimal lag length should be defined. In this respect, since the lag length without serial correlation becomes optimal lag length, it is required to define which lag length do not have serial correlation.

Table 4. Defining the optimal lag length for bound test

m	**AIC**	$\chi^2_{(1)}$
1	70.52448	0.7225
2	**70.35130***	0.5587
3	70.56182	0.1348
4	70.67864	0.5676
5	70.73571	0.6524
6	70.76247	0.5038
7	70.65077	0.4868

*$\chi^2_{(1)}$ expresses first degree of Lagrange Multiplier test that researchs the serial correlation shows the significance level of ** %5, *** % 10 and express whether there is a serial correlation problem in error terms.*

LM test shows that there is no serial correlation in model. Because of the fact that minimum AIC criteria is 2, lag length was accepted 2. From this point forward, to detect if there is a co-integration relationship among variables, F-stat value should be found and be compared with Pesaran's (2001) table values. That the F-stat value is less than base limit of Pesaran's table values means there is no co-integration, that the F-stat value is between the base and the ceiling limits of Pesaran's table values means there is instability, and finally that the F-stat value is higher than the ceiling limit of Pesaran's table values mean there is co-integration.

Table 5. F test results for cointegration relationship

Critical Values for ARDL Bound Test								
F-Value		k	Lag Length	Significance Level			Intercept + Trend	
					CI(III) Case III		CI(V) Case V	
Intercept	Trend +Intercept				I(0)	I(1)	I(0)	I(1)
8.8636	7.646	2	2	%1	3.17	4.14	4.19	5.06
				%5	3.79	4.85	4.87	5.85
				%10	5.15	6.36	6.34	7.52

Critical values are obtained from Pesaran et al (2001), Table CI (iii) Case (III): Unrestricted Intercept

 Critical values are obtained from Pesaran et al (2001), Table CI (v) Case V): Unrestricted Trend.

k is the number of explanotary variable in model.

Table 5 makes it possible to compare the criteria required in order to determine if there is co-integration among the variables in the model built. From this table, it is possible to conclude that there is a co-integration among the variables used in the model.

After detection of co-integration for ARDL model, short and long term coefficients should be obtained. For this, the lag length in compliant with the ARDL model should be found first. For the model created with regard to the equation 2, the conclusion was ARDL (1,2,0). According to this, the ARDL (1,2,0) model will be predicted.

Table 6 (A) Autoregressive distributed lag estimates selected based on Schwarz Bayesian criterion ARDL (1,2,0), dependent variable is CA

Regressor	Coefficient	Standard Error	T-Ratio[Prob]
CA(-1)	0.59353	0.08115	7.3137[.000]
GDP	0.13951	0.54182	2.5744[.013]
GDP(-1)	0.22592	0.77535	2.9141[.005]
GDP(-2)	0.11145	0.57437	1.9397[.058]
SA	0.18340	0.03686	4.9747[.000]
Intercept	0.20769	0.68144	3.0477[.003]

Table 6 (B)

R^2	0.93330	Adj R^2	0.92775
AIC	-416.3711	SBC	-421.2969
F-stat.	167.9221		
F significance	0.000		
DW-statistic	1.761		

After the ARDL model was determined, it is checked if the series include econometric problems like serial correlation, heteroscedasticity. LM test and White test were applied to learn to case of serial correlation and heteroscedasticity of series in table 7.

Table 7. Diagnostic tests

Item	Test Applied	CHSQ(χ^2)	Prob.
Serial Correlation	Lagrange Multiplier	24.12	0.745
Normality	Test of Skewness and Kurtosis	0.258	0.155
Functional Form	Ramsey's RESET Test	4.092	0.129
Heteroscedasticity	White Test	3.018	0.164

Above results indicate that the model's diagnostic tests for serial correlation, normality of residuals and heteroscedasticity problems have not been observed. Similarly, no model specification error exists with reference to Functional form.
In the next stage, the long run and the short run ECM coefficients are estimated by using Schwartz Bayesian Criteria to select the appropriate lags. Once we established that a long-run cointegration relationship existed, equation 2 was estimated using the following ARDL (1,2,0) specification. Firstly the long run coefficients will be estimated. It is presented in Table 8 below.

Table 8. Coefficient using ARDL (1,2,0) model selected based on Schwarz Criterion

Regressors	Coefficient	Standard Error	T-Ratio	P-Value
GDP	0.6142	0.1642	3.7416	0.000
SA	0.4512	0.0883	5.1079	0.000
Constant	0.2372	0.0563	3.3631	0.001

The estimated coefficients of the long-run relationship show that GDP and short-term capital flow have statistically significant long run effect on CA.

Our next set of findings report the short run estimates. The fact that the variables in the model are cointegrated provides support for the use of an ECM representation in order to investigate the short run dynamics. Estimation results still based on Schwartz Bayesian Criteria are presented in Table 9 below.

Table 9. Error Correction representation for selected ARDL(1,2,0) model

Regressors	Coefficient	Standard Error	T-Ratio	P-Value
dGDP	0.1395	0.5418	2.5741	0.013
dGDP1	0.1114	0.5741	1.9397	0.042
dSA	0.1834	0.0368	4.9747	0.000
ecm(-1)	-0.4064	0.0811	-5.0087	0.000

According to results short-term elasticities of economic growth and short run capital movement 0.13 and 0.18 respectively. It is also observed that economic growth and short run capital movement are significant in short term. ECM(-1) is one period lag value of error terms that are obtained from the long-run relationship. The coefficient of ECM(-1) indicates how much of the disequilibrium in short run will be eliminated in the long run. As expected, the error correction variable ECM (-1) has been found negative and statistically significant. The coefficient of ECM term suggests that adjustment process is quite fast and 40% of the previous year's disequilibrium will be corrected in the current year.

Finally, CUSUM and CUSUMSQ plots are drawn to check the stability of short run and long run coefficients in the ARDL error correction model. Figure 1 shows the cumulative sum of recursive residuals whereas figure 2 displays the cumulative sum of squares of recursive residuals.

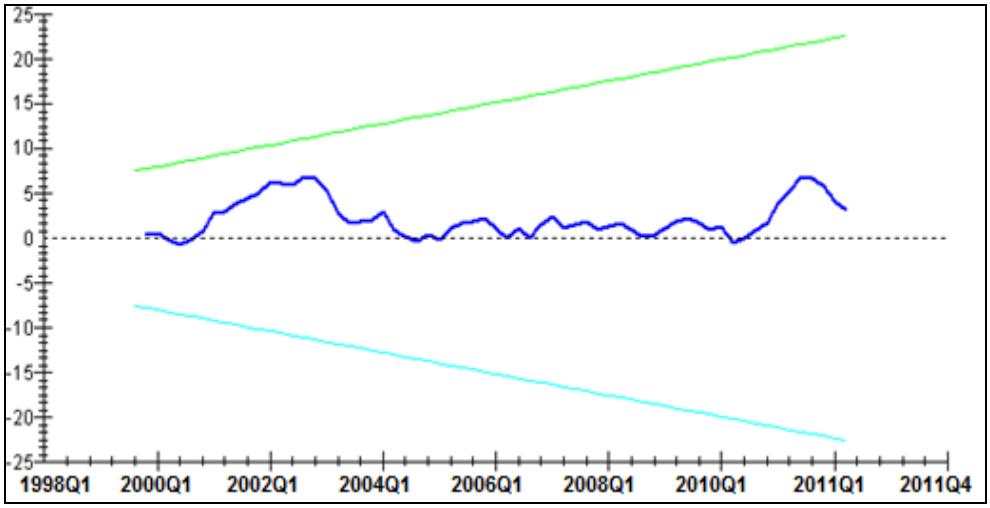

Figure 1 – Plot of cumulative sum of recursive residuals

Note: The straight lines represent critical bounds at 5% significance level.

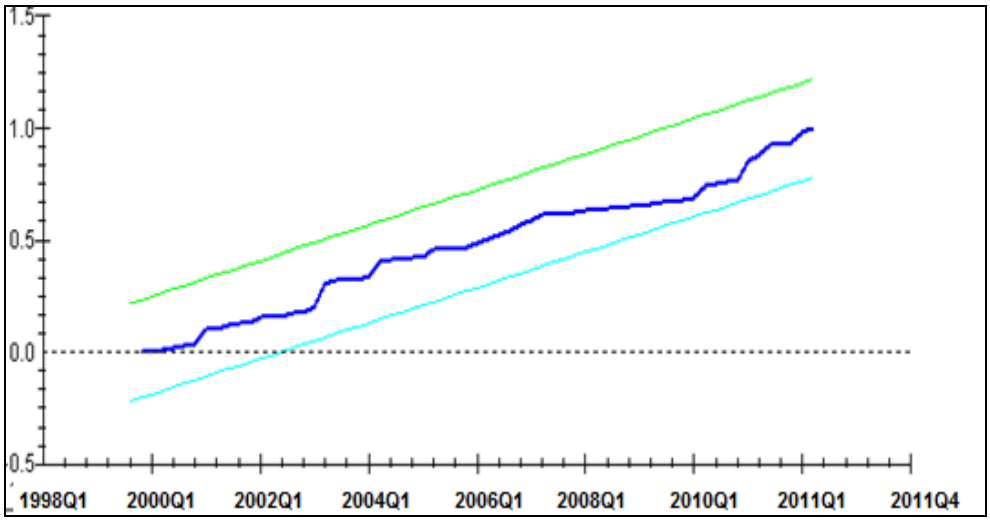

Figure 2 – Plot of cumulative sum of squares of recursive residuals

Note: The straight lines represent critical bounds at 5% significance level. Figure 1 and 2 show that both CUSUM and CUSUMSQ are within the critical bounds of 5%, so it indicates that the model is structurally stable.

According to Pesaran and Pesaran (1997) CUSUM and CUSUMQ plots investigated the stability of the estimated coefficient of error correction model. A graphical representation of CUSUM statistic is shown in Figure 1. Bahmani-Oskooee (2001) stated that the null hypothesis cannot be rejected if the plot of these statistics remains within the critical bound of the 5% significance level. As a Figure 1 and 2, it is seen that the plots of the CUSUM are within the boundaries and thus the model is structurally stabile.

VI. Conclusion and policy recommendations

In this study, it was tested if there is co-integration among the current deficit, short-term capital flow and economic growth series of Turkey. The stability of those series was tested by ADF and PP unit root tests. In this respect, the series of short term capital flow is stable at level, the data of current deficit and economic growth become stable when the first difference were taken and the co-integration level were found as I(1). In order to test the co-integration relationship among these three series, the ARDL model was used. According to this, it is possible to come to the conclusion that there is co-integration among the series and there are no econometric problems such as auto correlation, heteroscedasticity and normality.

According to the econometric methods used in this study, in the model that was created by keeping some variables constant, there are powerful co-integration

relationships in the short term and long term. The co-integration relationship is also quite out of the question for economic growth can be influenced by many factors in the long term. This situation is consistent to the economic theory.

Due to the developing economy, Turkey has followed out a foreign expansion policy with the liberalization process. Turkey has adopted an export based development strategy in this process. So much that, the export between 2000 and 2011 has increased rapidly apart from the crisis periods. But Turkey, being dependent on outsources for raw material, mid-products, technology and energy sources as well as having a density of the sectors mentioned above, increased import as well as export. As a matter of fact, According to Turkish Statistical Institute (TurkStat) working papers published in 2009, Turkey's export is dependent on its import at a 0.70% rate. Namely, the economic growth that came along with export also leads to the import increase and in parallel creates the problems of foreign deficit – primarily – and current deficit – secondarily. Moreover, since Turkey's import also includes other materials than raw materials, mid-products and energy, current deficit will return greated results in connection with domestic needs. In addition to that, in the name of keeping the inflation under control by the low interest currency policy that has been used for a long time, imported goods can become reasonable, and thus, this emerges as another concept that expands the current deficit.

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