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Structure and Sustainability of Current Account Deficit in Turkish Economy

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Abstract

 Turkish economy suffers from a chronic current account deficit because of the saving gap, foreign dependency in energy and intermediate goods and structural economic problems of the economy. It is vital to have sustainable current account balance for Turkish economy in order to keep sustainable economic growth in the economy. Main aim of the study is to analyze the strategies for sustainable current account deficit in Turkish economy by considering the main sources of the current account deficit in the economy and the current account sustainability by considering an econometric model. The result of the model is that current account has a weak form sustainability in Turkish economy.

1. Introduction

The current account deficit has a chronic structure in Turkish economy, resulting from saving gap, foreign dependency in energy and intermediate goods and structural economic problems of the economy. In order to keep sustainable economic growth in Turkish economy, It is vital to have sustainable current account balance for Turkish economy. In the study, main aim is to analyze the strategies for sustainable current account deficit in Turkish economy by considering the main sources of the current account deficit in the economy and the current account sustainability by

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considering an econometric model. Main sources of the current account sustainability in Turkish economy can be summarized as follows, a) Domestic energy gap and foreign dependency in energy. b) Competitiveness gap in high technological products and intermediate goods, c) Saving gap, increasing import and consumption, d) Higher risk premium with higher interest rates and external financing problem.

2. The Structure and Sustainability of Current Account Deficit in the Economy

2.1. Literature on Current Account Deficit in the Economy

In the literature there are many studies analysing the structure of the current account deficit in Turkish economy. Literatur mainly focuses on the determinants of current account deficit and the sustainability of current account deficit. Uygur (2004) analysed the sustainability of the Turkish current account deficits on the basis of a macro measure of sustainability.

Özmen (2004), claimed that sustainable levels of CAD and CAD-exchange rate relationships may not be invariant to institutional/financial structures, exchange rate regimes, macroeconomic policy stance and the order of the international financial system. Özmen (2004) stated that better governance and macroeconomic stance increases whilst the presence of original sin decreases the ability of an economy to sustain CAD. Exchange rate flexibility appears to put a discipline on CAD not to deviate systematically from it's equilibrium path. In the presence of the vulnerabilities, policy prescriptions to decrease CAD through real exchange rate depreciation can indeed add to debt unsustainability with a cost of substantially higher inflation rate than the target and a severe output contraction through balance sheets and currency mismatches.

Kasman, Turgutlu, and Konyalı (2005) analysed the sources of current account deficit. Kasman, Turgutlu, and Konyalı (2005) found long-run relationship among current account balance, real exchange rates and economic growth. They stated that both real exchange rates and economic growth have a significant impact on the current account balance.

Akçağlayan (2006) analyzed the sustainability of current account deficits in Turkey over the 1987-2003 period by using an optimization model of the intertemporal consumption smoothing. Akçağlayan (2006) stated that   optimal consumption smoothing took place over the sample period but the current account deficits were excessive in the subperiod before the 2000-2001 financial crisis.

Keyder (2006) stated that by reducing budget deficit and the excess tax burden on wages and energy. Energy cost and unit labour costs will decline, boosting employment, production, increase international competitiveness, which contributes to reduction of current account deficit as well as unemployment.

Çakmak and Varlik (2007) claimed that the sustainable CAD/GNP ratios are 3.6% and 5-5.6% for the moderate and the good scenarios respectively. Ok (2008) claimed that sustainable current account deficits were recorded during periods of economic stability, whereas periods of economic instability coincided with unsustainable deficits. Çakmak and Varlik (2007) stated that ratio of actual current account deficits to gross national income (CAD/GNP) exceeded the sustainable threshold levels during the 2003-2006 period in the Turkish economy.

Aytemiz and Şengönül (2008) analysed the effect of energy prices on current account deficit in Turkey. Aytemiz and Şengönül (2008) claimed that energy prices negatively affect the current account, indicating that energy price shocks do not have recessionary effect on economy, before the time period 2003:11, and the exchange rates become the most significant explanatory variable for the time period after 2003:11 and need to be considered more seriously.

Çeviş and Çamurdan (2008) in order to analyze the determinant of the current account balance used the real domestic GDP growth rate, the export/import coverage ratio, the degree of trade openness, the percentage change of the real exchange rate, the percentage of the government expenditure in the GDP and the real interest differentials as the explanatory variables. Akkaya and Gürkaynak (2012) stated that the current account deficit moving to a very high level and no longer being principally determined by the budget deficit as before.

Okay, Baytar and Saridoğan (2012) found that the real effective exchange rate inversely affects the current account balance in the long run, indicating Marshall-Lerner condition holds in the Turkish Economy in the long run, also the J-Curve effect exists in the Turkish Economy.

Kara and Sarıkaya (2013) states that Turkish current account deficit is quite volatile because of macro financial risks associated with external imbalances and structural problems. They found that deterioration in the current account balance during the last decade results mainly from the structural (non-cyclical) problems.

In literature the results on the determinants of current account deficit and the sustainability of current account deficit differentiate because of the methodology, variables selected and the period of analysis.

Figure.1 shows the current account balance and current account balance with energy and gold excluding. Energy import has very important role on the current account deficit in Turkish economy.
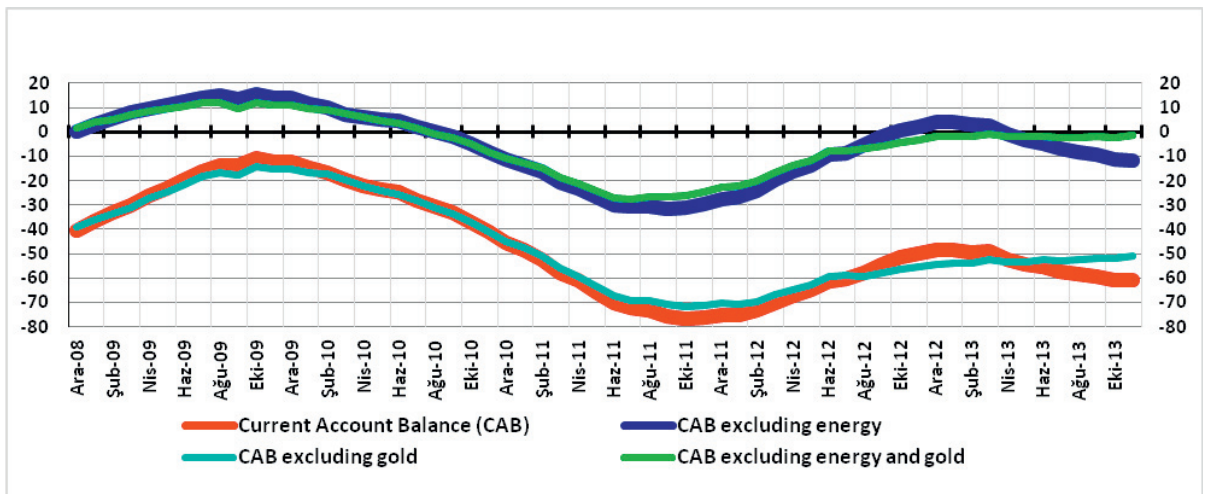

Figure.1 Current Account Balance with Energy and Gold excludings (USD,Billion, 12 month Cumulative

Source: Central Bank of the Republic of Turkey, Electronic Data Delivery System, http://evds.tcmb.gov.tr/
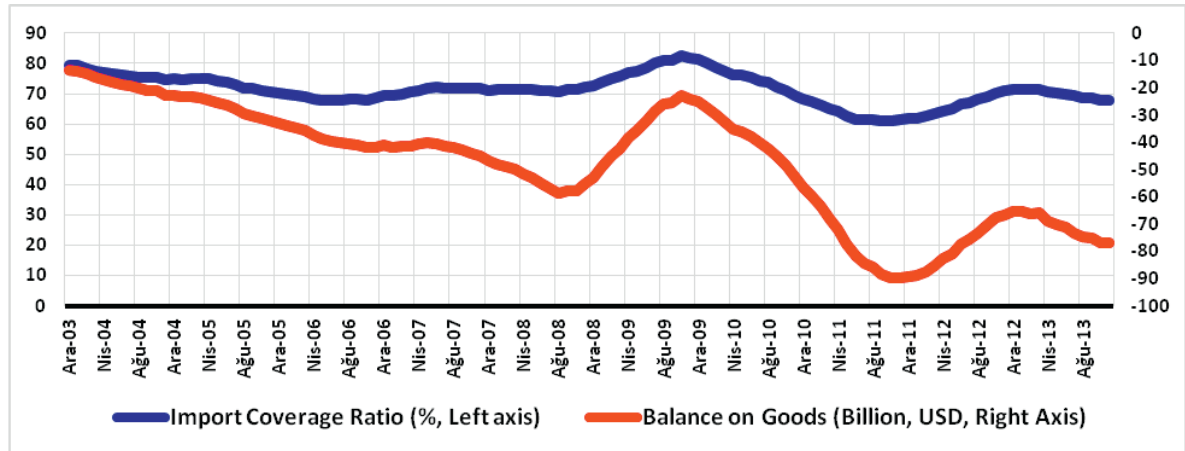

Figure-2 Balance On Goods (X-M) and Import Coverage Ratio (X/M,%), 12 months cumulative

Source: Central Bank of the Republic of Turkey, Electronic Data Delivery System, http://evds.tcmb.gov.tr/
Figure-2 shows balance on goods (X-M) and import coverage ratio (X/M,%). As import coverage ratio declines, deficit in balance on goods increases, leading to increase the current account deficit in Turkish economy.

Figure-3 shows the current account as a % of GDP, the current account deficit / GDP ratio increases except the Global 2009 Economic Crisis. Increasing current account deficit also rises the financial vulnerability risks for Turkish economy.
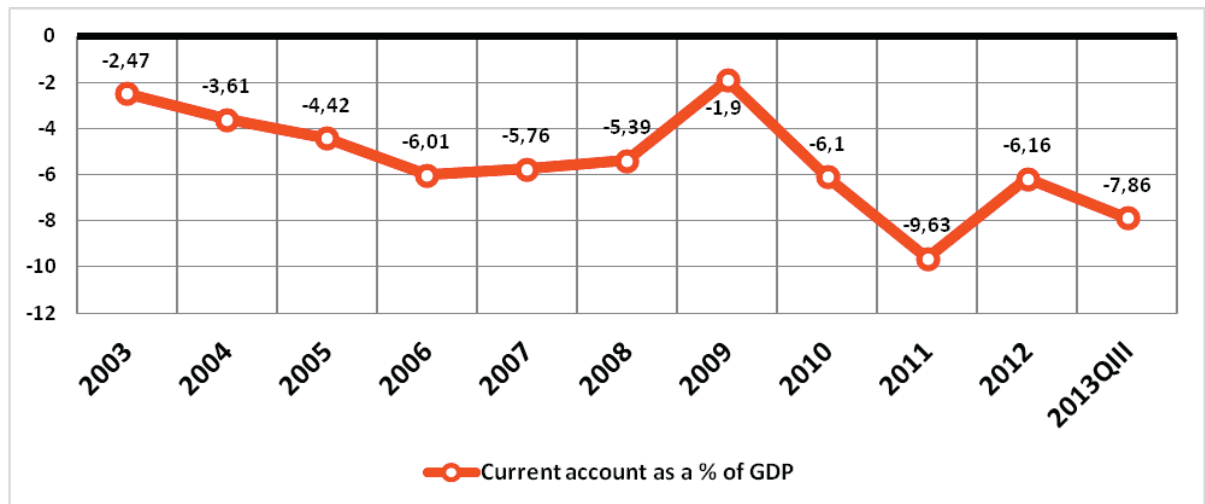

Figure-3 Current account as a % of GDP

Source: Central Bank of the Republic of Turkey, Electronic Data Delivery System, http://evds.tcmb.gov.tr/

Figure-4 shows the current account deficit and reel effective exchange rate. Reel effective exchange rate is deeply affecting current account deficit in Turkish economy. Increasing reel effective exchange rate (stronger Turkish Lira) widens the current account deficit.
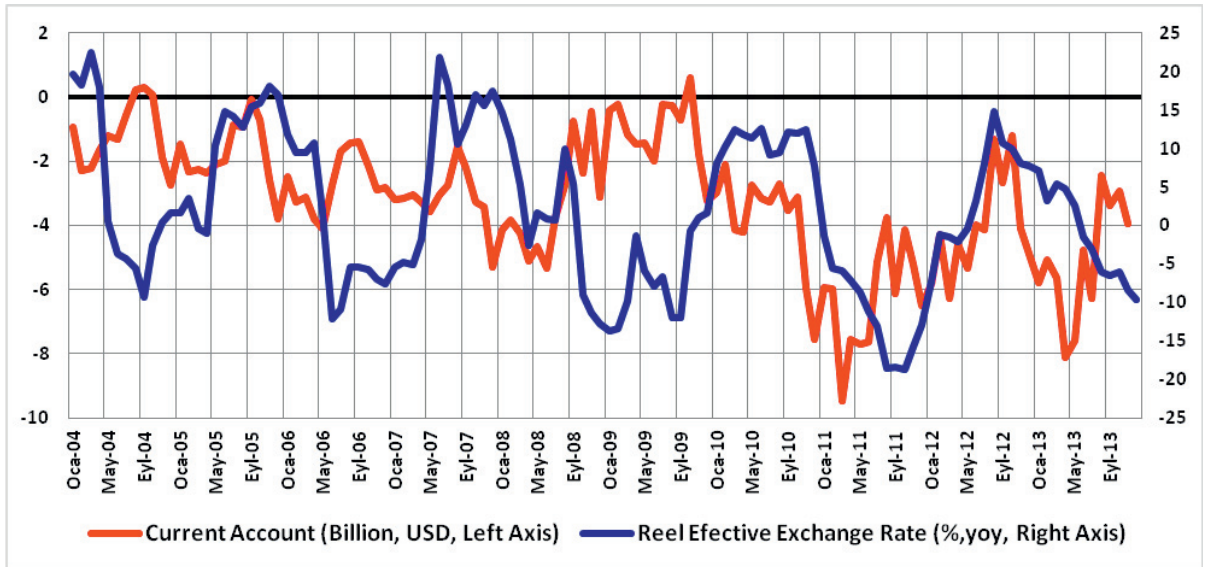

Figure-4 Current Account Deficit and Reel Effective Exchange Rate

Source: Central Bank of the Republic of Turkey, Electronic Data Delivery System, http://evds.tcmb.gov.tr/
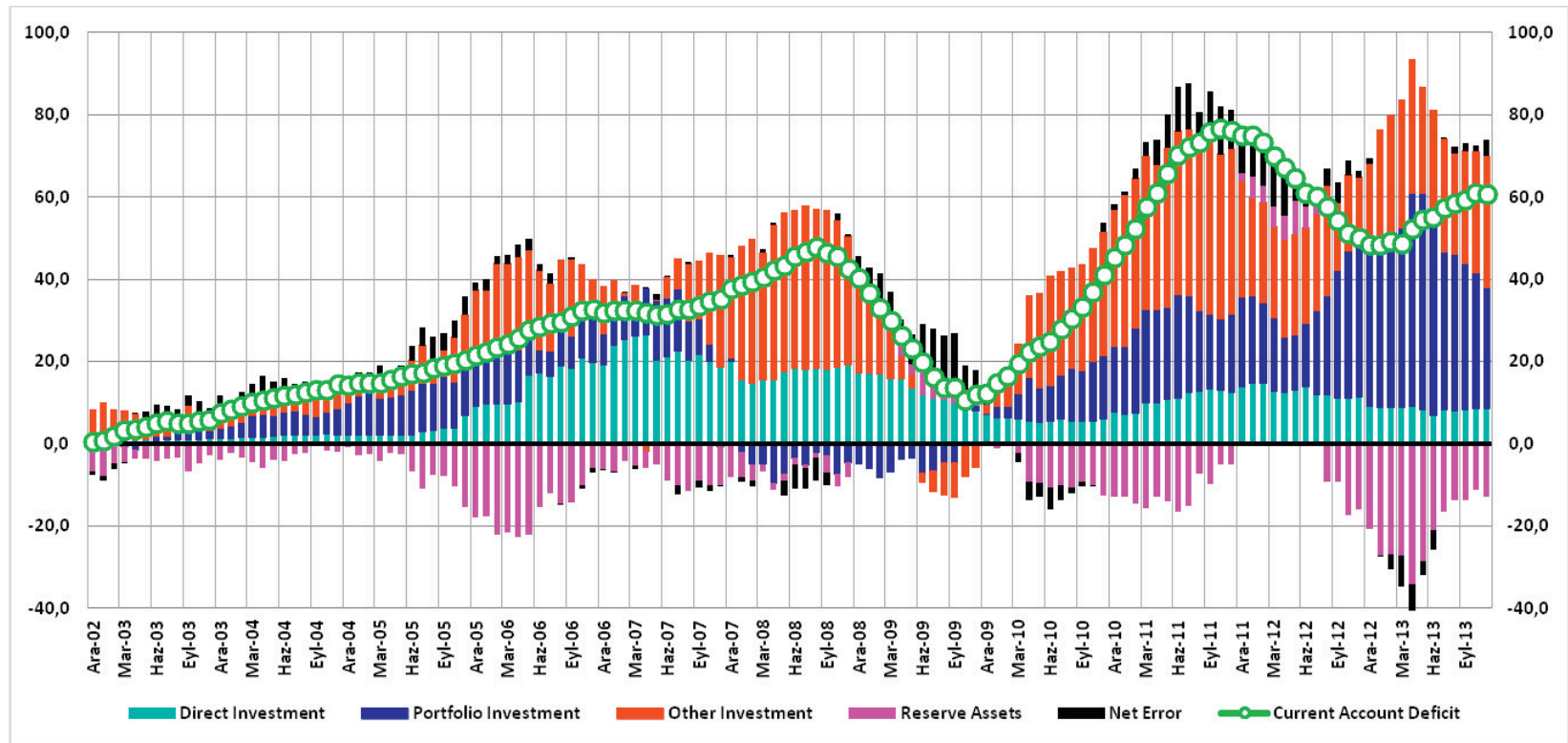
Figure-5 Current Account Deficit and Its Financing (Billion, USD, 12 months cumulative)

Source: Central Bank of the Republic of Turkey, Electronic Data Delivery System, http://evds.tcmb.gov.tr/

Figure-5 shows the current account deficit and its financing in Turkish economy. Portfolio and other investment (short term capital inflow) are the main financing sources of current account deficit in Turkish economy , which leads to vulnerable financing structure of current account deficit.

2.2. An Empirical Analysis of Current Account Sustainability in the Turkish Economy

Main aim of the empirical model is to analyse the current account sustainability in the Turkish economy for the period 2003M01-2013m02 by using Hakkio and Rush (1991), Husted (1992) model for Current Account Sustainability.

The estimated model is as follows, $X_t = \alpha + b * MM_t + \varepsilon_t$ $\qquad\qquad\qquad$ (1)

where, *X* is the export of Turkish economy, *MM* is the import of the Turkish economy.

Table-1 shows the Zivot Andrews (1992) unit root test results, export and import variables are stationary at the first difference.

Table-1. Zivot Andrews Unit Root Test Results	
	Model B
Export	-2.826071 (2007:3)
Import	-2.719171 (2006:5)
ΔExport	-16.86361* (2008:12)
ΔImport	-4.997076* (2008:12)
* Statistically significant at the 5% significance level.	

Table-2 shows the Gregory Hansen (1996) cointegration test results, indicating existence of the cointegration relationship.

Table-2. Gregory Hansen Cointegration Test Results	
	Model B
Export - Import	-5.229227*
	2010:2
* Statistically significant at the 5% significance level.	

Table-3 shows Dynamic Ordinary Least Squares (DOLS) proposed by Stock-Watson(1993) estimation results. As the coefficient of the import is 0.657, the model shows that current account has a weak form sustainability in Turkish economy.

Table-3. DOLS Estimation Results (Dependent Variable is **Export**)	
	Model A
Constant	**2.874***
Dummy ($\varphi_{t\tau}$)	**-0.141***
Trend (t)	**0.004***
Import (α^T)	*0.657***
* Statistically significant at the 5% significance level. The model satisfied the diagnostic tests.	

4. Conclusion

It is vital to have sustainable current account balance for Turkish economy in order to keep sustainable economic growth in the economy. Turkish economy suffers from a chronic current account deficit because of a) Domestic

energy gap and foreign dependency in energy. b) Competitiveness gap in high technological products and intermediate goods c) Saving gap, increasing import and consumption, d) Higher risk premium with higher interest rates and external financing problem. The policies implemented differ in short, medium and long terms because of the structure of the problems. In the study we found that current account has a weak form sustainability in Turkish economy.

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