TRANSMISSION OF MONETARY POLICY SHOCKS TO CURRENT ACCOUNT BALANCE IN NIGERIA

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Abstract
The paper examined the channels through which monetary policy shocks are transmitted to the current account balance in Nigeria using quarterly time series data for the period 1986 to 2020. In order to determine which component of the current account is more affected by monetary policy shocks, the paper decomposed current account into a number of components and a structural VAR approach was employed to examine the response of each endogenous shock to shocks in other variables. The result shows that, real interest rate shocks are mostly transmitted to the current account through the public sector component of the current account, whilst the trade balance component is significantly affected by shocks in the exchange rate. Thus, the paper suggests that monetary policy targeted at current account management should first consider the impact on exports and imports because their effect on the current account balance is very significant.

Keywords: monetary policy shocks, current account, SVAR, Nigeria

JEL Classification: C22, E52, E62, F32, F41

1. Introduction
Several existing studies in the literature have analysed the interaction between the current account and monetary policy variables such as the exchange rate and interest rate (e.g. Abbas, Bouhga-Hagbe, Fatás, Mauro &Velloso 2011, Lau, Baharumshah& Khalid 2006). Nevertheless, most of these studies are based on cross country data sets, the results of which are generalized. These give rise to conflicting results on the interaction of the current account with macroeconomic aggregates particularly in countries of different income levels (Calderón, Chong &Zanforlin 2007, Chinn & Prasad 2003). The inconsistency in results, suggest the need for case studies that analyse the relationship between the current account and monetary policy variables at a country specific level. The case studies that do exist however mostly focus on developed countries and either attempt to determine whether monetary policy intervention has any gains for current account sustainability (see Lu 2009, Lu 2012), or try to determine the best monetary rule that can be implemented for smooth current account adjustment (see Herz & Hohberger 2013, Di Giorgio & Nistico 2013, Ferrero, Gertler & Svensson 2008).

Moreover, the existing studies in the literature particularly in developing countries centred in determining the effect of some monetary policy variables and have also failed to examined the channels of transmission of shocks from monetary policy variable to the current account and did not also disaggregate
the current account balance into its various component in order to understand which of the component is more affected by these variables to help in narrowing down policy options. In as much as an optimal monetary rule for current account stability is important, it is worth noting that these studies lack a clear understanding of the implications of monetary policy for the current account as they neglect the initial step of empirically narrowing down the monetary determinants of the current account before incorporating such determinants in a model that tries to explain the evolution of the current account with regards to monetary policy.

Therefore, the need to understand the channels through which monetary policy shocks are transmitted to the current account, coupled with the lack of understanding of which of the components of the current account is more affected by monetary shocks particularly in developing countries, motivate this study. By analysing the channels through which monetary shocks are transmitted to the current account, it became easy to identify monetary policy options for improving the savings-investment gap in Nigeria.

In the next section, related literature is reviewed followed by methodology, model identification and data issues presented in section 3. Section 4 discusses the estimation results, while section 5 draws some conclusions.

2. Review of Related Literature
Exploration into the literature suggests that, current account can be described using alternate views such as the absorption approach, which describes the relationship between current account and the levels of income and expenditure, the twin deficit approach which describes the relationship between the current account and fiscal balance, or the net foreign assets approach which describes the current account as the outcome of trade in goods, services and financial assets. Theories that explain the relationship between the current account and monetary policy stem from the monetary approach to the balance of payments (Johnson 1972, Frenkel & Johnson 2013). This approach explains changes in the country’s external position to be a result of changes in the demand and supply of domestic currency, the creation of domestic credit and changes in domestic real income (Frenkel & Johnson 2013). By assuming a fixed exchange rate, the monetary approach theorizes that a balance of payments surplus or deficit is a result of disparities between money demand and money supply.

However, one of the main criticisms of the monetary approach is that the fixed exchange rate assumption is one that most present day economies have departed from. This implies that by assuming balance of payments disequilibrium is a result of monetary flows, the theory fails to deal with the demand for assets which are denominated in different currencies, and are affected by fluctuating exchange rates when traded internationally (Rabin & Yeager 1982).

To address these weaknesses, approaches to understanding the current account have evolved over time and consider the balance of payments as a consequence of international trade in goods, services and assets, which all affect the behaviour of consumption and income, not just the movement of money. This concept is encompassed in Obstfeld & Rogoff (1995)’s Intertemporal Approach to the Current Account which identifies changes in the real economy that are responsible for balance of payments disequilibrium, making the balance of payments an outcome of trade in goods and services between countries. The Intertemporal Approach demonstrates that countries are able to smooth consumption against specific shocks by lending and borrowing in international capital markets, and consequently, the current account is determined by domestic and foreign interest rates in the lending and borrowing process, and the prevailing exchange rate in the
trade of assets. This notion regards the current account as a monetary phenomenon explained by interest rates and exchange rates, and suggests that monetary policy may have implications for current account management.

Some empirical works studied the relationship between monetary aggregates and the trade balance and focus on analysing whether the J-Curve exists for developed countries, i.e., whether depreciation of the exchange rate worsens the trade balance in the short run but improves it in the long run. An example of such an analysis is provided by Ivrendi & Guloglu (2010) who analyses the relationship between monetary policy shocks, the exchange rate and the trade balance in Australia, New Zealand, Canada, Sweden and UK, and find that in all countries except the UK, a contractionary monetary policy shock improves the trade balance, with no evidence of the J-Curve effect in any country. The findings demonstrate the importance of interest rates and monetary policy decisions in the determination of the current account and are in line with similar findings by Prasad & Gable (1998).

The analysis on the impact of monetary variables, and particularly the exchange rate, can be extend to an analysis of the current account, not just the trade balance, so as to examine the impact of monetary shocks on the current account (see Lee & Chinn 2006). Lee & Chinn (2006) find that permanent monetary shocks have very small and insignificant effects on the current account, with models that differentiate between tradable and non-tradable potentially performing better than models that do not differentiate.

Contrary to these studies that disprove the J-Curve hypothesis though, several other studies find the J-Curve to still hold in some developed countries, and show that the trade balance, and in some instances the current account, first deteriorates after depreciation, before improving (e.g. Koray & McMillin 1999, Lane 2001, Nadenichek 2006). The lack of consensus on exchange rate effects is due to a number of factors which include the characteristics and macroeconomic fundamentals of a country, the conduct of monetary policy and the implications of monetary policy for the exchange rate, and the improper identification of monetary policy shocks which may result in puzzles (Kim & Roubini 2000).

The issue of properly identifying monetary policy shocks is explored in Kim (2001a) and Kim (2001b) who argue that monetary shocks are better identified in an open economy when the ability to differentiate between money demand and money supply shocks is demonstrated and structural contemporaneous restrictions are imposed. Both studies analyse the impact of monetary policy on the trade balance or current account and macroeconomic aggregates and find that expansionary monetary policy worsens the United States trade balance before it improves after a year. Kim (2001b) focuses on the trade balance in the US, whilst Kim (2001a) focuses on the effect of monetary shocks on the trade balance in France, Italy and the UK. An interesting finding from these studies is the importance of world interest rates in the determination of the trade balance, and the transmission of monetary shocks through spillover effects from the foreign to the domestic economy. These studies highlight the significant impact that monetary policy may have on the current account balance, and motivate an analysis of the impact of monetary policy on the current account balances in emerging markets, since macroeconomic fundamentals are affected differently by economic shocks, depending on the income level of a country.

An exception to the lack of studies on developing countries are studies by Dunne & Makanza, (2015) and that of Ncube & Ndou (2013) who analyse current account dynamics and monetary policy transmission and the link.
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between monetary policy, the exchange rate and the trade balance all in South Africa respectively. The authors investigate whether expansionary monetary policy shocks affect South Africa’s trade balance through an expenditure switching effect or an income absorption effect. An expenditure switching effect occurs when contractionary monetary policy results in higher interest rates, which increase capital inflows and appreciate the nominal exchange rate. This implies that imports become cheaper and exports become relatively more expensive. As a result, by increasing the amount of imports and reducing the amount of exports, the trade balance deteriorates. Consequently, the monetary channels through which the trade balance can be affected are the exchange rate and interest rate shocks under the expenditure switching effect.

On the other hand, an income absorption effect occurs when contractionary monetary policy reduces real GDP, thereby reducing imports and improving the trade balance (see Ncube & Ndou 2013, Kim 2001a). This also implies that through the rate of consumption in the economy, interest rate shocks also affect the trade balance.

Whilst Ncube & Ndou (2013) analysed how the exchange rate affects the trade balance, focus on the trade balance alone precludes an analysis of how savings and investment components are affected by monetary policy, and how monetary policy affects the overall external balance. This aspect is relevant because savings and investment components are crucial for determination of the current account in an economy, particularly given the volatility of capital flows which is affected by monetary policy.

Moreover, the literature has also use various estimation methods to determine the effects of monetary shocks on the current account. These methods range from panel datamethods for cross country studies, to new open economy macroeconomic (NOEM) models. In as much as panel data methods explain current account determinants for a general set of economies, and are able to control for endogeneity and simultaneity bias by employing Generalized Method of Moments (GMM) and the Sargan and Arellano-Bond specification tests (e.g. Calderon, Chong & Loayza 2002, Calderón et al. 2007), the results are generalized for the group of countries examined and this masks country level dynamics, (e.g. Lau et al. 2006, Kim & Lee 2008, Abbas et al. 2011).

Due to the need to uncover the underlying relationship between the current account and macroeconomic variables at a country level, the relationship between the current account and the exchange rate also tends to be modelled in new open economy macroeconomic (NOEM) models such as in Bergin (2006), Cavallo & Ghironi (2002) and Lane & Milesi-Ferretti (2002). These studies develop macroeconomic models that explain the relationship between the current account or net foreign assets and the exchange rate, and show that deviations from uncovered interest parity (UIP) are strongly related to shifts in the current account, and in some instances, explain current account movements more than they explain the exchange rate. Whilst new open economy models (NOEM) focus the analysis to country level studies that predict the exchange rate and the current account, these models are normally outperformed by Structural VAR (SVAR) models (Bergin 2006). Consequently, most empirical studies that analyze country specific current account dynamics use SVAR models and utilize Blanchard & Quah (1989)’s identification restrictions (Hoffmann 2003, Corsetti & Muller 2006, Lee & Chinn 2006, Kano 2008, Kim & Roubini 2008). The prominent use of SVAR models in analysing macroeconomic determinants of country level current account balances, and their general outperformance of NOEMs motivates the application of SVAR models in this study. The SVAR models are used to analyze the effect of monetary shocks on the current account, and
the results are tested for robustness using different variable specifications and identifying restrictions.

Therefore, given the sparse research on the relationship between monetary policy and the current account, particularly in developing countries, the paper adds to the literature by first, analyzing how monetary shocks affect the current account and analyzed which monetary shocks are more important for determination of the current account. The paper also goes further to analyze the channels through which monetary shocks are transmitted to the current account, because such an analysis facilitates with the appropriate monetary policy design for current account stability.

3. METHODOLOGY

In order to examine the channels through which shocks in monetary policy variables are transmitted to the current account, the study disaggregates the current account into its various components. This is because, understanding the transmission of monetary shocks to current account components facilitates in narrowing down the components of the current account that are more affected by monetary policy shocks, and helps in narrowing down policy options. Thus, the transmission of monetary shocks is analyzed by adding the current account component to the basic model that uses the data vector; Money Supply, Interest Rate, Exchange Rate, Gross Domestic Product and the Current Account Balance \{MSS, INT, EXR, GDP, CAB\}.

The current account components used are; Household consumption (HCON) and household savings (HSAV), which are used to infer household behavior in response to monetary shocks

The trade balance (TBAL), used to infer the effect of monetary policy on exports and imports

Government investment (GINV) and government savings (GSAV), which are used to analyze how monetary shocks are transmitted to savings and investment components.

As earlier mentioned, the paper employed an SVAR model which is a very good statistical tool for describing and analyzing the dynamic effects of innovations in the structure of a particular economy and it will be estimated in order to obtain a non-recursive orthogonalization of the error terms for the purpose of impulse response analysis. In doing that, identification is a necessary step in order to ensure that the impulse response functions yield proper structural interpretations. This is achieved via imposing appropriate contemporaneous restrictions on some parameters of the model which are conventionally derived from an economic theory or the presumed underlying structure of the economy (Dunne & Makanza, 2015).

To implement the empirical specification, we follow the model by Kim & Roubini (2008), who analyze the effect of fiscal and monetary variables on the current account, and the identification scheme abstracts from the model by Kim (2001) who extend the closed economy identification of monetary policy to an open economy. We use VAR models to isolate the exogenous component of shocks, with the economy described by the structural equation below;

$$G(L)y = \epsilon$$  \(3\)

In Equation (3) above, \(y\) is the data vector in the baseline model given by \(\{GBD, INT, EXR, GDP, CAB\}\) where all variables remain as defined before, \(G(L)\) is the matrix polynomial in the lag operator, and \(\epsilon\) is a vector of serially uncorrelated structural disturbances. The structural model is based on the reduced form model below:

$$y = B(L)y + \alpha$$  \(4\)
To recover structural parameters from the reduced form the equation, two matrices were assumed \( G_0 \) with contemporaneous coefficients and \( G_0^0(L) \) without contemporaneous coefficients in structural form such that:
\[
G(L) = G_0 + G_0^0(L)
\]  
(5)
This establishes a relationship between the structural and reduced form residuals given by:
\[
u = G_0 U_t \]  
where \( \Sigma = G_0^{-1} \wedge G_0^{-1} \)  
(6)
Thereafter, theoretically founded restrictions are imposed on the contemporaneous coefficients to recover structural parameters by normalizing \( n \) diagonal elements to \( 1s \) in \( G_0 \) and imposing at least \( n(n - 1)/2 \) contemporaneous restrictions on the matrix of contemporaneous coefficients. We then use these restrictions to apply a generalized structural VAR approach to the model.

The model uses the generalized non-recursive method that imposes restrictions to identify the structural components of the error terms. Therefore, the equation below summarizes the identification scheme used following Dunne and Makanza (2015) who provides a comprehensive framework of studying the transmission mechanism of monetary policy to the current account dynamics.

\[
\begin{pmatrix}
u^{MSS}_t \\
u^{INT}_t \\
u^{EXR}_t \\
u^{GDP}_t \\
u^{CAB}_t
\end{pmatrix} =
\begin{pmatrix}
1 & 0 & 0 & 0 & 0 \\
a_{21} & 1 & 0 & 0 & 0 \\
a_{31} & a_{32} & 1 & 0 & 0 \\
a_{41} & a_{42} & a_{43} & 1 & 0 \\
a_{51} & a_{52} & a_{53} & a_{54} & 1
\end{pmatrix}
\begin{pmatrix}
\epsilon^{MSS}_t \\
\epsilon^{INT}_t \\
\epsilon^{EXR}_t \\
\epsilon^{GDP}_t \\
\epsilon^{CAB}_t
\end{pmatrix}
\]

The first line of restrictions in the equation shows the effect of government budget deficit which is considered to be exogenous in our model (not affected by any of the endogenous variables). The government budget deficit thus captures fiscal policy changes and their effects on the current account dynamics. The second shows the real interest rate which is used to proxy the effects of endogenous monetary policy on the current account. Thus, we assume the real interest rate is contemporaneously affected only by government budget deficit and not the other variables in the model in order to determine its effect on the current account. The third line of restriction captures the effect of real effective exchange rate on the current account deficit. It is also assumed to be affected by the level of interest rate. The fourth line controls for the effects of business cycle fluctuations on the current account based on the assumption that output is not contemporaneously affected by other variables in the system, except exchange rate and interest rate. This restriction conforms to that of Rodrik (2008). This equation is used to show the goods market in the ISLM framework. Lastly, the current account equation is represented in line 5 where all variables are assumed to have contemporaneous effects on the current account (Kim & Roubini 2000, Kim & Roubini 2008).

It can be observed that 10 restrictions are imposed on the B matrices for the structural VAR models. This derives from the evidence in the econometric literature that the minimum number of restrictions required for identifying an SVAR model is \( n(n-1)/2 \). Here, \( n \) is the number of variables in the system, which in this study is equal to 5. Thus, there are 5(5 – 1)/2 = 10 restrictions to be imposed for identification of the shocks. Hence, our SVAR model is exactly identified with 10 restrictions.

4. RESULTS AND DISCUSSIONS

Table 1

<table>
<thead>
<tr>
<th>LR Test for Over-Identifying Restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Likelihood</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>263.3936</td>
</tr>
</tbody>
</table>

H₀: Over identifying restrictions are valid

Table 1 above reports the Chi-square statistical test for over-identifying restrictions used in the
model. The test indicates that we cannot reject the over-identifying restrictions used in identifying the shocks in the model because the p-value is greater than 0.05.

4.1 Structural VAR Impulse Response Functions Analysis

After identifying the model, the next step involves analysing the effect of monetary shocks on the current account through the use of impulse response functions and variance decomposition. The impulse response functions as depicted in Figure 4.2 below, traces out the dynamic response of each endogenous variable in the VAR to a one standard deviation shock in another variable. However, it is worth noting that the structural rather than the Cholesky impulse response approach is used. This is the impulse definition that is compatible with and appropriate for the structural VAR models. As can be observed from Figure 1 below, there are five shocks, namely money supply shock (shock 1), real interest rate shock (shock 2), exchange rate shock (shock 3), real income (GDP) shock (shock 4) and current account shock (shock 5). The effect of each shock is traced over 10 periods into the future.

![Impulse Response Functions](image)

**Figure 1 Impulse Responses to Structural One Standard Deviation Innovations**

*Source: the graph was fitted using Eviews 9 econometric software.*

From the figure above, the response of current account balance to a structural one standard deviation shock to the money supply (shock 1) was positive and insignificant throughout the ten periods. The response of current account to a structural one standard deviation shock in the
interest rate was initially zero but becomes negative at the second quarter significantly and continuously towards the tenth quarter. However, the response of current account to a structural one standard deviation impulse to exchange rate (shock 3) was positive and significant throughout the ten periods though it is insignificant at the first 2 quarters; it became significant at the third quarter towards the 10th quarter significantly. The response of current account to a structural one standard deviation shock in the real income (GDP) is positive though insignificant throughout the forecast horizon. Moreover, the response of current account to a structural one standard deviation innovation to itself was positive and significant throughout the 10-period horizon.

4.2 Structural VAR Variance Decomposition Analysis

Variance decomposition in a VAR framework gives the proportion of the overall forecast error variance of a variable that is ascribable to each structural shock at a specific forecast horizon (Favero, 2001). Therefore, the variance decomposition of each of the five variables, namely money supply (MSS), interest rate (INT), real effective exchange rate (EXR), real income (GDP) and current account-GDP ratio over a 10-period forecast horizon is shown in Tables 2 below;

<table>
<thead>
<tr>
<th>Period</th>
<th>S.E.</th>
<th>Shock1</th>
<th>Shock2</th>
<th>Shock3</th>
<th>Shock4</th>
<th>Shock5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.675283</td>
<td>0.244119</td>
<td>0.524043</td>
<td>1.827479</td>
<td>0.691999</td>
<td>96.71236</td>
</tr>
<tr>
<td>2</td>
<td>1.329997</td>
<td>0.850437</td>
<td>1.332313</td>
<td>3.782219</td>
<td>1.163820</td>
<td>92.87121</td>
</tr>
<tr>
<td>3</td>
<td>1.978752</td>
<td>1.156865</td>
<td>2.237854</td>
<td>5.975791</td>
<td>1.665998</td>
<td>88.96349</td>
</tr>
<tr>
<td>4</td>
<td>2.583034</td>
<td>1.359927</td>
<td>3.143410</td>
<td>8.257886</td>
<td>2.190486</td>
<td>85.04829</td>
</tr>
<tr>
<td>5</td>
<td>3.120564</td>
<td>1.493188</td>
<td>3.968197</td>
<td>10.49033</td>
<td>2.716797</td>
<td>81.33148</td>
</tr>
<tr>
<td>6</td>
<td>3.579378</td>
<td>1.578550</td>
<td>4.672196</td>
<td>12.58554</td>
<td>3.227150</td>
<td>77.93656</td>
</tr>
<tr>
<td>7</td>
<td>3.955345</td>
<td>1.628987</td>
<td>5.243504</td>
<td>14.49431</td>
<td>3.706582</td>
<td>74.92662</td>
</tr>
<tr>
<td>8</td>
<td>4.250560</td>
<td>1.653396</td>
<td>5.686552</td>
<td>16.19151</td>
<td>4.142503</td>
<td>72.32603</td>
</tr>
<tr>
<td>9</td>
<td>4.471852</td>
<td>1.658449</td>
<td>6.013839</td>
<td>17.66521</td>
<td>4.524402</td>
<td>70.13810</td>
</tr>
<tr>
<td>10</td>
<td>4.629287</td>
<td>1.649783</td>
<td>6.241382</td>
<td>18.91053</td>
<td>4.844143</td>
<td>68.35417</td>
</tr>
</tbody>
</table>

Source: Extraction from estimation output using E-views 9.

The variance decomposition of current account which is the main variable of interest for the purpose of this VAR analysis shows that most of the variation in the current account is due to own shocks, but the contribution of own shock decreases over time. By the 5th quarter, exchange rate (shock 3) account for tenth share of the variation in the current account and increase thereafter up to about 19% in period 10. Whilst interest rate (shock 2) explained up to about 6% of the variations in the current account in the long run (period 10), and real income (GDP) explained up to an average of 3% of the variations in the current account balance over the fracas horizon. Thus, monetary shocks appear to play a significant role as indicated by long life span of the shocks and the increasing contribution in the variance decompositions.
4.3 Transmission of Monetary Shocks to the Current Account

Apart from analyzing the effect of monetary shocks on the current account, the study also analyzed how monetary shocks are transmitted to the current account and to do this, various current account components are used. The results for these transmission mechanisms are summarized below;

Table 3
Summary of Transmission of Monetary Shocks

<table>
<thead>
<tr>
<th>CA Components</th>
<th>EXR</th>
<th>INT</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCON</td>
<td>+</td>
<td>not significant</td>
</tr>
<tr>
<td>HSAV</td>
<td>not significant</td>
<td>not significant</td>
</tr>
<tr>
<td>TBAL</td>
<td>-</td>
<td>not significant</td>
</tr>
<tr>
<td>GSAT</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>GINV</td>
<td>not significant</td>
<td>+</td>
</tr>
</tbody>
</table>

+ increase in response to shock while – decrease in response to shock

As presented in table 4 above, the real effective exchange rate affects household consumption, with an appreciation in the exchange rate causing an increase in consumption. This result is consistent with the response of household consumption to real interest rates but is not significant, which conforms with earlier findings that real interest rates are less important for the current account compared to exchange rate shocks. Even though an increase in the current account deficit reduces household savings, there is no significant impact of monetary shocks on the household savings. This indicates that monetary shocks are not significantly transmitted to the current account through household behaviour, and hence the need for an analysis of the transmission of monetary shocks to the current account through the trade balance and the public sector components.

Investigating the impact of monetary shocks on the trade balance gives an indication of how these shocks are transmitted to export and import components. An improvement in the trade balance improves the current account position, and an appreciation of the exchange rate worsens the trade balance. This shock is significant, and is consistent with theory as an appreciation makes imports relatively cheaper and exports relatively expensive, suggesting that the consumption of imports increases and the current account deficit worsens. The response of the trade balance to real interest rates is not significant, suggesting the use of the exchange rate to influence the trade balance as an appropriate tool as compared to interest rates. These findings on the impact of exchange rate shocks on the trade balance and current account are similar to Lee & Chinn (2006), Ncube&Ndou (2013) and Dunne&Makanza (2015), where temporary shocks depreciate the exchange rate and improve the current account. The results are also in line with findings on France, UK and Italy by Kim (2001) who founds that an expenditure switching effect exists, whereby contractionary monetary policy appreciates the currency and worsens the trade balance.

Analyzing the transmission of monetary policy shocks to public sector components reveals how the government sector responds to monetary shocks. We find that both contractionary monetary policy shocks and exchange rate shocks affect government
savings. When interest rate increases in response to contractionary monetary policy it consequently increases government savings. At the same time, an appreciation reduces government savings as they may be used to finance the deteriorating current account position. With regards to government investment, the response of government investment to monetary shocks is only significant as far as the real interest rate is concerned. Contractionary monetary policy increases government investment in the 1st and 2nd quarter, which is a result of higher returns on investment since the real interest rate is used. However, the magnitude of this response is very small and is outweighed by the impact of monetary shocks on the trade balance and government savings, suggesting that monetary policy is more suited to influence current account dynamics through exports, imports, and public sector savings.

The results for these transmission mechanisms as summarized and discussed above shows that real interest rate shocks are mostly transmitted to the current account through the public sector, whilst the trade balance is significantly affected by the exchange rate. This suggests the need for consideration of interest rate policy on the current account. More particularly, the savings-investment gap through the behaviour of public sector shocks as government savings play a large role in improving the savings-investment gap. Finally, more export is needed to stimulate household savings which may compliment exports by the public sector to improve the current account balance.

5. Conclusion and Recommendations

Given the findings of the paper, it can be concluded that the monetary shocks that are most important for the determination of the current account are interest rate and exchange rate. Exchange rate depreciation improving the trade balance and a contractionary monetary policy shock stimulating an increase in the interest rate which increases government savings. While real interest rate shocks are mostly transmitted to the current account through the public sector, the trade balance is significantly affected by the exchange rate. The paper therefore, suggests the need for consideration of interest rate policy on the current account. This is particularly, on the savings-investment gap through the behavior of the public sector shocks as government savings play a large role in improving the savings-investment gap. It also recommends for more export to stimulate household savings which may compliment exports by the public sector to improve the current account balance. More also, monetary policies targeted at current account management should first consider the impact on exports and imports as shocks in monetary policy variables are mostly transmitted to the current account through the trade balance (exports – imports). Finally, the paper suggests for further research towards investigating the optimal monetary policy that would ensure smooth adjustment of the current account.
References


