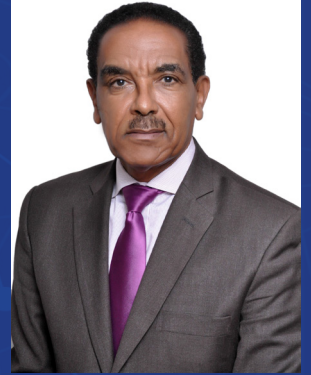


It is obvious that investing in government bond is less risky than a corporation's stock since the chance of the government going bankrupt is very low

Ato Tesfaye Hailemichael



25

FISCAL AND CURRENT ACCOUNT DEFICITS NEXUS IN ETHIOPIA: EMPIRICAL EVIDENCE FOR TWIN DEFICITS HYPOTHESIS

7

በኢትዮጵያ ውስጥ በሥራ ላይ ያሉ ባንክና መድን ተቋማት

BANK AND INSURANCE INSTITUTION OPERATING IN ETHIOPIA

የኢትዮጵያ ብሔራዊ ባንክ
National Bank of Ethiopia

ማዕከላዊ ባንክ
Central Bank

ስልክ ቁጥር
Telephone

0111517430

ፋክስ
Fax

0115-5-514588

የባንኮች ሥም ዝርዝርና አድራሻ

Banks Name & Address

የኢትዮጵያ ንግድ ባንክ Commercial Bank Ethiopia	Tel	0115511271
	Fax	0115514522
የኢትዮጵያ ልማት ባንክ Development Bank of Ethiopia	Tel	0115518171
	Fax	0115511606
አዋሽ ኢንተርናሽናል ባንክ Awash international Bank S.C	Tel	01155700065
	Fax	0116627765
ዳሽን ባንክ አ.ማ Dashen Bank S.C	Tel	0114654127
	Fax	0114653037
አቢሲኒያ ባንክ Bank of Abyssinia S.C	Tel	0115530663
	Fax	0115510409
ወጋገን ባንክ Wegagen bank S.C	Tel	0115523526
	Fax	0115523526
ህብረት ባንክ አ.ማ United Bank S.C	Tel	0114655284
	Fax	0114655243
ንብ ኢንተርናሽናል ባንክ Nib International S.C	Tel	0115503304
	Fax	0115504349
ኦሮሚያ ህብረት ሥራ ባንክ አ.ማ Cooperative Bank of oromia S.C	Tel	0115506025
	Fax	0115510489

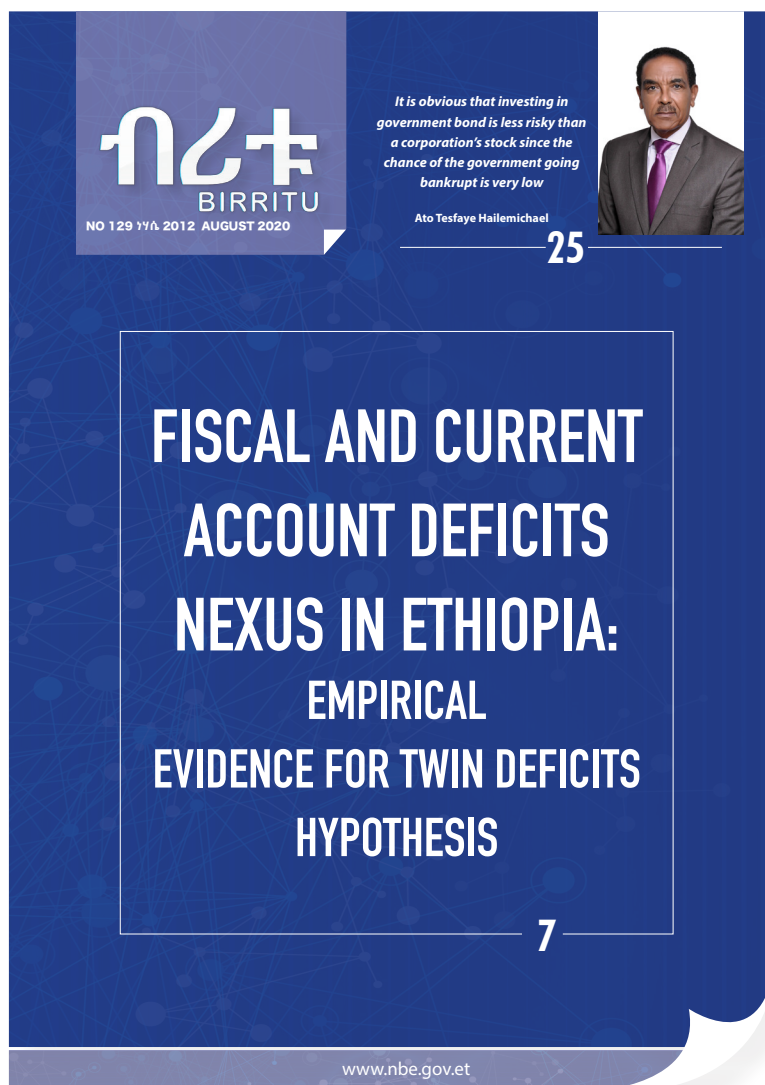
አንበሳ ኢንተርናሽናል ባንክ አ.ማ Lion international Bank S.C	Tel	0116627111
	Fax	0116625999
ዘመን ባንክ አ.ማ Zemen Bank S.C	Tel	0115540057
	Fax	-
ኦሮሚያ ኢንተርናሽናል ባንክ አ.ማ Oromia International Bank S.C	Tel	0115570201
	Fax	0111561585
ብርሃን ኢንተርናሽናል ባንክ አ.ማ Berhan International Bank S.C	Tel	01116630125
	Fax	-
ቡና ኢንተርናሽናል ባንክ አ.ማ Bunna International Bank S.C	Tel	011580831
	Fax	0115158314
አባይ ኢንተርናሽናል ባንክ አ.ማ Abay International Bank S.C	Tel	0115518923
	Fax	0115528852
አዲስ ኢንተርናሽናል ባንክ አ.ማ Addis International Bank S.C	Tel	0115549774
	Fax	-
ደቡብ ግሎባል ባንክ Debub Global Bank	Tel	0118501207/8
	Fax	-
ኦናት ባንክ Enat Bank	Tel	0115157475
	Fax	-

የኢንሹራንስ ኩባንያዎች ሥም ዝርዝርና አድራሻ

Insurance companies Name & address

የኢትዮጵያ መድን ድርጅት Ethiopian Insurance Corporation	Tel	011-5-51 24 00
	Fax	011-5-51 74 99
ብሔራዊ የኢትዮጵያ ኢንሹራንስ ኩባንያ አ.ማ National Insurance Company of Ethiopia S.C.	Tel	011-4-66 11 29
	Fax	011-4-65 06 60
አዋሽ ኢንሹራንስ ኩባንያ አ.ማ Awash Insurance Company S.C.	Tel	011-5-57 02 09
		011-5-57 02 05
		011-5-57 00 01
	Fax	011-5-57 02 08
ህብረት ኢንሹራንስ ኩባንያ አ.ማ United Insurance Company S.C.	Tel	011-4-65 56 56
	Fax	011-4-65 32 58
		011-4-67 19 34
አፍሪካ ኢንሹራንስ ኩባንያ አ.ማ Africa Insurance Company S.C.	Tel	011-6-63 77 16/19
		011-6-62 45 79
	Fax	011-6-63 82 53
ናይል ኢንሹራንስ ኩባንያ አ.ማ Nile Insurance Company S.C.	Tel	011-4-42 60 00
		011-4-42 57 54
	Fax	011-4-42 60 08
ኒያላ ኢንሹራንስ ኩባንያ አ.ማ Nyala Insurance S.C.	Tel	011-6-62 66 67/69
		011-6-62 67 07
	Fax	011-6-62 67 06
ግሎባል ኢንሹራንስ ኩባንያ አ.ማ Global Insurance Company S.C.	Tel	011-1-56 74 00
		011-1-56 04 83
	Fax	011-1-56 62 00
ንብ ኢንሹራንስ ኩባንያ አ.ማ Nib Insurance Company S.C.	Tel	011-5-53 51 29/32
		011-5-52 81 93
	Fax	011-5-52 81 94/96

አንበሳ ኢንሹራንስ ኩባንያ አ.ማ Lion Insurance Company S.C.	Tel	011-6-18 70 00
		011-6-63 29 40
	Fax	011-6-63 29 36/47
ኢትዮጵያዊ ሕይወት ጅነራል ኢንሹራንስ አ.ማ Ethio-Life & General Insurance S.C.	Tel	011-5-54 96 50/52
	Fax	011-5-54 96 53
ኦሮሚያ ኢንሹራንስ ኩባንያ አ.ማ Oromia Insurance Company S.C.	Tel	011-5-50 31 38
		011-5-54 51 31
		011-8-95 95 80
	Fax	011-5-50 31 92
አባይ ኢንሹራንስ አ.ማ Abay Insurance S.C.	Tel	011-5-53 53 00
		011-5-53 55 50
	Fax	011-5-15 76 90
ብርሃን ኢንሹራንስ አ.ማ Berhan Insurance S.C.	Tel	011-4-67 44 31
		011-4-67 44 23
	Fax	011-4-66 87 01
ፀሀይ ኢንሹራንስ ኩባንያ አ.ማ Tsehay Insurance S.C.	Tel	011-1-11 97 70
		011-1-11 98 27
	Fax	011-1-11 98 86
ሉሲ ኢንሹራንስ ኩባንያ አ.ማ Lucy Insurance S.C.	Tel	011-4-67 17 84
		011-8-96 59 70
	Fax	011-4 67 18 96
ቡና ኢንሹራንስ ኩባንያ አ.ማ Bunna Insurance S.C.	Tel	011-1-57 60 54
		011-1-11 96 35
	Fax	011-1-115207
Zemen Insurance S.C.	Tel	251115575850
		251116151415
	Fax	251116150001
Ethiopian Reinsurance S.C.	Tel	251115575757
	Fax	251115575758



OPINION EXPRESSED IN THE ARTICLE DO NOT NECESSAIRLY REFLECT THE
POLICIES AND STRAGIES OF THE NATIONAL BANK OF ETHIOPIA
for resources, please visit the NBE's official website
www.nbe.gov.et



Designed & Printed by
mo master print
☎ አራት ኪሎ : +251 111 557 788 ገርጂ : +251 116 298 777
✉ 31362 አዲስ አበባ ኢትዮጵያ
www.masterprintaddis.com

Birritu No.129

Birritu is a quarterly magazine published by the National Bank of Ethiopia. It presents in-depth articles, researches and news on Banking, Insurance & Microfinance

Address:

Birritu Editorial Office

Tel

+251 115 17 51 07

+251 115 53 00 40

P.O.Box

5550

www.nbe.gov.et

Addis Ababa , Ethiopia

Editorial Board Chairman

Gebreyesus Gunte

Members

Frezer Ayalew

Temesgen Zeleke

Abate Mitiku

Anteneh Geremew

Elias Salah

Editor - in - Chief

Elias Salah

Secretarial & Distribution Service

Hiwot Teshome

FISCAL AND CURRENT ACCOUNT DEFICITS NEXUS IN ETHIOPIA: EMPIRICAL EVIDENCE FOR TWIN DEFICIT HYPOTHESIS

7



**NBE PUTS A CAP ON CASH
WITHDRAWALS FOR INDIVIDUALS &
COMPANIES**

4

**CAPITAL MARKET IN ETHIOPIA;
RELEVANCE & CHALLENGES**

25

AFRICAN DEVELOPMENT BANK

30



**WORLD ECONOMY IN A DEEPER
RECESSION IN 2020 AND A SLOWER
RECOVERY IN 2021,**

IMF PROJECTION

5

**አወቅ ፍቅረዬ
ገረገጽ**

33

OPINION EXPRESSED IN THE ARTICLE DO NOT NECESSAIRLY REFLECT THE POLICIES AND STRAGIES OF THE NATIONAL
BANK OF ETHIOPIA

for resources, please visit the NBE's official website: www.nbe.gov.et

Dear esteemed readers, we are happy to meet you with the 129th issue of Birritu which consist of relevant and timely topics.

In the News and Information section, there are two news under the title "NBE Puts a Cap on Cash Withdrawals for Individuals, Companies" and "World Economy in a deeper recession in 2020 and a slower recovery in 2021"

The topics selected for research article is "Fiscal and Current Account Deficits Nexus in Ethiopia: Evidence for Twin Deficit Hypothesis". The Educational and Informative Article contains one interview which is "Capital Market in Ethiopia; Relevance, Challenges" and an article about "African Development Bank". Finally, on miscellany section there is a short story.

Dear readers, your feedbacks and comments are invaluable for enriching the next of Birritu. Please keep forwarding your comments and suggestions.

Birritu Editorial Office
Tel +251 115 175107
+251 115 530040
P.O.BOX 5550
www.nbe.gov.et
Addis Ababa, Ethiopia



Dr. Yinager Dessie, Governor of the National Bank of Ethiopia

NBE PUTS A CAP ON CASH WITHDRAWALS FOR INDIVIDUALS & COMPANIES

May 19, 2020

Addis Ababa: The National Bank of Ethiopia (NBE) issued a Directive which limits cash withdrawals for individuals and companies from commercial banks and microfinance institutions.

Briefing journalists, Dr. Yinager Dessie, Governor of the National Bank of Ethiopia disclosed that the Bank issued the directive in a bid to curtail illegal transaction, combat tax evasion and money laundering in the market system.

Accordingly, an individual can withdraw cash money up to 200,000 Birr a day, and 1 million Birr in a month, while companies are allowed to withdraw a maximum of 300,000 Birr a day, but not exceeding 2.5 million in a month.

The Governor underscored that individuals or companies that need to withdraw cash beyond the

set limit for transaction or other purposes can make payments from account to account, in cheques, CPO or any other form of payment system.

The directive allows bank presidents to make exceptions under certain circumstances and reports such above the limit payment to NBE weekly, the Governor said.

Any bank or microfinance institution, which violates the directive, will be fined 25 % of the amount it has paid in a penalty, he added.

It was learnt that the new directive came into effect as of May 19, 2020.

The full content of the directive is posted at NBE website; www.nbe.gov.et



WORLD ECONOMY IN A DEEPER RECESSION IN 2020 AND A SLOWER RECOVERY IN 2021,

IMF PROJECTION

The International Monetary Fund (IMF) states that the world economy is in a deeper recession in 2020 and will have a slower recovery in 2021.

IMF, in its news posted on June 24, 2020, states that the great lockdown has triggered the worst recession since the great depression. Hence, reopening from the great lockdown, may not guarantee countries to have even and certain recovery.

The COVID-19 pandemic pushed economies into a Great Lockdown, which helped contain the virus and save lives, but also triggered the worst recession since the Great Depression. Over 75 percent of countries are now reopening at the same time as the pandemic is intensifying in many emerging market and developing economies. Several countries have started to recover. However, in the absence of a medical solution, the strength of the recovery is highly uncertain and the impact on sectors and countries uneven.

Compared to the April World Economic Outlook forecast, IMF is now projecting a deeper recession in 2020 and a slower recovery in 2021. Global output is projected to decline by 4.9 percent in 2020, 1.9 percentage points below our April forecast, followed by a partial recovery, with growth at 5.4 percent in 2021.

The IMF further indicates that the cumulative output loss to the global economy across 2020 and 2021 from the pandemic crisis will exceeds \$ 12 trillion.

The IMF fears that there will be a high degree of uncertainty, with both upside and downside risks to the outlook. On the upside, better news on vaccines and treatments, and additional policy support can lead to a quicker resumption of economic activity. On the downside, further waves of infections can reverse increased mobility and spending, and rapidly tighten financial conditions, triggering debt distress. Geopolitical and trade tensions could damage fragile global relationships

at a time when trade is projected to collapse by around 12 percent.

The crisis, caused by the COVID-19 pandemic, which pushed economies into a Great Lockdown, will be enormous. First, the unprecedented global sweep of this crisis hampers recovery prospects for export-dependent economies and jeopardizes the prospects for income convergence between developing and advanced economies. So that the IMF is now projecting a synchronized deep downturn in 2020 for both advanced economies (-8 percent) and emerging market and developing economies (-3 percent; -5 percent if excluding China), and over 95 percent of countries are projected to have negative per capita income growth in 2020. The cumulative hit to GDP growth over 2020–21 for emerging market and developing economies, excluding China, is expected to exceed that in advanced economies.

Second, as countries reopen, the pick-up in activity is uneven. On the one hand, pent-up demand is leading to a surge in spending in some sectors like retail, while, on the other hand, contact-intensive services sectors like hospitality, travel, and tourism

remain depressed. Countries heavily reliant on such sectors will likely be deeply impacted for a prolonged period.

Third, the labor market has been severely hit and at record speed, and particularly so for lower-income and semi-skilled workers who do not have the option of teleworking. With activity in labor-intensive sectors like tourism and hospitality expected to remain subdued, a full recovery in the labor market may take a while, worsening income inequality and increasing poverty.

Given the tremendous uncertainty, IMF Advises that policymakers should remain vigilant and policies will need to adapt as the situation evolves. Substantial joint support from fiscal and monetary policy must continue for now, especially in countries where inflation is projected to remain subdued. At the same time, countries should ensure proper fiscal accounting and transparency, and that monetary policy independence is not compromised.



**FISCAL AND CURRENT
ACCOUNT DEFICITS
NEXUS IN ETHIOPIA:
EMPIRICAL
EVIDENCE FOR TWIN DEFICITS
HYPOTHESIS**



Mulualem Eshetu

Advisor to V/Governor and Chief Economist



The overall empirical results reveal the existence of a positive and significant causality link running from current account deficit to government budget deficit with no feedback effect, against the Keynesian Twin Deficits Hypothesis. The findings suggest that a persistent current account deficit could worsen the fiscal deficit position, supporting the Current Account Targeting proposition.

ABSTRACT

The relationship between government budget and current account deficits has long been a debate among policy makers and academicians. The issue of causality link between the two deficits has also been the central point of the debate and a considerable controversy among several economists, with conflicting empirical results. This paper attempted to empirically investigate the nexus between government budget deficit and current account deficit in Ethiopia using time series data for the period covering from 1982 to 2018 and determine the validity of the popular Keynesian Twin Deficits Hypothesis (KTDH) which postulates a strong long run correlation between the two deficits and a positive and significant causality link running from budget deficit to current account deficit with no feedback effect, in contrast to the Current Account Targeting Proposition (CATP)-positing a significant and positive reverse causality link going from current account deficit to fiscal deficit. It employed the Johansen co-integration test technique to examine the long run relationship between budget deficit and current account deficit and other control variables including house hold disposable income, real exchange rate and money supply –a proxy to capture changes in real interest rate and inflation. A simultaneous Error Correction Model (ECM) mechanism is also used to explore the direction of causality link between the twin deficits. The results of the cointegration test indicate the existence of long run correlation among the variables, implying that they are moving altogether over the sample period. The paper also found empirical evidences for a positive and significant short and long run influence of the current account deficit on budget deficit, against the Keynesian Twin Deficits Hypothesis. The empirical findings rather suggest that the proposition of the Current Account Targeting is valid in the context of the Ethiopian economy, implying that a long term current account deficit induces a persistence budget deficit. The policy implication of the results is that a prudent current account management may prove to be a veritable policy instrument for prediction of the fiscal deficit development.

FISCAL AND CURRENT ACCOUNT DEFICITS NEXUS IN ETHIOPIA: EMPIRICAL EVIDENCE FOR TWIN DEFICIT HYPOTHESIS

I. INTRODUCTION

The relationship between government budget deficit and current account deficit has long been the center of international macroeconomic literature and empirical investigations, especially with the recent experience of large imbalances in a number of countries. Theoretically, the nexus between government fiscal deficit and current account deficit has been hypothesized in different mechanism¹. The first view is based on the popular Keynesian Twin Deficits Hypothesis (KTDH) which asserts a positive and significant long run correlation between the twin deficits and causality link runs from government budget deficit to current account deficit, with no feedback effect.

The Keynesian income-expenditure absorption approach and the Mundell-Fleming (MF) model founded on the assumption of an open economy with high capital mobility explain the transmission mechanisms through which government budget deficit positively affects current account deficit. From the perspective of the income-expenditure approach, a rise in budget deficit increases domestic absorption that increases domestic income which will induce import expansion, resulting in widening of current account deficit. Using the well-known Mundell-Fleming (FM) model, Keynes showed that an increase in budget deficit would induce upward pressure on domestic interest rate above world rate, causing capital inflows and leading to local currency appreciation, which will make imports cheap and exports less

competitive in foreign markets and then, adversely affect net export and current account position.

In contrary, the Current Account Targeting proposition (CATP) posits a positive reverse causality link flowing from current account deficit to government budget deficit with no feedback effect, implying that a persistent current account deficit exerts a pressure on fiscal deficit to worsen. According to this hypothesis, a persistent current account deficit induces a slower pace of economic growth, resulting in a higher level of budget deficit through a loss of government revenue or a pressure on government to increase spending on sectors affected by falling exports. This form of causality relationship between the two deficits has often been prevalent in a small and open developing economy that largely depends on foreign capital inflows to finance its development.

The other theoretical stand –the Ricardian Equivalence Hypothesis (REH) –posits the non-existence of any correlation between government budget deficit and current account deficit. The main argument of the Ricardian Equivalence Hypothesis is that an intertemporal shift between taxes and budget deficit does not matter for real interest rate, investment and current account balance. This concept is of the view that since people are rational, they know that the reduction in government taxes, resulting from the government's expansionary fiscal policy of tax cut or increase in public debt, is

¹ The theoretical literatures on the twin deficits nexus are excerpted from different similar empirical studies conducted for developing countries.

temporal and will save the extra disposable income to pay the future higher taxes. This implies that the national savings position will be sustained because the reduction in government savings represented by increased fiscal deepening will be equitably compensated by the additional precautionary private savings for expected future increase in taxes. Hence, there is no any causality relationship between budget and current account deficits.

The other different view known in the theoretical literature as the Twin Divergence Hypothesis (TDH) postulates a negative and significant long run relationship between the two deficits with causality link flows from government budget deficit to current account deficit, implying that a persistent government budget deficit leads to improvement in current account deficit. The main concept of this hypothesis is that a fiscal expansion and then, a rise in government budget deficit causes domestic interest rate to increase which in turn, reduces investment through private sector crowding out effect, while boosts private savings. As a result, aggregate demand falls, resulting in improvement in current account deficit.

The theoretical debates over the twin deficits relationship has derived a number of studies in empirically examining the causality link between fiscal deficit and current account deficit in various countries. However, the findings of the studies varied across countries and within a country, likely due to the difference in methodology, data used, sample size and period covered in the econometric analysis².

Like many other developing countries, the Ethiopian economy has experienced a persistent government budget deficit over the past decades mainly due to the challenge in raising sufficient revenues to finance the national expenditure to advance the social economic development of the country. The tax system has been bedeviled by poor tax collection system, worsened by widespread tax evasion, tax avoidance and inefficient tax administration system. Moreover, the low level of income of a large segment of the population has resulted in low income tax liability. On the spending side, the government has paid a great deal of attention and disbursed an enormous

amount of budget more than ever since the last two decades, to meet the continuing demand for infrastructure, health and education.

The external economy of Ethiopia has also faced a consistent deficit in the current account balance over the past several years. The deficit has become more widened since 2001/02, basically in response to the faster growth in imports of goods into the country relative to that of exports. The imports have been highly essential goods including machinery and transport equipment, manufactured goods and petroleum products, the demand for which is not responsive to the international price changes. In contrast, the growth of exports has been slow with little diversification away from the traditional exports, which have low price and income elasticities of demand and are also vulnerable to global economic crisis, volatile international market prices and changes in weather conditions. International trade in services and current transfers, which are also parts of the current account, have been in surpluses aided mainly by improved earnings from export of transportation and tourism services and increased receipts from emigrants' remittances. However, the surpluses in service account and current transfers have been insufficient to offset the deficit in merchandise trade.

The long-run budget deficit along with consistent current account deficit has undesirable effects on the nation's long term development prospects and hence, examining the relationship between the two deficits has become essential and urgent issue. Therefore, this paper attempted to empirically investigate the link between government budget deficit and current account deficit in Ethiopia using annual time series data covering the period 1982 to 2018. The empirical findings could have an important policy implication as well as contribution to the theoretical controversy over the twin deficits relationship in developing countries.

The rest of the paper is outlined as follows. The following section presents the theoretical framework and empirical evidences for government budget and current account deficits relationship. Section three describes the methodology used and data sources for the Ethiopian case. The empirical

² Section two of this paper briefly presents the different methodologies used in various studies together with empirical findings for twin deficits nexus.

results and analysis are reported in section four. The next section summaries the overall finding. The last section draws a few policy remarks.

II. THEORETICAL FRAMEWORK AND EMPIRICAL EVIDENCES

2.1. THEORETICAL FRAMEWORK

The framework of national account identity defines a clear relationship between budget deficit and current account balance. This framework has a foundation in Keynesian theory which has been extended by Mundell (1963) and Flemming (1962). Hence, the theoretical reasoning for the link between budget deficit and current account balance can be traced from the national income identity as follow:

$$Y = C + I + G + (X - M) \dots\dots\dots (2.1)$$

Where Y = Gross domestic product (GDP)

C = Private consumption expenditure

I = Private investment spending

G = Total government purchases of goods and services

X = Total exports of goods and services

M = Total imports of goods and services and

$(X - M)$ = Current account balance (CA)

Identity (2.1) shows that gross national product (Y) is the sum of income derived from producing goods and services under private consumption (C), private investment (I), government goods and services (G) and exports (X). Imports (M) are treated as a negative item to avoid the double counting in consumption and investment goods purchased at home but produced abroad.

Referring the national income identity, national savings (S) in an open economy can be expressed as:

$$S = Y - C - G + (X - M) \dots\dots\dots (2.2)$$

Alternatively, equation (2.2) can be written as:

$$S = I + CA \dots\dots\dots (2.3)$$

Where $I = Y - C - G$ and I stands for investment spending and CA denotes current account balance ($X - M$). Furthermore, the national savings (S) can be decomposed in to saving decisions made by the private sector (S_p) and saving decisions made by

the government (S_g) and mathematically shown as:

$$S = S_p + S_g \dots\dots\dots (2.4)$$

Since private savings (S_p) is that part of personal disposable income (i.e. income after tax) that is saved rather than consumed and can be expressed as:

$$S_p = Y_d - C = (Y - T) - C \dots\dots\dots (2.5)$$

Where Y_d = personal disposable income

T = tax collected by the government.

$$Y = Y_d - C$$

Similarly, government saving (S_g) can be defined as the difference between government revenue collected in the form of taxes (T) and its expenditures in the form of government purchases (G) and mathematically expressed as:

$$S_g = T - G \dots\dots\dots (2.6)$$

Hence, Equation (2.4) in an identity form can be written as:

$$S = S_p + S_g = (Y_d - C) + (T - G) = I + CA \dots\dots\dots (2.7)$$

Alternatively, equation (2.7) can be simplified for private savings (S_p) as:

$$S_p = I + CA - S_g = I + CA - (T - G) \dots\dots\dots (2.8)$$

Rearranging equation (2.8) in terms of CA :

$$CA = (S_p - I) + (T - G) \dots\dots\dots (2.9)$$

Identity (2.9) suggests that the current account balance (CA) is the sum of private savings investment gap ($S_p - I$) and government budget balance denoted by the difference between government tax revenue and government expenditure on goods and services ($T - G$). It also provides a convenience framework to examine the relationship between government budget and current account balances. For instance, when the difference between private saving and investment ($S_p - I$) remains constant or stable overtime then, the change in fiscal balance ($T - G$) could cause change in the current account balance and hence, the assertion of either the Keynesian Twin Deficits Hypothesis (KTDH) or the Twin Divergence Hypothesis (TDH) could hold, implying budget deficit and the current account deficit are interrelated. The other inference is drawn if the relationship between private savings (S_p) and investment (I) is not stable, then the changes in the

fiscal balance (T–G) could be offset by the changes in private saving and investment (Sp–I) and the assertions of both Twin Deficits Hypothesis and Twin Divergence Hypothesis would not hold. Hence, the changes in fiscal and current account deficits would be unrelated and the Ricardian Equivalence Hypothesis (REH) becomes valid.

2.2. EMPIRICAL EVIDENCES

In view of contributing to the ongoing theoretical debate over the relationship between government deficit and current account deficit, a number of studies empirically explored the long run and causality link between the two deficits as it has an important policy implication for stable macroeconomic environment. However, the findings of these studies varied from country to country and within a country. For instance, Ayatta, Robert and Gordon (2018) examined the short term and long run relationship between government budget deficit and current account deficit and the direction of causality link between the two deficits for Kenya during the period 1970–2017 using Granger Casualty test and Autoregressive Distributed Lag modeling techniques. Other control variables such as interest rate, GDP and inflation are also included in the empirical analysis. The results of Granger causality test indicate the existence of bidirectional causality relationship between the twin deficits. The findings suggest that government budget deficit has a significant long run effect on current account deficit and also current account deficit has a significant long run impact on budget deficit.

Erastus, George and Julius (2014) also empirically tested the validity of the Keynesian Twin Deficits Hypothesis (KTDH) for Kenyan economy using quarterly data spanning from 1970Q1–2012Q1 in a multivariate approach. The study also employed various econometric test techniques including Johansen & Juselius cointegration test, Vector Auto Regression (VAR) and Toda- Yamamoto's Granger causality test. The empirical results suggest that the Keynesian Twin Deficits Hypothesis is valid in the Kenyan economy, implying that the deterioration of government budget deficit causes widening of current account deficit. Therefore, the study proposed that the government should formulate adequate fiscal and monetary policies aimed at effectively managing its expenditure and revenue

while looking into ways of increasing its revenues and reducing expenditures.

Umeora and Ibenta (2016) examined the effect of government fiscal deficit on current account balance for Nigeria during 1970–2013 using the Johansen's cointegration test technique and Ordinary Least Squares (OLS) method. The study incorporated interest rate and exchange rate in the econometric analysis. The cointegration test result implies that there exists a long run relationship among the variables. The results from OLS estimation show that government fiscal deficits do not affect the current account balance, against the Keynesian Twin-Deficits Hypothesis. The study also reported that exchange rate has a significant positive effect on current account balance in contrast to a negative significant impact of the interest rate on current account balance.

Dayo (2012) investigated the relationship between budget deficit and current account balance in Nigeria during 1960–2008. The study employed Ordinary Least Square (OLS) and Autogressive Distributed Lag (ARDL) techniques to determine the long run relationship between budget deficit, current account deficit, investment and private savings. Thereafter, Granger causality test was conducted to determine the causal relationship among the variables. An Error Correction Model (ECM) was conducted to estimate the short run disequilibrium situation among the variables, namely current account balance, budget deficit, investment and private savings. Bound cointegration test established a long run relationship among the variables. Ordinary Least Square results reveal that the rise in budget deficit increases the current account deficit. Evidences from ECM also indicate that changes in budget deficit positively affect the current account deficit position. However, the empirical findings from Granger causality test show a bidirectional relationship between the two deficits.

Emad Omar Elhendawy (2014) studied the relationship between government budget and current account deficits for the Egyptian economy during 1982–2011. The empirical analysis included other control variables including official exchange rate, general government final consumption expenditure, inflation and total debt service. The study utilized the Johansen co-integrated test

technique to examine the long run relationship among the variables and Granger causality test to detect the causality relationship between government budget deficit and current account deficit. The co-integrated test result suggests the existence of long run relationship among the variables. The causality test results indicate clearly that the null hypothesis that government budget deficit does not Granger cause current account deficit is rejected while current account deficit does not Granger cause budget deficit is also rejected, implying a strong and significant feedback linkage does exist, which in effect makes causality between the two variables rather bi-directional.

Omneia and Chahir (2015) tested the Keynesian Twin Deficits Hypothesis to determine the nexus between internal and external imbalances of the Egyptian economy. Using quarterly data for the period 2002–2014. Granger causality test and Error Correction Model (ECM) are run in order to determine both short term adjustment and long run relationship between the internal and external imbalances. The empirical findings failed to support the Twin Deficits Hypothesis but confirmed the validity of Current Account Targeting proposition for the reversed causality link running from current account deficit to budget deficit.

Antoine Ngakosso (2016) analyzed the Twin Deficit Hypothesis in the Republic of Congo during 1980–2013 through employing Autoregressive Distributed Lag (ARDL) cointegration test approach. The findings provide evidence for that the Keynesian hypothesis of a positive causality link running from government budget deficit to current account deficit is not valid, but rather a positive causality link flowing from current account deficit to budget deficit is verified. The study proposed that the consolidation of public finance in Congo requires a good command of the current account because the predictability of the current account balance is improved when the budget deficit is incorporated in the implementation of economic policy.

Manamba Epaphra (2017) empirically investigated the relationship between current account and government budget deficits in Tanzania in order to validate the Twin Deficits Hypothesis using annual time series data for the period 1966–2015.

The empirical tests fail to reject the Twin Deficits Hypothesis, indicating that a rising budget deficit put more strain on current account deficits. Specifically, the Vector Error Correction Model results support the conventional Keynesian theory of a positive and significant relationship with causality running from fiscal deficit to current account deficit, with a relatively high speed of adjustment toward the equilibrium position.

Using Bounds test approach and Toda Yamamoto (1995) causality test techniques, Tarawalie (2014) examined the short and long run relationships between government budget and current account deficit in Sierra Leone during the period 1980–2012. The long run results reveal that budget deficit, real GDP and political instability (proxy by war dummy) have positive impact on current account deficit. The short run estimates also show that budget deficit and war dummy are the most significant variables influencing the development of current account deficit. The empirical findings suggest that the Keynesian Twin Deficits Hypothesis is valid in Sierra Leone. Moreover, the results derived from Granger causality tests indicates uni-directional causality running from budget deficit to current account deficit with no feedback effect.

Musa and Wanga (2014) investigated the relationship between budget deficits and selected macroeconomic variables over the period 1999–2011 for Uganda through employing Vector Error Correction Model (VECM), Pairwise Granger causality test and Variance Decomposition techniques. The econometric analysis also considered other control variables including lending interest rate and GDP, inflation. The results indicate the existence of long run relationship among the variables. The finding obtained from VECM revealed unidirectional causal relationships running from budget deficit to current account deficit. Similarly, the Pairwise Granger Causality test results confirm the unidirectional causality link running from budget deficit to current account deficit. The study concluded that government budget deficits in Uganda are responsible for widening of current account deficit and raising interest rates and recommended the need for fiscal and monetary policy actions to contain and reduce the fiscal deficit in order to minimize its effect on the current account and lending interest rates. Such actions should aim at increasing Uganda's tax

revenue collection through establishing efficient and effective tax administration system.

Mossadak Anas (2013) tested the Keynesian Twin Deficits Hypothesis in Morocco during the period covering from 1980–2012 using the Johansen Co-integration test for long-term relationship between government budget deficit and current account deficit. The Johansen co-integration test result indicated the absence of long run co-integration relationship between the two deficits. However, the impulse responses analysis of the VAR model and Granger-causality test suggest the existence of unidirectional causality going from current account deficit to fiscal deficit, lending support for the reverse causality or Current Account Targeting proposition, implying that the deterioration of current account deficit could lead to worsening of government budget deficit.

Peter Searle (2013) studied the link between government fiscal policy and current account in South Africa in the post-apartheid period using Bayesian-Vector Autoregressions (BVARs) and Engle-Granger cointegration tests. The study used quarterly data covering the period

from 1994Q1 to 2011Q2 and extended samples from 1987Q1 to 2011Q2 and 1989Q1–2011Q2 for real GDP, government budget and current account balance to GDP ratio, real interest rate and real effective exchange rate. Consistent with the predictions of the Keynesian Twin Deficit Hypothesis, the econometrics analysis reports a strong positive relationship between government budget deficit and current account deficit.

Daniel and Eric (2014) conducted empirical study for Ghana over the period 1960–2012 by employing relatively novel estimation techniques –cointegration techniques with allowance for structural break. They found a significant negative causality relationship running from fiscal deficit to current account deficit, implying that the deterioration of fiscal deficit improves current account deficit. The study provided empirical evidence for the Twin Divergence Hypothesis and concluded that the fact that the Twin Deficits Hypothesis should not necessarily gain universal acceptability over the Twin Divergence Hypothesis counterpart.

Table 2.1: Empirical Findings on Government Fiscal Deficit and Current Account Deficit Relationship in Non-African Countries

No.	Authors	Country	Sample Period	Methodology	Findings
1.	Ateeq and Sumaira (2017)	Pakistan	1972–2015	<ul style="list-style-type: none"> - Engle Granger (1981) - Johansen co-integrating - ARDL or Bound test - Granger causality and ECM 	<ul style="list-style-type: none"> -long run relationship exist between budget deficit and current account deficit -unidirectional causality from current account deficit to the budget deficit
2.	Banday and Ranjan (2016)	India	1990–2013	<ul style="list-style-type: none"> - Johansen co-integration test - Granger causality test 	<ul style="list-style-type: none"> -both the deficit variables have a long run association -bidirectional causality relationship between the twin deficits
3.	Suresh and Vikas (2015)	India	1973/74–2013/14	<ul style="list-style-type: none"> - Johansen co-integration test - Granger causality test 	<ul style="list-style-type: none"> -no long term relationship between government budget deficit and current account deficit -bidirectional granger causality relationship between the two deficits
4.	Papia and Gholam (2014)	India	1994/95– 2013/14	<ul style="list-style-type: none"> - Johansen cointegration test technique - Error Correction Mechanism - Wald & Granger - Causality test 	<ul style="list-style-type: none"> -unstable long run relationship current account deficit and fiscal deficits -short run bidirectional causality between budget deficit and current account deficit
5.	Sumaira and Arshad (2012)	Pakistan	1972–2008	<ul style="list-style-type: none"> - Johansen cointegration test - Granger causality test techniques 	<ul style="list-style-type: none"> -long run relationship between the budget deficit and current account deficit -causality running from current account deficit to budget deficit with no feedback effect
6.	Ebrahim, Mohammad and Ala' (2012)	Kuwait	1993Q4–2010Q4	<ul style="list-style-type: none"> - Johansen cointegration test - Vector Autoregressive (VAR) modeling - Granger non-causality test. 	<ul style="list-style-type: none"> -negative long-run relationship between current account deficit and budget deficit -unidirectional causality link running from current account deficit to budget deficit
7.	Chin-Hong, Evan and Kim-Lee (2007)	Malaysia	1970–2005	<ul style="list-style-type: none"> - Johansen and Juselius (1990) maximum likelihood cointegration test - Wald test proposed by Toda and Yamamoto (1995) 	<ul style="list-style-type: none"> -no long term relationship between government budget deficit and current account deficit -unidirectional causality running from current account deficit to budget deficit
8.	Tahir, Muhammad and Mehboob (2007)	Pakistan	1975–2005	<ul style="list-style-type: none"> - Error Correction Modeling - Granger causality test 	<ul style="list-style-type: none"> -bidirectional granger causality link between the two deficits -positive and insignificant short run effect of budget deficit on current account deficit
9.	Evan lau and Ahmad Zubaiddi (2004)	Malaysia	1976Q1–2000Q3	<ul style="list-style-type: none"> - Granger non causality based on Toda and Yamamoto 	<ul style="list-style-type: none"> -bi-directional causality between the two deficits

Source: *Empirical studies*

To summarize, the empirical literature provides mixed and often conflicting results for fiscal deficit and current account deficit nexus. The results appear to be crucially depending on many factors including the variables considered, country and the time span of the data and estimation techniques.

III. MODEL SPECIFICATION AND DATA SOURCES FOR THE ETHIOPIAN CASE

The identity (2.9) shows that current account balance is associated with both private and public saving and investment gaps. But, it does not provide a theory of how the current account balance is determined. In effect, this phase of the investigation is bereaved of any attempt to incorporate the complex theoretical linkages between exchanges rates, domestic interest rates and other contributing factors that could influence the magnitude of savings, investment, export and import flows. The absence of critical

macroeconomic fundamentals constitutes a significant gap that may impair the results and thus needs to be filled. This suggests the need for multivariate model formulation by augmenting identity (2.9) with real income, lending interest rate and real exchange rate as follows³:

$$CA = (S_p(y, r) - I(r)) + BD \dots\dots\dots (3.1)$$

Alternatively,

$$CA = f(y, r, BD, rer) \dots\dots\dots (3.2)$$

Then, the long run cointegration relationship of the variables can be specified in an econometric model as follows:

$$ln cad_t = \beta_1 + \beta_1 ln bd_t + \beta_2 ln m_t + \beta_3 ln y_t + \beta_4 ln reer_t + \mu_t \dots\dots\dots (3.3)$$

The estimates to be obtained from regression of equation (3.3) could cast doubt on the validity of using single equation approach to analyze the relationship between government budget deficit and current account deficit. This implies that a comprehensive inquiry into the relationship between budget and current account

deficits should be performed in the context of a simultaneous equation. Therefore, the existence of reverse casualty relationship from current account to budget deficit should also be examined through equation (3.4) specified for budget deficit ($ln bd_t$) as follow:

$$ln bd_t = \alpha_0 + \alpha_1 ln cad_t + \alpha_3 ln m_t + \alpha_5 ln y_t + \alpha_4 ln reer_t + \varepsilon_t \dots\dots\dots (3.4)$$

Where *cad* = current account deficit to GDP ratio

bd = government budget deficit as a proportion of GDP

m = money supply as a percentage of GDP

reer = real effective exchange rate

y = real household disposable income captured through real GDP

β s and α s = parameters to be estimated

μ and ε = residual error terms and *t* stands for time period

Money supply in GDP ratio could capture monetary influences, including the change in real interest rate and inflation development. Exchange rate is an important macroeconomic variable that can also influence the current account movement. Changes in the exchange rate can have a significant impact on current account by altering the relative returns in the tradable and non-tradable sectors.

The econometric analysis proceeds to establishing the Error Correction Model (ECM) for both budget deficit and current account deficit in order to examine the short run relationship between the two variables and the speed of adjustment towards their long run trends. The ECMs are expressed as follow:

$$\Delta ln cad_t = \gamma_0 + \sum_{i=1}^n \gamma_1 \Delta ln cad_{t-i} + \sum_{i=0}^n \gamma_2 \Delta ln bd_{t-i} + \sum_{i=0}^n \gamma_3 \Delta ln m_{t-i} + \sum_{i=0}^n \gamma_4 \Delta ln reer_{t-i} + \sum_{i=0}^n \gamma_5 \Delta ln y_{t-i} + \delta ect_{2t-1} + \delta_t \dots (3.5)$$

$$\Delta ln bd_t = \lambda_0 + \sum_{i=1}^n \lambda_1 \Delta ln bd_{t-i} + \sum_{i=0}^n \lambda_2 \Delta ln cad_{t-i} + \sum_{i=0}^n \lambda_3 \Delta ln m_{t-i} + \sum_{i=0}^n \lambda_4 \Delta ln reer_{t-i} + \sum_{i=0}^n \lambda_5 \Delta ln y_{t-i} + \eta ect_{2t-1} + \varphi_t \dots (3.6)$$

³ According to economic theory, private saving (S_p) is positively affected by households' disposable income (y) and interest rate (r). In contrast, interest rate (r) tends to affect domestic investment (I) negatively. Moreover, exchange rate is an important macroeconomic variable in influencing current account position. It can have a significant impact on current account by altering the relative returns in tradable and non-tradable sectors. In fact, a depreciation of real exchange rate (rer) makes exports more competitive in the international markets and improves the current account deficit.

Where Δ is the first difference operator and ect_{1t-1} and ect_{2t-1} are the error correction terms and δ and η are coefficients to be estimated to determine the speed of adjustment.

The coefficients of error correction terms (δ and η) in Error Correction Models (3.5) and (3.6) are expected to be negative and statistically significant at a conventional level. These parameters indicate the speed of adjustment, implying how quickly the short run deviation of the dependent variables from long run trend is corrected or converged towards their equilibrium trend within a year.

The empirical analysis begins with unit root test to determine whether the time series data are stationary at levels or first difference. If all the variables are found stationary in the first difference, the Johansen co-integration test technique is used to determine whether there is any long-run or equilibrium relationship between the variables in the model. The Classical Linear Regression Model (CLRM) requires that the error terms should be normally distributed, serially uncorrelated across time period, constant variance across the observation (Heteroscedasticity) and the model should be correctly specified (Multicollinearity)⁴. For the reliability and robustness of the models, these criteria are examined through conducting such conventional model diagnostic tests as Jacque-Bera, Breusch-Godfrey serial correlation LM, Breusch-Pagan and Ramsey RESET test techniques respectively⁵.

The econometric analysis employed time series data for the period covering from 1982 to 2018

collected from the National Bank of Ethiopia (NBE) and National Planning and Development Commission (NPDC). The time series data of all the variables are transformed in to their natural logarithm form.

IV. EMPIRICAL RESULTS AND ANALYSIS

4.1. UNIT ROOT TEST

The issues of stationary, cointegration and Error Correction model (ECM) mechanism have been considered when dealing with models involving time series data. Stationary assures non-spurious model estimates; cointegration captures equilibrium or long-run relationship between (co-integrating) variables; and error correction mechanism is a means of reconciling the short-run behavior of economic variables with their long-run behavior. Tests for stationary usually precede tests for cointegration; and cointegration may be said to provide the theoretical underpinning for error-correction mechanism. In order to implement a more rigorous test to verify the presence of a unit root in the series, Augmented Dickey-Fuller (ADF) test is normally employed in the empirical studies. It tests the null hypotheses of unit root or nonstationary against the alternative hypothesis of non-existence of unit root or stationarity. Therefore, this paper employs the Augmented Dickey-Fuller (ADF) unit root test and the results in levels and in first differences data are reported below in Table 4.1.

Table 4.1: Unit Root Test Results

Variables	At level		At first difference		Order of Integration
	ADF Stat	Prob.	ADF Stat	Prob.	
Inbd	-2.2709	0.1864	-8.9707	0.0000	I(1)
Incad	-1.2629	0.6347	-7.2237	0.0000	I(1)
Inm	-0.7337	0.8254	-4.8558	0.0004	I(1)
Inreer	-2.2252	0.2014	-4.7621	0.0005	I(1)
Iny	3.0532	1.0000	-4.1474	0.0026	I(1)

Source: Own Computation Using E-view

⁴ The presence of model specification error or multicollinearity problem arises when a model incorporated an irrelevant independent variable and highly correlated with another independent variable.

⁵ The null hypothesis of normal distribution, no serial correlation, heteroscedasticity and multicollinearity cannot be rejected if the computed p-value of each test is higher than the 5 percent significant level.

The results of the ADF tests show that the series data of all the variables are indeed nonstationary in levels, i.e. $I(0)$, indicating that each of the series data contains unit root. After transforming all the series data into first difference, they become stationary at 1 percent significant level and integrated of order one, i.e. $I(1)$. The unit root test results indicate that shocks in the current account and budget deficits and other control variables tend to be permanent implying that the series data of the variables move on an unsustainable path.

4.2. COINTEGRATION TESTS

The theory of co-integration addresses the issue of integrating short-run dynamic with long-run equilibrium and is fundamental to understand the long-run relationship among economic time series variables. By definition, co-integration necessitates all variables of a model to be

integrated of the same order. Any equilibrium relationship among a set of non-stationary variables implies that their stochastic trends must be linked. It means that the variables cannot move independently rather integrate to each other. Since the stochastic trends are linked, the dynamic paths of the variables must bear some relation for their deviation from equilibrium relationship. Hence, co-integration which is the property of long run equilibrium provides information about the long run relationship among the variables. Since the variables used in the present analysis are integrated of order one, the cointegration test become necessary to analyze the long run relationship of the variables. Hence, this study employed the Johansen co-integration trace and maximum eigenvalues tests approach where the null hypothesis is no cointegration against the alternative of cointegration. The results of the cointegration test are presented below in Table 4.2.

Table 4.2: Cointegration Test Results

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.7179	80.313	69.8188	0.0057	44.3034	33.8768	0.0020
At most 1	0.3772	36.010	47.8561	0.3958	16.5751	27.5843	0.6165
At most 2	0.2804	19.435	29.7970	0.4620	11.5215	21.1316	0.5952
At most 3	0.1957	7.9138	15.4947	0.4747	7.6239	14.2646	0.4182
At most 4	0.0082	0.2898	3.8414	0.5903	0.2898	3.84146	0.5903

Source: Own Computation Using E-view

Both Trace and Max-eigenvalue tests indicate 1 cointegrating equation at 5 %level of significance. * denotes rejection of the hypothesis at the 0.05 level

On the basis of the trace and maximum eigen values, the null hypothesis of no cointegration is rejected at the 5 percent level of significance in favour of accepting the alternative hypothesis that there is at most 1 cointegrating vector. The implication of these results is that a linear combination of the series data of all the variables is found stationary, implying that there exists a stable long-run relationship between the time series data of the variables. The establishment of cointegration among the variables is an indication of a possible relationship between fiscal deficit and current account deficit and an outright rejection of the Ricardian Equivalence Proposition. Nonetheless, the justification for the validity of

Twin Deficits Hypothesis depends on the direction of causality link between government budget and current account deficits and more importantly, on the statistical significance of the relationship between the twin deficits.

The result of long run cointegration relationship between the variables suggests the existence of long run causality link between the fiscal and current account deficits. Hence, this relationship is examined through regression of the simultaneous equations (3.3) and (3.4) specified for current account and government budget deficits respectively. The results are reported below in Tables 4.3 and 4.4.

Table 4.3: Long Run Estimated Results – Equation (3.3)

Dependent Variable – Incad

<i>Independent Variables</i>	<i>Coeff</i>	<i>Std. error</i>	<i>t-statistic</i>	<i>Prob.</i>
<i>Incad(-1)</i>	0.2932	0.1908	1.5366	0.1349
<i>Inbd</i>	0.2503	0.2071	1.2084	0.2363
<i>Inreer</i>	-0.3713	0.1826	-2.0332	0.0510
<i>Inm</i>	-0.5773	0.4024	-1.4346	0.1617
<i>Iny</i>	0.2424	0.1797	1.3486	0.1875
<i>c</i>	1.3931	3.3472	0.4162	0.6802
<i>R-squared</i>	0.6717	<i>JB Normality Test</i>		1.8062 (0.4053)
<i>Adjusted R-squared</i>	0.6170	<i>Serial Correlation</i>		0.3918 (0.5362)
<i>F-statistic</i>	12.277	<i>Heteroskedasticity</i>		0.5921 (0.7060)
<i>Prob(F-statistic)</i>	0.0000	<i>Ramsey RESET Test</i>		1.2273 (0.2770)
<i>DW stat</i>	2.0316			

Source: Own Computation Using E-view**Note:** Numbers in parentheses are probabilities.

From regression equation (3.3), the parameter estimated for budget deficit (*Inbd*) is positive but insignificant at the conventional levels, implying that the increase in government budget deficit has no significant influence on widening of current account deficit.

Table 4.4: Long Run Estimated Results – Equation (3.4)⁶

Dependent Variable – Inbd

<i>Independent Variables</i>	<i>Coeff</i>	<i>Std. error</i>	<i>t-statistic</i>	<i>Prob.</i>
<i>Inbd(-1)</i>	0.2000	0.1707	1.1714	0.2503
<i>Incad</i>	0.3209	0.1500	2.1389	0.0404
<i>Inm</i>	0.4561	0.3510	1.2992	0.2034
<i>Iny</i>	-0.3825	0.1412	-2.7089	0.0109
<i>c</i>	4.2799	2.3456	1.8246	0.0777
<i>R-squared</i>	0.6623	<i>JB Normality Test</i>		0.5421 (0.7626)
<i>Adjusted R-squared</i>	0.6188	<i>Serial Correlation</i>		0.1555 (0.6961)
<i>F-statistic</i>	15.205	<i>Heteroskedasticity</i>		1.7087 (0.1732)
<i>Prob(F-statistic)</i>	0.0000	<i>Ramsey RESET Test</i>		0.0303 (0.8630)
<i>DW stat</i>	1.9201			

Source: Own Computation Using E-view**Note:** Numbers in parentheses are probabilities.

On the other hand, the coefficient of current account deficit (*Incad*) in the estimated equation (3.4) is found positive and statistically significant at 5 percent level, indicating a significant relationship between the two deficits with causality link goes

from current account deficit to government budget deficit. The overall empirical findings from regression equations (3.3) and (3.4) confirm the validity of Current Account Targeting Proposition against the Keynesian Twin Deficits Hypothesis.

⁶ The F-statistic indicates the significance of the estimated long run equation (3.4) while the other diagnostic test results proved that the estimated equation (3.4) is free from normality, serial correlation, heteroscedasticity and multicollinearity problems.

4.3. DYNAMIC ERROR CORRECTION MODELS

The Error Correction Model (ECM) has arisen from the long-run cointegration relationship and relates the short term fluctuations of the variable to the corresponding long term equilibrium values. This means the model not only facilitates the analysis of the short run impacts of the explanatory variables on the dependent variable, but also suggests the speed of adjustment towards the long-run equilibrium. The coefficient of the residual term in the estimated ECM indicates the speed of adjustment. The greater the co-efficient of the error correction term is the higher the speed of adjustment of the model from the short-run deviation to the long-run trend. All the variables in first difference and the first lag of residual term are

included in the regression process of the short run dynamic model.

The lag lengths are set at three to ensure that the dynamics of the ECM is not constrained by too short lag length. A model with too large lag length could also be difficult for interpretation. Therefore, the original ECM is reduced to a more interpretable model through a stepwise elimination of insignificant explanatory variables in the experimental regressions guided by the resulting Schwarz Criterion (SC) and Akaike Information Criteria (AIC) statistics. Lagged dependent variable is also used in the regression of error correction model as a means for ridding of the possible autocorrelation problem. The results of the estimated short run dynamic ECMs are presented below in Table 4.5 and 4.6.

Table 4.5: Estimated Error Correction Model (ECM (3.5)
Dependent Variable – (ΔIncad)

<i>Independent Variables</i>	<i>Coefficients</i>	<i>Std. error</i>	<i>t-statistic</i>	<i>Prob.</i>
$\Delta \text{Incad}(-1)$	-0.0250	0.2647	-0.0946	0.9253
ΔInbd	0.2080	0.1585	1.3119	0.2002
ΔInm	-1.3457	0.5800	-2.3201	0.0278
ΔInreer	-0.4276	0.3179	-1.3449	0.1894
ΔIny	-0.3571	0.9444	-0.3780	0.7082
$\text{ect}_{(1t-1)}$	-0.7390	0.3255	-2.2705	0.0311
<i>c</i>	0.0404	0.0689	0.5863	0.5623
<i>R-squared</i>	0.4538	<i>JB Normality Test</i>		1.4281 (0.4896)
<i>Adjusted R-squared</i>	0.3368	<i>Serial Correlation</i>		0.1167 (0.7352)
<i>F-statistic</i>	3.8782	<i>Heteroskedasticity</i>		0.4289 (0.8533)
<i>Prob(F-statistic)</i>	0.0060	<i>Ramsey RESET Test</i>		0.0565 (0.8139)
<i>DW stat</i>	1.8730			

Source: Own Computation Using E-view

Note: Numbers in parentheses are probabilities

From estimated the ECM (3.5), the parameter estimate for government budget deficit (ΔInbd) is found positive but statistically insignificant even at 10 percent level. The result suggests the non-existence of a significant causality link flowing from government budget deficit to current account deficit, disproving the validity of the Keynesian Twin Deficits Hypothesis.

The empirical analysis proceeds to ensure either the Ricardian Equivalence Hypothesis or the Current Account Targeting proposition holds through estimating the error correction model (3.6) specified for budget deficit ΔInbd . The results are reported below in Table 4.6.

Table 4.6: Estimated Error Correction Model (ECM (3.6))
(Dependent Variable – ΔInbd)

<i>Independent Variables</i>	<i>Coefficient</i>	<i>Std. error</i>	<i>t-statistic</i>	<i>Prob.</i>
$\Delta \text{Inbd}(-1)$	0.2308	0.2526	0.9137	0.3689
$\Delta \text{Incad}(-1)$	0.4085	0.1532	2.6658	0.0128
$\Delta \text{Inm}(-1)$	0.7967	0.6393	1.2462	0.2234
$\Delta \text{Iny}(-1)$	-0.0374	0.8973	-0.0416	0.9671
$\text{ect}(2t-1)$	-0.9249	0.3279	-2.8200	0.0089
c	-0.0215	0.0685	-0.3146	0.7554
<i>R-squared</i>	0.3566	<i>JB Normality Test</i>		0.5824 (0.7473)
<i>Adjusted R-squared</i>	0.2375	<i>Serial Correlation</i>		0.2204 (0.6426)
<i>F-statistic</i>	2.9936	<i>Heteroskedasticity</i>		0.2872 (0.9159)
<i>Prob(F-statistic)</i>	0.0281	<i>Ramsey RESET Test</i>		0.1381 (0.7132)
<i>DW stat</i>	1.9334			

Source: Own Computation Using E-view

Note: Numbers in parentheses are probabilities

The results from regression of ECM (3.6) shown in Table 4.6 indicate that the coefficient estimated for current account deficit (Incad) is positive and statistically significant at 5 percent level. The result suggests that the increase in current account deficit may cause a higher budget deficit, lending support for Current Account Targeting proposition.

The coefficient of error correction term (ect_{2t-1}) is found negative and significant at 1 percent level. The magnitude of the error correction coefficient implies that about 92 percent of any deviation of the dependent variable from its equilibrium level in the current year is adjusted towards the long run trend next year. The F-statistic is also significant at 5 percent level, suggesting the significance of the overall estimated error correction model (3.6). The Durbin Watson (DW) statistic signifies the absence of serial correlation in the residual series⁷. Moreover, the results obtained from other diagnostic tests indicate the non-existence of normality, heteroscedasticity, serial correlation and multicollinearity problems at 5 percent significance level.

The overall ECMs estimation results reveal the existence of a positive and significant causality link running from current account deficit to government budget deficit with no feedback effect, against the

Keynesian Twin Deficits Hypothesis. The findings suggest that a persistent current account deficit could worsen the fiscal deficit position, supporting the Current Account Targeting proposition.

V. CONCLUSION

The relationship between government budget and current account deficits has long been a debate among policy makers and academicians. The issue of causality link between the two deficits has also been the central point of the debate and a considerable controversy among several economists, with conflicting results arising likely from the differences in econometric methodologies and techniques, data type, set of variables used, sample size and period covered in empirical investigation.

This paper attempted to empirically investigate the nexus between government budget deficit and current account deficit in Ethiopia using time series data for the period covering from 1982 to 2018 and determine the validity of the popular Keynesian Twin Deficits Hypothesis (KTDH) which postulates a positive and significant causality link running from budget deficit to current account deficit with no feedback effect, in contrast to the

⁷ As a rule of thumb, if DW is found to be 2 in an application one may conclude that there is no first order autocorrelation in the residual series. Therefore, the closer DW to 2 is also the evidence of no serial correlation in the residuals.

Current Account Targeting (CAT) for a significant and positive reverse causality relationship flowing from current account deficit to fiscal deficit. It employed the Johansen co-integration test technique to examine the long run relationship between budget deficit and current account deficit and other control variables including personal disposable income, real exchange rate and money supply –a proxy to capture changes in real interest rate and inflation. A simultaneous Error Correction Model (ECM) mechanism is also used to explore the direction of causality association between the twin deficits. The results of the cointegration test indicate the existence of long run correlation among the variables, implying that the series of all the variables move altogether over the sample period. The paper also found results suggesting a positive and significant short and long run influence of the current account deficit on fiscal deficit, against the Keynesian Twin Deficits Hypothesis. The empirical finding rather suggest that the Current Account Targeting proposition is valid in the context of the Ethiopian economy, implying that a long term current account deficit induces a persistent government budget deficits.

VI RECOMMENDATION

The empirical findings imply that a prudent current account management may prove to be a veritable policy instrument for prediction of the fiscal deficit development. Strengthening policies and strategies aimed at expanding and diversifying exports towards high value products and increasing tourism incomes and emigrants' remittance receipts through official channels may improve the current account deficit which consequently may induce improvement in the fiscal deficit position.

REFERENCES

1. Antoine Ngakosso (2016). Congo's Twin Deficits Hypothesis: An Empirical Evaluation Case Study. *American Journal of Economics* 2016, 6(1)
2. Ateeq R. and Sumaira S. (2017). Validity of Twin Deficits Hypothesis in Case of Pakistan: Using Different Cointegration Techniques. *Economics, Commerce and Trade Management. An International Journal (ECTIJ)* Vol. 1, No.1, 2017
3. Ayatta, Robert O. and Gordon O. (2018). Relationship between Budget Deficit and Current Account Balance in Kenya. *Journal of Economics*, Volume 2 Issue 1 Page 60- 85 November 2018
4. Chin-Hong Puah, Evan Lau and Kim-Lee Tan (2007). Budget-Current Account Deficits Nexus in Malaysia. *Faculty of Economics and Business, University Malaysia Sarawak*
5. Daniel Sakyi and Eric Evans Osei Opoku (2014). The Twin Deficits Hypothesis in Developing Countries: Empirical Evidence for Ghana.
6. Dayo Benedict Olanipekun (2012). A Bound Testing of Budget Deficit and Current Account Balance in Nigeria (1960-2008). *International Business Management* 6 (4): 408-416 6, 2012
7. Ebrahim Merza, Mohammad Alawin and Ala' Bashayreh (2012). The Relationship between Current Account and Government Budget Balance: The Case of Kuwait. *IJHSS* Vol. 2 No. 7; April 2012
8. Emad Omar Elhendawy (2014). The Relationship between Budget Deficit and Current Account Deficit in Egypt. *International Journal of Economics and Finance*; Vol. 6, No. 3; 2014
9. Erastus K.N. George K. and Julius K. (2014). Testing the Twin Deficits Hypothesis for Kenya 1970-2012. *Internationals Journal of Business and Economics*, Research 2014; 3(5): 160-169
10. Evan lau and Ahmad Zubaidi Baharumshah (2004). On the Twin Deficits Hypothesis: Is Malaysia Different? *Pertanika J. Soc. Sci. & Hum.* 12(2): 87-100 (2004)
11. Manamba Epaphra (2017). The Twin Deficits Hypothesis: An Empirical Analysis for Tanzania. *Institute of Accountancy Arusha*
12. Mossadak Anas (2013). Twin Deficits in Morocco: An Empirical Investigation. *International Journal of Business and Social Research (IJBSR)*, Volume -3, No.-7, July, 2013
13. Musa M.L. and Joseph M. (2014). Macroeconomic Effects of Budget Deficits In Uganda: A VAR-VECM Approach. *Economic Policy Research Centre – (EPRC), Research Series No. 117*
14. Omneia H. and Chahir Z. (2015). The Nexus between Internal and External Macroeconomic Imbalances: Evidence from Egypt. *The Egyptian Center for Economic Studies, Working Paper No. 181, July 2015*
15. Papia Mitra and Gholam Syedain Khan (2014). Twin Deficits Hypothesis: An Empirical Analysis in the Context of India. *International Journal of Commerce & Business Studies*, Volume 2, Issue 2, pp. 10-23
16. Peter Searle (2013). Fiscal Policy and the Current Account: Evidence from South Africa. A Thesis Submitted for a Partial Requirement for the Fulfilment of the Master of Commerce. *University of Cape Town – School of Economics*

17. Sumaira Saeed and M. Arshad Khan (2012). Twin Deficits Hypothesis: The Case of Pakistan (1972-2008). *Natural & Applied Sciences*, Vol 3, No. 2, September 2012
18. Suresh K.G and Vikas Gautam (2015). Relevance of Twin Deficits Hypotheses: An Econometric Analysis with Reference to India. *Theoretical Economics Letters*, 2015, 5, 304-311
19. Tahir M, Muhammad Z and Mehboob A (2007). An Empirical Investigation for the Twin Deficits Hypothesis in Pakistan. *Journal of Economic Cooperation*, 28, 4(2007), 63-80
20. Tarawalie Abu Bakarr (2014). Fiscal Deficits and Current Account Imbalances: Evidence from Sierra Leone. *International Journal of Business and Social Science*, Vol. 5, No. 8(1); July 2014
21. U.J. Banday and Ranjan A. (2016). How Budget Deficit and Current Account Deficit are Interrelated in Indian Economy. *Theoretical and Applied Economics*, Volume XXIII (2016), No. 1(606), Spring, pp. 237-246
22. Umeora C. Emmanuel and Ibenta Steve N (2016). Effect of Government Fiscal Deficits on Current Account Balance: The Case of Twin Deficits Hypothesis in Nigeria. *IJBMA*



CAPITAL MARKET IN ETHIOPIA; RELEVANCE, CHALLENGES



Ato Tesfaye Hailemichael has done his education in the USA. He earned his first and second degrees in accounting and advanced education in Finance. He is a Certified Public Accountant (CPA).

He has worked for various global companies at different capacities for over 30 years in the United States, Europe, and Africa. He assumed positions such as Board Chairman, Chief Executive Officer, Chief Operating Officer, Chief Financial Officer, board member and co-founder of several companies in California. He was Chairman of the Board, Chief Executive Officer of two different companies in Ethiopia and was the co-founder of Cornerstone Advisory Services, Plc in Ethiopia.

He was a Board Member and Audit Committee Chair for one of the largest non-profit organizations in California, Board Member of Financial Executive International, and a professional organization in San Diego California. Co-Founder of Day for Change, a non-profit organization which provides financial support to abused women and children in California, and a member of Corporate Directors Forum, one of the largest boards of directors' organizations in the USA. He has also written a book. Currently Ato Tesfaye is a Senior Vice President of Cerberus Frontier, An Affiliate of Cerberus Capital Management, and Advising National Bank of Ethiopia regarding the establishment of Capital Market in the country.

Birritu has conducted written interview with him concerning the essence of capital market, its historical background, its relevance for the country's economy, the risks and so on. Birritu thanks Ato Tesfaye, for his willingness to share his rich experience on capital market. Here follows the questions and answers.



Ato Tesfaye Hailemichael

*CPA Senior V/President, Cerberus Frontier and
Advisor member to NBE on Capital Market Project*

Birritu: What does a capital market mean all about? How is the historical development of capital market explained?

Ato Tesfaye: The capital markets allow investors to allocate funds to different investment vehicles such as equity, debt, bonds, and other instruments. Such investments allow investors flexibility in timing and reduce risks through diversification. Investors with high risk of tolerance may want to invest in stock or equity. Investors with lower risk of tolerance may invest in government bonds, treasury, or savings deposits in a bank. Some may invest in both to diversify their exposure. The capital markets require knowledge of the market dynamics and all investment options available in the market before investing.

The history of the capital markets goes back to the 16th century and even before in different forms. It transformed into a more sophisticated form in the 18th and 19th centuries. The capital markets had their ups and downs throughout history, the major one being the 1929 stock crash, followed by 1987, 2001 and 2008 financial crisis in the USA and globally.

Birritu: How do you elaborate the concepts of bond, share, and derivatives?

Ato Tesfaye: It is an excellent question, A bond is a debt instrument issued by a government or corporation, government or company would borrow money from individuals or organizations with the promise of paying it back at a specified date with an agreed upon interest (generally interest is paid quarterly or annually and the principal at the maturity date). Principal and interest are sometimes paid at the maturity date.

Shares/stocks are an equity investment whereby the investor has an interest in the company. The shareholders/stockholders have the right not the obligations of the corporation or Plc. They are not responsible for the liabilities of a company, but they have the right to vote on the company's budget and performance and receive a dividend if the company is profitable.

Derivatives are contracts whereby their value is derived from the performance of underlying

entity; the underlying entity can be an asset, interest rate and index. The underlying entity can include forward contracts, options, futures and credit default swaps. Most derivatives are traded over the counter (Off-exchange).

Birritu: Some say that debt and stock are structurally similar except the choice of instruments traded, do you agree with that? Which should be the priority?

Ato Tesfaye: We have to qualify the type of debt before I answer your questions, a government bond is a debt instrument that is issued by the government and does not have a secondary market in the current Ethiopian context. Corporations issue bonds similar to the government bond and are traded. There are other types of debt instruments which may not apply to the Ethiopian context. A stock is an ownership instrument where stockholders have the right not the obligation of the corporation.

“It is obvious that investing in government bond is less risky than a corporation’s stock since the chance of the government going bankrupt is very low.”

However, the return on investment of a government bond is low compared to a corporation's stock. The basic logic is high risk investment may provide higher return in concept but this is not always true.

Birritu: Who are the key actors of a well-functioning capital market and which is the role of central banks?

Ato Tesfaye: As mentioned earlier, the capital markets are financial markets which include many types of investments such as equity-backed securities. Capital market channels the wealth of savers to those who can use it for long term productive use such as building manufacturing plants, training the workforce, and expanding operations.

The capital market is regulated by different government agencies, depending on the type of investments. The primary stakeholder of the capital markets is the Parliament which will write the law,

the Security and Exchange Commission which will regulate the stock exchange, the accounting oversight board which will oversee the auditors, the various stock exchange organizations which will monitor the exchange and report on any unusual transactions to the Security and Exchange Commission. There are other government agencies that are supporting the main stakeholders, the Attorney General office is responsible for enforcement of the law, professional organizations such as the stock brokers association, Investment Banks, stock analysts who determine the value of any given stock, accounting profession associations, legal associations are also the actors in the capital market.

The National Bank plays a major role in the supervision of banks, in advancing the country's monetary policy, currency control and financial services. The National Bank is responsible for providing The Automated Clearing House (ACH) and international wire services. The National Bank sometimes is called the bank for banks.

Birritu: How could the concepts and relationships of primary and secondary markets be explained? Are these markets currently functioning in Ethiopia? Please also explain the progress status of these markets in Ethiopia.

Ato Tesfaye: The primary market can only exist in a country where there is a stock exchange. A stock exchange is a place where securities are bought and sold. You may have heard of the New York Stock Exchange or the Nasdaq. Companies list shares of their stock on an exchange to raise money to grow their business and such event is called an Initial (first time) Public Offerings, (IPO). The secondary market is where investors buy and sell stock that they already own on a stock exchange.

Regarding your question of the existence of a primary and a secondary market in Ethiopia, it does exist in a rudimentary way; the law in Ethiopia is lenient in selling shares to the public which is not the case in most countries. Share companies in Ethiopia can sell shares and mobilize funds for their operations. Such activities are almost like doing an Initial Public Offering (IPO) without a proper valuation of the company and without strict rules to protect the investors, especially smaller investors. Shareholders cannot sell their

shares easily and whenever they want since there is no formal secondary market in Ethiopia.

The establishment of capital market in Ethiopia has been a priority for the Ethiopian government and the NBE is leading the way to implement the vision. Professionals have been hired to assess the viability and the required infrastructure and human capital. The National Bank Governor has appointed a capital market committee to advise the NBE in the formation of the capital market. Such efforts are ongoing until all the required systems are established and the responsible agencies entrusted with the implementation, monitoring of all the guidance are in place.

Birritu: How do you explain the economic and any other factors driving the establishment of capital markets and its relevance for developing countries like Ethiopia?

Ato Tesfaye: A stock market has the potential to accelerate the economy of developing countries like Ethiopia. The stock market can fuel economic growth by re-allocating savings to more productive projects such as manufacturing, building infrastructure and human capital formation. The stock market can only be successful if and only if there is public and private participation in crafting the legal framework, building the infrastructure, attracting Ethiopians with stock market experience and extensive training to all the stakeholders.

Birritu: What are the political platform and economic situations to be fulfilled before going to establish a capital market?

Ato Tesfaye: It appears that there is the political will to establish capital market in Ethiopia. Ethiopia has registered respectable growth for the last many years, although there is also a macroeconomic imbalance associated with that growth.

The stock market requires strong institutions before it can become effective. We need the legal framework from the Parliament, institutions such as Ethiopian Capital Market Authority that will be responsible for developing the law, a security enforcement division at the Attorney General's office, a stock exchange infrastructure which is responsible for the stock exchange, an accounting oversight board who will oversee

the auditors, competent audit firms, Chief Financial Officers (CFOs) and accountants who are responsible in reporting accurate corporate financial and operational milestones, professional associations such as Association of Stock Brokers which monitors its members and trained lawyers who will be involved in the filings of corporate reporting. Those professionals must be trained and understand the law, have technical experience, dedication and commitment to serve with the highest standards of ethical conduct.

Birritu: What are the challenges and possible risks encountered in the establishment and functioning of capital market with country experiences?

Ato Tesfaye: There is empirical evidence that countries with an active capital market tend to grow faster than countries without a stock market.

There are countries that have stock markets that are not successful due to inadequate participation of the society, mismanagement, not having the necessary human capital and not understanding the intricacies of the capital markets. Having the capital markets without educating the public will not lead to success. Countries must understand the global nature of the stock market and must prepare to accommodate international investors if they want the capital market achieve its objectives. The key to a successful capital market understands the complexity of capital markets, crafting the appropriate legal framework compatible with international standards, installing modern infrastructure and attracting the most competent professionals with experience to lead the execution of the plan. There will be challenges at the initial stage of a capital market until everyone understands the mechanics of the market and the positive impact on lives of individuals and businesses. The challenges are many but surmountable if the required resources are deployed in time, averting economic downturn, crafting government regulations that promote favourable taxes and incentives to align with the intention.

Birritu: Ethiopia is now going to establish stock exchange in the coming years, in view of enhancing the financial sector and thereby supporting the

economic growth of the country. Do you think the political, economic, legal, technological, human, and institutional standards are currently met to establish a well-functioning capital market?

Ato Tesfaye: As I mentioned earlier, the capital market can only be successful if there is full support by the government as well as by the citizens of Ethiopia. Success will not be assured without the involvement of dedicated, well versed, and experienced individuals. In the ideal world, government involvement in the establishment of a stock exchange is not necessary other than oversight. However, government involvement in the establishment of stock exchange in the developing world is vital since the capital required to establish is significant.

I must say that all the pre-conditions you mentioned are not met at this point, but the government and the private sectors are working together to establish a successful stock market. I can say that we are going in the right direction. We cannot short-circuit the process and establish an effective, efficient, vibrant, and respected exchange and therefore we should continue to look at every aspect of the challenges prior to starting an exchange.

I am happy to say that the professionals who are retained by NBE to work on the stock market implementation process are on the right trajectory, the advisory committee on the subject is doing good job as well. Nevertheless, a machine does not function unless all the parts are installed in the right place.

Birritu: Briefly discuss the practices of South and East African countries in establishing capital markets. What Ethiopia could learn from these countries?

Ato Tesfaye: The stock market in Africa is not as vibrant as in other parts of the world due to many reasons including the infancy of the economic base and the public understanding of the stock market as an investment vehicle. Twenty-eight countries in Africa have a stock exchange and only three of them are efficient. The rest of the countries are not performing as expected due to many reasons.

“Ethiopia should not only learn about the capital markets from African countries, but it should be open to gain valuable information from other countries including the USA and Europe and Asia.”

Coming late to the capital market could be an advantage for Ethiopia; it has a chance to learn the pitfalls from other countries. The platform and the standards of a stock market can be replicated from other countries with efficient stock market.

The key to the success of the capital markets in Ethiopia is deploying the right resources, dedicated professionals who have the fortitude and the aptitude to deliver quality results, have the capacity, tenacity, experience, and have the highest standard of ethical conduct.

Birritu: What roles the NBE is going to play in the upcoming capital market establishment?

Ato Tesfaye: The role of NBE is immense in making the capital market a reality. It has taken the lead in pushing the capital market forward and attracting professionals to draft the legal framework, the organizational structure, providing support in assessing the infrastructure needs, studying the capital market in Africa and other countries, attracting competent people to work on the objectives of capital market. Although the NBE participation as a lead organizer of the capital market will end as soon as the Ethiopian Capital Market Authority is formed, it will continue to support the Authority notwithstanding with its core responsibility of supervising financial institutions, leading the monetary policy of the country and supporting banks. In addition, NBE plays a major role in monitoring the activities of banks and Insurance companies, which may want to be listed in the upcoming exchange.

Birritu: Anything you may add, or your concluding remarks?

Ato Tesfaye: Thank you for the opportunity to speak to Birritu. I would conclude by saying the following; it is beneficial to have an efficient stock market to raise capital for business needs such as for expansion, product development, marketing, etc... However, we should and must have all the pre-requisites before having a stock market. As I mentioned earlier, the stock market is an investment vehicle for those who are able and have the risk tolerance to invest in stock and this is not for everybody. The stock market by its nature is risky even in developed countries that have been trading stocks for hundreds of years.

The issue of the stock market is quite tricky. It requires strong institutions before the stock market can become effective, we need institutions such as the Ethiopian Security Capital Market Authority which will be responsible to develop the law, Security Enforcement Division at the Attorney General's office accounting oversight board which will oversee the auditors and accountants, professional associations such as Association of Stock Brokers which will monitor its members, trained lawyers, auditors, accountants, Chief Financial Officers (CFOs) etc. those professionals must be trained and understand the law before they will be involved in such an undertaking.

We must not forget that having the required infrastructure to establish a capital market may not be the panacea for our economic growth unless we have the right people who have the capacity to lead it and have the fortitude to work for the interest of the shareholders and the country. These people must possess integrity, have the moral compass, understanding the fiduciary responsibilities they will have and upholding transparency are the cornerstone of managing public or private company. In addition, these people must respect the law, uphold corporate governance, have pride in doing good work, embrace social responsibilities and these guiding principles would result in the success of establishing a capital market in Ethiopia.



AFRICAN DEVELOPMENT BANK

The African Development Bank (AfDB) Group is a regional multilateral development finance institution established to contribute to the economic development and social progress of African countries that are the institution's Regional Member Countries (RMCs). The AfDB was founded following an agreement signed by member states on August 14, 1963, in Khartoum, Sudan, which became effective on September 10, 1964. The AfDB comprises three entities: the African Development Bank (ADB), the African Development Fund (ADF) and the Nigeria Trust Fund (NTF). As the premier development finance institution on the continent, the AfDB's mission is to help reduce poverty, improve living conditions for Africans and mobilize resources for the continent's economic and social development. The AfDB headquarters is officially in Abidjan, Côte d'Ivoire.

The Bank Group has 80 member countries, comprising 54 regional member countries (RMC) and 26 non-regional member countries (NRMC). The non-regional member countries are primarily from Europe, America and Asia. Initially, only independent African countries could become members of the Bank. However, due to growing demand for investments from African countries and because of the Bank's limited financial resources, membership was opened to non-regional countries. The admission of non-regional members in 1982 gave the AfDB additional means that enabled it to contribute to the economic and social development of its RMCs through low-interest loans. With a larger membership, the

institution was endowed with greater expertise, the credibility of its partners and access to markets in its non-regional member countries. The AfDB enjoys triple A ratings from all the main international rating agencies. However, the AfDB maintains an African character derived from its geography and ownership structure. It exclusively covers Africa. It is also headquartered in Africa, and its president is always African.

HISTORY

Following the end of the colonial period in Africa, a growing desire for more unity within the continent led to the establishment of two draft charters, one for the establishment of the Organization of African Unity (established in 1963, later replaced by the African Union), and for a regional development bank.

A draft accord was submitted to top African officials then to the Conference of Finance Ministers on the Establishment of an African Development Bank. This conference was convened by the United Nations Economic Commission for Africa (UNECA) in Khartoum, Sudan, from 31 July to 4 August. It was here that the agreement establishing the African Development Bank (AfDB) was cosigned by twenty-three African governments on 4 August 1963. The agreement came into force on 10 September 1964.

The inaugural meeting of the Board of Governors of the Bank was held from 4 to 7 November 1964 in Lagos, Nigeria. The Bank's headquarters opened

in Abidjan, Côte d'Ivoire, in March 1965 and the Bank's operations commenced on 1 July 1966. From February 2003 onwards, the Bank operated from its Temporary Relocation Agency in Tunis, Tunisia, owing to the prevailing political conflict in Côte d'Ivoire at the time. The Bank was able to return to its original headquarters in Abidjan in late 2013 once the political crisis was over. By June 2015, over 1,500 staff had returned to the Bank's Abidjan headquarters out of the more than 1,900 total staff complement at the Bank.

Although, originally, only African countries were able to join the bank, since 1982 it has allowed the entry of non-African countries as well.

Since its founding, AfDB has financed 2,885 operations, for a total of \$47.5 billion. In 2003, it received an AAA rating from the major financial rating agencies and had a capital of \$32.043 billion.

GROUP ENTITIES

The African Development Bank Group has two other entities: the African Development Fund (ADF) and the Nigeria Trust Fund (NTF)

AFRICAN DEVELOPMENT FUND

Established in 1972, the African Development Fund started operations in 1974. "The African Development Fund" United Nations Convention to Combat Desertification (UNCCD) 2004], no longer available (2006) It provides development finance on concessional terms to low-income RMCs which are unable to borrow on the non-concessional terms of the AfDB. In harmony with its lending strategy, poverty reduction is the main aim of ADF activities. Twenty-four non-African countries along with the AfDB constitute its current membership. The largest ADF shareholder is the United Kingdom, with approximately 14% of the total working shares followed by United States with approximately 6.5 percent of the total voting shares, followed by Japan with approximately 5.4 percent. The Federal Reserve Bank of New York was designated as the depositor bank for the fund according to telegraphs sent from the U.S. Embassy in Abidjan in 1976.

The ADF's general operations are decided by a Board of Directors, six of which are appointed by

the non-African member states and six designated by the AfDB from among the bank's regional Executive Directors.

The ADF's sources are mainly contributions and periodic replacements by non-African member states. The fund is usually replenished every three years, unless member states decide otherwise. The total donations, at the end of 1996, amounted to \$12.58 billion. The ADF lends at no interest rate, with an annual service charge of 0.75%, a commitment fee of 0.5%, and a 50-year repayment period including a 10-year grace period. The tenth United Kingdom replenishment of the ADF was in 2006.

NIGERIA TRUST FUND

The Nigeria Trust Fund (NTF) was established in 1976 by the Nigerian government with an initial capital of \$80 million. The NTF is aimed at assisting in the development efforts of the poorest AfDB members.

The NTF uses its resources to provide financing for projects of national or regional importance which further the economic and social development of the low-income RMCs whose economic and social conditions require financing on non-conventional terms. In 1996, the NTF had a total resource base of \$432 million. It lends at a 4% interest rate with a 25-year repayment period, including a five-year grace period.

WHAT TYPES OF PROJECTS DOES THE BANK GROUP FINANCE?

The African Development Bank Group finances projects, programs and studies in the areas of agriculture, health, education, public utilities, transport and telecommunications, the industry and the private sector. The Bank Group has, since 1968, also sought to finance non-project operations, including structural adjustment loans, policy-based reforms and various forms of technical assistance and policy advice.

The AfDB Group has also widened the scope of its activities to cover new initiatives such as the New Partnership for Africa's Development (NEPAD), water and sanitation as well as HIV/AIDS. The Bank Group is also involved in important initiatives

on debt reduction, to the tune of US\$ 5.6 billion under the Highly Indebted Poor Countries (HIPC) Initiative, which aims at reducing the debt stock of 33 eligible countries to sustainable levels. In 2006, the AfDB Group also made a commitment to cancel nearly US\$9 billion owed by the countries concerned in order to help them attain the MDGs.

WHO CAN BENEFIT FROM BANK GROUP ASSISTANCE?

Most AfDB resources and projects are intended for its regional member countries (RMCs). Countries are classified under three categories on the basis of two criteria: (i) country-creditworthiness and (ii) GNI per capita. The first category comprises 'not creditworthy' countries with a GNI per capita below an established threshold updated annually (in fiscal year 2013-2014: \$1,205). Countries in the first category are only eligible for concessional resources from the African Development Fund window.

The second category contains countries with a GNI per capita below the operational GNI cut off but creditworthy: these are called 'blend countries' and are eligible for ADF and ADB resources. Finally, the third category is made up of countries above the operational GNI cut off and creditworthy. Those countries are eligible to ADB resources only. The Group's credit policy has been reviewed in May 2014, enabling, under certain conditions, an ADF eligible country to borrow non-concessional resources from the AfDB window.

Compiled by: Elias Salah

Source: www.afdb.org

https://en.wikipedia.org/wiki/African_Development_Bank



ለወዳ ፍቅረዬ ትረፋት

መጋቢት 7 ቀን 1969
ክፍለዓመት

በዘመናችን አንቱ የተባለውን ዲታ የፈጠረ እግዚአብሔር እኔን ነጭ ድሃ መፍጠሩ አላስገረመኝም፤ ድህነቴንም እንደ አመሉ ይዜ ከማደጋ በስተቀር «ምነው እንዲህ ታደርገኛለህ?» ብዬዉም አላዉቅም። ከዚህም በላይ ልቦና ገዝቼ በጀመርኩት መንገድ ላይ ወድቄ መቅረቴም እንዳማርረዉ አላደረገኝም። አንቺንም የመሰለች የመልካም ሰው ምሳሌ ፈጥሮም እኔ ላይ ከጣለሽ ማንገላታቱም ይሁንልህ ብዬዉ ነበር። ሆኖም አሁን በህልፈተ - ህይወቴ ተስፋ እንድትቆርጭ በማድረግ "ግን ለምን ፈጣሪዬ?" እንድለዉ ተገደድኩ። ይህም ሆኖ ታዲያ በኔ ሞት ስሜትሽ እንዳይነካና የበለጠ እንዳይደርስብሽ ብርታትና ፅናቱን እንዲሰጥሽ ልለምነዉ አልከጅልም፤ ከዛ ይልቅ ኢዮብንም የፈጠረ እሱ መሆኑን እንዳስታዉስሽ ልቦና ስለሰጠኝ ማመስገኑን አመርጣለሁ። በመጨረሻ ደቂቃዬ ላይ ላደረገልኝ መልካም ነገርም ብዬ አቆጥረታለሁ።

ዉዴ! ከአሁን በኋላ ብቻሽን ነሽ፤ ስለዚህም መፅናናት ከባድ ሊሆንብሽ ይቻላል። አያገባቸዉ እየገቡ፤ መኖር ማለት የሌላዉን መነካካት በሚመስላቸዉ «ሰዎች» ምክንያት የሚፈስሱት ዘለላ ዘለላ ዕንባዎች በእጅ ሳይሆን በከንፈር ከጉንጮችሽ ላይ የሚቀበላቸዉ አለመኖሩ ብቻ ሳይሆን ብዛታቸዉም ስለሚጨምር ኑሮ ይከብድሻል፤ በቁጭትና በእልህ መታመቁ አንስት በስርቅታ ወደ ላይና ወደ ታች ለሚፋተገዉ ጨጓራሽ «ለመኖር ያክል» እያለ የተገኘዉን የሚልክለት አሳቢ ማጣቱም ሌላዉ ህመም ነዉ። የተፈጥሮ ፀጋ ዉበትሽ ለመወደስ ይህን የታደለ ባይሆንም በተገኘዉ አጋጣሚ፤

የዉበት መታያ ሊያደርግሽ አስቦ፤

ፈጣሪ የሠራሽ ተጨንቆ ተጠቦ።

መባሉም ሲቀር ያለመድሽዉ ነበርና አንጀት ይንጣል። በምትኩም እኛ እድለኞች የሆን ይመስል ባልታደሉት «በዉሬ ለተፈቱት፤ ይቅርን ሲሹ ላላገኙት»፤

ለዉሬ ነጋሪ አድማቂም ባያሻዉ

መፋቂያም ባይኖረዉ የትዝታ አሻራዉ

መሆንን አረስቶ ነበርን መልመዱ

አይደለም ለስጋ አይቀርም መንገዱ፤

እያልን የምናንጎራገረዉን ያዉ ያልተመቸነዉ ፈጣሪ «እስቲ መክራዉ!» ብሎሻልና «ቻይዉ!» ከእንግዲህ ፍቅራችን ትዝታ ሆኖ መቅረቱን ተቀብይ! እኔ ላንቺ ትዝታሽ ብቻ ለራሴ ደግሞ ትቢያ ሆኛለሁ።

ዉዴ! በቀሪዉ የህይወት ዘመንሽ መልካም እንዲገጥምሽ ያንኑ የከፋብኝን ፈጣሪ መማፀን ባስብም አንቺን በሚያገኘዉ ዕድለኛ ቀናሁ፤ አሁን ማን ይሙት ለሞት ደቂቃዎች የቀሩት ሰዉ ይቀናል? ይህ በኔ መሆኑ እንጂ ሌላ ቢያወራልኝ ለምነዉ የምቸለዉ አይደለም፤ ያኔ ታምሜ ሥራ ፍለጋ ስትባዝኚ የቀበሌያችሁ መሠረተ ትምህርት ጣቢያ ላዉጣዉ ማስታወቂያ ስታመለክቺ «ብቻሽን ላገኝሽ ከቻልኩ ሁሉም ይሆናል... አለበለዚያ ግን እንደማይምነት የጨለማ ጉዞ...» ያለሽ የጣቢያ ኃላፊ ማመልከቻሽን ሲያፈላልግ ታየኝ፤ ካገኘዉ አቧራዉን ሲያራግፍ፤ ካጣዉ ደግሞ. . . ሒሳብ ፈተና ወድቀሽ እንዲሻሻል ከፈለግሽ ያለሽ መምህር. . . በስምሽ ንግድ ፈቃድ ልክፈትልሽ ያሉሽ የሰፈራችን ሮክፌለር፤

ብቻ በሞት መንገድ ላይም ቅናት አለ . . . እነዚህ የምስር ሳንድዊች እየሸጠች ትቀልበዋለች . . . የቀን ሥራ ከሚሠራ ጋር ፍቅር . . . ውዴ! ልቀጥል አልቻልኩም . . . የታሰርንበት ክፍል በር ተከፈተ . . . እስከዘለዓለሙ ደህና ሁኒ!

ፍሰህ

ጓደኛዬ ደህን ያልታሸገ ደብዳቤ አድርስልኝ ሲለኝ እየተርበተበተና እየተቻኮለ ቢሆንም ያልረሳው አንቺን ብቻ ነበረ። ለዚህም ማረጋገጫው የመጨረሻ ቃላት «ትሩዬ ያንተ አደራ ነች» ማለቱ ነው። እኔ ታዲያ ደህን ያልጨረሰውን ደብዳቤ ስቀጥል ከህደትና ፅናት ልቤን እየተፈታተኑት ነው። ድፍረትም ለሁለቱ ሃይል ሰጪያቸው። የራሱ የጓደኛዬ አንድ ምሣሌ ግን አረጋጋኝና ልቀጥል በቃሁ።

ነብይ ደሁን ሐዋርያ አላስታውሰውም እግዚአብሔርን ጠየቀው . . . አለውም «እግዚአብሔር ሆይ! በምድር ላይ ሃጥያተኛ ማነው ፃደቁስ?» እግዚአብሔርም መለሰለት

«በምድር ላይ ሃጥያተኛው ዳዊት ነው ወንድሙን ጦር ሜዳ በመላክ ካስገደለው በኋላ ሚስቱን በማግባቱ፤ ፃደቁም እሱዉ ነዉ፤ ጥፋቱን አውቆ ንሰሃ በመግባቱ።»

ውዴ! እዚህ ላይ ፍሰሃ የዳሰሰውን ገላ ለኔም ይድረሰኝ ማለቱ እንዳይመስልሽ። /ዳሩ እሱ መቼ ታደለና! ከብርና ትዕግስት ተጭነውት ለአፈር አሳለፉት እንጂ/።

መተከዣ በምንለው የምሽት የጭውውት ሰዓታችን ስለአንቺ «እሷ . . . ኮ ለኔ ሁሉንም ነች . . . ስለስለት ብላ ለምናለች . . . ዳቦ በየጠጅቤቱ አዙራ ሸጣለች . . . አሁንም ያልሰማሁ መስጋታል እንጂራ ትጋግር ጀምራለች . . . »

እያለ የሚያወጋኝ ልቤን በቅናትን በቁጭት ከሞላው ሰንብትዋል፤/እኔ ሀብትን እንጂ ፍቅርን አላውቀውምና/እንደውም ብዙ ጊዜ የሚያነሳብኝ ያንቺን ስቃይና ችግር ስለነበር ገንዘብ እንዳለኝ በማወቁ ነው ስል በልቤ ያማሁትን አሁን ላንቺ አሳውቁ ንስህ እገባለሁ። እኔን ሳያውቅኝም ይኖር ነበርና ለፍቅር እንደተቸገረ። ግን ንስሃ አበዛሁ አይደል?

«እሺ እንደምን ሙት ይቀናል?» ያለው ሲገርመኝ የኔ የባሰ መሆኑን ተረዳሁ። ነገ የምሆነውን አላውቅም። ግን ገላው ያልፈረሰ ጓደኛዬን ፍቅር ለኔ ተመኘሁ። ድሮም ቢሆን አንዱ ትቶ ያለፈውን ሌላው በቁርጠኝነት ቢለጥቅ መቼ ነፃነት እንዲህ ደርቅ ነበር? ምንም ከፍሰሃ እስተካከላለሁ ባልልም ልቤን በድፍረት ሞልቼ እዚህ እገኝ ነበር? አሁን ግን አልቻልኩም መሰለኝ፤ የብቻ ነፃነቱን እናፍቅ ጀመር። ውበት፣ዕምነት፤ መልካም ሥነ-ምግባር . . . ለነሱ ስል የመጣውን መቀበል . . . እሱም ካንቺ ጋራ። ጊዜ እያጠረኝ ነዉ። ጎህ ቀደደ።

ናፋቂሽ ተስፋሁን በላይ

ለትሩፋት ገረመው፡- በጣም ያሳዝናል ወራሽ ልሁን ያለው ተስፋሁንም ፍሰሃን ተከትሎ ሄዷል። ዕቃውን ስለበስብ ደህን ደብዳቤ አገኘሁ፤ የኔን ባላውቅም ደብዳቤው እንዲደርስሽ ግን ለሰዉ ልኬአለሁ።

ዘሪሁን አንተነህ

እኔ ደግሞ ከ28 ዓመታት በኋላ ደህን ደብዳቤ ቢሮ ሲቀየር ከሚጣሉ ወረቀቶች ዉስጥ አገኘሁት። ዋናዉ ደሁን ኮፒዉ አላወቅሁትም፤ ዋናዉ ለትሩፋት ደርሷት ደሆን? እርሱንም አላዉቅም።

ከከልካይ ይፈሩ

የቀድሞ የኢብባ ሠራተኛ እና በህይወት የሌሉ

CAPITAL GOODS FINANCE COMPANIES

No	Name Of Company	Address	Phone	Fax
1	Waliya Capital Goods Finance Business S.Co	Bahirdar	058-2206780	0582 205 342
2	Oromia Capital Goods Finance Business S.Co	Addis Ababa	0115-571307	251-0115571411
3	Addis Capital Goods Finance Business S.Co	Addis Ababa	0111-262445	251-0111263479
4	Debub Capital Goods Finance Business S.Co	Hawasa	046 2125191	251-462 125 170
5	Kaza Capital Goods Finance Business S.Co	Mekelle	0344 40 00 85	0342 40 00 84
6	Ethio lease Ethiopian Goods Finance Business S.Co	Addis Ababa	0116 393 397	0116 392 730

Capital Goods Finance Bussiness Licensing and Supervision Team

Information on Micro Finance Institutions

NBE MFI No.	Name of Institutions	Telephone No.	Fax No.
001	Amhara Credit and Saving Institution S. Co.	058-2201652 / 0918340256	251-058 – 2201733
002	Dedebit Credit and Saving Institution S.C.	034-4409306 / 0914702214	251-034-4406099 251-034-2400208
003	Oromia Credit and Saving Institution S.Co.	0115571158/18/33/ 0911771023 (GM)	251- 011- 1571152
004	Omo Micro Finance Institution S. Co.	096619611 GM 046-2202053/ 0462207384	251-046 – 220-20-52
005	Gasha Micro Financing S. Co.	0118952389/90/91 0911240437	
006	Vision Fund Microfinance Institution S. Co.	0116463569 0911211823 (GM)	251-011 – 6293346
007	Sidama Micro Finance Institution S.Co.	046-2200850 / 0462206151 0916836687 (GM)	251-046 – 2204704
008	Africa Village Financial Services S. Co.	0116532052 / 0113204732 0911296401 (GM) 0913113446	
009	Buusaa Gonofaa Micro Financing S. Co.	0114162491 0911223679 (GM) / 0912017087 (FM))	251-011 – 4162501
010	Poverty Eradication & Community Empowerment Micro Financing Institution S. Co.	0116678059 / 0911219506 (GM)	251-011 - 4654088
011	Addis Credit and Saving Institution S. Co.	0111572720 011111512/13 0911406174 (GM)	251-011 – 1573124
012	Meklit Micro Finance Institution S. Co.	0113484152 / 0113482183 0911318625 (GM)	251-011 – 5504941
013	ESHET Micro Finance Institution S.Co.	0113206451/52 0911677434 GM)	251-011 – 3206452
014	Wasasa Micro Finance Institution S.Co.	0911-67-38-22 / 0113384133	251-0113679024
015	Benishangul-Gumuz Micro Financing S.Co.	057-7750666 / 057-7752042 0911951484 Gm	251-057 – 7751734 251-057 - 7750060
016	Kendil Micro Finance Institution S. Co.	046 1105952 / 3831 / 5663	251-046-11015
017	Metemamen Micro Financing Institution S. Co.	6615398/6635801/0913460432(GM)	251-011 – 6186140
018	Dire Micro Finance Institution S. Co.	0251129702/1127072/1119246/47 0911353890 (GM)	251-025 – 1120246
019	Aggar Micro Finance S.Co.	6183382/3104 0911689457 (GM)	251-011 - 6183383
020	Letta Micro Finance Institution S. Co.	0911658497 (GM) / 0911169263 (Finance GM) 0911418280 (Aster)	
021	Harbu Micro Financing Institution S. Co.	0116185510 / 0911512633 (GM)	251-011 - 6630294
022	Digaf Micro Credit Provider S. Co.	0112787390/2782252/0910-27-52-34 0911936785 (GM)	
023	Harar Micro Microfinance Institution S. Co.	025-6663745/025-6664078/0912401911	251-025 - 6661628
024	Lefayeda Credit and Saving S.Co.	0116296976 / 0118237179	
025	Tesfa Micro Finance Institution S. Co.	0115526205 / 0911831882	251-011 - 5512763
026	Gambella Micro Financing S. Co.	0475511250/0475512252 / 0917823153	0475511271 / 0475512390
027	Dynamic Micro Finance S. Co. (Approved 23/03/09)	01155491585540390 / 0915766908(GM)	
028	Somali Micro finance Institution S.Co.	0257752122257-756976/77 0915768505 (GM)	0257780462
029	Specialized Financial and Promotional Institution S. Co.	0116622780 0911625576	251-011 - 6614804

Information on Micro Finance Institutions

NBE MFI No.	Name of Institutions	Telephone No.	Fax No.
030	Lideta Micro Finance Institution S.C.	0914788554 0344450064/32	0344452829 /0344450383
031	Nisir Micro Finance Institution S.Co.	0115500700/701 /0912364092 0911059722 / 0911875165	305/1250
032	Adaday Micro finance Institution S.Co.	0342405095/69 /0914749064	0342405217
033	Rays Micro Finance Institution S.Co.	0913386180	496/1110
034	Afar Microfinance Institution	0913399644	0336660748
035	Kershi Micro Finance Institution S.Co.	0118 721106/02	
036	Debo Micro Finance Institution S.Co.	0911758872	
037	Sheger Micro Finance Institution S.C	0113 698998	
038	Yemsirach	0118312404	
039	Grand Micro Finance Institution S.Co.	0912116101	
040	KAAFI Microfinance Institution S.Co.	0946877364	
041	Kalub Microfinance Institution S.Co.	0252789263	



የኢትዮጵያ ብሔራዊ ባንክ
National Bank of Ethiopia