

# **Current Account Deficits in Sub-Saharan Africa: Do they Matter?**

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## **Abstract**

Many African countries run a current account deficit, with a number of economies maintaining high deficits above five percent for many years. This raises concern about the sustainability of these deficits and the subsequent debts accumulated to finance them. In this paper, we investigate the sustainability of current account deficits in a sample of African countries using the five percent threshold along with other operational indicators of current account sustainability used in the literature. Looking at this range of indicators suggests that a number of African countries run current account deficits alongside low levels of investment and economic growth. These economies are therefore maintaining deficits that are not beneficial for the economy in the long run.

This paper also analyses the determinants of both short and medium-term current account deficits in Africa. It finds that countries are more likely to have a deficit exceeding five percent if the economy is small, less open and diverse, and is experiencing macroeconomic instability. Less democratic governments also have a higher probability of running a deficit. Overall, the main message is that though most African economies are characterised by current account deficits, only a few have real concerns regarding the sustainability of this imbalance. As long as these countries can finance their deficits via aid and debt accumulation, they face no immediate crisis. However, this allows these economies to continue with the status quo rather than addressing the structural causes of the deficit, such as export supply constraints due to poor infrastructure. African leaders and policymakers should focus on remo-

ving such impediments, which would provide a boost to long-term growth and development prospects.

**Keywords:** current account deficits and adjustment, Africa, trade

**JEL:** F32, F34, F35, F21

## 1. Introduction

The high and growing current account imbalances of the United States in the last decade has generated discussions and debates on whether these imbalances are sustainable, given the current structure of the US economy as well as the prevailing international economic environment. It has also led to concerns about the impact of a disorderly correction of these imbalances on the global economy and on poor countries that have trade and investment relations with the US. In Africa, there are also concerns about whether or not the current account imbalances observed in several countries are sustainable. There are several reasons why policymakers in the region should be concerned about growing current account imbalances.

First, the current account balance is an indicator of the state of an economy. To the extent that foreign investors believe a country's current account imbalances are unsustainable, they are unlikely to hold assets denominated in that country's currency. Depending on the speed and magnitude of the decline in demand for its foreign assets, this could lead to a current account reversal, which has implications for the domestic economy. Recent evidence suggests that high current account deficits increase the probability of a currency crisis (Edwards 2002). This is in contrast to the results and conclusion by Frankel and Rose (1996), that there is no systematic evidence of a link between current account deficits and currency crises.

Second, current account deficits lead to the accumulation of foreign debt, which has to be repaid at some point in the future. If domestic investors are rational, they will expect an increase in future taxes by the government in order to service and repay the debt. The expected increase in taxes will affect their investment decisions with negative consequences for output and employment.

Against this background, this paper examines trends and sources of current account imbalances in Africa. It also uses several economic techniques to assess and determine what makes a country vulnerable to high current account deficits. Furthermore, it identifies countries that have current account imbalances that are unsustainable. Finally, it performs an econometric examination of the determinants of the probability that a country will have high current account deficits.

The structure of the paper is as follows: Section 2 presents trends in current account deficits in Africa, while section 3 identifies countries that have unsustainable current account deficits using certain economic criteria. Section 4 investigates the source of financing of current account deficits, and

section 5 focuses on the determinants of current account deficits in the region. The final section deals with policy recommendations and concluding remarks.

## 2. Trends in Current Account Deficits in Africa

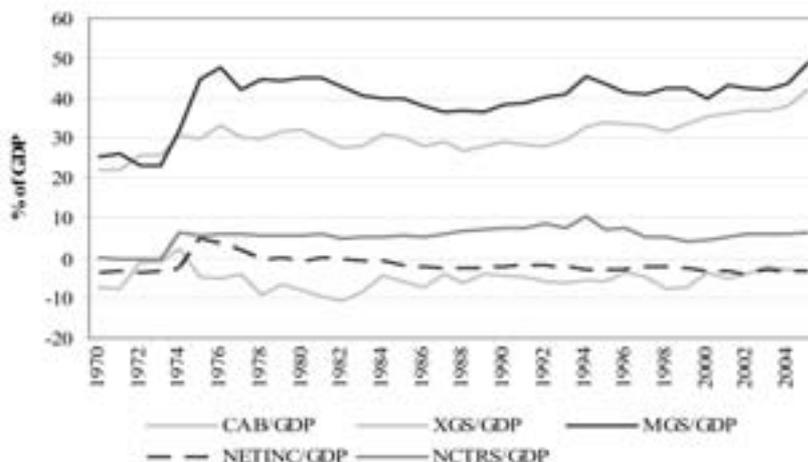
The current account balance (CAB) of a country is defined as the sum of its exports of goods and services (XGS) less imports of goods and services (MGS), plus net income (NETINC) and unilateral transfers including remittances (NCTRS) (see IMF 1996). A current account deficit implies that a country accumulates external liabilities as it finances its deficit with foreign credit in the form of external debt, aid, foreign direct investment, portfolio investment, and other forms of capital flows, which make up the capital and financial account of the balance-of-payments equation.

Current account deficits are a persistent feature of African economies. As shown in Figure 1, the average current account balance has mostly remained in negative territory for a large sample of sub-Saharan African countries. Using a sample of 38 sub-Saharan African countries for the period 1970-2005, the average current account deficit as a ratio to GDP is 5.6 percent (see Table A1 in the Appendix). In terms of the specific components of the current account, imports have always exceeded exports, but for a brief period in the early 1970s. In many African countries, the trade deficit is in fact the main driver of the current account imbalance. However, in response to recent improvements in the terms of trade, the gap between exports and imports has narrowed over the last five years or so. Net income resulting from investment and employment receipts has had a downward trend since the early 1980s, entering the negative zone. Representing such inflows as grants and other forms of aid in addition to workers' remittances, net current transfers have averaged about five percent of GDP in these sub-Saharan countries, reflecting the important role this component plays in keeping deficits down.

Another way of viewing the current account deficit is to look at the difference between savings and investment. If savings are less than investment, the economy needs to import resources to finance investment beyond the level of capital accumulation in the domestic economy. As clearly evident in Figure 2, gross capital formation in this sample of sub-Saharan African countries has always exceeded the level of domestic savings, resulting in a financing gap that has to be filled with foreign inflows of capital.

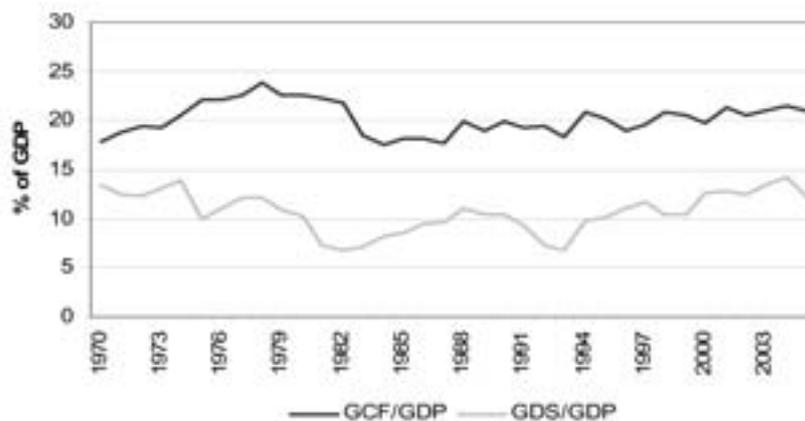
There is considerable country variation in the current account deficit to GDP ratio, which ranges from a deficit of 15.08 percent in Mozambique to a surplus of 2.92 percent in Gabon. Overall, 19 countries in the sample have maintained a deficit above five percent for the whole period, a sustainability threshold that has been much cited in the literature, following remarks made by former US deputy secretary of the Treasury, Lawrence Summers (Sum-

**Figure 1. Trends in current account balance and its components in sub-Saharan African countries, 1970-2005**



Source: IMF International Financial Statistics February 2007 CDROM

**Figure 2. Trends in investment and savings in sub-Saharan African countries, 1970-2005**



Source: World Development Indicators online database

Notes: GCF=Gross capital formation? GDS=Gross domestic savings

mers 1996). Four countries – Botswana, Gabon, Namibia, and Nigeria – have actually produced a surplus on average over the three-and-a-half decades, reflecting the impact of receipts received from natural resource exports on the current account balance.

Consistent with the message from Figure 1, the statistics presented in Table A1 also underscore the importance of current transfers in most African countries. At the same time, they indicate that most of these economies are

net payers of employee compensation and investment income to other countries. The exceptions are Lesotho and Swaziland, which both rely heavily on salaries earned in neighbouring South Africa. These are not classified as remittances.

As a result of volatility in the different components of the current account, mainly the trade balance, deficits vary considerably over time. The African countries with the largest volatility in their current account balances over the period 1970-2005 include Botswana, Swaziland, and Nigeria.<sup>1</sup> However, in Botswana and Nigeria's case, the volatility has been in terms of a current account surplus due to fluctuations in commodity exports, while in Swaziland, it is the deficit that has been volatile.

Clearly, these summary statistics show that current account deficits are very much a permanent feature of many African economies. To further understand the nature and causes of current account deficits in Africa, we next analyse how key economic variables vary by the level of the deficit. As presented in Table 1, the trade deficit, mainly driven by higher imports, is a major source of high current account deficits. In comparison, there is no significant difference in net current transfers between low and high deficit countries, while net factor income is lower on average in economies with a deficit above five percent.

Consistent with Figure 2, high deficits in African countries tend to be more the consequence of low savings than high investment rates, which does not bode well for the long-term sustainability of deficits since they are not being used to promote future economic growth. This aspect of current account deficits in sub-Saharan African countries is also evident in Table 1, which shows that growth rates in low and high deficit countries are not significantly different.

Workers' remittances are on average US\$62.1 million per annum in low deficit countries compared to \$42.3 million in high deficit ones.<sup>2</sup> Foreign direct investment is part of the financial account in the balance of payments calculation. It offsets deficits arising on the current account. Moreover, it is seen more favourably, given its long-term nature in comparison to portfolio investment and other capital flows. Higher FDI inflows are evident in high deficit countries (Table 1), suggesting that some African countries are at least financing their current account deficit with more stable sources, such as foreign investment.

Most African countries have accumulated external debt as a consequence of persistent current account deficits. This is reflected in the figures provided in Table 1, which show that high deficit countries have higher levels of debt (as a percentage of both GNI and exports of goods and services) and more onerous debt servicing ratios. In terms of the type of debt, however, there is

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1. This ranking is based on the coefficient of variation (standard deviation normalized by the mean) using data over the period 1970-2005.  
2. Remittances are included in the current transfer component of the current account balance.

**Table 1. Variation in key economic variables  
 by level of current account deficit**

Variable	Low deficit countries (CAD/GDP ≤ -5%)	High deficit countries (CAD/GDP < -5%)	Different means <sup>a</sup>
Exports of goods & services/ GDP (%)	33.26	29.47	***
Imports goods & services/ GDP (%)	38.64	44.09	***
Trade balance/GDP (%)	-1.31	-8.34	***
Net current transfers/GDP (%)	6.18	5.86	No
Net factor income/GDP (%)	-0.14	-3.24	***
Gross capital formation/ GDP (%)	19.41	21.26	***
Gross domestic savings/GDP (%)	33.23	7.73	***
Savings gap/GDP (%)	-6.17	-13.53	***
Remittances (Current US\$ million)	62.1	42.3	*
FDI/GDP (%)	1.36	2.37	***
Aid/GNI (%)	8.66	14.72	***
External debt/export of goods & services (%)	307.56	493.58	***
External debt/GNI (%)	69.84	110.12	***
Debt service/export of goods & services (%)	15.04	18.67	***
Short-term debt/total debt (%)	10.30	10.49	No
Fiscal balance	-1.30	-4.13	**
GDP growth rate (%)	3.54	3.19	No
Fuel, ore & minerals exports/merchandise exports (%)	30.14	28.21	No
Manufacturing exports/merchandise exports (%)	20.41	14.72	***

Source: IMF International Financial Statistics, February 2007 CDROM, World Bank Development Indicators online database

Notes: \*\*\* – significant at the 1% level, \*\* – significant at the 5% level, and \* – significant at the 10% level;  
 a – Two-sample t-test with equal variances

no significant difference in the level of short-term debt, which is more of a concern than long-term borrowings since it makes an economy vulnerable to a sudden reversal by lenders. These aspects of financing deficits are addressed further in Section 4 below.

Another issue that has been raised in discussions on sustainability is the notion of “twin deficits”, referring to economies that run both a current account and budget deficit. Both require financing, which leads to concerns about their sustainability. A number of African countries have been in this situation on occasions. They include Burundi, Cameroon, Ghana, Madagascar, Seychelles and Zimbabwe. Table 1 shows that countries with very high current account deficits also have higher fiscal deficits, and that the difference is statistically significant at conventional levels.

Finally, with respect to the trade structure, low deficit countries tend to have a higher percentage of manufacturing exports in total merchandise

exports than high deficit economies. While these summary statistics provide an insight into the characteristics of low and high deficit countries, the main question for policymakers and foreign donors or lenders is whether these deficits are sustainable. That is the focus of the next section.

### **3. Identifying Current Account Sustainability in sub-Saharan African Countries**

The sustainability of current account deficits is an issue that has received considerable attention over recent decades, particularly in light of their relationship with currency crises (Edwards 2001, 2002, 2004). Strictly, current account is sustainable when it is solvent, which implies that the level of the deficit is consistent with a stable ratio of the external debt to GDP (Milesi-Ferreti and Razin 1996).

From policymakers' perspective, it was originally viewed that a country could only sustain a deficit for a limited period and would have to generate a surplus to bring the economy back into balance (Edwards 2001). More recently, the source of the deficit was brought into the picture. There is less of a concern if the deficit stems from private sector activity rather than fiscal imbalances (Corden 1994). However, this argument was reassessed as a consequence of the debt crisis of the 1980s, where affected economies had high current account deficits in conjunction with a high investment rate. The Mexican Peso crisis of 1994 and the 1997/98 East Asian Financial crises also showed that private sector generated current account deficits are a cause for concern, a point made by the then US deputy secretary of Treasury, Lawrence Summers. He subsequently made the much quoted remark in 1996 that "Close attention should be paid to any current account deficit in excess of five percent of GDP, particularly if it is financed in a way that could lead to rapid reversals" (Edwards 2001? Summers 1996).

This debate makes it clear that while current account deficits are an important indicator of economic stability, there is by no means any simple definition of an unsustainable deficit. To make inferences based on a much structural view of current account deficits, the literature has focused on two approaches: 1) the accounting methodology as in Husted (1992) and Wu, Fountas and Chen. (1996)? and 2) the inter-temporal optimal approach proposed by Obstfeld and Rogoff (1995) and applied to African countries in such studies as Adedeji (2001). These models have been extensively tested using time-series econometric techniques applied to developed country data. However, in the African context, these approaches are difficult to implement as a result of short series of data (mostly 25 years or less in length). Panel data techniques, which use both the time and cross-sectional dimension to the data, are now available for both testing for unit roots and cointegration. However, these approaches require strong assumptions to generate consistent

**Table 2. Indicators of an unsustainable current account deficit**

	<b>Indicators</b>	<b>Rationale</b>
1	Trade imbalance (trade deficit/GDP)	Current account deficits resulting from the trade component often indicate structural competitiveness problems and hence an indicator of sustainability
2	Low domestic savings (% of GDP)	The deficit is not financing future economic growth.
3	Low foreign direct investment (FDI) (% of GDP)	FDI is a more sustainable way of financing CADs than other forms of capital flows such as portfolio investment.
4	Low economic growth	This implies that future prospects for paying off debt are not strong.
5	High external debt and debt service (% of exports of goods and services)	If debt levels are high and unsustainable, it is difficult for an economy to continue to maintain a current account deficit.
6	Poor governance	Poor governance leads countries to implement poor macroeconomic policies, which are needed to correct imbalances.

estimates. They are also not very useful for identifying countries that have a higher likelihood of having current account deficits.

For this reason, we focus (in this section) on analysing the current account deficit together with other indicators of sustainability as discussed in the literature (see in particular Milesi-Ferreti and Razin (1996)). As above, we define a high current account deficit as one above the five percent threshold. We subsequently identify countries with potential unsustainable deficits based on the dimensions outlined in Table 2.

In Table A2 in the Appendix, we classify countries with high current account deficits on this basis using five-year averages over the 2000-2004 period. This provides an insight into the medium-term situation rather than focusing on annual figures that are affected by the volatility in many of the key variables. Countries are ranked according to the number of indicators of unsustainable current account deficit, as listed above (Table 3). On this basis, Burundi has the most unsustainable deficit, which is driven by a trade deficit and low savings rather than high investment. In addition, the country has a very high level of external debt, does not attract substantial flows of FDI, and ranks relatively low on a governance scale. Moreover, Burundi has not succeeded in using its deficit to promote economic growth. Having six out of seven indicators of an unsustainable deficit, Burkina Faso, Rwanda and Togo also have an imbalance that should be of concern to policymakers. At the other end of the scale, Mali and Seychelles appear to have the least concern about the sustainability of their current account deficit, though Seychelles does suffer from negative economic growth.

**Table 3. Dimensions of current account deficit sustainability**

Country	No. of indicators of unsustainable CAD
Burundi	7
Burkina Faso	6
Rwanda	6
Togo	6
Benin	5
Madagascar	5
Malawi	5
Niger	5
Guinea-Bissau	4
Senegal	4
Sudan	4
Uganda	4
Gambia, The	3
Lesotho	3
Mozambique	3
Zambia	3
Mali	2
Seychelles	2

Source: See Table A2, Appendix

## **4. Financing Current Account Deficits in African Countries**

### **4.1 External capital flows offset current account deficits**

In Section 3, we identified African countries with potentially unsustainable current account deficits based on a number of indicators. Ultimately, sustainability of the deficit depends on the type and stability of capital inflows.

As captured by the balance-of-payments accounting identity ( $BOP = \text{current account} + \text{capital/financial account}$ ), a current account deficit must be offset by inflows under the capital and financial account, which includes such sources of financing as foreign direct investment, portfolio investment including debt securities like bonds, and external debt. The United States is precisely able to finance its long-running current account deficit because it continues to attract large capital inflows, particularly as a consequence of countries like China purchasing US Treasury Bonds. On the other hand, if a country cannot attract sufficient external flows of capital, it must use its reserves of foreign exchange to pay for the outstanding deficit, which clearly is not sustainable over the longer term and typically leads to a balance-of-payment crisis followed by the intervention of the IMF and other multilateral lenders.

Even when a country can finance its deficit through the capital and financial account, it is important to recognise that certain financing sources are more sustainable for a country. For example, foreign direct investment brings in not only much-needed foreign exchange, but also represents the transfer of technology and skills besides creating jobs. In comparison, the accumulation of debt often leads to debt service payments that hamper investment in infrastructure and social services. To analyse the specific situation in African countries, we now turn to three main financing flows captured under the capital and financial account. They are foreign direct investment (FDI), portfolio investment, and debt flows, including debt relief. Table 4 reports the different flows as a percentage of the current account deficit for 12 African countries that had a deficit over five percent in 2004 (also use five-year average, 2000-2004).

In terms of multilateral debt, the largest source of financing is grants and interest-free loans from the World Bank's International Development Association (IDA). It reaches 43.6 percent of the current account deficit in the case of the Gambia. Apart from Seychelles, all the countries in the sample used for Table 4 are classified as low-income, hence it is not surprising that loans from the IBRD and non-concessional loans from either the IMF or African Development Bank are very low. As a consequence of sustained borrowing over many decades, these countries have accumulated large levels of debts, as discussed in Section 3.

Under the auspices of the Highly Indebted Poor Countries (HIPC) initiative and the Multilateral Debt Relief Initiative (MDRI), debt relief has reduced the levels of external debt in a number of African countries, thereby increasing the likelihood that their current account is sustainable.

In terms of private flows, FDI has become an important source of external financing in African countries. Foreign investment accounts for more than 50 percent of the current account deficit in five countries listed in Table 3, reaching a maximum of 162.3 percent in the case of Lesotho, which had received considerable FDI inflows into such industries as the textile sector. Given the undeveloped capital markets in these countries, it is unsurprising that portfolio inflows in terms of both equity and bonds are insignificant. Togo did receive portfolio flows into equity that accounted for 7.2 percent of the deficit.

#### **4.2 *The role of aid and remittances in reducing current account deficits***

Though it is not captured as a flow under the capital and financial account, aid and remittances both reduce potential current account deficits through the current transfer component of the deficit.

The figures in Table 4 illustrate that these countries are substantially reducing their deficits through official development assistance (ODA) flows, with 10 countries receiving flows exceeding 100 percent of their CAD. Ethio-

**Table 4. Financing the current account deficit in selected African countries (% of CAD), 2004**

Country	FDI	Multilateral debt						Portfolio		Aid
		IBRD	IDA	IMFC	IMFNC	RDBC	RDBNC	Bonds	Equity	
Benin	34.18	0	11.53	-1.75	0	10.66	-0.11	0	-0.92	121.76
Burundi	0.02	0	16.16	21.55	-15.71	-7.35	-3.83	0	0	199.01
Ethiopia	81.62	0	28.33	3.28	0	10.23	-0.66	0	0	272.41
The Gambia	127.64	0	43.62	-25.19	0	15.18	0	0	0	147.29
Lesotho	162.70	-3.12	13.27	12.93	0	11.81	-2.22	0	0	139.33
Mali	24.70	0	16.87	-3.95	0	9.35	0	0	-0.17	138.82
Mozambique	40.29	0	30.58	-1.11	0	14.16	-0.13	0	0	205.04
Niger	11.40	0	27.37	2.53	0	11.95	5.42	0	1.65	234.49
Rwanda	3.86	0	41.43	0.56	0	8.00	0	0	0	246.13
Senegal	15.01	0	30.79	-5.72	0	9.94	-0.34	0	-5.40	205.51
Seychelles	59.65	0	0	0	0	0	0	0	0	16.23
Togo	27.87	0	-0.01	-7.83	0	0	4.82	0	7.20	33.39
<b>Total</b>	49.08	-0.26	21.66	-0.39	-1.31	7.83	0.25	0	0.20	163.28

Notes: FDI=foreign direct investment, IBRD=International Bank of Reconstruction and Development loan, IDA=International Development Association credit/grant, IMFC=International Monetary Fund concessional loan, IMFNC=International Monetary Fund non-concessional loan, RDBC=Regional development bank concessional loan, RDBNC=Regional development bank non-concessional loan.

Source: See Table A2, Appendix

pia's ODA flows exceeded 272 percent of their CAD in 2004. Large flows of assistance allow such countries to maintain high imbalances in their economies.<sup>3</sup>

In the sample of countries displayed in Table 4, remittances represent on average 37.22 percent of the current account deficit, exceeding 50 percent in the cases of the Gambia, Senegal, and Togo. Another way of looking at the contribution of remittances is to subtract it from the current transfer component of the CAD where it is recorded. Based on averages for the five-year period of 2000-2004, a number of countries have been able to reduce their deficit to GDP ratio by over five-percentage points, including Guinea-Bissau, Senegal, Sudan, Togo, and Uganda.

## 5. Determinants of Current Account Deficits

Besides looking at the decomposition and financing of current account deficits, it is instructive for policymakers to recognise the economic drivers of these imbalances. In contrast to the literature (Calderon *et al.* 2001, 2002, Chinn and Prasad 2003), which largely focuses on estimating the determinants of the ratio of current account deficit to GDP, we examine variables that are associated with the probability of having an unsustainable current account deficit using a Probit model. The dependent variable in the model takes the value 1 if a country runs a current account deficit of five percent or more. This threshold was chosen because it has been widely discussed in the economic literature, and the conventional wisdom is that policymakers should be seriously concerned about deficits above five percent (Mussa 2004; Summers 1996; Milesi-Ferretti, and Razin 1996).<sup>3</sup> The information provided by the approach used in this paper is useful in the sense that it identifies important drivers of the likelihood that a country has an unsustainable deficit. We start with a base specification where the determinants are growth in GDP (positive effect), log of real GDP (ambiguous), openness (ambiguous), and OECD growth rate (negative effect). The words in parenthesis describe the expected outcome.

As reported in column (1) of Table 5, our Probit estimates indicate that larger economies and more open economies are less likely to experience a high current account deficit. As expected, higher OECD growth reduces the probability of a deficit, which reflects the impact of stronger demand for African exports. Interestingly, growth in real GDP does not seem to have an impact on the chances of a country experiencing a deficit, which suggests that the current account imbalance in African countries tends to occur as a result of structural rather than cyclical factors.

The Probit model assumes that the error term is independently distributed, which is not feasible when using panel data. Therefore, to account for

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3. These countries were identified above in section 3.

the unobserved time-invariant effect, we employ a random effects Probit estimator, which has the specification:  $y^*_{it} = x_{it}b + c_i + \epsilon_{it}$ , where  $y^*_{it}$  is the latent variable,  $x_{it}$  the vector of determinants,  $c_i$  the time invariant unobserved effect, and  $\epsilon_{it}$  is the time variant error term. The estimate of the correlation ( $\rho$ ) between the composite error term ( $c_i + \epsilon_{it}$ ) across two time periods is significant, which tells us that controlling for the unobserved effect is important. As evident in column (2) of Table 5, this results in the coefficient on openness becoming insignificant, while the magnitude and the sign of the other coefficients remain approximately the same. To account for other explanatory variables discussed in the literature (Calderon *et al.* 2002), we extended the base specification by including the real effective exchange rate (REER), inflation, ratio of resource to manufacturing exports, the ratio of external debt to exports, and a variable capturing the political regime in a country. The results of this version of the model are presented in columns 3 and 4 of Table 5.

Based on the random effects Probit model, real GDP growth reduces the probability of having a high current account deficit. Openness also reduces the probability of having a high current account deficit because a country that exports more would have less deficits. Interestingly, an increase in the ratio of resource exports in total merchandise exports increases the probability of having a high current account deficit. Finally, there is some evidence that weak democratic regimes have less probability of having a high current account deficit than autocratic regimes.

## 6. Conclusion

It has been widely acknowledged that African countries have made significant progress in improving macroeconomic policies as well as economic performance. Since the mid 1990s, growth performance in sub-Saharan Africa has been positive and inflation has gone down considerably in most countries. Despite these improvements, it is well known that current account imbalances are still observed in most countries in the sub-region. Consequently, one of the key policy questions is whether these imbalances are sustainable and what should be done to ensure that they do not lead to severe economic crises. This paper examined trends in the current account balance in sub-Saharan Africa, arguing that deficits are a feature of many countries in the sub-region. It also examined the source of the deficit, pointing out that for several countries, they seem to be driven by trade deficits.

Using several qualitative indicators of current account sustainability, the paper identified countries such as Seychelles, Mali, Zambia, Mozambique, Lesotho, and Gambia, as those in which the current account deficits are sustainable. Countries such as Burundi, Burkina Faso, Rwanda and Togo were identified as those with an unsustainable current account deficit. The paper also examined the determinants of the probability that a country will

**Table 5. Determinants of the likelihood of a high current account deficit**

Dependent variable: Exceeding 5% current account deficit				
Variable	Probit (1)	RE Probit (2)	Probit (3)	RE Probit (4)
Real GDP growth	-0.002 (0.007)	-0.001 (0.008)	-0.053** (0.024)	-0.064* (0.033)
Log of real GDP	-0.243*** (0.034)	-0.260*** (0.086)	-0.467*** (0.104)	-0.366 (0.298)
Openness	-0.004*** (0.001)	0.004 (0.003)	-0.067*** (0.012)	-0.166*** (0.028)
OECD GDP growth	-0.088** (0.034)	-0.095*** (0.037)	-0.005 (0.099)	-0.015 (0.128)
REER			-0.001 (0.003)	-0.005 (0.005)
Inflation			0.004 (0.008)	0.012 (0.011)
Resource exports/merchandise exports			0.014*** (0.005)	0.033*** (0.009)
External debt/export of goods & services			5.63e-04 (3.23e-04)	0.001 9.20e-04 (5.97e-04)
Polity category (ref: Strongly autocratic)				
Weakly autocratic			0.233 (0.249)	0.076 (0.367)
Weakly democratic			-0.650** (0.324)	-1.078* (0.580)
Strongly democratic			0.132 (0.274)	-0.665 (0.470)
No. of Obs.	985	985	236	236
Log likelihood	-651.72	-589.67	-108.60	-92.07
L-R test of Rho=0	-	124.09***	-	33.05***

Notes: Dependent variable is a binary variable: =1 if current account deficit is greater than 5% and 0 otherwise? Constant not reported.

Source: See Table A2, Appendix

have a high current account deficit, and found that an increase in real GDP growth, trade openness, and weak democratic regimes reduce the probability of having a high current account deficit. On the other hand, an increase in the ratio of resource exports in total merchandise exports increase the probability of having a current account deficit.

## References

- Adedeji O. (2001), "The size and sustainability of Nigerian current account deficits", *IMF Working Paper*, WP/01/87.
- Calderon C., A. Chong and N. Loayza (2002), "Determinants of current account deficits in developing countries", *Contributions to Macroeconomics*, 2(1), pp.1-31

- Calderon C., A. Chong and L. Zanforlin (2001), "Are African current account deficits different? Stylized facts, transitory shocks, and decomposition analysis", *IMF Working Paper*, WP/01/04.
- Corden W.M. (1994), *Economic Policy, Exchange Rates, and the International System*, Oxford University Press, Oxford.
- Edwards S. (2001), "Does the current account matter?" *NBER Working Paper*, No.8275.
- Edwards S. (2002), "Debt relief and the current account: an analysis of the HIPC initiative", *Working Paper*.
- Edwards S. (2004), "Financial openness, sudden stops, and current-account reversals", *American Economic Review*, 94(2), pp.59-64.
- Husted S. (1992), "The emerging U.S. current account deficit in the 1980s: a cointegration analysis", *The Review of Economics and Statistics*, 74(1), pp.159-166.
- International Monetary Fund (IMF) (1996), *Balance of Payments Textbook*, IMF, Washington DC.
- Mussa M. (2004), "Exchange rate adjustments needed to reduce global payments imbalance", in Bergsten C. F. and J. Williamson (eds), *Dollar Adjustment: How Far? Against What?*, Institute of International Economics, Washington, D.C.
- Milesi-Ferretti G.M. and A. Razin (1996), "Sustainability of persistent current account deficits", *National Bureau of Economic Research Working Paper*, No. 5467.
- Obstfeld M. and K. Rogoff (1995), "The Intertemporal approach to the current account", in *The Handbook of International Economics*, ed. by G. Grossman and K. Rogoff, Vol. 3, Elsevier.
- Summers L. (1996), *The Economist*, Dec. 23 1995 – Jan. 5 1996, pp.46-48.
- Wu J., S. Fountas and S. Chen (1996), "Testing for the sustainability of the current account deficit in two industrial countries", *Economic Letters*, 52, pp.193-198.

**Appendix**

**Table A1. Average current account balance and its components, 1970-2005**

Country	CAB	XGS/GDP	MGS/GDP	NETINC/GDP	NCTRS/GDP
Current account balance<-5%					
Benin	-7.37	23.54	36.48	-0.93	6.50
Burundi	-6.46	9.22	25.16	-1.68	11.17
Congo, Rep.	-10.30	61.95	56.32	-16.40	0.47
Cote d'Ivoire	-5.88	39.46	35.29	-6.52	-3.53
Gambia, The	-5.21	48.99	64.51	-2.93	13.23
Guinea	-5.68	23.73	28.58	-3.74	2.91
Guinea-Bissau	-29.31	15.71	42.52	-7.96	5.47
Lesotho	-5.60	24.46	114.37	56.89	27.43
Madagascar	-6.38	16.72	23.32	-3.03	3.25
Malawi	-9.41	24.86	35.08	-5.31	6.12
Mali	-8.85	19.12	33.60	-2.17	7.80
Mauritania	-11.88	39.66	57.25	-6.24	11.95
Mozambique	-15.08	14.70	35.94	-4.20	10.36
Niger	-7.20	18.85	28.12	-1.21	3.28
Senegal	-7.88	30.76	40.40	-2.86	4.63
Seychelles	-10.54	69.28	80.29	-3.98	4.45
Tanzania	-9.05	16.89	30.73	-2.43	7.22
Togo	-7.74	38.19	50.53	-2.52	7.11
Zambia	-12.03	34.88	37.47	-9.70	0.25
Current account balance≤-5%					
Angola	-3.30	59.09	53.51	-12.45	3.57
Botswana	2.24	54.65	52.91	-3.08	3.59
Burkina Faso	-3.53	10.49	27.11	-0.55	13.64
Cameroon	-3.92	24.37	24.38	-4.06	0.14
Central African Republic	-4.23	19.41	30.72	-1.03	8.10
Chad	-2.08	12.32	24.84	-0.46	10.89
Ethiopia	-2.28	9.31	18.02	-0.34	6.77
Gabon	2.92	56.23	40.23	-10.67	-2.41
Ghana	-3.56	26.22	35.34	-1.88	7.44
Kenya	-3.52	26.57	30.84	-2.96	3.70
Mauritius	-1.81	59.55	62.56	-1.41	2.61
Namibia	4.39	47.28	56.58	2.12	11.57
Nigeria	2.01	40.27	33.21	-6.43	1.38
Rwanda	-4.01	9.65	25.72	-0.60	12.67
South Africa	-0.70	26.14	23.44	-3.13	-0.27
Sudan	-4.36	8.76	13.84	-1.58	2.29
Swaziland	-2.31	75.31	90.33	3.22	9.48
Uganda	-4.66	11.68	22.72	-1.41	7.78
Zimbabwe	-2.45	23.54	24.41	-2.49	0.92

Source: IMF International Financial Statistics February 2007 CDROM

**Table A2. Sustainability in Sub-Saharan African countries  
 with high current account deficits, average 2000-2004**

Country	High trade deficit	Low savings	Low investment	Low FDI/GDP	Low growth	High debt	Poor governance	Number
Benin	Yes	Yes	Yes	Yes	No	Yes	No	5
Burkina Faso	Yes	Yes	Yes	Yes	No	Yes	Yes	6
Burundi	Yes	Yes <sup>a</sup>	Yes	Yes	Yes	Yes	Yes	7
Gambia, The	Yes	Yes	No	No	No	n.a.	Yes	3
Guinea-Bissau	No	Yes <sup>a</sup>	Yes	Yes	Yes	n.a.	No	4
Lesotho	Yes	Yes <sup>a</sup>	No	No	Yes	No	No	3
Madagascar	No	Yes	Yes	Yes	Yes	Yes	No	5
Malawi	No	Yes <sup>a</sup>	Yes	Yes	Yes	Yes	No	5
Mali	No	Yes	No	No	No	Yes	No	2
Mozambique	Yes	Yes	No	No	No	Yes	No	3
Niger	No	Yes	Yes	Yes	Yes	Yes	No	5
Rwanda	Yes	Yes	Yes	Yes	No	Yes	Yes	6
Senegal	Yes	Yes	No	Yes	No	Yes	No	4
Seychelles	Yes	No	No	No	Yes <sup>b</sup>	No	n.a.	2
Sudan	No	Yes	Yes	No	No	Yes	Yes	4
Togo	Yes	Yes	Yes	No	Yes	Yes	Yes	6
Uganda	Yes	Yes	No	No	No	Yes	Yes	4
Zambia	Yes	Yes	No	No	No	Yes	No	3

Source: IMF International Financial Statistics, World Development Indicators online database, Polity IV Project  
 Notes: a = negative Savings/GDP ratio? b = negative economic growth? n.a. = not available