Box 1.5. How Does Macroeconomic Instability Stifle Sub-Saharan African Growth?

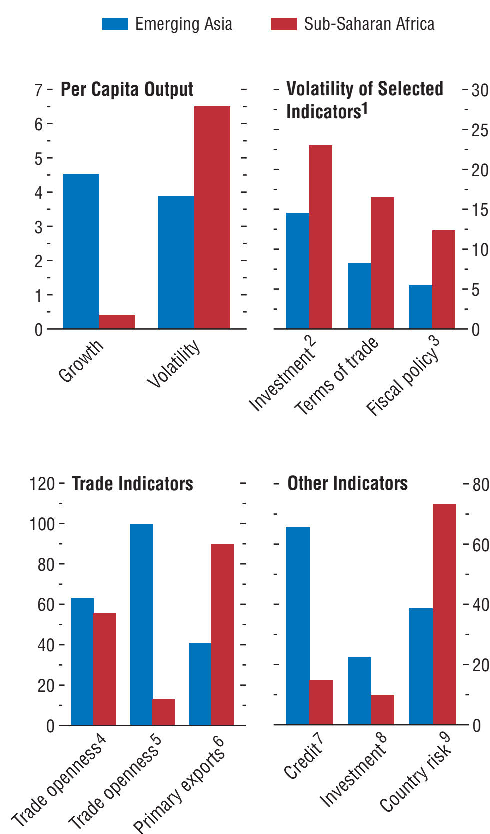
Many countries in sub-Saharan Africa have undertaken important steps to generate a more stable macroeconomic environment in recent years. However, output volatility remains high, adversely affecting long-term growth, and more needs to be done to create an environment under which the strong and sustained growth needed to reduce poverty can be attained. Recent research shows that volatility has a particularly damaging effect on economic growth in low-income countries (Hnatkovska and Loayza, 2005). The countries in sub-Saharan Africa, in addition to being poor, share several other common features that further magnify the negative effects of volatility on growth. This box briefly reviews some of these features, which are associated with the dynamics of investment, the strength and composition of economic linkages with the global economy, the development level of the domestic financial sector, and the nature of macroeconomic policies.

Dynamics of Investment

Investment plays a critical role in transmitting the negative impact of volatility to growth in Africa (Kose, Prasad, and Terrones, 2005). While sub-Saharan Africa's low rate of investment has always been a major impediment to economic growth, the high volatility of investment in the region has been particularly damaging (see Fischer, Hernández-Catá, and Khan, 1998, and the October 1999 *World Economic Outlook*). The average growth rate of investment in sub-Saharan Africa has been the slowest of any region over the past three decades, while its volatility has been the highest (see the figure).

Why has the volatility of investment been so high in sub-Saharan Africa? The major culprit driving investment volatility in the region has been the high risk attached to the return on investment. The average risk on investment return is determined by several factors, including those affecting overall macroeconomic volatility as well as uncertainty associated with the scope and implementation of future government policies (see Azam and others, 2002). Not surprisingly, the typical measures of country risk indicate that investment is much riskier in sub-Saharan Africa than in other regions.

Selected Regional Characteristics, 1970–2000



Sources: Penn World Table Version 6.1; IMF, *International Financial Statistics;* and Kose, Prasad, and Terrones (2005).

[1]Standard deviation of growth rates.
[2]Real per capita investment.
[3]Real per capita government consumption.
[4]Sum of exports and imports divided by GDP.
[5]Updated Sachs and Warner trade indicator. See Wacziarg and Welch (2003).
[6]Share of primary exports to total exports.
[7]Credit to GDP ratio.
[8]Investment to GDP ratio.
[9]100 – institutional investor index.

Note: The main authors of this box are M. Ayhan Kose and Marco Terrones.

Box 1.5 *(concluded)*

Substantial growth benefits could be gained by stabilizing investment fluctuations in the region. For example, a reduction in investment volatility of the typical sub-Saharan African country to the level of a typical emerging Asian country—even if the average level is unchanged—would imply a ½ percentage point increase in annual per capita real GDP growth.[1]

Strength and Composition of Trade Linkages

Sub-Saharan Africa's trade linkages with the global economy remain relatively weak, limiting the region's ability to cope with the adverse impact of volatility on growth. Despite recent improvements in the region as a whole, the trade policy regimes of several countries in sub-Saharan Africa are highly restrictive, reflecting the presence of high and dispersed tariffs and widespread use of nontariff barriers. Several studies conclude that trade integration has a central role in helping achieve rapid growth in developing countries, including those in sub-Saharan Africa (see Krueger, 2004). Moreover, recent research shows that trade has a special role in mitigating the adverse impact of macroeconomic volatility on growth. For example, trade integration could help a developing economy to export its way out of a recession since a given exchange rate depreciation could have a larger impact on that economy's export revenues than in an economy with weaker trade linkages. Stronger export revenues could also help in servicing external debt, which is quite substantial in a number of sub-Saharan African countries. There are significant growth benefits associated with further liberalizing trade regimes in sub-Saharan Africa: if the countries in the region were to raise the level of trade integration to the average of emerging Asia, their annual per capita real GDP growth would increase by about 1 percentage point.[2]

Sub-Saharan African economies depend on a narrow range of commodities for their export earnings. In particular, primary goods constitute close to 90 percent of total exports in sub-Saharan Africa, which is more than double that in emerging Asia. Mainly because of this, terms of trade fluctuations are very volatile in the sub-Saharan African countries, adversely affecting growth.[3]

Domestic Financial Sector and International Financial Integration

Having underdeveloped domestic financial systems and limited integration with global financial markets tends to magnify the negative impact of macroeconomic volatility on growth in the region. Total credit to the private sector as a ratio of GDP in the sub-Saharan African countries is roughly one-fifth of that in emerging Asian countries, implying that the financial sector plays only a minor role in these economies. Moreover, sub-Saharan Africa lags behind other developing regions in attracting capital flows (see Reinhart and Tokatlidis, 2003). Recent research finds that greater financial development not only significantly contributes to economic growth, but also dampens the adverse impact of volatility on economic growth. For example, if the level of financial sector development in sub-Saharan Africa increases to that of emerging Asia, this could increase the annual growth rate of per capita real GDP by ½ percentage point. International financial integration also appears to weaken the negative relationship between volatility and growth since it expands the set of risk-sharing opportunities.

[1]The calculations reported in this box draw on Kose, Prasad, and Terrones (2005).

[2]To achieve this growth gain, however, reciprocal liberalization for key commodities in target markets will be needed. In addition, to mitigate the adverse impact of trade liberalization on fiscal balance, the sub-Saharan African countries would also need to implement fiscal reforms.

[3]Terms of trade shocks are an important channel transmitting the adverse effects of volatility on growth since they have a significant impact on savings and investment decisions (see Kose and Riezman, 2001; Belaney and Greenaway, 2001; and Calderon and others, 2004). Terms of trade shocks in sub-Saharan Africa are also highly persistent (see Cashin and others, 2004).

Nature of Macroeconomic Policies

Sub-Saharan African countries also suffer from the detrimental effects of highly volatile and procyclical fiscal policies on economic growth. Government revenues in sub-Saharan Africa are dependent on extremely volatile commodity exports, which results in large fluctuations in these revenues (Dehn, Gilbert, and Varangis, 2005). Meanwhile, inadequate expenditure control and the lack of a medium-term budget framework often mean that government expenditures move in tandem with revenues—leading to highly procyclical fiscal policy in most sub-Saharan African countries (Kaminsky, Reinhart, and Vegh, 2004). Recent research shows that highly volatile and procyclical fiscal policies often lead to an increase in the amplitude of macroeconomic fluctuations and lower economic growth (Fátas and Mihov, 2003).

In sum, economic growth in sub-Saharan Africa has strengthened in recent years, while volatility has fallen. Despite these welcome developments, however, growth is still below the rates that will be needed to achieve the Millennium Development Goals, and volatility remains the highest in the world. While macroeconomic stability is not a sufficient condition for economic growth in sub-Saharan Africa, recent research shows that it plays an important role. Without it, the impact of all other potential factors hindering economic growth in the region become much more damaging. This box—together with the analysis in Chapter II—suggests that creating a more attractive investment climate, expanding and diversifying exports, deepening the domestic financial sector, and designing prudent fiscal policies will all be important elements of the effort to further reduce economic volatility and enhance growth in the region.

growth is very rapid and unit labor costs are rising, raising the risk that without monetary tightening, the 3–6 percent inflation target may be missed. Notwithstanding the recent gains in employment, unemployment is likely to remain high unless reforms are implemented to reduce existing labor market rigidities.

In Nigeria, short-term economic performance continues to be greatly influenced by developments in the oil and gas sectors. The economy grew by 3.5 percent in 2004 and is expected to expand by 7.4 percent this year as a major offshore oil field and two new liquefaction trains come on stream. The adoption of more prudent macroeconomic policies has helped contain inflation, move the current account balance into a surplus, and increase international reserves sharply. Looking ahead, further reforms—centered around a strengthening of fiscal policy and monetary policy, civil service reform, and efforts to reduce corruption—together with sound macroeconomic policies are critical for the achievement of rapid and sustained economic growth. The government should take advantage of the current favorable environment to implement other reforms, including trade liberalization, the unification of the exchange rate, and privatization to help increase the efficiency and resilience of the economy.

In the Maghreb region, the outlook remains positive notwithstanding an expected slowdown in output growth this year. In Algeria, the economy slowed in 2004—and is projected to slow further this year—reflecting a moderation in the expansion of hydrocarbon production. Fiscal policy has remained expansionary, as expenditures have been linked to hydrocarbon revenues. Starting with the 2005 budget, the government has begun the process of fiscal consolidation by delinking government spending from volatile hydrocarbon revenues. Financial sector reform, including the privatization of state-owned banks, and the pursuit of foreign trade liberalization are priorities to enhance economic growth and reduce the still-high levels of unemployment.