8 Sustainability of Trade Accounts

8.1 Introduction

Trade deficits pose difficulties not only for developing countries, but also for industrialized countries such as the U.S. and the countries of Europe. As economies grow, their demand for foreign goods grows in parallel and world trade benefits as a whole. Any problems which appear derive not from rising imports, but from the mismatch between export and import growth. Without a stable balance between exports and imports, a newly emerging trade deficit will tend to expand.

We use the concept of cointegration to examine changes in the trade accounts of sub-Saharan African countries. Specifically, we seek to determine whether changes in the trade accounts of sub-Saharan Africa are temporary or permanent. If the changes in the trade accounts are temporary, then exports and imports are cointegrated and the changes are self-correcting. If the changes in trade accounts are permanent, then exports and imports are not cointegrated and the changes are explosive.

This type of analysis is important from a policy perspective, but only when the changes in trade accounts are permanent. When changes in trade accounts are temporary, the imbalances in the trade account converge toward equilibrium over the long run. When the changes are permanent, however, the trade deficits gradually expand. In the former case, short-run trade deficits do not pose significant policy problems. In the latter, governments must use macroeconomic policies to control the changes in trade accounts.

Several groups have analyzed the problem of negative trade accounts. Mann (2002), for example, has published an excellent survey on the topic. Only a few papers, however, have addressed the idea of long-run equilibrium between exports and imports. The study by Husted (1992) is probably the most important among those so far published. In an analysis of quarterly U.S. data from 1967 to 1989 using the Engle and Granger test (Engle and Granger, 1987), Husted (1992) identified a long-run equilibrium between exports and imports. This result shows that U.S. trade deficits are temporary and that the imbalances of the U.S. trade account converge.
toward equilibrium over the long run. It also indicates that trade deficits are sustainable as a whole. Even without macroeconomic policies to correct deficits in the U.S. trade account, equilibrium seems to be achieved in the long run.

Arize (2002) investigated the long-run convergence between imports and exports in 50 countries (including nine African countries) over the quarterly period between 1973 and 1998. This study finds evidence of cointegration between imports and exports for the majority of the countries, and supports the view of Husted (1992). This indicates that these countries are not in violation of their international budget constraint. The evidence further suggests that imports and exports are cointegrated, not just in low income countries but in middle-income and high-income countries as well. Empirical results concerning constancy of the cointegrating space are robust to income classification.

Irandoust and Ericsson (2004) also expanded on Husted’s (1992) analysis by focusing on a larger sample set of six countries—the U.S., Germany, the U.K., France, Sweden, and Italy—between 1971 and 1997. Their objective was to search for cointegrating relationships between exports and imports in those countries using the Johansen and Juselius test (Johansen, 1988; Johansen and Juselius, 1990). Cointegrating relationships between exports and imports were found in Germany, the U.S., and Sweden. This implies that these countries are not in violation of their international budget constraint and that trade imbalances are short-run phenomena and, in the long-run, are sustainable.

In this chapter we empirically analyze trade account issues in the countries of sub-Saharan Africa. In doing so, we are forced to rely extensively on analyses with the panel unit root test. Standard unit root tests lack robustness with small samples, and limitations of available data from sub-Saharan Africa pose serious challenges for analyses of the region (often only annual data can be used). By applying the panel unit root test, however, we can perform both time series and cross section analyses without limiting the power of our analyses due to a small sample size.

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1 These nine African countries are Burundi, Ethiopia, Kenya, Mauritius, Morocco, Nigeria, South Africa, Tunisia, and Zambia.

2 Phillips and Moon (2000) and Baltagi (2005, Chap. 12) are good reference for nonstationary panel data analysis.