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## Trade and Development When Exports Lack Diversification A Case Study from Malawi

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In developing countries, export concentration is a critical obstacle to sustained economic growth. A number of countries in Africa, Latin America, and the Caribbean depend heavily on a limited number of cash crop exports and are vulnerable to domestic and international shocks. Malawi stands out among these countries. Malawi's agricultural exports averaged 20 percent of gross domestic product (GDP) between 2000 and 2004, and one commodity, tobacco, provided over half of Malawi's export earnings.

### *What Is the Issue?*

The contribution of agricultural exports to economic growth in developing countries has been neglected in the literature on export-led growth. In addition, past studies have effectively assumed that an increase in exports would affect GDP to the same extent as an equivalent decrease. This assumption may not be correct. For example, if export revenues are inefficiently utilized (for instance, diverted towards low-return enterprises that are not consistent with a country's comparative advantage), rising exports will do little to increase GDP, and the growth-enhancing effects of export expansion may be largely lost. Moreover, inefficient utilization of export revenues may leave the country's economy unprepared for unfavorable shifts in market conditions that lead to falling exports. The economic benefits of export expansion may then be muted, and the economic losses of export contraction may be accordingly larger.

This analysis uses Malawi as a case study of export concentration and heavy exposure to volatility, a topic with broad relevance for other developing countries that have difficulty in drawing sustained economic growth from a narrow portfolio of cash crop exports. The study investigates the relationship between Malawi's tobacco and nontobacco exports and its GDP, particularly the impact of rising compared with falling exports. If the economic impacts of falling exports exceed those of rising exports, how does variability in foreign sales influence the pace of Malawi's GDP growth, compared with a scenario in which Malawi's economy is affected equally by increasing and decreasing exports?

In the absence of offsetting improvements in productivity, a country that depends heavily on commodity exports is less likely to experience persistent economic growth because its economic fortunes would be closely tied to booms and busts in world commodity markets. In developing countries such as Malawi, considerable potential exists to enhance the productivity of the agricultural export sectors by raising farm productivity and marketing efficiency. If tobacco exports are indeed an engine of Malawi's GDP growth, might efficiency gains in the tobacco sector reduce the potentially adverse effects of export volatility on Malawi's economy?

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### ***What Did the Study Find?***

The statistical findings of the study bear out anecdotal evidence that Malawi's tobacco exports are positively related to its GDP. The analysis, which disaggregated Malawi's total exports, showed no evidence that nontobacco exports drive the country's economic growth.

Variability in Malawi's tobacco exports leads to slower economic growth, because GDP falls by a relatively large amount in response to a given decrease in exports, while recovering little during an upswing in exports; the analysis showed that the impact of tobacco exports on GDP is almost three times greater when exports are falling than when they are rising (asymmetry). This result for Malawi provides a cautionary tale for other countries with similar economic structures: Ineffective management of export revenues, along with production and marketing inefficiencies, may diminish the positive GDP effects of rising exports without tempering the negative effects of falling exports. Such inherent weaknesses may, in fact, exacerbate the negative impacts of export variability on a country's GDP.

Model results show that Malawi's GDP would be least vulnerable to volatility in tobacco export earnings if gains in yield and marketing efficiency were combined with an export-GDP relationship that was symmetric, that is, with rising and falling exports having GDP impacts of equal magnitude. Growth in farm productivity would require improvements in the availability and quality of resources and inputs, as well as in human capital. Greater marketing efficiency could be achieved by reducing internal costs of transportation and distribution, which could partially insulate Malawi's GDP from falling export prices. Lower export prices would not be fully transmitted to the farm price if increased efficiency along the marketing chain led to increases in the farmers' share of the export price. Consequently, as marketing margins contracted, Malawi's economy would be shielded to a degree from lower international prices: the model results indicate that a decrease in the export price would only slightly reduce farm prices, domestic tobacco production, exports, and hence GDP.

On the other hand, if export prices rose, increased efficiency along the marketing chain could amplify the benefits accruing to growers—an increase in the farmers' share would mean that farmers received a greater portion of a higher export price. The analysis shows that this would lead to relatively large increases in farm prices, production, and exports, and therefore in GDP. As export variability inevitably occurs, the combination of margin compression—which reduces the gap between farm prices and export prices—and rising tobacco yields can partially offset the negative impact of falling export prices on Malawi's GDP, while amplifying the benefits of rising export prices, generating an upward ratcheting effect.

### ***How Was the Study Conducted?***

The underlying framework for empirically investigating the relationship between exports and economic growth is based on an extension of an aggregate production function model. The value of exports is partitioned into rising and falling components, leading to a more flexible model specification that allows for differential impacts of increasing vs. decreasing exports. Although the econometric results clearly suggest an asymmetric relationship between real tobacco exports and real GDP, this study does not predict or forecast the continuation of relationships found in historical data. Rather, it compares different scenarios involving asymmetric vs. symmetric export-GDP linkages. Econometric estimates of the export-GDP relationship for Malawi are embedded in a simulation model that also incorporates relationships for the farm supply response of tobacco and the transmission (to varying degrees) of export prices to producer prices.