

DEC notes

Research findings

Does commodity dependence slow development?

Commodity-dependent countries are not doomed—provided policies and an active private sector help promote growth.

Because of an association with weak export and income growth, commodity dependence has long been considered a barrier to economic development. This pessimism resurfaced in the 1980s, when commodity prices plummeted. Theories purporting to explain the relationship between commodity dependence and economic stagnation suggest the difficulties that commodity-dependent countries can face in fostering economic development. Yet at the initial stage, commodity sector development is one of the few options many developing countries have for accelerating economic growth.

Statistical analyses and case studies indicate that commodity dependence does not necessarily hinder economic growth. But growth does require appropriate government policies and a vibrant private sector. To support commodity sector growth, governments should not intervene in the market, but rather should create an enabling environment for private sector development.

Well-placed pessimism?

Several phenomena explain why it can be difficult for commodity-dependent countries to increase their income and exports: the Dutch disease syndrome, the adding-up problem, high commodity price volatility

(which makes economic management difficult), and declining prices of commodities relative to prices of manufactured goods.

The consequences of commodity dependence have been debated since the 1950s. Several theories have been proposed. The first and most prominent was the Prebisch-Singer hypothesis (1950), which argued that commodity-dependent countries have trouble increasing their income and exports because of an enduring decline in the terms of trade for commodity barter (prices of commodities relative to prices of manufactured goods). The collapse in commodity prices in the 1980s reinforced the notion that commodity prices have been and will continue to be on a downward trend.

There are, however, indications that commodity price movements during the 1980s were caused by the disintegration of the Soviet Union (which caused demand for commodities in the former Soviet republics to drop sharply), the collapse of international commodity agreements, and other historical aberrations. Between 1920 and 1980 nonfuel commodity prices fluctuated but remained largely stable (figure 1), and the commodity boom of the mid-1990s suggest that the declining prices of the 1980s are unlikely to continue. One reason is the price response of commodity production. The extremely low

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prices of many commodities in the early 1990s discouraged producers, causing world production of several commodities (such as coffee and grains) to fall. This cutback led to higher prices in the mid-1990s. Thus commodity dependence pessimism based on the experience of the 1980s may be misleading.

Further, most studies of commodity prices analyze commodity price indexes. For example, the price index of nonfuel commodities declined sharply in the early 1920s and again between the late 1970s and early 1990s (see figure 1). But commodity dependence analysis based on such indexes is becoming less appropriate for many commodity-dependent countries because the export shares of nontraditional commodities—which are not included in these indexes—are becoming more significant. The commodities included in the Grilli and Yang (1988) index in figure 1 are mainly traditional ones whose share of world commodity trade has been falling—from 64 percent in 1961 to 45 percent in 1993. This decline reflects spectacular growth in nontraditional exports such as fishery and horticultural commodities (figure 2).

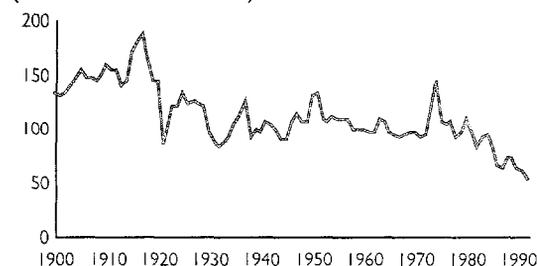
A recent study by Hausmann and Gavin (1995) identified commodity price volatility as one of the main factors hindering economic development in commodity-dependent countries. The study argues that volatile prices and the fluctuating export revenues they induce make it difficult for these countries to maintain stable economies. But while it is true that these countries experience volatile terms of trade, the effect of price volatility on exports, income, and investment is not clear except in coffee- and petroleum-exporting countries during the 1980s.

Two other well-known problems arise in commodity-dependent countries—Dutch disease and the adding-up problem. Dutch disease, which results from commodity booms and busts, generates significant appreciation of the exchange rate, which adversely affects nonbooming export and import substitution sectors. Thus Dutch disease could have a significant adverse effect on commodity-dependent economies.

The adding-up problem occurs when a country's (or group of countries') share of a commodity is so large that export revenues from that

Figure 1. Commodity prices have been stable for most of this century

(Price index: 1977–79=100)



Note: Shows the price index of nonfuel commodities, deflated by the manufactures unit value.
Source: Grilli and Yang 1988.

commodity do not increase in proportion to an increase in export volume because of the price-depressing effect of the increased volume. Only a few countries face this problem.

Policies to grow with

These difficulties are real, but they are not insurmountable. Commodity dependence is often a symptom of low economic growth, not a cause. To achieve export growth, commodity-dependent countries need timely and appropriate policies that alleviate the adverse effects of commodity dependence. Specific policies that are crucial to sound commodity sector development are discussed below.

Unpegging exchange rates

Empirical evidence and the study by Hausmann and Gavin (1995) suggest that many developing countries with a pegged exchange rate regime have trouble managing their economies. This finding indicates that flexible exchange rates are essential to alleviating Dutch disease and the adding-up problem.

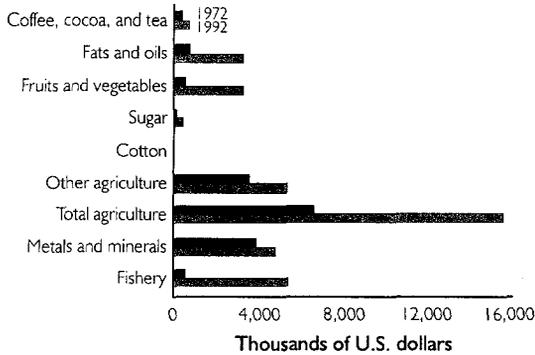
Commodity-dependent countries with pegged exchange rates also have a harder time adjusting their economies to terms of trade shocks. Adjustment is even more difficult when a country's currency remains overvalued for a prolonged period. When exchange rates are overvalued, the market anticipates devaluation. This anticipation often spurs capital flight and lowers investment.

Eliminating market controls and dismantling state-owned enterprises

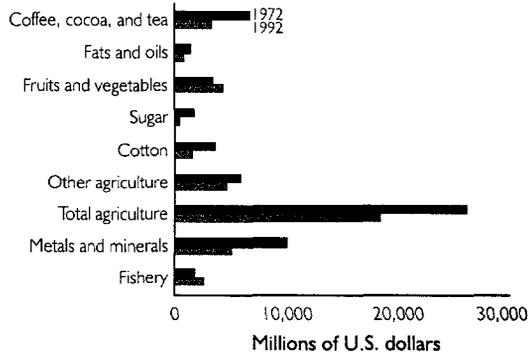
Governments often intervene in commodity markets by implementing market controls and

Figure 2. Fast-integrating countries have been more successful at diversifying their commodity export structures

Commodity exports from fast integrators, 1990
(Chile, Indonesia, Malaysia, and Thailand)



Commodity exports from non-oil exporting slow integrators, 1990



Note: Fast-integrating countries had low ratios of trade to GDP and FDI to GDP and strong creditworthiness ratings.
Source: World Bank 1996.

protecting dominant state-owned enterprises. These interventions usually distort market signals and dampen market responses, especially in the long run. They also can impede the reorientation of commodity sectors from traditional to nontraditional commodities.

State-owned enterprises often have very high production and marketing costs. For example, the marketing costs for cocoa are two to three times higher in Côte d'Ivoire and Ghana, where the marketing is controlled by state-owned enterprises, than in Malaysia and Indonesia, where markets are liberalized. Moreover, most of the recent increase in mining output in Africa has come from private enterprises, while output from public enterprises has stagnated or even declined. One of the main reasons for this difference in performance is that private enterprises have access to the management and technical skills of international mining companies, which in turn are able to mobilize the financing needed for exploration and investment.

In several commodity-dependent countries liberalization has drastically changed systems for marketing and exporting commodities. This has been the case with coffee in Uganda and Côte d'Ivoire, coffee and cocoa in Cameroon, and coffee, cotton, and cashews in Tanzania. In Tanzania liberalization attracted a large number of private traders—including many foreign and foreign-affiliated ones—who now purchase and export cashews. As a result farmgate prices more than doubled (in real terms) between 1988/89 and 1991/92. Production, which had fluctuated around 20,000 tons in the late 1980s, increased

to 47,600 tons in 1993/94. And export volume increased sixfold between 1990 and 1993.

Attracting foreign capital and new technology

Many successful commodity exporters have been aided by governments that created a favorable environment for the transfer of foreign capital and technology. In these countries government and the private sector attract foreign capital and technology in a complementary manner—the government creates the enabling conditions for investment, which encourages the private sector to maximize its efforts to attract it.

Governments' main contribution to the expansion of commodity exports have been to encourage research and development, disseminate market information, provide subsidies or favorable tax treatment, develop physical facilities and transport infrastructure, and promote exports. Government can play an important role in promoting commodity exports—especially when it collaborates with the private sector.

Promoting research and extension

The rapid growth of palm oil exports in Malaysia and Indonesia underscores the importance of research and extension in commodities. Because of intensive research, palm oil production in both countries has expanded greatly: between 1961 and 1993 Malaysia increased its share in world production from 7 to 51 percent, and Indonesia increased its share from 10 to 24 percent. Other examples of research-driven commodity export growth include tomatoes in Mexico, grapes in Chile, poultry in Thailand,

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shrimp in China and Thailand, soybeans in Brazil and Argentina, and cut flowers in Kenya.

Developing essential transport and communication infrastructure

One of the most important roles of government in commodity-dependent countries is to provide the physical, financial, and legal infrastructure required to attract private investment in commodities. Good transport and communication systems are essential to viable commodity sectors. Without such systems, countries cannot compete in global commodity markets. Since developing these systems is costly, governments should identify priority sectors and develop systems that maximize the potential gains in these sectors.

The availability of adequate transport facilities was one of the main reasons for the rapid expansion of the smallholder cocoa subsector on the island of Sulawesi, in Indonesia. In 1984 cocoa production was 18,000 tons; by 1993 it was 201,000 tons. Horticulture markets require well-functioning and low-cost communication systems because horticulture products are perishable. In addition, the markets for these commodities can change quickly, and exporters need to know the latest market developments. The rapid growth of horticulture exports in Chile, Colombia, and Kenya would not have been possible without good communication systems.

From pessimism to promise

World commodity markets are becoming more competitive. Yet a number of recent developments could provide new opportunities for com-

modity-exporting countries. These include the general global trend toward trade liberalization, sharp increases in capital and technology transfers, and high income growth in many developing countries, notably China and India, where income elasticity and hence commodity demand is likely to be high. Countries that have the right policies can seize the opportunity to become successful commodity exporters. But for countries that fail to adapt to new demands and opportunities, pessimism about commodity dependence can become a self-fulfilling prophecy.

—Nanae Yabuki and Takamasa Akiyama

Further reading

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Recent developments provide new opportunities for commodity-exporting countries

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Prepared for World Bank staff