21695

DEVELOPMENT BRIEF

Number 54 The World Bank May 1995

Sunk costs: Why exporters remain exporters

How to get companies to export has long been a puzzle. What works today will not necessarily work tomorrow. "Sunk costs" may have something to do with it

Depending on the time and the place, economists have found different, sometimes conflicting, answers to the question of what works when a country wants to stimulate exports. As a result, policymakers have gotten little guidance on how their national manufacturers might respond to one incentive or another. A trade or exchange rate policy that works marvelously in one country often fails in another—and sometimes even in the same country when tried a few years later.

Some researchers have concluded that the effect of changes in markets or in export policy can be masked or offset by the potential exporters' entry or "sunk" costs—the largely one-time expense of gathering information on foreign markets, upgrading product quality, changing packaging, and establishing marketing channels. If such expenses do weigh heavily in export decisions, they might produce "hysteresis" in international trade. Put in English, if you can start firms exporting—say, by setting favorable exchange rates—they are likely to continue exporting even when the rates are no longer favorable.

Although the sunk cost hypothesis seems reasonable, it has not been easy to validate. Shifts in trade flows can be correlated with changes in export policy. But do the figures reflect increased or decreased sales by the same exporters or an increase or decrease in the number of companies exporting? A recent World Bank research project has developed an econometric model that tests theory against the real comings and goings of a nation's manufacturers.* The model not only reflects the influence of sunk costs, but is sensitive to other conditions, including a plant's prior exporting experience.

If you can start firms exporting . . . they are likely to continue exporting

The model is based on the export patterns of plants in four major exporting industries in Colombia over a nine-year period, 1981–89. The industries—food, textiles, paper products, and chemicals—accounted for nearly 60% of Colombia's exports of manufactured goods during the 1980s. Included in the sample are 650 plants that were operating in each of the nine years.

The hard part: Getting in

The model shows that once a producer has met the costs of entering an export market, it will remain in the market as long as its operating costs are covered. If that's the case, changes in government policy, exchange rates, or prices in foreign markets can permanently alter trading patterns and national exports. For example, policy changes that entice companies into exporting can continue to increase the flow of exports even if the policy is later changed. But if businesspeople suspect that the policy will be changed in the future, they will shy away. Companies will not start exporting if they conclude that export incentives might disappear after they have paid the entry fee. Stable policies can bring more companies into exporting than can transitory changes in exchange rates.

A plant that exported last year is likely to export again this year. But after two years out of the export market, the plant is not much more likely to export than one that has never done so. Export experience can be lost. Market information goes out of date rapidly—a new exporting campaign means a new, costly effort to accumulate information.

Sunk costs are not the only factors in export decisions. Profit expectations also are important. Rising and falling entry costs will, of course, influence the calculation of net profits. But so will other factors, including the strength of the cur-

*For more details, see Mark J. Roberts and James R. Tybout, "An Empirical Model of Sunk Costs and the Decision to Export," Policy Research Working Paper 1436, World Bank, Washington, DC, 1995.

rency. Many Colombian companies apparently entered the export market in 1986 and 1987 because they anticipated several years of peso depreciation. (They were right.) Profit calculations also appear to be the reason that plants that are large, old, and owned by corporations are much more likely than smaller firms to be exporters. The large plants probably have cost advantages, or are simply further along the export learning curve. Larger plants also are more likely to produce the type of product that can be sold in volume to a few foreign customers—lowering ongoing marketing expenses if not entry fees. Not surprisingly, location also counts. Exporting companies are more likely to be in the port cities, Baranquilla and Cartagena, than in Andes-locked Bogotá.

Lessons for policymakers

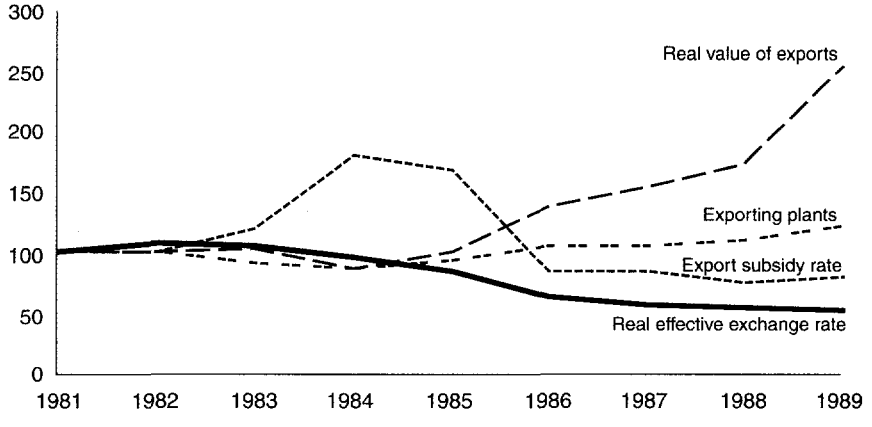
The combined effects of sunk costs, type of plant, and even type of ownership mean that industry's response to changes in policy or macroeconomic factors will vary from time to time and from place to place. The effect of a change in policy will depend on the number of plants already exporting, on whether managers perceive the changes as temporary, and on the cost of entry. In turn, the cost of getting into a market will vary with the type of product, the amount of information that exporters have about the foreign market, and the conditions in the importing country. An expanding market is easier and cheaper to enter.

Declining peso = climbing exports

A Colombian export subsidy meant to expand trade did not help. A depreciating peso obviously did. The figure, which charts export activity against the subsidy and the exchange rate, is based on census data for 19 Colombian industries accounting for 96% of the country's exports. Illegal exports, an inflow of foreign capital, and a coffee boom led to a steady appreciation of the peso from the 1970s into the early 1980s. Exporters were further hurt by trade policies that protected domestic industry, but also made it difficult to import the raw materials or capital goods that manufacturers needed to compete internationally. The value of exports and the number of companies exporting declined until 1984. By then, the peso was weakening, in part because of central bank intervention. As it continued to decline, exports rose sharply even though export financing was difficult and businesspeople had to be convinced that lobbyists for protectionism would not succeed in reversing a move toward trade liberalization.

Colombian exports of manufactures responded largely to exchange rate movements

(Index: 1981 = 100)



Source: Mark J. Roberts and James R. Tybout, "An Empirical Model of Sunk Costs and the Decision to Export," Policy Research Working Paper 1436, World Bank, Washington, DC, 1995.

With all these forces at work, policymakers still lack a clear directive on how to stimulate international trade. They should recognize, however, that they need two programs: one to encourage existing exporters and another to entice newcomers into international trade. And if getting into exporting is a greater problem than expanding export sales, governments can profitably abandon export subsidies always perceived as temporary and concentrate instead on providing market intelligence, improving export infrastructure, and replacing uncertainty with policy stability and consistency.

Development Briefs are issued by the World Bank to inform the media, business, academic, and government policy communities about development policy analyses and results from the Bank's research activities. They are drawn from the work of individual Bank researchers and do not necessarily represent the views of the World Bank and its member countries—and should not therefore be attributed to the World Bank or its affiliates. *Briefs* are issued periodically by the Research Advisory Staff, Development Economics Vice Presidency, The World Bank, 1818 H Street, NW, Washington, DC 20433. Tel: (202)473-3984, Fax: (202)477-0955. *Briefs* are not copyrighted and may be reproduced with the appropriate attribution.