

A Framework for Analyzing Technical Trade Barriers in Agricultural Markets

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Introduction

The deepening integration of world markets in recent decades has blurred the lines of the formerly sharp distinctions between “domestic” and “international” policies. In the past, the predominant view was that domestic policies should be determined by the preferences of a nation’s citizens, with little regard to any effects the policies might have on other countries. More recently, the exponential growth in worldwide trade flows has led to closer international scrutiny of the differences among some domestic policies that were formerly overlooked. Of the domestic policies now subject to such scrutiny, technical trade barriers—measures that sometimes restrict imports to prevent entry of products that fail to meet the health, quality, safety, or environmental standards of importing countries—were among the first to attract attention. The enforcement mechanism of these policies, which is to restrict entry of unsatisfactory imports, often made them indistinguishable from explicit trade policies that likewise limited entry of goods at the border.

Although economists have found it difficult to evaluate the effects of technical trade barriers or to assess their relative importance in the world trading system, the consensus has been that these measures can significantly impede trade. Consequently, disciplines on technical trade barriers were adopted by the Contracting Parties to the original General Agreement on Tariffs and Trade (GATT) in 1947, while multilateral trade rules for other “domestic policies” such as investment, services, and intellectual property measures were left to future negotiations. The fact that disciplines on the use of technical barriers

were subsequently expanded and strengthened in multilateral trade negotiations that took place during the 1973-1979 Tokyo Round and again in the 1986-1993 Uruguay Round is further evidence of the broad recognition that these measures can effectively thwart the commercial opportunities created by other trade liberalization policies.

Technical trade barriers exist in most industries, but are particularly important in the international exchange of primary and processed agricultural products. Agricultural exporters may be required to demonstrate that native plant species or human health are not endangered by their products, while simultaneously complying with standards that stipulate everything from ingredients to packaging materials. The regulatory environment for agricultural and agroindustrial producers is expected to become more complex, even though reform initiatives aimed at reducing the number and rigidity of regulations faced by the private sector are currently underway in many countries. Income growth is fueling demand for environmental amenities, food safety, product differentiation, and product information in developed and developing countries alike. Regulators are increasingly being asked to provide these services when markets fail to do so.

Designing technical trade measures that can provide nonmarket goods and attributes at the lowest cost to the consumer and to the international trading system requires an understanding of the complex economics of regulatory import barriers. Technical barriers are a difficult conceptual and empirical topic, and it may be some time before key questions about optimal regulatory trade regimes for agricultural and agroindus-

trial products are resolved. The objective of this report is to strengthen the conceptual basis for understanding technical trade barriers as a distinct class of trade-restricting measures that are becoming increasingly important to trade in agricultural products.

To achieve this objective, this report discusses alternative terminology found in the literature about technical trade barriers, proposes definitions that appear to be most useful for the study of these barriers in agricultural markets, examines why technical barriers are becoming an increasing focus of public policy debates, and suggests classifications for the myriad individual barriers that are observed. These classification schemes focus on characteristics of technical trade barriers related to the policy instrument used, the scope of the measure, and the regulatory goal.

The report then turns to empirical and theoretical evaluation of the prevalence and economic effects of

technical trade barriers. Results of a 1996 USDA survey of foreign technical barriers to U.S. agricultural exports are examined using the proposed classification criteria. In the following section, models are developed graphically to highlight three basic elements that affect the economic impacts of changes in technical measures:

- The case where there is no valid rationale for the barrier,
- Supply shifts that might result from changes in policy if the barrier has a significant technical basis, and
- Demand shifts that might result from changes in policy if the barrier has a significant technical basis.

An application of this analytical framework is illustrated by an assessment of the price, quantity, and welfare effects of modifications to the quarantine rules for importing Mexican avocados into the United States.