EFFECTIVE PROTECTION ON PRODUCTS OF INTEREST TO DEVELOPING COUNTRIES

At its meeting of 14-16 October 1975, the Group "Tariffs" agreed that the secretariat should examine the feasibility of calculating effective rates of protection in the developed countries on products of interest to developing countries. This note takes up this question. The first section discusses the methodological and theoretical problems involved in calculating rates of effective protection. The second section describes some of the published studies which contain estimates of effective protection in developed countries. It is accompanied by a more extensive bibliography.

Problems in estimating effective rates of protection

The concept of effective protection relates nominal duties to value added in production. Defined as the additional value added made possible by the tariff structure, its size varies directly with value added and with the difference between the level of tariffs on the final output and on its intermediate inputs. To estimate effective protection, the basic requirements are information on value added, the value of material inputs and the tariffs on the output and the material inputs.

Data on the value of output and material inputs and on value added are normally taken from input-output tables or censuses of manufacturing. However, because such data are not available for free-trade conditions, it is necessary to assume, somewhat unrealistically, that tariff changes do not induce producers to vary over time the composition and the amount of material inputs used per unit of output. More crucially, if the objective is to compare rates of effective protection prevailing in several industrial countries, it is necessary to have closely comparable data for each country. Such data normally do not exist and, by way of substitution, either the data for a single country or standardized data are applied to all countries. Both of these procedures involve potentially large distortions in effective rates of protection.

Another serious difficulty arises from the fact that more than one product results from one manufacturing process and thus product cost and value added data are difficult to obtain for individual products. Moreover, since available statistics are for broadly defined industries, a number of tariff items must in general be averaged to
reach this degree of aggregation. There is no satisfactory method of weighting tariffs in this averaging procedure and all methods which have so far been applied lead to serious distortions. A simple average of duties does not take into account the relative importance of different items while the method of weighting by a country's own imports introduces distortions because the tariffs themselves affect the relative value of different import items. While this difficulty can to some extent be overcome by weighting by the importance of different products in world trade, the composition of world trade is itself affected by inter-country similarity in tariff structure. In certain instances, industrial inquiries gather information on the costs of production at various stages of processing with a degree of detail close to that of the tariff schedule. Where countries can provide such data on products of interest to developing countries, the reliability of estimates of effective rates of protection can be considerably improved.

Aside from problems of data, the concept of effective protection is subject to serious theoretical difficulties such as its general equilibrium interpretation and the treatment of non-traded goods. The estimation of effective protection calls for a comparison between value added under protection and value added under conditions of free trade. However, it is not possible to specify what the structure of value added would be under conditions of free trade. Though it is customary to take a country with relatively low tariffs as a proxy for a free-trade structure of production, this can at best offer only a rough approximation since even the production coefficients of a country with no barriers to trade would be affected by the existence of protection elsewhere.

The cost of producing traded goods includes the purchase of non-traded goods such as construction, banking and the services of various utilities. Estimates of effective protection for traded goods are sensitive to whether or not one assumes that value added in the production of non-traded goods is affected by tariffs. Uncertainty on this issue is so great that it is common to estimate rates of effective protection under both assumptions.

Given these theoretical and methodological problems, it does not seem feasible to calculate with a reasonable degree of reliability effective rates of protection that could be compared between countries.

Existing estimates of effective protection

The choice of studies mentioned here is confined to those which contain rates of effective protection for a number of developed countries and for a broad range of product categories. Other studies of possible interest are listed in the accompanying bibliography.
Prior to the completion of the Kennedy Round, a comprehensive study was done by Bela Balassa who estimated rates of effective protection in the year 1962 for the United States, the United Kingdom, the Common Market, Sweden and Japan. These rates, covering thirty-six industries, were calculated on the basis of a standardized input-output table and tariffs were averaged using world trade weights.

The UNCTAD has published estimated rates of effective protection for before and after the enactment of the Kennedy Round tariff cuts. This study covers the same set of countries as the Balassa study mentioned above and shows rates at different stages of processing for all imports and for twenty-two primary commodities. Another UNCTAD study on effective rates of protection in developed countries is in preparation and will appear shortly.

A recent study by the United States International Trade Commission estimates effective rates in over 350 industries for the United States, the European Economic Community prior to its enlargement, Japan and Canada. The input-output table for the United States in 1963 is used for all four areas and post-Kennedy Round rates of effective protection are computed based on both the unweighted and own import weighted tariff averages of the GATT tariff study.

Conclusion

In addition to methodological considerations, available statistics on production costs are not detailed and comprehensive enough on the products of interest to developing countries. Delegations are invited to forward to the secretariat any available data on input costs and value added in specific production processes. Though the rates of effective protection that could be estimated with this data would remain open to questions of interpretation, they could be of some interest.

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BIBLIOGRAPHY


Australian Tariff Board, Annual Report for Year 1969-70, Canberra, Australia.


UNCTAD, Trade Barriers Facing Developing Countries, Research Memorandum, Geneva, 1976.

