

Measuring the Restrictiveness of International Trade Policy

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This book constitutes a seminal contribution to the theoretical analysis and empirical measurement of the restrictiveness of trade policy. The authors are two of the leading lights in this literature and the book is the culmination and synthesis of their research agenda over the past twenty years. It should become essential reading for those interested in trade policy, whether they be theoretical economists, applied researchers or policy-makers.

Despite the intense popular debate about the extent of trade integration, and the long tradition of empirical work examining trade barriers, there is a surprising lack of intellectual rigor in this area. A key challenge is how to aggregate the multitude of tariff and non-tariff barriers across thousands of commodities into a meaningful measure of the overall restrictiveness of trade policy. Anderson and Neary supply the intellectual foundations for such an aggregation process. Theoretically-consistent measures of the restrictiveness of trade policy are derived and the assumptions underlying these measures are laid bare. The authors show that their theoretically-consistent measures of the restrictiveness of trade policy can be implemented in practice and demonstrate a marked difference between them and other atheoretic measures that are commonly used in the trade literature.

The book's intellectual vision is to develop index numbers for policy variables which are analogous to the standard index numbers used for prices, output and productivity. The aggregation problem is formalized as the search for an index number that preserves the essential connection between the information being aggregated (tariffs, tariff-equivalent quotas and domestic policies which affect trade) and the economic variable of interest. Two index numbers are developed that relate to different economic variables of interest. The Trade Restrictiveness Index (TRI) aggregates trade barriers holding constant the level of real income, which under standard neoclassical assumptions corresponds to welfare. The TRI is therefore the uniform tariff that if applied to all goods would yield the same real income (welfare) as the actual tariffs. The Mercantilist Trade Restrictiveness Index (MTRI) aggregates trade restrictions holding constant the volume of imports; the MTRI is therefore the uniform tariff that would generate the same import volume as the actual tariffs. The TRI is motivated as the appropriate index for measuring the welfare cost of protection or (relatedly) for examining the relationship between trade policy and income levels or growth. In contrast, the MTRI is motivated as the appropriate index for a trade negotiations context, where foreign exporters are concerned with domestic market access.

The authors surmount the aggregation problem by applying dual techniques to questions of trade policy within a competitive general equilibrium structure.

These techniques have been used in positive analyses of the causes and consequences of trade in for example Dixit and Norman (1980) and are deployed in the analysis of trade policy with great ingenuity and élan. Section I (Chapters 1-2) provides a non-technical introduction to the TRI and MTRI in partial equilibrium and contrasts them with atheoretic measures such as the trade-weighted average tariff. Section II (Chapters 3-10) is the intellectual core of the book and analyzes the TRI and MTRI in general equilibrium, incorporating both tariffs and quotas. Section II (Chapters 11-15) contains empirical applications; actual measures of trade restrictiveness for particular countries and time periods are reported; the implementation of the TRI and MTRI in Computable General Equilibrium (CGE) models is examined.

As the authors themselves note, the techniques and methods developed in this book open the door to a wave of empirical work exploiting recently available disaggregated data on trade barriers to compile theory-consistent measures of trade restrictiveness for a wide range of countries and time periods. This promises to deepen our understanding of the extent of trade integration and the impact of trade barriers, and also to shed light on the political economy of trade policy and of international trade negotiations.

While much of the book is concerned with a competitive open economies, Chapter 9 briefly discusses imperfect competition. This is one area where it would be interesting to see the techniques developed further. With love of variety preferences, an increase in the range of varieties consumed is new source of welfare gains from trade liberalization. Feenstra (1994) develops theory-consistent price indices that capture the welfare gains from the introduction of new goods. Broda and Weinstein (2006) provide empirical evidence that the reduction in import price indices from an expansion in the range of imported varieties has been an important source of U.S. welfare gains in recent decades.

Another area where there may be scope for further analytical development is in the analysis of heterogeneity. The book makes the powerful simplifying assumptions that the aggregate household sector can be modelled analogously to an individual household and the behaviour of firms can be captured using an aggregate revenue function. The motivation for these assumptions is the focus on questions of efficiency rather than those of distribution. But recent research in the heterogeneous firm literature suggests that the uneven effects of trade restrictions across heterogeneous agents may have important consequences for aggregate behaviour which it would be interesting to explore.

The power and flexibility of the techniques developed by Anderson and Neary open the way for further research. This book should become an essential reference manual for those interested in the economics of trade policy and one of the classics in the field.

References

- [1] Broda, Christian and Weinstein, David E. (2006) “Globalization and the Gains from Variety,” *Quarterly Journal of Economics*, 121(2), 541-86.

- [2] Dixit, Avinash K. and Victor Norman (1980) *Theory of International Trade*, Cambridge: Cambridge University Press.
- [3] Feenstra, Robert C. (1994) "New Product Varieties and the Measurement of International Prices," *American Economic Review*, 84, 157-77.