1 Introduction

The influence of a country's trade policy on its economic well-being is one of the most widely debated topics in economics. Yet the prior question of how the stance of trade policy should be measured has received very little attention in the past. In practice this is done typically using a variety of ad hoc measures such as the trade-weighted average tariff, the coefficient of variation of tariffs, or the non-tariff-barrier coverage ratio. But all these measures lack any theoretical foundation and are subject to theoretical and practical drawbacks. Some researchers, such as Papageorgiou et al. (1991), have constructed subjective measures of trade restrictiveness. These have the advantage of incorporating important local considerations, but they are inherently difficult to compare across different countries or time periods.

The problem of how the restrictiveness of trade policy should be measured is not so severe in the textbook world where there is only a single trade barrier that takes a well-defined form, such as a single tariff or a single quota. But in most real-world situations, especially in developing countries, actual systems of trade intervention are pervasive and highly complex. This poses a challenge for analysts and policy makers alike. In the face of a bewildering array of tariffs and quantitative restrictions, it is extremely difficult to assess the true orientation of a country's overall trade policy or to evaluate the thrust of a package of policy changes that encourage trade in some product lines but discourage it in others.

Traditional analysis provides little guidance on how to aggregate restrictions across different markets. This makes it difficult to evaluate proposals for trade liberalization that form part of a stabilization package or to assess the progress made in moving toward less restricted trade. A further reason for seeking a framework within which trade policies can be compared consistently is of analytical as well as practical importance. Since

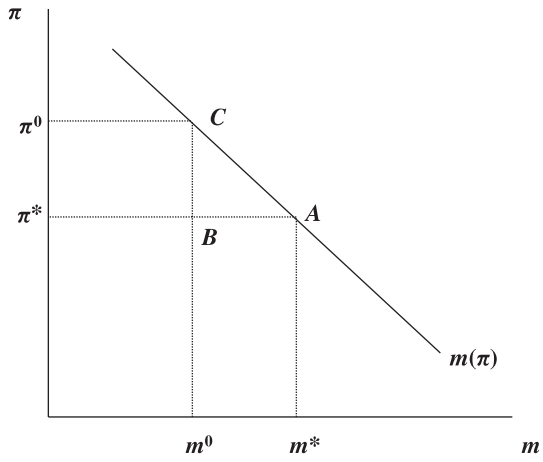

Figure 1.1
Trade policy restrictiveness and the cost of protection

ultimately the case for free trade is a scientific hypothesis, theoretically sound but potentially false, some measure of trade restrictiveness is necessary if satisfactory tests of the impact of trade on growth and economic performance are to be possible.[1]

This book describes an approach we have developed that provides theoretically satisfactory yet practically implementable procedures for measuring the restrictiveness of trade policy. Two relatively recent developments have made this approach possible. At a theoretical level, the normative theory of international trade has been formalized in a systematic way and extended to take account of varieties of trade policy other than tariffs.[2] And, at a practical level, the rapid increase in availability of cheap computing power has made possible the implementation of models with a disaggregated structure that comes closer than ever before to the complexity of real-world protective structures. Later in the book we describe how the approach we propose can be implemented on a personal computer. First, we examine the conceptual problem in more detail, show how different aspects of trade policy regimes can be incorporated

1. Leamer (1988b) and Edwards (1992) propose and implement tests along these lines, adopting the Heckscher-Ohlin explanation of trade patterns as a maintained hypothesis. Krishna (1991) and Pritchett (1996) review this and other approaches to measuring openness and trade restrictiveness.

2. Dixit (1986) and Anderson (1988, 1994) provide overviews of work in the field.

into a single measure, the Trade Restrictiveness Index, and review some of the theoretical extensions and applications of this Index.

The simplest context in which measuring trade restrictiveness arises is when tariffs are the only form of trade policy. Figure 1.1 illustrates the market for a single good whose world price (assumed given) is π^* and whose home import demand curve is $m(\pi)$. Domestic producers and consumers face a price that is raised by the tariff to π^0. By adopting a partial equilibrium perspective for the moment, we can measure the deadweight loss, or cost of protection, given by the Marshallian triangle ABC. As for the restrictiveness of trade policy, in this one-good context it can obviously and unambiguously be measured by the height of the tariff, the distance BC. However, once we move beyond the simple one-good case, it is not immediately clear what is meant by the restrictiveness of trade policy, far less how we might go about measuring it. Just as in figure 1.1, it is not the same as the welfare cost of protection, though we will see that one natural way to measure trade policy restrictiveness uses that welfare cost as a benchmark. The next chapter presents a mainly diagrammatic analysis of an extended two-good example that introduces these issues, and prepares the way for the general theoretical treatment in part II of the book.