There is a widely held view that totally unrestrained international trade is ultimately good, both globally and individually, for all trading nations. This belief goes back to the nineteenth century and the economic theories of Adam Smith and David Ricardo. In this book, Gomory and Baumol report on results from simplified economic models with basic assumptions that differ from those of the earlier work. Their somewhat controversial results are different from those of earlier studies in important ways. In their results, while there are regions in which global prosperity and individual national prosperity both benefit from more open trade, there always exists a region of conflict in which, even as total global prosperity increases, one nation can benefit at the expense of another.

Of necessity, any model of world economics must be grossly simplified. This fact by itself will lead to models that produce different results with subsequent controversy. Most of the experiments of Gomory and Baumol assume a world of only two nations, which for literary convenience are labeled France and the United Kingdom.

The classical trade models assumed diminishing rates of returns with greater output, with certain natural advantages in various industries for each trading partner. Gomory and Baumol agree that under these conditions totally unrestrained trade should benefit all. The authors, however, have run experiments using computer models with different assumptions, which they claim are more representative of the modern world. These models assume a variety of starting dispositions for the distribution of industries between nations. These starting dispositions lead to equilibrium outcomes that differ in total global income and individual national income. Results are shown as scatter plots of global income versus national income. It is assumed that these levels of income can be taken as a measure of prosperity.

The first set of experiments involves industries defined as retainable. These are industries in which neither nation has a natural advantage, but for which there is high initial cost of entry, caused by factors like higher unit cost for small-scale production or high cost of attaining the knowledge and skills needed to make quality products. Automotive, computer and television industries are sited as examples.
Without early sheltering of these industries it is difficult for a new company to come up to speed in order to compete effectively. With retainable industries the Gomory and Baumol models produce outlying regions in which one of the countries has a very large proportion of world trade and in which unrestrained trade policies benefit both countries. However, at variance with the classical model, there is a central region of conflict, in which both countries have a respectable proportion of global trade and in which a gain by one trading partner is reflected in a loss by the other.

A second set of experiments replaces the assumption of retainable industries with industries where costs are linear with scale of production with the added twist that individual companies are able to improve productivity. Since with these assumptions there is no impediment to entry on a small scale, a reasonable argument is made that these experiments extend to the classical situation, where per unit costs diminish with volume of production, with the additional proviso that production efficiency is subject to change. Although these assumptions differ significantly from those of the retainable industries model, the results are amazingly similar, displaying outlying regions of mutual benefit with more open trade and a central region of conflict.

A number of other experiments are reported, some with a world of more than two nations, some with combinations of retainable and linear industries, and so on. In all cases, the behavior of these models is similar to the earlier results with regions of national conflict.

Reviewer’s comments: This reviewer is not an economist, nor are the experiments described in sufficient detail to justify a strong opinion about their validity. It is, however, the opinion of the reviewer that international trade is sufficiently complex and sufficiently important that the often-repeated benefits of the classical assumption – that totally unrestrained trade will ultimately benefit everyone – should not be blindly accepted. At the very least we should make a strong effort to gain a better knowledge of possible outcomes. Both our leaders and our citizenry have a vested interest in knowing more about potential future results of current decisions.