raw materials for use in manufacture and to penalize imports of processed or finished goods. To the extent that these influences prevailed, many of the less developed countries would have to remain

hewers of wood and drawers of water.

Theoretical and empirical support for the view that the "escalated tariff structures" of the advanced countries are "a potentially powerful inhibitor of economic growth in the underdeveloped countries" has been developed by a number of distinguished economists. Their analyses make the point that nominal tariffs may be quite different from effective tariffs, the latter being related to value added by manufacture after taking account of duties paid on material inputs. When the rates specified in the tariffs are graduated according to stage of manufacture, the effective rates are higher, and frequently much higher, than the nominal rates.

Suppose, for example, that an important consignment of cotton cloth worth \$500 is subject to an import duty of \$100. Suppose further that the same amount and quality of cloth produced at home would require \$240 of yarn which, if imported, would bear a duty of \$30. In this case the value added by weaving is \$260, protected by a duty of \$70.11 The effective rate of duty, computed in relation to value added, is therefore 26.9 percent as contrasted with the nominal rate of 20

percent.

Moreover, it may be more meaningful to relate the duty only to the wage part of value added on the assumption that capital costs are not likely to be lower, and may well be higher, in less developed than in developed countries. On this basis, and assuming that payroll makes up 60 percent of value added in the example chosen, the effective rate of protection would be about 45 percent. This would be the amount by which labor costs per unit of output in the importing country could exceed those in the exporting country. The difference will be greater still to the extent that capital costs, transportation charges, and other costs work in favor of the importing country. (And, of course, the difference in earnings per worker will be much greater still when the difference in productivity of labor is as large as it typically is between less developed and developed countries.)

Table III-1 drawn from a current study by Balassa, presents nominal tariff rates and estimates of the effective rates, on both of the bases just described, for a number of intermediate products and finished manufactures of interest in this study. These estimates necessarily involve an element of approximation regarding input coefficients and can perhaps best be regarded as illustrative rather than as precise measurements. In most cases the effective rates are much higher than nominal tariffs. The effective rates in Japan are in most instances higher than in the United States or the Common Market. In the United Kingdom, the structure of protection is not very different from that of other developed countries as far as tariff rates imposed on imports from outside the Commonwealth are concerned. These rates are, however, of less relevance than those of other countries (and are accordingly omitted from the table), since imports from the Commonwealth, including such major suppliers as Hong Kong and India, are generally free of duty (though not necessarily free of other restraints, as in cotton textiles and jute products).

 $<sup>^{11}\,\</sup>mathrm{It}$  is relevant to the history of economic doctrine to note that this example is drawn from a study of tariff protection and free trade published more than 60 years ago by the Austrian economist and former Underscretary of State Richard Schüller.