

During 1965-66, the growth in U.S. exports to the EEC/UK slowed because of a tight capacity/demand relationship in chemicals in the United States.¹ However, it is believed that this condition is not representative of long-run trends and that the increase in United States chemical exports to the EEC/UK of 7.4% in 1966 over 1965 probably is lower than should be expected between 1966 and 1972. Still, if this 7.4% growth rate is used in order to project exports to 1972, this resulting estimate of \$1.2 billion might represent a reasonable estimate for the probable "low." However, in this study in order to use a conservative estimate of United States export growth, this \$1.2 billion is used as the "best estimate" of United States exports to the EEC/UK in 1972.

In some years United States exports to the EEC/UK increased as much as 30% (e.g., 1964 versus 1963), but this is too high a figure to use in order to make a reasonable estimate for a probable "high." If the \$1.2 billion is used as the "best estimate," then it seems reasonable to use as a "high estimate" the \$1.5 billion previously calculated for the 12.2% growth rate. In order to have a \$300 million difference on either side of the "best estimate," a figure of \$900 million—equivalent to a growth rate of 2.7%—is used for the "low estimate." The important point about these estimates is that they are made only to enable the estimation of the effect of the ASP Package, and as is shown later, a variation of \$600 million in the estimated level of U.S. exports does not affect the major conclusions of this study.

Various methods of estimating future market demand for chemicals are shown in my article on chemical marketing research.² For a category of chemicals comprising thousands of individual items, the projection of past trends is a reasonable and commonly-used method. The dangers involved in projecting past growth rates into the future are discussed in this article. An especially significant danger is that the projected growth will become too large in comparison with either the production capabilities of the exporting country or the market requirements of the importing country. However, in this analysis this danger does not seem to be very real because it is estimated that the total United States exports to the EEC/UK in 1972 will be less than 3% of either United States chemical production or the combined EEC/UK chemical consumption in 1972 (exports less than \$1.5 billion compared with \$50 billion for United States chemical production or the combined EEC/UK chemical consumption).

An alternate method of estimating United States exports is to relate growth in United States exports to growth in the EEC/UK market. However, with this approach, two estimates must be made: (1) the relationship between growth in United States exports and growth in the EEC/UK market; and (2) the growth in the EEC/UK market. For the analysis in this report, if it is assumed that conditions and relationships existing in the period 1957-1966 are representative of conditions and relationships that will exist between 1966 and 1972, then the various methods would result in approximately the same estimate of United States exports in 1972. Hence, the simpler method of using a conservative estimate of a past trend line is believed to be quite satisfactory.

II. ESTIMATE OF THE EFFECTS OF KENNEDY ROUND UNCONDITIONAL TARIFF REDUCTIONS

The next step is to determine the effects of the Kennedy Round unconditional tariff cuts on the expected export flow of \$1.2 billion from the United States to the EEC/UK in 1972. Because of the large number of individual chemical commodities in question, some of which are not yet in existence but which will be by 1972, it is necessary to estimate the effect of tariff cuts on an aggregate basis. Detailed studies have been made showing the effect of tariff cuts on aggregated groups of products.

A review of these studies reveals that a tariff decrease equivalent to 1% of the combined value of the goods and tariff results in an increase in trade flow in chemicals of about 2.5-5%. For this study an estimate of 3.5% is used for

¹ The tight capacity/consumption relationship in the United States is discussed in more detail in Chapter III of this report.

² Robert B. Stobaugh, Jr. "Chemical Marketing Research," *Chemical Engineering* (November 22, 1965) pp. 153-160.