

Using interindustry computational techniques, a hypothetical or projected final demand can be translated into total output requirements for each industry in the model. A given industry's total output includes not only output in direct response to final demand, but also output required as a consequence of final demand on other industries to which the given industry supplies inputs, and of final demand on still other industries to which its customers deliver inputs.³

In the U.S. economy many industries deliver a large proportion of their output not to final users but to other industries. For example, in order to determine how much the demand for bauxite would increase if the Air Force increased its purchases of military aircraft by a given amount, one must determine how much ore the nonferrous metals industry requires for producing primary aluminum; how much primary aluminum is used in producing a given amount of aluminum plate, sheet, wire, and other fabricated products; and how much of the fabricated products is used in production of military aircraft. The interindustry relations incorporated in the processing sector of the input-output table permit the tracing of such indirect effects of changes in final demand for end products.

In late 1964 OBE published an interindustry table of the U.S. economy based on 1958 data. This table breaks down the economy into 81 industries or functional economic sectors. The 1958 interindustry table was constructed as a complement of the national income and product accounts published by the Department of Commerce, so that the measurement of total final demand (or gross national product) and of the flows to each final market is the same in the two sets of accounts.⁴ Preparation of an input-output table based on 1963 data, showing considerably more industry detail than the 1958 model, has been under way since 1965.

The industry sectors in the interindustry tables are defined in terms of the standard industrial classification (SIC) system, which was developed under the supervision of the U.S. Bureau of the Budget, and to which all government agencies are expected to conform in gathering and publishing economic statistics. The SIC industrial structure defines a system of four-digit industry codes of which the first two digits represent a "major group" and the first three digits a "group." For example, in the manufacturing industries, two-digit major group 37 is transportation equipment, three-digit group 372 is aircraft and parts, and four-digit industry 3722 is aircraft engines and engine parts. The entire system is divided into 10 divisions representing general areas of economic activity, e.g., agriculture, mining, manufacturing.

In classifying products the Bureau of the Census extends the four-digit SIC industry classification. Beyond the first four digits the Bureau of the Census defines a five-digit product class plus unique sixth and seventh digits. Thus a seven-digit product code carries within its numbering structure the product class, industry, group, and major group of which it is a part, i.e., in which it is a primary product. A list of SIC census manufactured products was made up for use in the 1939 Census of Manufactures, and these lists have been expanded and revised for each census thereafter. The current list, "Numerical List of Manufactured Products, 1963 Census of Manufactures,"⁵ includes approximately 7,500 seven-digit product codes, 1,130 five-digit product classes, and 425 four-digit industries.