feed grains. We shall see that factors other than demand have contributed to sluggish prices for some of these products. The point to be emphasized is that generalizations covering all primary products or all agricultural commodities need to be elaborated more carefully; price history of some major commodities confirm the traditional view, while for others the contrary is true.

PROBLEMS STEMMING FROM THE GROWTH OF SYNTHETICS

Through modern science, a wide range of synthetic substitutes for agricultural raw materials have been developed. The list includes rayon, nylon and a host of other fibers, synthetic rubber, atabrine and others for quinine, synthetic detergents, substitutes for leather, artificial sweeteners, along with certain more traditional substitutes such as paper for jute and other fibers. Presumably the general effect of such developments is to reduce the growth in demand for the natural materials. To the extent to which these new products derive from nationally produced raw materials, they also reduce the potential growth in international trade. However, the actual situation is more

First, these new synthetics provide certain qualities which create new uses for the end product, carpeting in places not previously carpeted, a more extensive use of soft drinks, wider use of foam rubber cushions, pillows, etc. Thus, synthetics displace much less than the equivalent amounts of the natural commodity.

Second, in some cases, synthetics and natural products are being combined to create commodities more pleasing to consumers. Such joint products may enhance the sales opportunities, creating a larger demand for the final product, as has occurred recently for fibers.

Third, the price patterns are modified by the existence of a close substitute. The price elasticity of demand for the natural product is increased, thus reducing the probable range of price movements.

A 1964 study by the FAO of "Synthetics and their Effects on Agricultural Trade," states:

"One of the main threats to the exchange earnings of developing countries in recent years has come from competition of synthetics with agricultural raw materials, principally cotton, wool, jute and allied fibers, hard fibers (mainly abaca), and rubber. In the period 1959-61, world exports of these products were valued at about U.S. \$5,600 million, equivalent to 24 percent of the total value of world agricultural trade. Moreover, more than half (55 percent) the total originated in developing countries, where they accounted for 30 percent of total exports of agricultural products.

"The overwhelming items in the developed countries' exports of agricultural raw materials are wool, the bulk of the trade in which originates from Australia, New Zealand, and South Africa, and United States cotton, valued at \$779 million in the period mentioned. Otherwise the trade consists essentially of a flow from developing to de-

veloped countries.

"The world output of synthetic materials is heavily concentrated in developed countries (the United States, Western Europe and Japan) and centrally planned countries.

¹² FAO. "Synthetics and Their Effects on Agricultural Trade," Commodity Bulletin Series 38, FAO, Rome, 1964, p. 1.