manufacturing plants and other organizations are coordinated to help advance its chemical industry. I deal extensively with Soviet operations in my recently published book "Soviet Chemical Idustry."[11] ASP offers some protection from the economic warfare which the Soviet Union sees fit ot engage in to advance its military, political and economic goals.

(D) COMPARISON OF THE CONCENTRATION OF DYE PRODUCTION IN VARIOUS COUNTRIES

The latest figures available for the concentration of dye production for the main dye-producing countries are shown in Table I. This table clearly shows that there is much more concentration of production among the major foreign producers than there is among U.S. producers. In addition, the production of these foreign producers is much more "rationalized" or cartelized than in the United States. I would also like to point out that a report by the U.S. Tariff Commission states that: "Foreign dye producers supply (through imports or production in their U.S. plants) about one-third of the U.S. dye market (in terms of value) and imports consist predominantly of intracompany transfers between foreign dye producers and their U.S. subsidiaries."[12]

TABLE 1.—CONCENTRATION OF PRODUCTION IN PRINCIPAL LYE PRODUCING COUNTRIES OF THE WORLD

Country	Number of firms	Percent of total national production
West Germany[1]	4	95
Switzerland[2]	3	92
France[3]	1	90
Japan[4]	5	[5] 79
Italy[6]	1	70
United Kingdom[7]	1	70
United States[8]	2	[9] 30

[1] The West German companies Bayer, Hoechst, BASF, and Cassella. These were the main components of the German international chemical cartel I. G. Farben (Interessengemenschaft für Farbenindustrie Aktiengesellschaft) which operated before and during the 2d World War.

[2] The Swiss companies Ciba, Geigy, and Sandoz. These companies have formed a cartel-type of arrangement known as the "Basler Interessengemeinschaft".

[3] The French company Kuhlmann (Francolor subsidiary). This Kuhlmann subsidiary was formed by a merger of the 3 main pre-2d World War French dye firms. Kuhlmann itself has recently combined with the French companies Ugine and Société des Produits Azotés.

[4] Sumitomo, Mitsui, Nippon Kayaku, Mitsubishi and Hodogaya. These companies are the main components of the official Japanese Government synthetic dyestuffs cartel.

[5] The figure 79 percent is that given by the Japanese Fair Trade Commission.

[6] The Italian company Montecatini (now Montecatini-Edison).

[7] The British company Imperial Chemical Industries Limited (ICI).

[8] The U.S. companies DuPont and American Cyanamid.

[9] The figure 30 percent is that which was given by the Japanese Fair Trade Commission in its study of the degree of concentration in the United States. The U.S. Tariff Commission has pointed out that for 1964 5 producers of dyes in the U.S. accounted for 59 percent of sales. Foreign dye producers supply (through imports or production in their U.S. plants) about ⅓ of the U.S. dye market (in terms of value). Representative Thomas B. Curtis has pointed out that "the biggest plant in the industry is that at Toms River, New Jersey, owned by a consortium of 3 Swiss firms, which employs 800–1,000 people, it is estimated. (The same 3 Swiss firms are also reported to be closely linked with several German chemical companies)." These Swiss companies are Ciba, Geigy, and Sandoz.

Sources: Toshio Kojima, Senryo to Yakuhin ("Dyestuffs and Chemicals"), vol. 6, No. 12 (1961): Ernest M. May, memorandum before the Tariff Commission and Trade Information Committee (Jan. 29, 1964), p. 10 and Appendix 4; U.S Tariff Commission, TC Publication 181 (July 1966), p. 19; and Thomas B. Curtis Congressional Record (July 10, 1967), p. H8392.

(E) CONDITIONS WHICH COULD PERMIT FOREIGN CARTELS TO GAIN CONTROL OVER MANY U.S. CHEMICAL MARKETS ESSENTIAL FOR NATIONAL DEFENSE

The conditions which existed in U.S. chemical markets during the 1930's made it possible for foreign cartels, particularly the German cartel I. G. Farben, to gain control over many critical areas of the U.S. chemical industry which were essential for the national defense. These conditions also exist today. They are:

(1) Low tariff duties in the United States. Tariff duties will be further lowered by the Kennedy Round tariff cuts.

(2) The U.S. patent laws—which permit foreign companies to obtain patents without requiring them to use the patented inventions in the United States.

[11] Yale L. Meltzer, *"Soviet Chemical Industry"* (Park Ridge, New Jersey, Noyes Development Corp., 1966).

[12] United States Tariff Commission, TC Publication 181 (Washington, July 1966).