Appendix C

ECONOMIC STOCKPILING IN FOREIGN COUNTRIES

Appendix C discusses economic stockpiling in the nine-nation European Economic Community (EEC) in general, and then specifically examines the stockpiling policies of three foreign countries: Japan, France, and Sweden.

A. THE EUROPEAN ECONOMIC COMMUNITY STOCKPILING PROGRAM

This information was derived from an interview which was not part of the planned series undertaken as part of this assessment. It represented a valuable opportunity to exchange ideas with a representative of the European Economic Community (EEC) who is engaged in a study closely paralleling the stockpile assessment, The informant is a Coordinator for Industrial Raw Materials Supply Policy for the EEC. He was referred to us by the Visitor Program Service, a nonprofit organization making arrangements for foreign dignitaries to consult with experts in this country.

The informant was in the United States to discuss economic stockpiles with Government officials, experts in stockpiling or resource management, corporation heads, private research companies, and so on. He said that the nine-nation EEC had asked him in 1974 to prepare a policy paper on the subject of economic stockpiling, The request was prompted by the OPEC oil embargo, the subsequent price increase, and the possibility of similar actions being taken by other nations for other materials, The following information briefly outlines the EEC plan and the informant's reactions to this assessment,

1. Conclusions

This policy paper prepared by the informant was reviewed by the EEC, The conclusion reached was that an economic stockpile might contribute to the achievement of one or more of the EEC's objectives and that the informant should undertake extensive travel and discus-

sion with persons in other countries of the world, including other importing and exporting countries. It was felt that the United States might be able to offer some useful counsel based on previous stockpile experience.

2. **EEC Management**

Of particular interest was the informant's description of a combined policy/management system being analyzed by the EEC. The policy objectives are the growth and stabilization of the economies of less developed nations which are heavily dependent on the income from exports of a particular material. To support these objectives, the EEC nations would enter longterm agreements for purchase of such materials at agreed-upon prices. If market prices fell below the agreed-upon price, the nations would make their required purchases and pay for them at the agreed-upon price rather than the market price. He was less certain of the arrangement it the contrary occurred. This apparently is one of the subjects under negotiation.

The EEC arrangement is, of course, an alternative to stockpiling. It was the informant's view that its application should be limited to those materials for which the nations are not heavily import dependent. The reason for this is that the drain on their financial *resources* (and possible competitiveness in export markets) would be too great if market prices fell substantially below the agreed-upon prices for a large import volume material,

The informant said that considerable progress in this effort had already been made and that discussions were about to commence regarding the budget contribution to be made by member nations.

3. The Attitude of West Germany

Of particular interest was his anticipation that West Germany would present the greatest difficulty in funding any economic stockpile program and his reason for thinking so. He said that West Germany could be expected to offer opposition to any EEC program which interfered with the operation of the free enterprise system. This is not to say that West Germany does not participate, or is inexorably opposed to such programs, but rather that it places very much more stress on the cost of such interference than do the other member nations

4. Review ot OTA Stockpile Assessment

The informant reviewed the list of economic stockpile policies and found them generally consistent with the EECs thinking. He was in total agreement with those cases in which U.S. interests and EEC interests were parallel, such as protection against cartels and increased foreign country production of materials.

a. Concentration on Aluminum, Steel, and Base Metals.-Several phases of this assessment were outlined to obtain the informant's reaction. He was astonished at the number of materials under consideration. He said the Raw Materials Supply Policy section of the EEC, which he heads, is one of six such units into which the EEC staff is divided. He stated that lack of sufficient expertise alone demanded that study efforts be limited to toppriority materials only. All efforts are presently being concentrated on lead, zinc, copper, bauxite, and iron ore.

He was moving toward the conclusion that iron ore was too bulky to make it feasible to stockpile. For much the same reason, he was weighing the costs and benefits of stockpiling bauxite ore against the costs and benefits of stockpiling it in a more highly fabricated form such as alumina, or even aluminum.

Notes.—The informant made the following observations:

- He would have been quite surprised if such an assessment had not been underway.
- He seemed to proceed on the basic assumption that major changes will take place in the next few years in the buyer/seller relationships between less developed nations exporting industrial materials and highly developed importing nations.
- His view was that the major element in such a new relationship would be the development of a stabilization device to permit the industrialized importing nations to aid (economically) the less developed exporting nations. (Presumably the national interest of the developed nations would be served by improving the stability and economic prospects of the less developed nations, thus reducing the likelihood of cartels, embargoes, violent price increases, etc.)
- An economic stockpile program represents one potential tool for use in accomplishing the above-stated objectives. It should be evaluated in terms of an alternative means of dealing with the future rather than in terms of the institutional arrangements that were created to deal with the past.
- The prospect of the European Economic Community's engaging in the management of an economic stockpile program, or taking alternative actions with the same objectives, raises the possibility of a large new institution with which a U.S. stockpile program will interact. Considering especially the relatively thin margin

which frequently exists between a shortage and upward pressure on prices and a surplus and falling prices, that interaction could be of critical importance to the success of both the U.S. and EEC programs.

B. STOCKPILING IN JAPAN

Japan, of all the major powers, has the worst imbalance between requirements for mineral resources to support a modern industrial complex and the ability to produce these resources domestically. Japan depends on imports for almost 100 percent of its requirements for bauxite and alumina, chromium ore, nickel, phosphate rock, and tungsten; for more than 90 percent of its copper, iron ore and concentrate, manganese ore, and tin; and for more than 75 percent of its lead ore and concentrate, and zinc, The following account presents Japan's program as currently planned.

1. Import Dependence and Stockpiling

Japan's resource shortage is complicated by its high degree of independence on relatively few sources of imports, In 1973, for example, more than 50 percent of its copper imports came from Canada, Zambia, and the Philippines; 64 percent of its lead from Canada and the United States; 58 percent of its zinc from Canada and Peru; 65 percent of its nickel from New Caledonia and Canada; and 54 percent of its bauxite from Australia, Japanese industry was forced to cope with reduced production attributed to conditions beyond its control, such as labor walkouts and strikes, natural disasters, and political changes in the producing countries. Domestically, Japanese industry in recent years has also experienced great difficulty in obtaining plant sites because of aroused public interest in environmental protection and preservation.

a. Stockpile Consideration.—The use of stockpiles as one means of solving Japan's resource problems has been under active consideration for much of the last decade. At least as early as 1967, the Japanese Ministry of International Trade and Industry (MITI) drew up plans for a semigovernmental agency to acquire and maintain stockpiles of materials like

nickel, molybdenum, cobalt, tungsten, and vanadium which are needed by the specialty steel industry, The plan contemplated an agency, supported on a 50-50 basis by the Government and the specialty steel industry, which would guard against increases in metal prices by developing mines in Japan and abroad and by purchasing ores when market prices were low.

- b. Copper.—Late in 1971, officials of Japan's copper smelting industry urged the Government copper and copper concentrates, which at that time were estimated to be about 50,000 tons above Japan's normal stock position of 30,000 tons. The officials stated that copper smelters were having difficulty in arranging cuts in copper concentrate shipments from overseas sources, particularly in the developing countries. And because of the low market prices overseas, Japan's surplus of refined copper could not be exported except in very small lots,
- c. Other Metals.—Early in 1972, MITI proposed that the Government support a \$500-\$700 million stockpile of materials consisting of iron ore, zinc, nickel, bauxite, copper, and other ores and concentrates, The proposed stockpile would serve three major purposes: (1) protection of Japanese industries from price fluctuations and delivery interruptions; (2) use of the country's growing foreign reserves, then approaching \$16 billion; and (3) elimination of pressure on Japanese industries, faced with business slowdowns, to cancel or amend existing contracts for imports of overseas ore.
- **d.** Guidelines for Stockpile. -Stockpiling again received high-level attention a few months later when the subject was included in a document published in May **1972** by the Natural Resources Committee of the Prime

Minister's Economic Council. This document contained the first important statement of Japan's minerals policy issued after devaluation of the U.S. dollar. It proposed the following guidelines for Japan's future minerals policy:

- Increase efforts to stabilize world supply and demand, emphasizing international cooperation to achieve harmony with scarce resources;
- Establish a buffer stockpiling program to help stabilize prices, thereby enabling the orderly development of minerals in countries with mineral resources:
- Expand the world minerals supply by using Japan's technical and financial resources in all fields of minerals activity—from exploration, development, and production to transport, processing and construction:
- Stress technology and planning to achieve maximum utilization of resources, investigate substitutes for and regeneration of materials, develop new energy sources, adopt more efficient processes, control pollution hazards, cooperate with other countries in large projects, and aid developing countries; and
- Develop integrated approaches to resource development and utilization in contrast to pursuing a project-based approach.

In addition to acquiring minerals for its own needs, Japan's basic goal would be to help developing countries improve their efficiency and maximize economic growth. Japan's involvement would be from the initial phase and would be broad in scope--encompassing mapping, initial surveying, business consultations, infrastructure building, financial and technical assistance, joint ventures, and improvement of the investment climate.

- e. Rare Metals.—In June 1972, MITI began studies on a program to stabilize demand, supply, and prices of the so-called "new metals" (such as tantalum, beryllium, columbium, zirconium, and rare earths), and to create adequate emergency stockpiles of these materials equivalent to 6—12 months' supply. Stockpiling would be handled by the Japan Rare Metals Co. This company had been established in 1967 by the steel, ferroalloy, and nickel producers to buy up nickel, tungsten, cobalt, and molybdenum. By mid-1972, 1,300 tons of ferronickel and 120 tons of tungsten ore had been stockpiled.
- f. Nonferrous Metals.—The \$500-\$700 million stockpiling program for nonferrous metals which MITI had proposed early in 1972 was temporarily shelved late that year. Instead of going ahead with it, the Japanese Government used its large holdings of foreign-currency reserves to finance loans to refiners of nonferrous metals who were committed to take delivery of foreign ores beyond their immediate requirements. The rationale for this course of action was that many developing nations, as well as suppliers in Australia and Canada, would otherwise encounter serious financial difficulties and might well seek outlets other than Japan.

2. The Japanese Ministry of International Trade and Industry (MITI) Metals Program

In September 1974, a nonferrous metals study group of the Mining Industry Council (an advisory group to MITI) recommended that the Japanese Government immediately subsidize the stockpiling of certain nonferrous metals. In making its recommendations, the study group sought to identify metals that are economically important to Japan; not amenable to substitution; unavailable domestically; maldistributed in terms of known reserves and the sources of import into Japan; monopolized by large international mining companies subject to supply interruptions through strikes, natural disasters, and political instability; and

frequent targets of speculative purchasing. The group selected nine metals as follows:

- Recommended for immediate stockpiling: copper, nickel, chromium, and tungsten;
- Immediate stockpile held to be desirable, but market conditions judged to be currently inappropriate: zinc, cobalt, and molybdenum;
- Supplies considered stable at present, but supply structure requiring observation: antimony and tin.
- a. Four Critical Metals in the First Category.—The study group recommended stockpiling of copper, nickel, chromite, and tungsten in the first category as follows:
 - The report of the study group noted that Japan's consumption of copper over the past decade has increased at an average annual rate of 11.4 percent and that Japan's dependence on imports has reached 89 percent. It was estimated that 100,000 MT of primary copper would meet Japan's requirements for 1 month on a minimum basis. Stockpiling was justified on the ground that difficulties in finding refining sites and managing pollution problems will force Japan to become increasingly dependent on imports of refined copper and reduce the country's ability to adapt to supply interruptions.
 - The amount of nickel was set at 8,000 MT, estimated to provide a 3 months' supply. Japan has no domestic nickel resources, and depends on only four countries (New Caledonia, Canada, Australia, and Indonesia) for 90 percent of its total supply. The report expressed particular concern over labor problems and tropical storms in New Caledonia, which supplies 47.1 percent of Japan's nickel,
 - . One million MT of chromite was estimated to provide a 3 months' minimum

- supply. According to the study group, Japan's consumption of chrome has increased by an average of 12 percent annually over the past decade. The concentration of world chromium resources in Rhodesia and South Africa presents Japan with a major problem in view of its efforts to improve relations with Black Africa. Japan has recently been increasing the percentage of its imports from India, Iran, the U. S. S. R., and Malagasy.
- With tungsten, 330 MT was determined to provide a 3 months' minimum supply. Japan's consumption of tungsten has increased at an annual rate of 4.6 percent over the past decade, The study group noted with concern that Communist China has over 75 percent of the world's reserves of tungsten ore, that Japan obtains tungsten from a large number of small mines in developing countries which are frequently in financial difficulty, and that the U.S. tungsten stockpile cannot be expected to lend stability to the market for many more years.
- **b.** Other Critical Metals **in a** Second Category.—In recommending the second category of metals for stockpiling when market conditions are appropriate, the study group made the following observations regarding zinc, cobalt, and molybdenum:
 - While Japan produces 40 percent of its zinc requirements domestically, during the past decade consumption of zinc has increased at an average annual rate of 8.7 percent, and Japan is dependent for 74 percent of its imports on three countries (Canada, Peru, and Australia). The large-scale scrapping of Canadian zinc refineries unable to meet new environmental standards is a matter of concern to Japan, which gets 34.5 percent of its zinc imports from Canada.

- . Japan's consumption of cobalt has been increasing at an average annual rate of 11.5 percent over the past decade. Japan's only production of cobalt at present is a byproduct of nickel mining, and amounts to about 10 MT annually. Plants are being built that are expected to produce a total of about 2,800 MT annually. Imports from Zaire account for over 80 percent of Japan's cobalt supply. At present cobalt stocks on hand amount to about 3 months' supply, the level recommended for stockpiling.
- has been increasing at an average annual rate of 12.6 percent over the past decade. Japan is almost totally dependent on imports for molybdenum, with the United States supplying 53 percent of Japan's ore imports and 37 percent of its metal imports. Strikes by miners and longshoremen in the United States are of concern to Japan. Although the stockpiling of 3 months' supply was considered desirable, the current tight world supply situation as regards this metal precluded such action.
- c. Two Metals in a Third Category.—The study group recommended observation of two metals, antimony and tin:
 - . Domestic demand for antimony has been increasing at an average annual rate of 1.8 percent. Japan is almost totally dependent on imports for this metal, with Bolivia and Communist China supplying about 50 percent and 30 percent, respectively, Stocks on hand exceed the recommended 3 months' stockpile supply,
 - . Domestic tin demand has increased at an average annual rate of 8.6 percent, Japan produces only a small amount of tin, and depends on two countries for most of its imports (Malaysia, 85 percent; Indonesia, 12 percent), The research group concluded that buffer

stocks held under the International Tin Agreement are adequate to insure a stable supply, but thought that market developments should be watched.

The research group also studied Japan's supply situation regarding aluminum, iron ore, coking coal, and timber products, but made no recommendations for stockpiling these materials.

d. Stockpile Supervision and Quantities.—The study group's report recommended that the stockpiling of the four metals in the first category (copper, nickel, chromium, and tungsten) be carried out through a private corporation financed by Government-guaranteed funds and also partially subsidized by the Japanese Government. The Japan Mining Public Corp., which is controlled by MITI, would supervise stockpiling arrangements and the issuance of bonds.

MITI considered the recommended stockpile quantities to be adequate for major supply interruptions, but it halved the amounts of copper and chrome to be stockpiled. It did not consider the acquisition of buffer stocks to stabilize prices. MITI requested the Finance Ministry to budget 44,100 million yen (\$147 million) for this project, and also asked the Japan Export-Import Bank to make available 70,000 million yen (\$233 million) at 7.5 percent interest to private companies to finance up to 70 percent of the cost of imported ore for the stockpiling product.

e. Financing.—The Japanese Ministry of Finance turned down MITI's request for funds in the fiscal year 1975 budget to finance the proposed national stockpile of nonferrous metals. It also reduced from 70,000 million yen to 10,000 million yen MITI's request for funds to support a special financing issue by Japan's Export-Import Bank to facilitate the obligatory receipt of copper ore.

Of the nonferrous metals, copper is giving Japan the most problems at present. Large stocks are accumulating in the current depressed market despite production cutbacks

by smelters. Stock levels in April 1975 were expected to reach 200,000 MT of refined copper, as compared with 136,000 at the end of 1974, Copper stocks held by fabricators and consumers were estimated to bring the total to 300,000 MT, Japan has sought relief by urging exporters to reduce or delay shipments to Japan, but has been only partly successful in this campaign. Government loans to support the growing inventory increase totaled 50,000 million yen as of March 1975, and the Japanese Mining Association as of March 25 was requesting another 90,000 yen,

f. Scrap.—Japan appears to have recently decided to create a stockpile of scrap steel from domestic sources, Late in April 1975, MITI announced that an organization for this purpose would start functioning by the middle of May. Initially funded at 4,110 million yen (about \$13.7 million), the organization (a non-profit foundation composed of steel manufacturers, scrap wholesalers, and scrap collectors) would stockpile up to 100,000 MT of high-grade domestic scrap steel to stabilize prices and encourage recycling.

g. Recycling.—A separate organization, known as the Cycling Association, will be created to promote utilization of recovered iron resources. The association will guarantee loans advanced to scrap processors for purchasing new equipment to modernize the recycling of scrap. The association will also develop new technology for more efficient utilization of scrap, and will promote the wider use of the new technology and equipment.

3. References

Airgram A-750, from American Embassy, Tokyo, to U.S. Department of State, Dec. 24, 1974.

American Metal Market, Apr. 24, 1975.

Council on International Economic Policy, Special Report: Critical Imported Materials.

"Japan Makes Plans for Stockpiling Agency," Metals Week, Aug. 21, 1967.

"Japanese Smelters Urge Central Stockpile," American Metal Market, Dec. 14, 1971.

Journal of Commerce, Mar. 7, 1972,

Metal Bulletin, Mar, 25, 1974.

"Metal Stock Build-Up Plan Facing Complex Problems," Japan Chemical Week, vol. 15, No, 755, Oct. 17.1974.

Metals Week, Jan. 20, 1975.

"The Mineral Industry of Japan," reprint from Minerals Yearbook, U.S. Bureau of Mines, 1972.

C. STOCKPILING IN FRANCE

The French Government in 1972 announced its decision in principle to establish a national stockpile of critical material to meet economic rather than strategic supply crises. The stockpile was to have four purposes:

- Reduce the excessive vulnerability of certain processing industries, and protect small- and medium-sized companies from excessive shortages and price fluctuations;
- 2, Allow France to participate more actively in international agreements to stabilize prices of raw materials;
- 3. Provide possibilities for regulating prices of materials; and
- 4. Serve political and economic defense needs,

The French Government's decision involved participation with French industry in a combined or cooperative program as follows.

1. Stockpile Management

The stockpiling management program would be given to Groupment d'Importation et de Repartition des Meteaux (GIRM), This semigovernmental organization, whose activities had formerly been limited to copper, would serve a much broader area of responsibility. GIRM would assist French mining companies in mining activities beyond their traditional efforts in French Africa and the oversea territories. GIRM would also be expected to help French companies extend their endeavors into developed countries with minimal resources, such as Australia and Canada, and also ore-rich developing coun-

tries such as Brazil, Iran, Indonesia, Zaire, and Yugoslavia. GIRM would examine mining possibilities in mineral-rich countries, intervene more actively as a service company in the developing countries, and generally promote new possibilities for French private mining industries over the long run.

- **a.** Selection of a Commodity.—For stockpile purposes, selection would be made on the following conditions:
 - 1. France is a substantial consumer but not a major producer of the commodity.
 - 2. Suppliers of the commodity are relatively few and are concentrated in politically unstable areas.
- b. Copper Priority.—Because France was totally dependent on non-French companies for its copper supplies, copper was given priority over other materials. The Government's goal was to have French-owned companies provide from one-quarter to one-third of France's imports of this metal. To this end, GIRM planned a program of copper development which would eventually embrace activities ranging from extraction to refining. The program anticipated expenditures of some 300 million francs over a period of 4 years, with the French Government subsidizing 35 to 40 percent of the outlays. At the end of 1972, GIRM was maintaining a copper stockpile of about 60,000 tons for the benefit of French industry.
- c. Nickel.—The 1972 program also gave special attention to nickel. France's Societe Le Nickel (SLN) signed a nickel stockpiling agreement estimated to add \$20 million to the company's coffers, and permitting SLN to continue mining New Caledonia ore at the 1972 rate, while expanding facilities in northern New Caledonia to meet anticipated future demands. Under this agreement, GIRM was to purchase 10,000 tons of SLN nickel ore in 1973 at a negotiated price, with SLN to repurchase the nickel at the same price over the next 5 years, depending on market conditions.

2. Specific Actions Taken

Although discussions of the pros and cons of stockpiling continued within Government circles, the 1972 stockpiling program appears not to have been implemented to any substantial degree, mainly because of opposition from the Ministry of Finance.

Early in 1975, however, following a year's study of France's vulnerability to deficiencies in supplies of hard minerals, the Government of France apparently made some major policy decisions for corrective action. These decisions were inspired by interministeral studies showing that the supply of over half of France's mineral imports (which account for 55 percent of total consumption) could become critical under certain eventualities. The Government's policy decisions, which were taken at a special session of the Council of Ministers, chaired by President Giscard, contemplated action in four areas:

- Mineral geological research and exploration;
- Increased recycling;
- Negotiation with producers; and
- Stockpiling.
- a. Mineral Geological Research and Exploration.—A multiyear approximation of 125 million francs (10 million in 1975 and approximately 25 million annually thereafter) has been made for increased hard mineral prospecting in France, and revision of the mining code is being studied to improve the economic conditions of mineral production. The goal is to double France's own mineral production or, at a minimum to achieve a more complete inventory of the country's available resources. Development or subsidy of non-economic mines is not presently being considered. French geological research activities overseas are also to receive priority attention.
- b. Increased Recycling.—A new office will be created in the Ministry of Industry to provide increased recycling of metals, as well as

other materials. Legislation on recycling will soon be presented to Parliament.

- c. Negotiation With Producers.—Maintenance of good relations with mineral exporting countries will continue to be emphasized as the most important factor in securing mineral imports, 65 percent of which come from less-developed countries. To this end, the Government will continue to seek arrangements for cooperating with traditional and potential suppliers of minerals in such fields as geological research, minerals exploration, and manpower training. Relationships that promise to stimulate new export sales for French manufacturers will be emphasized.
- d. Stockpiling.—A national minerals stockpile will be created to contain stocks equivalent to 2 months' average imports for each category of raw or processed materials normally imported. An appropriation of 100 million francs (approximately \$23 million) has been provided in 1975 for this purpose. The appropriations are expected to double in 1976 and remain at that level during the expected buildup period of 3 to 4 years. (U.S. Embassy

officials believe that given gross French mineral imports of approximately 12 billion francs in 1974, the buildup may take longer,) Stockpiles will be maintained at Government expense and will be available only under Government authorization, which could include drawdowns in time of extreme market shortages or price rises.

According to the Ministry of Industry officials, France would not try to use the stock to intervene in the marketplace, The relative unimportance of potential French stocks in proportion to world supply would make such an effort fruitless in any event. Officials hoped, however, that creation of a national stockpile would enable France to negotiate with minerals producers from a stronger position

3. References

Buttner, F. H. Draft Report on Stockpiling Effects. on Economic and Supply Stability, National Commission on Materials Policy, Apr. 9, 1973.

Minerals Yearbook, Area Reports: International, U.S. Bureau of Mines, 1972.

Airgram A-95, from American Embassy, Paris, to U.S. Department of State, Feb. 25, 1975.

Metals Bulletin, Apr. 14, 1972.

D. STOCKPILING INCENTIVES IN SWEDEN

In view of the immense investment in the U.S. strategic stockpile, a search for a method of financing stockpiling less costly to the Government should not be surprising. Sweden has decided to eliminate the expense of stockpiling through a system of tax incentives to support production and encourage industry to maintain its own inventories. The explanation of this plan is as follows.

1. Taxation of Corporate Income

The Government of Sweden maintains Government-owned stockpiles of raw material for strategic or economic purposes. At the *same time*, it provides incentives to industry to do so too. It does this through its unusual system of taxation of corporate income. The rules governing the taxation of corporate income in Sweden apply to three special areas:

- Inventory valuation;
- Depreciation; and
- Reserves for future investment.

The Swedish tax rules in these areas have contributed to the ability of Swedish industry to compete in world markets. By providing substantial incentives to industry and commerce. The rules have encouraged the use of private capital to deal with economic fluctuations and the business cycle.

a. Use of Tax Incentives.—An essential feature of these devices is the degree of control they give business taxpayers over the amount of profit to be reported. The corporation has the option of taking larger or smaller deductions in any particular year. To that extent, corporate and other taxpayers are permitted a substantial degree of latitude in leveling out

their annual results and in building \boldsymbol{u} \boldsymbol{p} reserves.

b. Inventory Valuation.—Sweden's tax provisions governing the valuation of inventories are designed to eliminate taxation of merely inflationary profits and permit the strengthening of corporate resources against the possibility of inventory price declines. Although provisions exist in other countries for similar purposes, none takes the same form as Sweden's, where the basic rule is that the valuation of the inventory entered by the taxpayer in his account books shall govern for tax purposes. However, the right to value inventories in the taxpayer's business discretion is subject to certain limitations established by the tax laws.

The main rule governing inventory valuation is complemented by two supplementary rules. The first of these is the rule of "comparable value." If the value of the inventory at the end of a corporation's fiscal year-at cost or market and after deducting obsolete or unsalable items—is less than the average of the value of the inventory at the close of the 2 prior years (this average value is called the "comparable value"), the corporation may write its inventory down by 60 percent of that comparable value, rather than by 60 percent of the value at the end of the income year in question.

The second supplementary rule relates to the valuation of raw materials or staple commodities in the inventory. The corporation has an option to value these inventory assets at the lowest market price in effect during the income year or in any of the 9 previous years, and then to reduce that figure by 30 percent to give an inventory valuation equal to 70 percent of the lo-year low. If the corporation chooses to value raw materials or staple commodities in this way, it may not also take advantage of the rule of "comparable value" outlined above.

In any event, a corporation may always write its inventory down to its actual value

despite the foregoing rules and take appropriate deductions from taxable income.

So far as the company's books are concerned, it is immaterial whether the amount of an authorized writeoff is deducted directly from the cost or market value of the inventory on the asset side, or is set up instead as a reserve for inventory price decline on the liability side. The latter method is customarily used, however, when the use of the "comparable value" rule results in a negative inventory value.

- c. Depreciation.—The main rule provides that a taxpayer, after first writing off all obsolete or unsalable items in full, may write down the balance of the inventory by 60 percent to a floor of 40 percent of cost or market value, whichever is lower. Cost is determined on a first-in, first-out basis. The amount of this inventory writeoff is deductible from taxable income,
- d. Reserves for Future Investment.—A special provision, enacted in 1964, permits a Swedish parent company selling inventory assets to a foreign subsidiary for further resale on the foreign market to defer tax on profits attributable to goods which remain unsold in the hands of the subsidiary at the end of the parent's fixed year. The parent may take a deduction from taxable income, by an amount not exceeding the difference between (1) the price at which the parent sold these goods to the subsidiary (minus any amount of inventory writeoff deducted by the subsidiary), and (2) the parent's cost of these goods. The allocation must be restored to taxable income during the following fiscal year; at the end of that year, the question of a deduction for a renewed allocation is considered in view of current circumstances.

2. Incentives Preferred to Stockpiling

While the tax system of Sweden was not designed to create a national stockpile, but rather to support a health industrial economy in good rapport with Government, it has

tended to obviate the need for a national stockpile by encouraging industry to maintain inventories large enough to meet emergency situations.

True, the inventories thus supported include many items not necessarily of a strategic and critical nature, as well as those that are. On the other hand, the coverage becomes much greater than would be possible if the Government were to purchase and store only those items it could afford and which were deemed vulnerable enough to warrant the Government effort.

In brief, the Swedish tax rules as they apply to inventories, along with other tax measures, are designed to increase the efficiency of Swedish industry as a competitor in world markets. The creation of a "Swedish stockpile" is more or less a byproduct, Whether or not it might be desirable to extract at least the principle from the Swedish tax system for application to the United States would seem to warrant further examination.

3. Reference

The Tax System in Sweden, Skandinaviska Enskilda Banken, February 1972.